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A REPORT OF THE NATIONAL COMMISSION ON GANJA TO

Rt. Hon. P.J. PATTERSON, Q.C., M.P. PRIME MINISTER OF JAMAICA

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August 7, 2001

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EXECUTIVE SUMMARY

The National Commission of Ganja, pursuant to its terms of reference and after a period of exhaustive consultation and inquiry from November 2000 to July 2001, involving some four hundred persons from all walks of life, including professional and influential leaders of society, is recommending the decriminalisation of ganja for personal, private use by adults and for use as a sacrament for religious purposes.

The Commission, after reviewing the most up-to-date body of medical and scientific

research, is of the view that whatever health hazards the substance poses to the individual — and there is no doubt that ganja can have harmful effects, these do not warrant the criminalisation of thousands of Jamaicans for using it in ways and with beliefs that are deeply rooted in the culture of the people. Besides, there is growing evidence that the substance does have therapeutic properties.

The Commission interviewed over three hundred and fifty persons in all the parishes, and received written submission from over forty. The overwhelming majority of these share the view that ganja should be decriminalised for personal, private use. Many of them are personally opposed to the smoking of it. The Commission is persuaded that the criminalisation of thousands of people for simple possession for consumption does more harm to the society than could be done by the use of ganja itself. The prosecution of simple possession for personal use and the use itself diverts the justice system from what ought to be a primary goal, namely the suppression of the criminal trafficking in substances, such as crack/cocaine, that are ravaging urban and rural communities with addiction and corrupting otherwise productive people.

Decriminalisation of ganja will require appropriate amendments to the Dangerous Drugs Act, in particular Sections 7C and 7D.

The Commission, after very careful consideration of the legal issues involved, concludes that decriminalisation will in no way breach the United Nations Drug Conventions, which have been ratified by Jamaica. Especially is this so, when arguments of human rights, including the proposed Charter of Rights being discussed by Parliament, are taken into account.

Accordingly, the National Commission is recommending:

1. that the relevant laws be amended so that ganja be decriminalised for the private, personal use of small quantities by adults;
2. that decriminalisation for personal use should exclude smoking by juveniles or by anyone in premises accessible to the public;
3. that ganja should be decriminalised for use as a sacrament for religious purposes;
4. that a sustained all-media, all-schools education programme aimed at demand reduction accompany the process of decriminalisation, and that its target should be, in the main, young people;
5. that the security forces intensify their interdiction of large cultivation of ganja and trafficking of all illegal drugs, in particular crack/cocaine;
6. that, in order that Jamaica be not left behind, a Cannabis Research Agency be set up, in collaboration with other countries, to coordinate research into all aspects of cannabis, including its epidemiological and psychological effects, and importantly as well its pharmacological and economic potential, such as is being done by many other countries, not least including some of the most vigorous in its suppression; and
7. that, as a matter of great urgency Jamaica embark on diplomatic initiatives with its CARICOM partners and other countries outside the Region, in particular members of the European Union, with a view (a) to elicit support for its internal position, and (b) to influence the international community to re-examine the status of cannabis.

ACKNOWLEDGEMENT

The National Commission on Ganja acknowledges with gratitude the hundreds of people,

old and young, male and female, artisans, workers, farmers, clerical workers, health, legal and other professionals, managers, unskilled and unemployed persons, policemen, clergy, self-employed, and visitors, who thought the work of the Commission serious and worthwhile enough to be interviewed or to send written submissions, letters and electronic mail.

We thank the Staff of the Office of the Prime Minister (OPM), in particular Mrs Deta Cheddar, the Secretary to the Commission, for facilitating our work, to the OPM in Montego Bay, and to the Local Government Officers and Social Development Commission staff in the parishes, who provided logistic and other support. The Jamaica Information Service made invaluable contribution by bringing the work of the Commission to the general public. Our thanks go as well to the various members of the communications media, who kept alive public interest in the work of the Commission.

Our thanks are extended also to Chantal Ononaiwu and Natalie Ebanks for providing summaries of the laws and oral depositions, respectively, and to Ethnie Miller and Sonjah Stanley for surfing the Internet. Jacqui Getfield, an Assistant to the Dean of the Faculty of Social Sciences at the University of the West Indies, Mona, worked closely with the Chairman. We thank her and other members of the Dean's Office for their support. A special thanks to Dr Stephen Vasciannie and Lord Anthony Gifford for preparing briefs at the Commission's request.

Without the verbatim transcripts provided by the team of stenowriters led by Mrs Lilleth Haughton, the Commission's report would have been seriously handicapped. Special thanks, therefore, to Mrs Winnifred Mannaham and Ms Marjorie Goodgame, and to Miss Elaine Walker, Mr Garfield McKoy, Mrs Yvonne Jenkins, Mrs Clementina Barrett, Mrs Dorothy Ramsay and Ms Ursula Farquharson.

Professor Barry Chevannes, Chairman

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Mr. Anthony Freckleton

Ms. Norma Linton, Q.C.

Mr. DiMario McDowell

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Mrs. Barbara Smith

PREFACE

For well over a hundred years, ganja has become the subject of considerable debate and investigation, beginning with the much celebrated India Hemp Commission of 1894, which was followed by no fewer than ten landmark Commissions and studies. Notable among

these was the Commission of scientists and experts set up by Mayor La Guardia of New York in 1938, which took six years to complete its Report. Despite the favourable reviews of both these Commissions, yet another study was commissioned by the United States National Institute of Mental Health, subsequently renamed the National Institute of Health, on the long term effects of cannabis use. Led by Dr Vera Rubin of the Research Institute for the Study of Man and Professor Lambros Comitas of Columbia University, the study assembled a panel of United States and Jamaican scientists from the University of the West Indies, and carried out their extensive study in Jamaica from in 1970 and 1971. This study did not find any negative effect that might be attributable to chronic ganja use, but although it provided a basis for some States in the United States to ameliorate their positions, the debate has not only continued but intensified, in the wake of considerable increase worldwide in the smoking of cannabis, especially in the North Atlantic countries.

Then in 1977 the Jamaican Government set up a Joint Select Committee "to consider the criminality, legislation, uses and abuses and possible medicinal properties of ganja and to make appropriate recommendations." The Committee while rejecting legalisation, on account of Jamaica's obligation to the 1961 Convention, unanimously concluded that "[t]here was however a substantial case for decriminalizing the personal use of ganja." It recommended specific amelioration of the law, and that there should be "no punishment prescribed for the personal use of ganja up to a quantity of 2 ozs. by persons on private premises." It further recommended that ganja be lawfully prescribed for medicinal use.

The fact that these recommendations have been shelved, and that the work of reputable scientists have been ignored would lead the sceptic to suggest that that could well be the fate of the present Commission. Contributing in no mean way to the scepticism is the factual consideration that the original proscription against ganja was never based on medical evidence, but now medical evidence is being sought to justify its continued ban.

In recommending decriminalisation for personal use, we do not share the pessimism.

After nine months of consultation and reflection, visits to every parish and hearings amounting to 3776 pages of transcriptions, the Commission is convinced that its recommendations will not go the way of those of all previous commissions and studies, notwithstanding the difficulties that will confront the Government due to Jamaica's ratification of UN Conventions that seek to prohibit cannabis, except for research and medical-scientific purposes. The reason for the Commission's sanguineness is what it has uncovered as an overwhelming national and growing international consensus that cannabis should be decriminalised, or at least differentiated from other banned substances.

Nationally, the consensus reaches across the lines that once divided us historically, and that continue to divide us socially, to wit party, class and religion, where none seemed to have existed before, even at the time of Joint Select Committee twenty-five years ago.

Internationally, hardly a week goes by without some intimation of changing attitudes to cannabis. In many States of the United States of America the use of cannabis for medical purposes has been declared legal. Earlier this year Health Canada, Canada's Ministry of Health, issued regulations to create a government-regulated system for using cannabis for medical purposes, the first country to do so. This action has been quickly sanctioned by Parliament which now makes cannabis legal in Canada for terminally ill patients and those suffering certain painful debilities. In June 2001 the British press reports on the launch of a pilot scheme in London in which cannabis offenders are simply warned and sent on their way, instead of being cautioned, arrested, charged and tried. A British Parliamentary Committee is soon to review the matter. British practice lags far behind those of the Dutch

and of a growing number of other European countries which have simply decriminalised the personal use of small quantities of cannabis. Portugal, according to press reports, has taken the very bold step of decriminalising the use of all banned substances. An international momentum is clearly underway.

The Report seeks to capture the extent of this national consensus. This is set out in Chapter 3, the main body of the report, but not before a discussion of the methodology (Chapter 1) by which we have undertaken our work and arrived at our conclusions, and a review of the most up-to-date scientific reports (Chapter 2). Having presented this, the Report turns to consider the legal and political implications of our general recommendation, in Chapter 4. One critical issue raised by many experts and witnesses is the attitude of the United States, and this too is taken into account in the context of discussion on our international treaty obligations. The Report concludes with a summary of the recommendations, in Chapter 5, which is followed by the Appendices.

TERMS OF REFERENCE

Whereas there has been long and considerable debate in Jamaica regarding the decriminalisation or non-decriminalisation of ganja in well-defined circumstances and under specific conditions,

Whereas differing views have been urged on the advisability of allowing the possession of specified quantities of ganja, its permissible use by adults within private premises, while continuing to prohibit its smoking by juveniles or by anyone on premises to which the public ordinarily has access,

Whereas some Groups have proposed that its use as a sacrament for religious purposes ought to be sanctioned,

Whereas there is a body of scientific opinion which attests to its medicinal qualities and clinical value,

Whereas serious questions have been raised as to its impact on health, on patterns of social behaviour, its implications for the economy and possible effects relating to crime and security,

Whereas there are international treaties, conventions and regulations to which Jamaica subscribes that must be respected,

In consideration thereof a National Commission is hereby established, with the following of Reference:

- i. To receive submissions or memoranda, hear testimony, evaluate research and studies, engage in dialogue with relevant interest Groups, and undertake wide public consultations with the aim of guiding a national approach.
- ii. To indicate what changes, if any, are required to existing Laws or entail new legislation, taking account of the social, cultural, economic and international factors.
- iii. To recommend the diplomatic initiatives, security considerations, educational process and programme of public information which will need to be undertaken in light of whatever changes may be proposed.

- iv. To consider and report on any other matter sufficiently relating to the foregoing.
- v. To make such interim reports as it may deem fit and a final Report within a period of nine months from the first sitting.

September 2000

CHAPTER 1

METHODOLOGY

1. Guided by our Terms of Reference the National Commission of Ganja (NCG) visited every parish capital except one, in addition to several other townships. Exception was Black River, the capital of St Elizabeth, substituting instead, on advice, the market town of Santa Cruz and the seaside village of Treasure Beach.
2. Hearings were of two sorts. The first was *in camera*, in order to provide those who wished the privacy to state their own views in confidence, and without fear of intimidation, recrimination or exposure.
3. The Commission also held hearings in public, in squares, markets and street corners of inner city communities and rural townships, in an effort to reach people who might not have been aware of the Commission or its presence, or who, though aware would otherwise not bother to respond.
4. Aware that a Commission set up to look into the decriminalisation of ganja at the present time would necessarily attract more of those in favour of changing the laws than those against any change, and fearing that in the midst of a vocal majority in favour of decriminalisation those against any amelioration might be inclined to be reticent, the Commission made it a special point of inviting the views of those it believed held conservative positions. Thus, apart from declared Christians interviewed as part of the general public, the Commission interviewed members of the Linstead Baptist Church, the President and students of the United Theological College of the West Indies, His Grace the Archbishop of Kingston, the Lord Bishop of Jamaica, the Chairman of the Church of God in Jamaica, the Reverend Dr Garnet Brown, and two theologians of St Michael's Seminary.
5. Written submissions were also received voluntarily from many persons, most of them living in distant parts of Jamaica or abroad, by post or electronic mail.
6. Scores of organisations and professionals were targeted and invited to submit. While no more than 40% of organisations responded, due largely, we believe, to the fact that most had not worked through a position, those that did were of enormous import to the Commission.
7. The Commission also undertook a literature review, focusing on the most up-to-date

summaries, owing to the voluminous corpus of medical and scientific studies that have been on-going all over the world in the course of the last twenty-five years.

8. A comprehensive review of the relevant laws and United Nations Conventions was made, and expert advice sought from legal luminaries.
9. Finally, the Commission availed itself of the opportunity of one of its members on a business trip to The Kingdom of The Netherlands to familiarise itself with practices in that country, one of a few in Europe to have *de facto* decriminalised and regulated cannabis use in small quantities.

CHAPTER 2

THE MEDICAL-SCIENTIFIC LITERATURE

INTRODUCTION AND BACKGROUND

Cannabis sativa plant is called 'ganja' in India and Jamaica, 'marijuana' in North America, 'hif' in North Africa and 'dagga' in South Africa. The plant produces a resin often referred to as 'hashish'.

As early as 2737 BC the Chinese Emperor Sheng Nun described cannabis as a superior herb and for centuries it was embraced unreservedly (Cole 2000). There are records of its use in Arabic medicine dating back to the 8th century. Cannabis sativa was used for over a thousand years as a textile and medicine in Arabia, Mesopotamia, Persia, Egypt, China, India and extensive areas of Europe (Lozano 2001). In 1901 a United Kingdom Royal Commission concluded that cannabis was relatively harmless and not worth banning (Cole 2000).

Cannabis sativa was classified in the 18th century by Carl von Linne. It was first admitted to western pharmacopoeias in the 1800s. In 1839 W.B. O'Shaghnessy at the Medical School of Calcutta observed its use in the indigenous treatment of various disorders and found that tincture of hemp was an effective analgesic, anticonvulsant and muscle relaxant (Grinspoon 2000). It was included in the British, United States and Indian Pharmacopoeias up to 1932, 1941 and 1966, respectively.

Ganja was brought to the West Indies in the middle 19th century by East Indian labourers who came primarily to Guyana, Trinidad and Jamaica. Up until the early years of the 20th century it was widely used as a folk medicine and did not appear to constitute a major social problem.

Beginning in the 1920s, interest in cannabis as a recreational drug grew. During the 1960s and 1970s there was a large increase in the use of smoked cannabis as an intoxicant in the USA and Europe. Starting in the 1980s there has been renewed interest in the potential medicinal uses of cannabis and its derivatives.

RESEARCH

There have been many commissions over the years looking at the effect of cannabis. Some

of these are:

- Indian Hemp Drug Commission
1894
- Panama Canal Zone Report
1924
- LaGuardia Commission Report
1944
- The British Wooten Report
1969
- The Canadian La Dain Commission Report
1970
- National Commission on Marihuana and Drug Abuse (USA)
1972
- The Dutch Baan Commission
1972
- Commission of the Australian Government
1977
- National Academy of Science Report (USA)
1982
- Report by the Dutch Government
1995
- Report to the House of Lords (Britain)
mid 1990s

There is also extensive research at a number of levels. The use of cannabis engenders strong feelings and many of the research reports reflect this. There is a strong body of opinion that sees cannabis as harmful and advances 'scientific evidence' to prove this. On the other hand there is an equally strong body of opinion that feels that cannabis has been unnecessarily vilified and that it has relatively minor harmful effects and great potential for medicinal use. This group also advances 'scientific evidence' to prove its point. It is therefore necessary to analyse the 'scientific evidence' bearing in mind the source and especially to note those items agreed on by both groups and done by independent groups such as the World Health Organization (WHO).

EPIDEMIOLOGY OF GANJA USE IN JAMAICA

Ganja is widely used for recreational, medicinal (folk medicine) and religious purposes in Jamaica. The 1990 Carl Stone study among respondents age 15 and over island wide showed 47% in the Metropolitan areas and 43% in the rural areas who had ever used ganja. The usage was higher among males than females but cut across all social, educational and economic groups. In the upper income group 46% of males and 25% of females had tried ganja, the figures for the middle income group were 33% of males and 10% of females, and for the lower income group 52% of males and 18% of females.

A national lifestyle survey carried out by the Ministry of Health in 1993 reported that among Jamaicans 15 — 49 years old 37% of the men and 10% of the women had ever used ganja.

A 1997 survey by Ken Douglas among 8,000 in-school adolescents, grades 9 to 13, found 27% had had lifetime ever-use of smoked ganja, a significant increase from the 20% reported in a 1986 school study. In the 1997 study 20% reported ever use of ganja tea. Turning to current use over the preceding 30 days, the study showed 8% had smoked ganja and 6% had had ganja tea.

Recent data coming out of Treatment and Rehabilitation Centres published in the National Council on Drug Abuse *Infosum* for October 2000 shows that some of the clients admitted with a history of smoking ganja had their first use as early as between 5 and 9 years old.

Of 282 clients who went into treatment for a ganja habit in 1999-2000, 4% started using the drug from age 5 to age 9, 26% from age 10 to age 14 and 3% from age 15 to age 19, that is one-third of them started smoking ganja at the age of 19 or below. These figures show the widespread use of ganja in Jamaica and the early age of initiation.

Other studies have sought to look at any link between traffic accidents, trauma and drug use. The role of alcohol is well recognised but the possible causative role of ganja is less clear. Francis *et al.* (1995), in a pilot study of alcohol and drug-related traffic accidents and deaths in two Jamaican parishes, found evidence of alcohol intake in 77.5% of fatalities and 35.5% had alcohol levels above the legal acceptable limits; 22.5% of road traffic fatalities tested positive for cannabis and 3.2% for cocaine.

McDonald *et al.* (1999) took sera and urine samples from 111 trauma patients seen at the Accident and Emergency Department of the University Hospital of the West Indies, Jamaica, over a three-month period. Alcohol levels were tested in the blood and the urine was tested for metabolites of cannabis and cocaine. Results showed 38% of patients negative for any drug, 62% positive for one or more drugs; 15% for alcohol only, 15% for alcohol and cannabis, 25% for cannabis only, 5% for cannabis and cocaine, 1% for cocaine only, and 1% for all three.

Many patients admitted to the psychiatric services on the island report ganja use. For example, approximately 60—80 % of males admitted to the Cornwall Regional Hospital Acute Psychiatric Unit in 1999 gave a history of ganja use, although this was not necessarily the reason for their admission (Abel 2001).

PHARMACOLOGY

Cannabis sativa contains 400 known chemicals. The family of chemically related 21-carbon alkaloids found uniquely in the cannabis plant are known as cannabinoids. There are sixty different cannabinoids. One of these, *delta-9-tetrahydrocannabinol* (THC), is the most abundant and accounts for the intoxicating properties of cannabis. THC dissolves readily in fat but not in water. When smoked, THC is rapidly absorbed into the blood stream, giving perceptible effects within minutes. When taken by mouth peak effect may not occur for hours but last much longer. The THC also persists in the brain longer than in the blood, so that psychological effects persist for some time after the level of THC in the blood begins to fall.

THC is widely distributed in fatty tissue of the body, whence there is slow release, thus producing low levels of THC in the blood for several days after a single dose, although

there is no evidence that any significant pharmacological effects persist for more than 4-6 hours after smoking and 6-8 hours after ingestion.

It is now recognised that THC interacts with a naturally occurring system in the body, known as the cannabinoid system. THC takes effect by acting upon cannabinoid receptors. Two types of cannabinoid receptors have been identified, namely the CB1 receptors and the CB2 receptors.

CB1 receptors are present on nerve cells, in the brain and spinal cord as well as in some peripheral tissues; CB2 receptors are found mainly in the immune system and are not present in the brain (NCDA 1998).

The CB1 receptors are distributed differentially in the various regions of the brain, in a pattern that is similar throughout a variety of mammalian species, including humans. Most of the receptors are in the basal ganglia, cerebellum, cerebral cortex and hippocampus. A rough correlation appears to exist between the distribution and some of the effects of cannabis. For example, binding sites in the hippocampus and cortex are linked to the subtle effects of cannabis on cognitive function, while those in the basal ganglia and cerebellum may be associated with cannabis produced ataxia (WHO 1997).

From animal experiments, CB1 receptors seem to mediate pain relief, memory impairment, control of movements, lowering of body temperature and to reduce gut activity. It is also assumed that they mediate the intoxicant effects of THC (NCDA 1998).

Little is known about the physiological role of the more recently discovered CB2 receptors, found in macrophages (white blood cells) in the spleen, but they seem to be involved in the modulation of the function of the immune system.

The presence of this cannabinoid system has implications for further research into the effects of cannabis on the body and the potential beneficial uses of cannabis.

EFFECTS OF CANNABIS

Acute effects

A state of euphoric intoxication is induced. There is mild intoxication, relaxation, increased sociability, heightened sensory perception and increased appetite. In higher doses acute effects can include perceptual changes, depersonalisation and panic (WHO 1997).

Other behavioural changes associated with cannabis intoxication include loss of time sense, sensation of 'high', anxiety, tension and confusion (Matthew *et al.* 1993).

Intoxication with cannabis leads to slight impairment of psychomotor and cognitive function, which is important for those driving a vehicle, flying an aircraft or operating machinery. Subtle impairment of cognitive function may persist for twenty-four hours.

There is sufficient consistency and coherence in the evidence from experimental studies and studies of cannabinoid levels among accident victims to conclude that there is an increased risk of motor vehicle accidents among persons who drive when intoxicated with cannabis (WHO, 1997). Cannabis can impair various components of driving behaviour, such as braking time, starting time, and reaction to red lights or other danger signals. However, persons under the influence of cannabis may perceive that they are impaired and where they can compensate, they do so.

Such compensation may not be possible when they are presented with unexpected events and hence the risk of accidents remains higher following cannabis use (WHO 1997).

A study carried out on the effects of cannabis on aircraft pilot performance showed that cannabis use impaired flight performance at 0.25, 4, 8, and 24 hours after smoking. These results suggest that human performance while using complex machinery can be impaired as long as 24 hours after smoking as little as 20mg of THC, and that the user may be unaware of the drug's influence (Leirer *et al.* 1991).

There is a short-term effect on the cardiovascular system. There can be an increase in the heart rate and lowering of the blood pressure. This would be of concern in persons with ischaemic heart disease (angina).

A single dose of cannabis for an inexperienced user, or an over-dose for a habitual user, can sometimes induce a variety of intensely psychic effects, including anxiety, panic, paranoia and feelings of impending doom. These effects usually persist for only a few hours.

Signs of intoxication include blood-shot eyes, lack of coordination, enhanced sensations and perceptions, increased appetite, dry mouth, possible dizziness and nausea.

Effects on the Brain—Psychiatric/Psychological

Cannabis (THC) is said to affect the neurons (brain cells) in the information processing section of the hippocampus, the part of the brain that is responsible for memory and the integration of sensory experiences with emotion and motivation.

Literature on both sides recognise that short-term memory can be affected in the acute phase of ganja intoxication. This does not seem to affect recall of previously learned items but does appear to interfere with the learning of new material. Researchers note great variation in results to cognitive testing and point out that individual response to marijuana varies considerably (Zimmer and Morgan 1997).

Marijuana's effect on cognition in the real world seems to depend on the time and place people choose to use marijuana and the tasks they are performing. In the laboratory, marijuana temporarily impairs short-term memory and learning. In real world structured settings, such as the classroom, it is likely to have similar effects (Zimmer and Morgan 1997).

Several studies have shown that cannabis appears to increase the perceived rate of the passage of time. Cannabis is also known to impair psychomotor performance in a wide variety of tasks, such as handwriting and tests of motor coordination.

There is less agreement about the long-term effects of ganja on the brain. Some authorities state that chronic marijuana use interferes with the interplay of chemical and electrical impulses between brain cells, causes shrinkage and death of brain cells. However, other authorities point out that the experiments showing death of brain cells were carried out in animal models exposed to concentration of THC about 100-fold higher than even a heavy marijuana user would be exposed to. It is stated that in other studies exposing monkeys to amounts equivalent to 4-5 marijuana cigarettes a day for a year these findings could not be replicated (Zimmer and Morgan 1997). The early claims of gross anatomical changes in the brains of chronic cannabis users have not been substantiated by later studies with high-resolution computerized tomography, in either humans or primates (Rimbaugh *et al.* 1980; Hannerz and Hindmarsh 1983).

It is felt that learned behaviours, which are dependent on the hippocampus, deteriorate after chronic exposure to THC and that chronic abuse of cannabis is associated with impaired attention and memory. It is also reported that prenatal exposure is associated with impaired verbal reasoning and memory in pre-school children (Abel 2001).

Zimmer and Morgan point out that during the past thirty years, researchers have found, at most, minor cognitive differences between chronic marijuana users and non users, and the results differ substantially from one study to another. Based on this evidence, it does not appear that long-term marijuana use causes any significant permanent harm to intellectual ability. Even animal studies, which show short-term memory and learning impairment with high doses of THC, have not produced evidence of permanent damage.

Studies (Fletcher *et al.* 1996) have shown that the long-term use of cannabis leads to subtle and selective impairment of cognitive functioning. Prolonged use may lead to progressively greater impairment, which may not recover with cessation of use for at least 24 hours (Pope and Yurgelum-Todd 1995) or 6 weeks (Solowij *et al.* 1991), and which could potentially affect functioning in daily life.

Not all individuals are equally affected. The basis for individual differences needs to be identified and examined. There has also been insufficient research to address the impact of long-term cannabis use on cognitive functioning in adolescents and young adults, and on different age groups and genders (WHO 1997).

The Diagnostic Statistical Manual IV for classification of disorders and diseases recognises the following conditions:

- Cannabis Dependence
- Cannabis Abuse
- Cannabis Intoxication
- Cannabis Induced Psychotic Disorder
- Amotivational Syndrome
- Cannabis Induced Anxiety Disorder
- Cannabis Induced Mood Disorder.

Cannabis dependence is seen as compulsive, habitual use and not a physiological dependence or addiction. Tolerance to most of the effects of cannabis has been reported in individuals who use cannabis chronically (Abel 2001).

Studies conducted over many decades in a variety of settings have found that when high-dose marijuana users stop using the drug, withdrawal symptoms rarely occur and when they do, they tend to be mild and transitory (Zimmer and Morgan 1997). The presence of withdrawal symptoms is one of the markers for addiction. It is therefore felt that cannabis is a weakly addictive drug but does induce dependence in a significant minority.

However, in the WHO report, **Cannabis: a health perspective and research agenda**, it is stated that clinical and epidemiological research has clarified the status of the cannabis dependence syndrome. A reduced emphasis on the importance formerly attached to tolerance and withdrawal symptoms in diagnostic criteria for dependence has removed a major reason for scepticism about the existence of a cannabis dependence syndrome.

Research using standardised diagnostic criteria has produced good evidence of a cannabis dependence syndrome that is characterized by impairment, or loss of control over use of the substance, cognitive and motivational handicaps which interfere with occupational performance and are due to cannabis use, and other related problems such as lowered self-

esteem and depression, particularly in long-term heavy users. As with other psychoactive substances, the risk of developing dependence is highest among those with a history of daily cannabis use. It is estimated that about half of those who use cannabis daily will become dependent (Anthony and Helzer 1991).

Since tolerance and withdrawal symptoms are still widely regarded as diagnostic criteria of substance dependence, it is worth noting that there is abundant experimental evidence of tolerance to many of the effects of cannabis. There is not yet universal agreement about the production of a withdrawal syndrome (WHO 1997).

Apart from the acute psychic effects noted previously, cannabis intoxication in some instances may lead to a longer lasting toxic psychosis involving delusions and hallucinations that can be misdiagnosed as schizophrenic illness. This is transient and clears up within a few days of termination of cannabis use.

It is well established that cannabis can exacerbate the symptoms of those already suffering from schizophrenic illness and may worsen the course of the illness (NCDA 1998; WHO 1997).

The occurrence of an "amotivational state" in long term heavy cannabis users with loss of energy and the will to work has been postulated. However some feel that this represents nothing more than an ongoing intoxication (NCDA 1998).

Studies of high school students show that heavy marijuana use is associated with academic failure. Heavy marijuana users have lower grades and lower career aspirations than occasional users or nonusers. Heavy marijuana users are also more likely than occasional users or nonusers to drop out of school before graduation. However, most high school students who use marijuana heavily were performing poorly in school before they began using marijuana. Most have a number of emotional, psychological, and behavioural problems, often dating back to early childhood (Zimmer and Morgan 1997). It is therefore possible that the underlying problems lead to the marijuana use rather than the marijuana being the cause of all the problems. When studies control for other factors marijuana use makes no significant contribution to high school student's academic performance (Zimmer and Morgan 1997).

It is noted that there are a number of factors that influence the effects cannabis may have on an individual. These include:

- Potency of the cannabis (the THC content of marijuana is said to have increased from the 1960s to the present time and varies among different plants)
- The route of administration
- The smoking technique
- The dose
- The setting
- The user's past experience
- The user's unique biological vulnerability to the effects of cannabis.

Effects on other organ systems

Respiratory System

Tobacco smoking causes a number of lung diseases, including chronic bronchitis, emphysema and cancer. Except for their active ingredients—nicotine and cannabinoids—bacco smoke and marijuana smoke are similar with a greater concentration of the

carcinogenic benzanthracenes and benzpyrenes in marijuana smoke.

In the United States, marijuana smokers typically inhale more deeply and retain smoke in their lungs longer than tobacco smokers. As a result, marijuana smokers deposit more dangerous material in the lungs each time they smoke. However it is said to be the total volume of inhaled toxic material over time that matters and not the amount inhaled per cigarette. It is further postulated that even heavy marijuana smokers never reach the smoke consumption levels of heavy tobacco smokers (Zimmer and Morgan 1997).

Theoretically, the risks to the respiratory tract of smoking marijuana are similar to those of tobacco smoking. In human studies, it has been shown that the principal respiratory damage caused by long-term cannabis smoking is an epithelial injury of the trachea and major bronchi (WHO 1997). The alveolar macrophage, the key cell in the lung's defence against infection, has been shown to be impaired by cannabis smoke in both animal and human studies (WHO 1997). Studies suggest that regular cannabis consumption reduces the respiratory immune response to invading organisms. Further, serious invasive fungal infections as a result of cannabis contamination have been reported among individuals who are immuno-compromised, including a series of patients who were affected by AIDS (Denning *et al.* 1991).

These findings suggest that persistent cannabis consumption over prolonged periods can cause airway injury, lung inflammation, and impaired pulmonary defence against infection. Epidemiological studies that have adjusted for sex, age, race, education, and alcohol consumption, suggest that daily cannabis smokers have a slightly elevated risk of respiratory illness compared to non-smokers.

Reproductive System

Studies, including a Jamaican study, have shown lowered sperm count and motility in ganja smokers compared to non-smokers (NCDA 2001). There is no demonstrable difference in testosterone level or levels of female sex hormones. In neither male nor female have researchers produced evidence of permanent harm to reproductive function from either acute or chronic marijuana administration. There is no convincing evidence of infertility related to marijuana consumption in humans (Zimmer and Morgan 1997).

Results from research looking at effects of cannabis smoking in pregnancy vary. Some reports point to an increased risk of early foetal death, decreased foetal weight and premature birth. In animal studies, THC has been shown to produce spontaneous abortion, low birth weight and physical deformity—but only with extremely high doses, only in some species of rodents, and only when the THC is given at specific times during pregnancy. Studies with primates show little evidence of foetal harm from THC (Zimmer and Morgan 1997).

There is reasonable evidence that cannabis use during pregnancy impairs foetal development, leading to a reduction in birth weight, perhaps as a consequence of shorter gestation, and probably by the same mechanism as cigarette smoking, namely, foetal hypoxia (WHO, 1997).

There is ongoing research, for example the Ottawa Prenatal Prospective Study, looking for possible effects of prenatal exposure to cannabis on later development. So far there is no consistent evidence of any significant difference in the development of children exposed to prenatal cannabis as against those not so exposed. The study suggests that any long-term consequences of prenatal exposure to the child are very subtle. (Fried 1980; Fried 1995).

Another study suggests that in utero exposure to cannabis can affect to some degree the mental development of the growing child (Day *et al.* 1994).

MEDICINAL USES OF CANNABIS

The medicinal uses of cannabis are well documented in the modern scientific literature. Using either smoked cannabis or extract preparations from the cannabis, researchers have conducted controlled studies.

The broad range of potential therapeutic applications of cannabinoids reflects the wide distribution of cannabinoid receptors throughout the brain and other parts of the body. The possibility of distinct subtypes of cannabinoid receptors and the probable development of new compounds to bind selectively to these receptors, as either agonists or blockers, may well open the door to the selective treatment of a number of disorders.

Areas in which cannabis has been shown to have therapeutic use are:

- Reducing nausea and vomiting
- Stimulating appetite
- Promoting weight gain
- Diminishing high intraocular pressure from glaucoma

There are also reports of use of cannabis for:

- Reduction of muscle spasticity from spinal cord injuries
- Reduction of muscle spasticity and tremors in multiple sclerosis
- Relief of migraine headaches
- Depression
- Seizures
- Insomnia
- Chronic pain

Although an anti-emetic effect of THC had been suggested as early as 1972, the first report of a placebo-controlled trial came in 1975 from one of the top oncology centres in the USA (Hollister 2001). An oral preparation, dronabinol, has been used especially in cancer chemotherapy patients for control of the side effects of nausea and vomiting. Although smoked marijuana is often preferred by the patients, whether it is superior to orally administered THC has not been tested in controlled comparisons (Hollister 2001). Smoked cannabis is more immediate in its effects than oral THC. Cannavert is also available for use in motion sickness.

The use as an appetite stimulant is of particular use in cancer and AIDS patients. In the USA, approximately 16 per cent of the total AIDS population suffer from the progressive anorexia and weight loss known as AIDS wasting syndrome. An open pilot study of dronabinol in patients with AIDS-associated wasting syndrome showed it effective in increasing weight as well as being well tolerated (Hollister 2001).

The international literature recognises the role cannabis can have in reducing intraocular pressure in glaucoma. Local researchers, Professor Hon. Manley West and Dr. George Lockhart developed the extract Cannasol, which is now registered and used in the treatment of glaucoma. Another product, Asmasol, was developed based on the Cannasol research, for the treatment of cough, cold and bronchial asthma. There was also work done by the late Professor Sir John Golding and Professor West towards developing a protocol for use of a cannabis preparation in the control of pain in terminally ill patients (NCDA 1998).

In Europe, cannabis has been anecdotically reported to help in the symptoms associated

with multiple sclerosis. Published trials have shown some positive results especially for spasticity, the pain associated with spasticity, tremor and urinary bladder control (NCDA 1998). An antispasmodic action of THC was confirmed by the first clinical study (Petro and Ellenberger 1989).

There is undoubtedly need for much further research into the potential of the medicinal use of cannabis and its extracts.

CONCLUSION

Information on the effects of cannabis on physical and psychological functioning has increased greatly, as has knowledge of the extent and patterns of use. However, there is still a need for further research in several important areas, including clinical and epidemiological research on human health effects, chemistry and pharmacology, and research into the therapeutic use of cannabinoids. Moreover, there are important gaps in knowledge about the health consequences of cannabis use (WHO, 1997).

There needs to be continued objective research and ongoing public education about all aspects of Cannabis sativa use.

CHAPTER 3

THE FINDINGS

A. WIDE PUBLIC CONSULTATION

The overwhelming majority of persons appearing before the Commission feel that ganja should be decriminalised, but are united in restricting its use to private space and to adults. Their arguments are presented in this section.

(1) personal benefits

These range from miraculous-like cures to relief from simple colds, but they include well-known ailments and symptoms such as asthma and glaucoma. The Commission received many personal testimonies of benefits from either smoking ganja or ingesting it as tea or medicine steeped in rum. We heard the tale of a woman whose beast of burden was cured from the ashes stuffed in a wound; of a man stricken as a schoolboy with dengue fever, who drank the tea and was cured overnight; of a former Jamaica Constabulary Force member whose chronic hypertension, after nineteen years of prescribed medication, completely disappeared with the now regular smoking of ganja. We quote the story of a prominent professional stricken with cancer, who not only was "violently against ganja in the first place", but also at one time shared responsibility for ensuring that the country's exports were drug-free. Saved by the anti-nausea properties of ganja, but carrying a moral burden of falling on the wrong side of the law, he carefully and in measured wording argued that *"to impose restrictions and to impose the taint of illegality on something that may be used really as a home remedy, like mint tea or ginger tea or cerasse tea or whatever it is, creates an additional burden for those who are ill and imposes, it seems to me, a situation which reduces their ability to fight and overcome the condition which they are in"*.

The stories of the personalised benefits of ganja are so deeply entrenched in the folklore of the people that we do not think any warnings as to its danger or attempt to suppress its use by punitive sanction stand any chance of success. More so because of recent scientific advances in manufacturing legal drugs from it as well as much publicised changes permitting "medical marijuana" at State levels in the United States and in Canada.

(2) God and the natural order

The Commission interviewed many people for whom the present laws fly in the face of God, the Creator. Their argument is that ganja is a natural, not a man-made, substance, given by God to be used by mankind as mankind sees fit, the same way that He provides other herbs and bushes. As a natural substance, ganja does not even have to be cultivated. Spread by birds and other vectors, it grows wild. It therefore cannot be eradicated. God also created other poisonous herbs but none of these is subject to the prohibition imposed by the law. In the simple words of a thirty-two year old handyman in Montego Bay, *"the weed don't really have no revenge carrying because it comes from God. He created all earth, trees, seeds, you know, so if you are going to fight against it you are fighting against what He does. You already know that man fight against a lot o' things that He does. If you are going to charge a man for it you have to charge God because God make it."* Or in the words of a sixty-five year old retired postal service worker, *"I hate to hear the word legalise, because how can you legalise the thing that God create? People must think weh dem talking, man. God say every herb is made for man, so God wen wrong when he mek ganja? God wen wrong? I tell you I hate to use the word legalise because you can't legalise weh God create, because God a God!"*

Among many people we spoke with in the streets, the influence of Rastafari mythology was clearly felt. One eighty-year old male Evangelist, who spoke of ganja as a creation of God, echoed the belief that it first appeared on the grave of King Solomon.

With such deeply-held religious views, which cut across gender and age, many regard the existence and prosecution of the laws against ganja as evil.

(3) not a crime

We met no one who regarded the simple possession or use of ganja as a crime in itself. There were those few, who, opposed to any change whatever, saw it as criminal by definition, that is criminal because the law says it is. But of the hundreds of people who spoke no one saw the drinking of ganja tea, or folk remedy use, as a socially harmful act belonging to the category of offenses against other persons. In other words, ganja use to them is not immoral. Many Christians found smoking in general to be reprehensible, if not sinful, and so categorised ganja smoking, but they too saw nothing essentially criminal about drinking it for tea or using it for medication.

(4) inequity

Universally, in the Commission's visits throughout the island, the views were everywhere the same: it was grossly unfair that alcohol and tobacco already proven to be more harmful substances were legal but ganja was criminal. *"What happen to tobacco weh a kill nuff people and a give people cancer"*, angrily asked a young man in an inner city community, *"how dem legalise that and have that pon di shelf?"* His colleague-participant in the street corner interview before the Commission, replied: *"A pure hypocrisy dem keep up pon we. You know what a man tell me se and me have fi look pon him? The man look pon me and say, 'Is not everybody weh you see poor is fool'. And one o' di thing weh dem a use pon wi is dem thing deh like herb"* [This is all hypocritical. Do you know what a man told me that

made me respect him? The man said, 'Not everyone poor is a fool.' And herbs is one of those things that think we do not see through].

The difficulty of reconciling the legal status of tobacco, a known cause of lung cancer, or alcohol, a known cause of death, with the illegal status of ganja, not known in its entire history for having been the cause of a single death, led some to speculate that this was a form of the whiskey-drinking classes trying to keep down the poor man from having his "poor man whiskey", or of the "white people" suppressing the colonial peoples of Asia, Africa and the Americas, or, finally, of the liquor and tobacco companies stifling potential competition.

(5) alleviation of stress

Stress alleviation is a personal benefit, but we single it out because of the peculiar psychological effect attributed to it by so many we spoke with. A man told us of his experience, when, as a young man, he had taken a resolve to kill a policeman who was relentless in harassing him, but how a smoke of ganja calmed him, put the conflict in perspective, and saved the lawman's life as well as his own.

This calming effect was cited by many. According to one rural landowner who himself has been a chronic user, the legalisation, which he believed could not be mooted at the present time, would *"reap untold benefits in terms of social calm, in terms of reducing the friction that exists between the people and the police"*. His views were echoed by a thirty-two year old inner city resident, who explained that *"more time you wi deh pon the road and some likl punk wi get you pissed off, and you do so bam, you burn a spliff, you cool, you just easy. It calm you down. That is what me know it do, it do for the body. It calm you."*

A resident in yet another inner city community explained to the Commission the importance of ganja in the prisons: *"You see all a man weh deh pon long sentence? A herbs a man use and run him sentence! That is why you see herbs haffi smuggle inna jail, no care what happen—herb dem man-deh use and run dem sentence!"* [Take the case of a man on long sentence. It's the herbs he uses to cope with his sentence. That's why the herbs has to be smuggled into prison, no matter what—it's herbs those men use to cope with their sentences].

He went on to say of themselves, *"We weh deh pon di road, we a prisoner, too, because we deh in a little segment. A herb we have fi use fi keep our control said way! A it mek we can go on day to day underneath dem stress ya weh wi a face. A herb wi have fi bun more time fi hold it and so that we don't do silly things!"* We understood him to mean that they too, although technically free, were prisoners of the ghetto, their "little segment", and resorted to ganja to keep control over themselves, to keep from doing "silly things", that is running afoul of the law.

(6) criminalising the non-criminal

Many were the submissions to us that addressed the danger to society already posed by criminalising ganja. A corollary of (c) above, the lumping of ganja users together with men who have committed serious crimes against the person only serves to corrupt them. According to many, the jailed ganja offender is often forced into a situation where unless he exhibits "bad man" ways he cannot survive the lock ups, or where he develops sympathy for hardened criminals or enter into relations with them. Having gone in as a law-abiding person, except for ganja, which no one regards as wrong, he returns a bitter opponent of the rule of law.

Others, including one officer of the law, identify the criminal problem with ganja as coming not from its effect on the user but from the illegal and immoral activities surrounding the growing and trafficking of it. Their views coincide remarkably with the views of experts who cite the effect of Prohibition in the United States up to the 1930s. Complete legalisation of all banned substances, these experts argue, would cripple the criminal syndicates and organisations that are reaping vast amounts of wealth controlling the production and distribution, and by placing the emphasis on education and rehabilitation would be less costly to State and society than the efforts to suppress.

crack/cocaine

Almost everywhere it went, in town, in country, the Commission heard tell of the scourge which crack/cocaine addiction has had on communities. In terms of social impact, ganja use was far less a threat than cocaine addiction. A sixty-two year old housewife in a passionate statement, told the Commission:

As I stand up here, I have a son and him have eight subjects in CXC. And if I stand up here him will sell me. I can't take mi eye off him. Him break mi place and him do all manner of evil. Sometimes me say me would a buy something and poison him kill him. Me naw tell you nuh lie, you know. Mi say I woulda give him a good plate a food and see him dead. Mi tired a it, me get fed up. Well if him did a smoke the ganja, me nuh think him woulda gwaan so. The coke mash up the people-dem. A dat the people must hail out on, not the ganja. I don't smoke and I don't know what dem get from it, but I believe a di coke dem fi stan up pon.

This mother's pain was intense and personal. But other depositions made before the Commission represented that serious erosion of the social fabric, which once guaranteed the stability and sociality of community life, has been taking place. The corruption crack/cocaine has brought about poses, they believe, a serious threat to the society. They link the call to decriminalise ganja to the urgent need to curb the cocaine menace.

B. VIEWS OF EXPERTS AND INFLUENTIAL LEADERS

Written and oral submissions were made by a number of professionals, volunteers and persons of influence in the country, whose expertise and special interest make their views compelling.

(1) Professional and volunteer workers with Addicts

In their own individual capacities, several professionals and volunteers declared their support for the decriminalisation of ganja to the extent set out in the Terms of Reference. Their arguments cover some of those proffered by the general public, for example the inconsistency where tobacco and alcohol are concerned, but include as well:

- i. the fact that ganja is not manifestly harmful for the majority of people who use it in one form or another;
- ii. the inability to suppress it by legal means;
- iii. the wasteful use made of the criminal justice system, in terms of its human and financial resources; and
- iv. the compromising of the anti-drug message.

In relation to (iv) the views of two experts are well worth quoting *verbatim*.

Expert 1: In our school programme there is no perception of harm in the use of ganja, none whatsoever. So, let us say the education is the key.

Expert 2: It is very, very hard to convince these young people that they should not smoke it.

Expert 1: Personally, I am not so sure whether decriminalising would make a big difference. Our young people are trying to give us a message and we are not listening to them. They have not bought [our] message, and for some reason the education that we have been giving them maybe has not been clear. They are getting cross-messages.

Chairman: Are you saying that young people are using... ganja as a way of telling us something?

Expert 1: I think the fact that the usage is so widespread and it is growing, not just here, but right throughout the world, I think they are trying to tell the world that "we are not buying your message".

Expert 2: I think what you are saying is that the type of education that is out there, what young people are saying is that "we don't believe that is so". So it comes back to who develops the policies and who develops the materials. Most of them [who develop the policies and materials] don't really understand what this drug is all about anyway. And if you tell a child that marijuana is going to impair their memory, but their mothers and their grandmothers and everybody around them have been using it for the last twenty years and they don't see any harm, they are not going to believe the message. So I think, when we look at the message, the type of education, it needs to be developed by people who really know, people who are in recovery, people who work with young people every day, people who used the drugs themselves.

Expert 1: Not tying the message of ganja in with other drugs. There has been a tendency that a drug is a drug is a drug. And drug education went across [like that]. And, really, from my own experience working with young people, that is not working. We have to be much more specific in the fact that we are doing education on ganja, that it is specific and we are not linking it with a drug like cocaine.

The gist of this excerpt is that current education to discourage ganja use by children lacks credibility. For it to succeed, ganja should be separated from hard drugs, its criminal status reversed, and the education around it framed and carried by people with personal experience of the substance. All the experts, and indeed all but a very few of the over two hundred users and non-users who made depositions, argue that ganja, particularly in the form of smoking, should be kept away from children. Many were the examples brought to us of students, almost always boys, who became demotivated after beginning to smoke ganja. To convince such young people to refrain requires an entirely different strategy from that adopted for the control of other substances, particularly crack/cocaine.

(2) Counselling Psychologist

A trained Counselling Psychologist, with many years experience working at the Bellevue Mental Hospital, and in managing a drug rehabilitation centre, spoke on his own behalf.

Carefully distinguishing between the legal status of cannabis and its effects, he presented a case that the legal status of the substance was not due to its effects. The same was true of the 1919 ban on cocaine under the Harrison Act in the United States, as well as the ban on alcohol and the lifting of the prohibition in 1933. The 1937 ban on marijuana was not guided by medical knowledge. What motives there were, he opined, could have been economic, but he was convinced from his historical research that medical motives were not

the reason. Turning to the effects, the Psychologist pointed out that it was true that ganja had ill effects, in particular as a dis-inhibitor in young users. But, both those who supported and those who opposed the status quo, by being one-sided, were victims of a jaundiced view. "Those who support the legalisation sometimes speak as if the drug has absolutely no harmful effect. I think they are speaking maybe not out of ignorance but out of anger for the lies that have been told on the drug, to the extent that they ignore some of the truths in their defense of it. The harm that marijuana can cause cannot in any way justify it being illegal. If that were the case, we should maybe make ackee illegal, because by far ackee contains one of the most deadly substances that human beings can ever come in contact with."

He supports decriminalisation, pointing to the threat to the rule of law entailed in maintaining laws that cannot be enforced.

(3) CODAC

Under the National Council on Drug Abuse, scores of Community Development Action Committees (CODACs) operate at community level. The Commission heard from individual members in several areas of the country, all of them supporting decriminalisation. One of the most persuasive, however, was the Coordinator of a CODAC from a working-class community in Kingston.

"The community supports conditionally the decriminalisation of possession of ganja for personal use, not because it is harmless—all smoking is harmful, but under the present law otherwise law-abiding persons are treated as criminals. The smoking of ganja should be a health concern and not a criminal matter; not an act for punishment but a matter of medical instruction and help. In addition, for every individual arrested and charged, several are not apprehended. One youth is held at a corner and taken to the police lock-up, but hundreds of individuals blow ganja smoke in the face of other spectators at the National Stadium unchallenged. Feelings of partiality and injustice are harboured and people lose respect for the system of law."

The Coordinator addressed several critical issues. One was the gap created between the community and the police. Young men refrain from joining the well organised Police Youth Clubs because as ganja smokers the clubs bring them too close to the police, who they feel more easily frame a smoker than a non-smoker.

The women also—mothers, sisters, girlfriends—dislike the police for harassing their sons, brothers and spouses over a splif "while they, the police, are having dealings with the ganja men."

More critical is the need to look beyond the fact that young people are using cannabis, to why they are using it. Faced with deep emotional and psychological problems, some of them peculiar to their stage of development, others to their social and economic status, they turn to ganja.

"We have found that in our community six youngsters who were involved in firing guns—they say they were defending the area from others, in all these cases their fathers were gunmen, killed by gunmen. In two instances the fathers were thieves, killed by the police. Now, somehow they seemed able to go along with this, until they reach fifteen, sixteen, and then the anger starts to come out.

One young person says he hates every May and June. Why? We found out. Mother's Day is in May and Father's Day is in June, and he knows neither mother nor father. And this is somebody who has been to a Technical High School, and he is under so much stress

sometimes. So when he said, 'Do you know that I used to defend a gun?' I said, 'Well, I am not surprised.' He said, 'I used to hold up people, too, you know.' The emotional problems, what happens inside! They are having real problems, emotional problems. I think we tend to talk to them but we don't listen to them. We don't hear what they have to say.

I think it is established that most of the youngsters are regularly abusing ganja because of these other emotional and psychological problems and they all tell us that it is a comfort. It relaxes them. Nearly every single one whom we have spoken with tell us this, that, you know, when you are out there the weekend, [and] you don't have anything to eat and there is no work, nothing, and somehow these things come across to you. And then they sit down there and the pressure comes on, and then they take it [ganja].

Now, two boys are having similar problems, stressed out. One his mother takes to her doctor and the doctor prescribes a tranquilizer. The other on the street has no mother, no money—his tranquilizer is a splif. The trouble is that he keeps using it, because I suppose it is like you are having a headache, you take Panadol or Phensic. When this comes up for him, he just takes another splif and forgets what is happening. Now when you try to take that away from him, he becomes very angry and turns against the whole system, and says, 'Look, all of you are against us!'"

The CODAC's answer is a strategy that focuses not on the evils of ganja but on demand reduction, in the context of attending to the root problems. In this way the respect of the youths is won and they are inclined to take advice. Such a strategy, however, necessarily demands decriminalisation as the first step, before being able to tackle the emotional and social problems. Hence, the CODAC's recommendations:

- (1) For private personal use as a cigarette splif and bush tea, a lineament, on private premises—no arrest.
- (2) Smoking it in public places, public gatherings, a misdemeanour, and that is for openly disrespecting the law, and putting non-smokers at the risk of intoxication. In that case—a ticket, as in a traffic offence. The person receives a ticket to appear in the Drug Court.
- (3) Students eighteen years and under smoking it in public should be taken to the Principal for the school to decide if the school will undertake to provide counselling or other support for that student, or if the Principal feels that the case should go to the Drug Court."

The Coordinator drew attention to the canvassed opinion of Guidance Counsellors from fourteen schools, most of whom opposed decriminalisation, their major concern being that it would remove the one barrier preventing students from smoking ganja. But in his opinion, the Counsellors were ill-informed, "they do not fully understand what is involved".

(4) The National Council on Drug Abuse (NCDA)

The Chairman of the NCDA presented to the Commission the position of the Council on the decriminalisation of ganja. Premised on its mission to reduce the supply and demand of illicit substances and the abuse of licit ones, the Council works with other agencies in implementing prevention projects.

The Council notes the important derivatives of ganja being marketed for medical use, but is aware of its acute effects, which have implications for learning and motor skills, and the possible negative effects of chronic use on production in both the private and public sectors. It is aware as well of the psychosis produced by excessive use and of marijuana-modified psychiatric states, which worsen certain psychiatric illnesses.

Notwithstanding all this, and in light of the worse effects produced by other substances that are legally available, the Council "support[s] the decriminalization of ganja, such as to allow the possession of small, specified quantities, by adults for use within private premises," with a number of measures aimed at primary prevention, protection of the general public, and rehabilitation of habituated users.

Decriminalisation would have to take into account Jamaica's obligations to the treaties and conventions it has signed and ratified, but the Council "is aware that many countries are considering the modification of their laws in respect to Ganja."

What led the Council to adopt such a position? "I can tell you," replied the Chairman of the Council. "One—the way it became a criminal act was totally unacceptable in this day and age. It should not have been there in the first place.

Two—when we examined the other substances now which are available and legal, we see that the damage that those things cause are much more potent than the evidence we have for ganja.... When you think of alcohol, the organ damage which results from alcohol you would be appalled—cancer of the throat, cancer of the stomach, cirrhosis of the liver, cancer of the liver, testicular atrophy, brain damage, pancreatitis, heart disease—can I stop there? Okay, let's talk about tobacco—lung cancer, throat cancer, cancers, emphysema, heart disease, hypertension. Those substances are legal and available. So, ... even though it has psychological influence, to use a splif should not be a criminal act."

The Council's position is the result of seminars and workshops, which included scientific and legal presentations.

(5) Medical Association of Jamaica

The President of the Medical Association of Jamaica spoke on behalf of the Association.

The Association is of the view that the present laws of criminalising people for small amounts "is probably having a worse effect than if it had been legalised," though the Association is not recommending legalisation. Possession of small amounts for personal use, within the confines of the home and not in public places, as long as this does not impinge on the rights of others to be at peace with themselves, could be decriminalised."

(6) The Chief Medical Officer

The Chief Medical Officer of Health, Dr Peter Figueroa, spoke to the Commission in his own individual capacity as an epidemiologist. He began by reminding the Commission of the widespread cultural significance of ganja, substantiated by a 1993 lifestyle survey which found an "ever smoked" incidence of 37% among men of ages 15 to 49, and 10% among women of similar age. Forty percent of these men and 22% of these women were what he would define as heavy users, that is they smoked three or more times weekly. Listing some of the side-effects to both short-term and long-term use, he drew the conclusion that "the use of ganja is adverse to good health and needs to be discouraged," but proposed that a different approach ought to be adopted to those substances that are culturally endemic from those that are newly introduced into society. "I am of the view," he said, "that criminalising ganja use when the use is personal and private does not make any sense." It does not, because, if the objective is to reduce use, experience (certainly with cigarette smoking) shows that prevention is more effective than treatment and rehabilitation. "[F]or me decriminalisation is simply a platform in order to better control and prevent the use of ganja. My own view is that to try any kind of educational programme in a climate of

criminalisation, you are not going to get anywhere, given the endemic use and the strongly-held confirmed views."

But even in a decriminalised context, education, though necessary, will not be enough to make prevention successful.

Again, drawing from his wide experience with tobacco use, the Chief Medical Officer said: "There are studies to show that where educational programmes are put in place with young people—serious programmes, starting from young age right through school, if you don't have the other measures in place, what happens is [that] the cigarettes are promoted." Other measures include limiting access through taxation and banning use in certain spaces, and serious health warnings with every purchase. In the case of ganja these must include measures that provide an environment supportive of the education, such as banning its use in public. "Decriminalisation," he emphasised, "is a platform for a strategic reduction of ganja use in the society, not for freeing up a lifestyle."

(7) Political Leaders

The Commission presents the views of two leaders in representative politics, one a medical practitioner and member of the Jamaica Labour Party (JLP), the other a practicing attorney and member of the People's National Party (PNP).

- i. According to Dr Horace Chang, from a professional point of view "I don't see the risk involved in the use of ganja justifies it being made an illegal drug." He reminded the Commission that from as early as the 1970s a youth organisation he had established within the JLP called for decriminalisation. This position was taken to Parliament by Dr Percy Broderick, and resulted in the setting up of a Joint Select Committee of the House and Senate. Nothing came of it, however, so "we have kind of come full circle twenty-three years later".

The medical problem with ganja, as far as he saw, was ganja

psychosis, which affected no more than 0.5% of users. Most legal drugs had side effects, anyhow, often more serious and far-reaching than ganja. It was better, he felt, to educate around the risks than to ban wholesale a substance that was quite clearly cultural.

He raised what he saw as a far greater problem, that of cocaine, and shared with us his opinion that for the amount of cocaine seemingly passing through Jamaica, the number of persons addicted ought to have been greater. That it was not he attributed to ganja. "Culturally the strongest opponents [of cocaine] I find at the street level and in our poorer socio-economic group are people who actually use ganja. I find [they] just take a position that the 'white lady' will ensnare them". In other words, the culture around ganja functions as a buffer against the spread of cocaine.

- ii. According to Mr Ronald Thwaites, ganja use by the young people in the constituency he represents in the city of Kingston, "is very much an antidote to boredom, a sense of uselessness and an inability to, by other means of occupation and recreation, actualise [their] best dreams."

He cites the example of some young men taken from his communities, the type who would have been smoking ganja, many of them with criminal records, put through the National Youth Service programme of personal discipline and social reconstruction, and who were so completely rehabilitated, that they were able to move into positions of assistant sports masters in primary schools. Thus, once gainfully employed they have little need ganja.

For him, the prosecution of ganja, especially with respect to small

quantities, and the way the interdiction is carried out, only serves to bring the law into disrepute. "One thing that the law must never do is fly in the face of the mores of a people for an extended period of time, where despite consistent interdiction, education and a standard being maintained by the law, it is still consistently at odds with their dominant social pattern".

Of far greater concern is crack/cocaine. "If I", said Mr Thwaites, "were ever to resile from being an abolitionist [as far as capital punishment is concerned], it would not be so much for murder as for the purveyors of the hard drugs, and cocaine especially. Those who spread cocaine in this community and crack, are not only murderers, they are mass murderers. And it is a reproach to the system of Government and the canons of law-abiding behaviour that we spend our time and our money voted for national security running after small quantities of ganja when I can identify for you—and I have identified for the police and the Ministry of National Security, at least four crack houses in this constituency, and nothing has been done!" This double standard, he was sure, was not lost on the people. It set "their teeth on edge against the law, against the whole tissue of social authority."

He concluded that, though not personally in favour of the use of ganja, it ought no longer to be proscribed by criminal law.

(8) Law Enforcement Officers

Also not to be ignored are the views of law enforcement officers. We first interviewed a retired Assistant Commissioner of Police, and a Sergeant of Police.

- i. The retired Assistant Commissioner of Police, with forty active years in the JCF at all levels, interacting with the general public, observing the changes in beliefs over the period, and being party to the enforcement efforts before, during and after the period of mandatory sentencing, comes to the position that the possession of cannabis below a certain weight should not be a crime. That it has remained for so long on our statutes as a crime, which, aside from the sentence one serves, remains on one's record "is one of the most destructive aspects", one that has "a most deleterious effect on our young people".

In support of decriminalisation for private purposes, he is of the opinion that the relations between police and citizen, in particular the poor, was flawed by our failure at Independence to inculcate within the Force "a deep respect for the individual and the individual's home, however humble". The power to enter and search a home is a power that normally should not be granted easily in legislation to the law enforcers.

- ii. "To be frank", according to a Sergeant of Police of a very large station, "for the small amount I think it costs the Government more to bring a person to court, than it costs the person. Because the paper that you write it on maybe costs more."

The officer expressed the view that ganja smoking does not of itself contribute to crime. What does is the prohibition that drives cultivation and trafficking underground. "Whatever contribution to crime is like a person plants [and] somebody comes in to steal it. That is where the crime comes in. But to say that because somebody use it they go out there and steal, I don't think that is a fact".

(9) His Grace the Most Reverend Roman Catholic Archbishop of Kingston

His Grace, the Archbishop, presented to the Commission the view that ganja use ought not to be criminal. He based this conclusion on three principles. The first was the theological approach that in creating the world and everything in it, God created them good and created them for the use of mankind. Second, God invested in mankind stewardship and dominion over all things. This required mankind to investigate, with a view to understanding, the qualities and capabilities of the various plants and herbs, including even noxious ones. And third, in the exercise of dominion, mankind was also expected to exercise responsibility. "We always teach people, 'Everything in moderation'. Anything that we do in excess, or abuse, is going to have ill-effects upon us."

Based on these principles, His Grace confirmed that the decriminalisation of ganja for private use would have the blessing of the Roman Catholic Church. He emphasised that the views he expressed were personally shared by his fellow Bishops in Jamaica.

Moderation being one of the principles on which their position stood, His Grace saw no necessity to regulate quantities, and would therefore support the conscientious use by certain people for religious purposes. "My thing is to respect a person's conscience and anything done in moderation, not abused. And if they see that it is something that can assist them in their prayer life and in approaching the divine, and [if] they genuinely and sincerely believe that God has provided it for them to assist them in that, then I can't say to that 'It is immoral'. And I can say to the Government to decriminalise it, unless the Government can say it is going to be abused in [the] act of worship."

(10) His Lordship, the Anglican Bishop of Jamaica

"[To] be consistent with Christian morality," the Lord Bishop said, "the fact that you are against something does not mean that it should be a criminal offence. I can think of maybe a thousand things that I would classify as one, and they are not criminal offences. In saying that, I would have no problem in decriminalising limited private use by adults of marijuana, without compromising my position that it is not something that [one] would consider to be good or healthy or right." Sharing with the Commission views from a paper he had written on the subject in 1977 at the request of the Bishop at that time, which he remains in substantial agreement with, he distinguishes the recreational from the medicinal and religious uses of ganja. He supports the decriminalisation for private medicinal and religious use, but has reservations about recreational use, because, although ganja is not addictive, it exposes young people to other more dangerous substances. But, agreeing that in practical terms, it would be difficult to decriminalise for private and religious but not for recreational use, he declares it unjust for any law to target, as this one does, the young, vulnerable and poor. "If the intention is to protect the morality of these young people, then you certainly cannot protect it by sending them to prison where they will mix with hardened criminals and come out as criminals, whereas they were not before and needn't have been." Morality cannot be legislated, he says. Ways need to be found, he concludes, to reduce demand through alternative activities "that people could find more wholesome" in achieving the same objectives.

(11) Lord Anthony Gifford

Lord Gifford in an early appearance before the Commission spoke to a written brief he presented in support of the decriminalisation of ganja, but arguing as well for its complete legalisation. Cautioning that he was not himself a user of ganja, but that his approach was that of a human rights advocate, Lord Gifford made the following points.

In the first place, "if there is a substance which is derived from something naturally grown

which gives a lot of pleasure to some, it should not in principle be bad just because it may be abused by others." From a spiritual point of view, it is better to encourage people to use responsibly what God has given. Secondly, educating people, especially young adults, is more effectively done on the basis that something is permitted but that they should exercise caution with it. Thirdly, the prosecution of so many unfortunate defendants, most of them for smoking spliffs, is nothing short of a violation of their human rights.

Drawing attention to the conundrum that would ensue were possession and use to be decriminalised but production and trafficking not, he urged the Commission "to grasp the nettle" and recommend that it be legalised. Only thus would ganja be extracted from the criminal fraternity, and a regime laid down to allow it to be grown, bought and sold, subject to basic controls.

He found The Netherlands solution, where ganja is decriminalised for use in specially designated cafes, but still illegal, as "a kind of half-way compromise", which nonetheless, by separating ganja from hard drugs, has had the partial effect of reducing the use of the latter.

Lord Gifford drew the attention of the Commission to a recent judgment handed down by the Canadian court, which found the sanction against self-administered use of marijuana for medical conditions a violation of the right to liberty. In his opinion the Jamaica's ganja laws are in violation of human rights.

(12) The Rastafari

It would have been remarkable, indeed, if the Commission did not receive depositions from the Rastafari community. Apart from the many Rastafari adherents interviewed in the course of the Commission's hearings in various parts of the country, three delegations presented. The first, led by Abuna Foxe, came from the Church of Haile Selassie I, with branches in Kingston, New York and London. The second comprised elders of the Nyabingi order, from Pitfour in the Montego Bay area, and led by Bongo Mannie and Ras Tafari, and the third was a team of three non-affiliated believers, led by Ras Iya. Two of these three delegations included women.

As is well known and in need of no repeating, the Rastafari cultivate the use of ganja for their religious purposes, although the tradition of giving it sacred status is of Indian derivation. As a community Rastafari have been advocating for its legalisation, or certainly defying its criminal status at great personal costs, for over half a century. Their appearance, therefore, presented the Commission with a valuable opportunity to more fully to appreciate the theological and ethical premises on which they justify and use ganja as a sacrament and a part of their way of life.

(a) The Church of Haile Selassie I

The leaders of the Church of Haile Selassie I base their justification of the use of the sacramental use of ganja on an analogous argument, using the doctrine of transubstantiation. In transubstantiation the bread and wine are transformed by the words of the priest into an entirely different material substance, namely respectively the body and blood of Jesus. In the same way, seeing that "in Rastalogy anything the word does not give a name to does not exist", the pronouncement of the Rastafari priest transforms the herb into "the body of the mighty Trinity".

In their ritual practice the sacred herb is placed on an altar, called a tabu, and blessed by the priest. Some of it is separated and placed into a censer and the congregation blessed with it. "The women is on the right hand side, the men on the left. So, what the priest do: him went

over the women and she say 'Bless me', and him make a chant over her head, and ... she inhales and she says a prayer on herself. And she let it out. That send it to the heavens—it is a communion."

Thus is the administering of the sacrament done, all present taking turns inhaling the sacred fragrance. The rest of the substance is distributed *ad libitum* in small quantities to adult male members—"our women don't smoke ganja", to take home at the close of the ceremony for their own private use. The leaders limit this distribution to members twenty-one years old and over, and stress their rejection of the recreational use of it. Ganja is "not for any form of enjoyment or desire", explains Abuna Foxe. "In Rastalogy we believe that the Goliath is the lower self and David is the higher self. For us to kill that lower self we have to control the five senses, kill desire. We believe that when one is being initiated into those principles then one would see herb not as something to get high on, but as part of the body of Christ which gives strength. ... It is not like I want to get a drink of white rum to get high off, but [to] become one with the Creator."

This ritual the Church has been able to perform in London and in New York, where there is greater discourse on and respect for human rights. Not so in Jamaica, however. "Historically, Rasta in Jamaica is a criminal, murderer, etc."

(b) The Nyabinghi Elders, Pitfour Tabernacle

The exposition of the Nyabinghi elders begins with the well-known Rastafari cosmological argument that God created all things—plants and animals, and mankind itself, to which He has given knowledge of them. Herbs, according to the Bible, were created for the use of man. But by creating a man-made world, placing it in opposition to God's creation, "man has become God. He starts to dictate to us or to those that take the divine law, [that] lead to the divine law—because God create herbs [and] gave man the knowledge. Who therefore should come between [man and] that plant? You smoke it, I eat it. You drink it. Who cares if they that smoke want to kill themselves, you understand?" The law, as a man-made imposition, ruptures the divinely created relation between man and the natural order.

Of all the herbs, ganja occupies a special, spiritual place in the livity of Rastafari. First and foremost is its place in the ceremonial rituals held five or six times a year, known as a nyabinghi, or "binghi" for short, which takes place in one of the tabernacles dedicated for these purposes. The tabernacle itself and its grounds being sacred, all commercial transactions are taboo for the duration of the binghi, which could last up to twelve days. In preparation, therefore, Rastafari farmers will grow the herb solely for the binghi, which they present as gifts to the High Priest on their arrival. The Priest places some on the altar, to be later used as incense, and stores away the rest, which he dispenses in a centrally located calabash for personal use, or on request.

Apart from the communing among and between brethren, sistren and entire families, two main activities characterise the binghi, one formal at night, the other informal, during the day. The lighting of a large bonfire, whose flames are kept alive for the duration of the binghi, signals the start of the ceremony at sunset. Just about then, the High Priest along with seven priests and seven matriarchs, followed by the children, enters the Tabernacle. After each priest and matriarch has prayed, the High Priest lights the herbs on the altar.

He will see to it that it is kept burning throughout the night, until sunrise. He makes an offering of ganja to each elder and matriarch, which they will smoke at will, while the children start the drumming and chanting. When the time comes for the House to enter and begin the formal binghi, the children withdraw, the drummers take over, the High Priest prays, and the chanting begins, continuing without break throughout the night. This ritual is

repeated every night.

The informal activity is the reasoning. It will take place throughout the day. Ras Tafari described it for the Commission as "foundation reasoning," because it is there that Rastafari attitudes to politics, theology, repatriation, reparation are shaped. "So the daily event is much more than the rituals at nights," he concluded. The herb is integral to the reasoning "because herb stimulates that part of the thought that keeps us lucid, open and receptive, bearing in mind that we have one common interest. Before you talk you have got to make sure [that] what you talk does not disrupt the peace or the unity. And so, you have to find your own consciousness. With smoking herb everyone can go within themselves to find their own consciousness."

The herb centrally available, every man builds a little spliff as he desires, but with a self-discipline that is mindful of the needs of others and wary of excess. But where they prefer, the group may send for a chalice. To use the chalice, "you have to be very mature, I would say clean-spirited." One of the senior elders prays over the herb, calling on the name of Haile Selassie I for a blessing on those about to partake, and as the herb is cut up and sprinkled with water, the participating circle chants a psalm. In preparing the herb the elders more often than not mix it with ground tobacco, "which signifies balance." The pure or ital herb, which a few prefer, makes some people cough a great deal, others to develop a big appetite, or fall asleep. When balanced, however, it enables most "to sit and reason and smoke the whole night without getting overloaded." After the substance is prepared and stuffed into the kochi, another psalm is said, and the pipe lit as someone holds a stick of matches or a piece of paper or corn trash. Each then takes his turn, the chalice moving from right to left, until the matter is exhausted.

Reasoning, declared Brother Tafari, "is what you call the most integral part of the Rastaman—to sit and reason and come into one common interest, whether it is political, economical, business, or about the state of the Jamaican Government." The philosophy behind reasoning posits the Rastaman as the temple of God, within which God dwells. Smoking the herb is in actual fact burning "this fragrant incense within this temple unto Him, the Head, the Divine, the Highest Thought of man," in order to stimulate this inner being through spiritual discourse, putting it above the mundane, the political. The herb, whether in the chalice or spliff, helps them to rise to this level and penetrate knowledge. To cite one example, it is through reasoning under the help of the herb, the Rastaman comes to the knowledge that Moses could not possibly have seen God "from the burning bush", but "from burning the bush." Moses "must have taken a spliff, because there was no God in no bush, because we read the Bible biblically, prophetically, literally, and so on.

So when we look at it, we see it is a cup, a chalice, and when him [Moses] sit up inna himself from a panoramic vision, he sees."

The herb is thus "a sacred part of the Rastaman's life, where he finds his inner self." As he wakes in the morning he may smoke a spliff, say his prayers and be one with himself as he focuses to face the day. He uses herb not for recreation but for meditation, for finding the divinity in man. "We know God is one, but God is also found in man and it is out of that consciousness and presence of God in man that the Rastaman function and go and live day by day, knowing that He is dealing with him and direct[ing] him. And he could sit down with his herb and his consciousness within him. You find that the brethren walk five, ten miles to share that with his brethren—just to burn a spliff or chalice."

(c) Ras Iya, Sister Ita and Sister Wood

In this third excerpt, the Rastafarians explain the meaning of the herb as a part of a way of

life. Ras Iya does not smoke the herb, he eats and drinks it. "For me, eating and drinking it is full healing of the people, because it is medicinal control by creation." Using a mortar to beat it into a pulp, if green, or to grind it, if dry, he combines it with other herbs, nuts and honey. As preventive medicine, he mixes it with other spices, such as bissy, nutmeg, garlic, pimento, ginger and orange peel. "That means if one keeps using this thing, no one would sick by accident." In forty years of ingesting it in this way he has never experienced what it means to be sick or in pain.

Sister Ita gives an explanation that could shed light on what many experienced educators describe as a fall off in the motivation of many, sometimes brilliant, students. According to her ganja slows down: those who smoke it, but in a beneficial way, taking them out of the world and into the hills, where "you will prefer the breeze of natural creation more than being in town." It induces, she says, a state of mind in which material things become secondary and one begins to see oneself as a part of creation. "Most youths who use herbs are into a more sober, normal lifestyle than the downtown rush. It sobers one to a certain point where it takes you out of the rush, as I say, and it makes you more humble as well, more satisfied with what you have." She describes it as "a kind of escape route for some youngsters", from the pressure of life, by "creat[ing] a space where one can go, like [how] people would go to church. For it is the same way a youngster would go to the weed for." And in this space they become satisfied with the little pennies from their little garden and the bowl of porridge they can afford.

(13) Independent Jamaica Council for Human Rights (1998) Limited

In a presentation to the Commission, the Independent Jamaica Council for Human Rights, led by Mr Dennis Daly, Q.C., made a case for removing ganja from the list of dangerous drugs altogether.

The Council based its position on several arguments: the smoking and possession of small quantities of ganja, representing the majority of cases prosecuted, do not infringe the rights of others; arrests and prosecutions are a drain on the justice system; rehabilitation, the objective of sentencing, is seldom realised because the activity is not considered wrong; the rights to liberty, privacy, security and freedom of religion are violated; the right to work, which the cultivation of ganja as a cash crop represents, is infringed; and sentencing does more harm than the use of ganja could cause an offender. The Council recommends that every individual should be able to cultivate, possess, sell, smoke and use ganja, that Rastafarians should not need any special permit to use it for their religious purposes, and that the court should have the power to treat addiction as a medical problem.

(14) Dr Ronald Lampart

A retired Medical Officer of Health, once in charge of the Princess Margaret Hospital, Dr Lampart traced for the Commission the "very sad, sad history" of the prohibition of ganja in the 1930s, charging racial motives in its suppression, since "up to that time marijuana was being smoked by the Blacks and the Hispanics." He read from the biography of Anslinger, the Commissioner of Narcotics who in association with the Hearst-owned press led the campaign, to show the hysterical basis on which the legislation was passed, despite the objections of the American Medical Association. Dr Lampart testified that he worked for ten years with the Coptics, whose members smoked very hard and never once committed any offence other than breaches of the dangerous drugs law. If for no other reason than ganja's proven medicinal value, he argued, it should be decriminalised. His position was that since it could not now be legalised, it should be made a regulated instead of a prohibited substance.

C. VIEWS AGAINST DECRIMINALISATION

The Commission heard from a very small but important minority, who expressed considered views that the law should not be changed. There were people who in their opening depositions opposed any amelioration of the law, but who on being posed questions by members of the Commission conceded that criminalising young people for small amounts or older people for medicinal use was not what they intended. Such positions, however cautious and reserved, are excluded from this Section, being considered part of the general body of opinion in favour of some measure of decriminalisation. We present only those of people who are definitively against it.

(1) ill-effects

The main argument among those in favour of the criminalisation of ganja possession and use is the negative effects they either see or have heard of. These seem to be of three sorts. The first, from their description of the symptoms, would seem to fit the now well-documented personality disorder referred to as ganja psychosis.

Having smoked it, the person loses control of himself, often behaving aggressively. But the aggression may follow only after other personality changes, including uncontrolled levity and paranoia.

In a letter to the Commission two parents wrote of their painful experience of seeing their twenty-two year old son gradually turn into someone they no longer knew. Their first sign of noticeable change was when "he began to appear amused at times when there was no apparent joke." With increased use, a "new, unusually 'philosophical' person began to emerge, expounding on irrelevancies," and manifesting mood swings, anger and frustration, "not entirely due to ganja smoking we must add in fairness, but certainly likely to be complicated by it." Then came an aggressive stage, in which he threatened others and verbally and even physically attacked his own friends. At that stage he was smoking heavily. Now twenty-six years old, he remains like this, a member of the family, but one, who, compared to the son they knew, is like a "stranger in our house."

With an experience like this, "we say an emphatic NO to legalization in today's Jamaica", at least not until "a reasonable and proper assessment of the effects of the majority of the many chemicals is made". Ganja use "is a form of chemical Russian roulette. You don't know what its effects are going to be on you! Our son gambled, and lost!"

A second effect would seem to be a sort of amotivational syndrome. The anecdotal evidence brought before the Commission is too repetitive to be ignored. The profile of the victims describes an adolescent male, whose interest in scholarly activity declines fairly sharply, who sleeps a lot in class, achieves below his potential and sooner or later drops out of school. Even those strongly in favour of decriminalisation are aware of this reaction and would like to see a ban imposed on the smoking of ganja by all students of primary and high school age.

The third effect is mainly physical, where the effect of smoking knocks out the person, or causes hallucination. Although the remedy of a quick infusion of sugar and water is well known, the experience is enough to convince some people that ganja is a dangerous substance and to harden their resolve that it should be kept illegal and criminal.

(2) proliferation

A second argument advanced is that decriminalisation is going to cause ganja to be more widely available than currently exists and more widely used. And if it is more widely used,

there is bound to be more schoolboys using it. "Because, if it free, too much ruption, and no behaviour, and dem just come and smoke in front you face." Among the likely consequences, then, according to this thirty-two year old mother, is the loss of respect that young children ought to show adults by not smoking in their presence. In addition, to quote an inner city resident, more people smoking ganja wil mean more people that "it sheg up."

(3) gateway

A third argument is that ganja is a gateway drug, leading to other substances, particularly crack-cocaine. Those who advance it see a progression from ganja toseasoned spliffs" (ganja laced with cocaine), to crack-cocaine. Or, they see ganja as part of a "culture" of drugs. "Addiction didn't start from just crack-cocaine, you know, it starts from little small use of drugs—tek a one beer, tek a drink o' rum, smoke a small spliff." Decriminalising the use of ganja seems a small step but it would lead to "a big blown out thing", such as now affect many communities.

(4) smoking

Many who are adamant that ganja should remain criminal see smoking as essentially a harmful activity, regardless of the substance. Tobacco is bad enough already, and to add another substance is to make the situation worse. Some would be for criminalising the smoking of tobacco itself.

(5) Resident Magistrate

The position of a Resident Magistrate of twelve years of service in many parts of Jamaica, including the west and the Corporate Area of Kingston, was put to the Commission. Her Honour exhorted the Commission not to rush to recommend a change in laws "which our forefathers in their wisdom embraced, unless we have clear and sufficient justification for doing so."

She argued that many persons brought before the court, though admittedly a small minority—a mere one or two out of every twenty, displaying violent, anti-social and aggressive behaviour, sometimes to the point of having to be restrained for a period of time, were, according to their own families, acting under the influence of ganja.

It would be, she suggested, a backward step to decriminalise ganja, in light of the damage already being done by tobacco, and in light also of the fact that "the jury is still out", where the scientific evidence on ganja was concerned.

Many people alleged that ganja has stress-alleviation properties, but she did not believe changing its legal status on that account was justified.

"Are we therefore saying that we are going to legalise the sedation of our people? Is that what we are saying, so that they don't experience emotional pain, stress, etc.? Should our effort [not] be instead in calling them out of themselves to look to their Creator to find solutions to their problems? All pain is not a bad thing. It can alert us that something is wrong and when we get past our threshold of pain tolerance then we can do something about it, like our forefathers who rose up against slavery. It is not okay for everything to be 'irie' and 'no problem'. It is not okay. If this nation is going to go forward in this new millennium, we need to deal with the wounds, the psyche of our people—because certainly, the psyche of our people is wounded, and not give them legal justification for putting their pain to sleep."

A better alternative to decriminalisation, she suggests, is what is now presently being envisioned in the setting up of the Drug Court, which will effectively remove drug offenders out of the ordinary justice system and treat them in a rehabilitative way.

In answer to the Commission's question whether preventing the use of small amounts of ganja in specified circumstances was acceptable as a matter of justice when the use of alcohol was not, she maintained that the abuse of other legal substances was enough of a problem already.

In short, her position was for amelioration of the laws, not for decriminalisation. And to that end she felt that with greater discretion the court could determine whether a certain quantity was being intended for trafficking as against use.

(6) The Church of God in Jamaica (COGJ)

According to its Chairman, "[t]he Church of God in Jamaica does not support the use of ganja privately or publicly. It is a moral position of the Church." Nonetheless, his view is "that if someone is using it privately on the advice of a medical practitioner, then to me it is quite alright." For those caught with the substance, "a first offence should not be seen as an habitual offence", and such persons should be made to undergo counselling instead of punitive sanction.

Commissioner: This lady is inadequately advised that this little ganja that she has in the vial helps some sort of pain. She is caught using it once, using it twice, she is caught using it thrice—now, remember you said that the first should be counselling. Are you suggesting that after the third time it would be just to really prosecute her and let her face the consequences, even if it means serving time in prison?

COGJ Chairman: No, I would not agree for someone, you know, [who] have a little thing in a vial and they really believe it helps the pain, and may well help too, I would not be in favour of criminalising her.

Commissioner: You wouldn't be in favour of criminalising her?

COGJ Chairman: No, I would not.

Commissioner: What about treating it as a misdemeanour then?

COGJ Chairman: Yes, I think there should be some form of sanction, but not as a criminal offence. ...

Now, you asked about the lady caught once, twice and three times. Well, I would say, this is the fourth time now, and maybe we should just take the bull by the horn and say people are going to use it, and so we will have to now specify the amounts, the form in which it is used, and so on, rather than the frequency.

Commissioner: That is right.

COGJ Chairman: Provided we are convinced that it is not going to be dangerous to their health or affect their body. I think we could stratify that and say for this group [it] will not be regarded as a criminal offence."

Upholding the moral position of the Church of God in Jamaica against the use of ganja, the

Chairman nevertheless believes that prescribed medical use should be permitted, that first offenders should be treated to counselling instead of criminal sanction, and that habitual folk medicinal use should be treated as a misdemeanour.

CHAPTER 4

THE LEGAL AND INTERNATIONAL CHALLENGE

Based on the foregoing, bearing in mind its terms of reference, and weighing carefully the issues raised and the arguments presented to us, the Commission has come to the unanimous conclusion that ganja should be decriminalised for adult personal private use.

Its criminal status cannot be morally justified, notwithstanding the known ill effects it causes in some people. It contravenes natural justice, seeing that it has been, like other natural substances, a part of the folk culture in Jamaica for decades prior to its criminalisation, a part of recognised medical practice for centuries, and a part of herbal lore for millennia in other parts of the world. Nor was its criminal status first recommended by scientific evidence, in any way remotely resembling the proliferation of research, some of it of questionable value, now being called on to justify its current status. Totally ignored is the centuries of accumulated folkways, which through common sense and native wisdom make up for what they lack in modern scientific rigour, and have developed their own modes of uses and limitations, providing valuable clues to well-being for the scientific community.

The Commission takes the view that, ironically, the criminal status of ganja poses a serious danger to society. By alienating and criminalising hundreds of thousands of otherwise law-abiding citizens, and by making the State in their view an instrument of their oppression rather than their protection, the law and its prosecution create in them disrespect for the rule of law. When the rule of law goes, anarchy sets in. Any law that brings the rule of law into disrepute is itself thus a threat to the stability of society.

Thirty years ago the eminent jurist, the late Aubrey Fraser, concluded that cannabis use could not be controlled by the punitive sanctions of the law. Thirty years on, from all the available evidence ganja use not only has spread, but has become defiantly more open. The justice system is severely challenged, its manpower diverted from focusing on more serious crimes, and its material resources consumed in the prosecution of a war that it cannot win.

The inequity that governs the legalisation and control of tobacco and alcohol, but the illegality of ganja cannot be rationally justified, and is indeed iniquitous, given that from all available medical evidence it is the least deleterious and harmful of all. Thousands of people die from cirrhosis of the liver due to alcohol abuse and from lung cancer caused by excessive, chronic smoking of tobacco, but from our research and the evidence presented to the Commission not a single death has ever been recorded from the use or abuse of cannabis.

This is not to say that ganja is not harmful. The Commission is convinced, in the face of the folk anecdotal and medical scientific evidence before it, that many, if only a small percent, of those who use or have attempted use of it are victims of harmful psychological effects. Of great concern are those of school age, many of whom are reported to experience a fall in

motivation, that intellectual and emotional condition for educational achievement.

One group that has made recognised contribution to the development of the arts, and through it brought to our country wide international recognition and acclaim, deserve to be heard for the claims they make on the spiritual significance of ganja to them. It would be a sign of grave disregard and rejection not to accept as serious the meanings which the Rastafari attach to ganja use. That would be like appropriating the inspired achievements of Bob Marley for the glory he has brought our country, but dismissing as trivial and of no consequence the source of his inspiration, namely his religion.

The Commission is persuaded also, given the deeply rooted place of ganja in the culture of the people, that its decriminalisation could provide a buffer against the spread of the evil cancer, crack/cocaine. Decriminalisation separates it from cocaine and heroin, and offers a much better framework in which to focus the efforts against those substances. Under its criminal status ganja is classified alongside the others, even though its effect is nowhere the same. If it were declassified, we think ganja users could be enlisted in the fight against drugs, while at the same time become more open and receptive to sustained education as to its harmful effects.

And so, we turn to the knotty question, how is ganja to be decriminalised. Were it simply a matter for our country alone to decide, a simple repeal or amendment of the laws is all that would be necessary, seeing that there is such wide consensus. However, if Jamaica is not to isolate itself from the international community or to ignore geo-political sensibilities, it has to take careful account of its obligations.

The Laws

There are six Acts relevant to ganja in Jamaica, all of them the results of ratifying certain United Nations Conventions. The Acts are:

1. The Dangerous Drugs Act
2. The Money Laundering Act
3. The Drug Offences (Forfeiture of Proceeds) Act
4. The Mutual Assistance (Criminal Matters) Act
5. The Sharing of Forfeited Property Act
6. The Drug Court (Treatment and Rehabilitation of Offenders) Act, and The Drug Court Regulations.

The Dangerous Drugs Act addresses measures required under the *Single Convention on Narcotic Drugs, 1961, as amended by the 1972 Protocol Amending the Single Convention on Narcotic Drugs, 1961*.

The remaining five Acts address measures required under the *United Nations Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances, 1988*. A third Convention to which Jamaica is a party is the 1971 Convention on Psychotropic Substances. As this Convention seeks to control of psychotropic chemical substances, including certain derivatives of cannabis sativa, rather than cannabis sativa itself, it need not detain us.

For the purposes of this Commission the *Dangerous Drugs* and the *Drug Court Acts* are the relevant statutes.

Dangerous Drugs Act

The *Dangerous Drugs Act* responds to the legislative and administrative measures parties to

the 1961 Convention are required to adopt to limit the production, manufacture, export, import, distribution of, trade in, use and possession of drugs, except for medical and scientific purposes. The drugs defined by the Convention include cannabis, cannabis resin, extracts and tinctures of cannabis. In conformity, the *Dangerous Drugs Act* includes under its purview all parts of the plant known as ganja (cannabis sativa) from which the resin has not been extracted, as well as any resin, extract or tincture obtained from the plant.

Part IIIA of the Act renders it unlawful to import, export, or take steps to export ganja, and imposes a fine of up to \$500 for each ounce of the substance on conviction before the Circuit Court, or imprisonment of up to thirty-five years, or both. On conviction before a Resident Magistrate, the maximum fine is between \$300 and \$500 for each ounce, but not exceeding one-half million dollars, or three years imprisonment, or both.

The Act prohibits as well cultivating, gathering, producing, selling or otherwise dealing in ganja. It prohibits using the premises one owns or occupies for such purposes, or knowingly permitting such premises to be so used, and bans using a conveyance for transporting, selling or otherwise dealing in ganja, or knowingly permitting a conveyance to be so used.

But it is the prohibition of possession and smoking that is most relevant to the work of the Commission. Sections 7C and 7D of the Act state:

7C. Every person who has in his possession any ganja shall be guilty of an offence and—

- a. on conviction before a Circuit Court, shall be sentenced to a fine or to imprisonment for a term not exceeding five years or to both such fine and imprisonment; or
- b. on summary conviction before a Resident Magistrate, shall be liable—
 - i. to a fine not exceeding one hundred dollars for each ounce of ganja which the Resident Magistrate is satisfied is the subject-matter of the offence, so, however, that any such fine shall not exceed fifteen thousand dollars; or
 - ii. to imprisonment for a term not exceeding three years; or
 - iii. to both such fine and imprisonment.

7D. Every person who—

- a. being the occupier of any premises knowingly permits those premises to be used for the smoking of ganja; or
 - b. is concerned in the management of any premises which he knows is being used for such purpose as set out in paragraph (a); or
 - c. has in his possession any pipes or other utensils for use in connection with the smoking of ganja; or
 - d. smokes or otherwise use ganja,
- shall be guilty of an offence and shall be liable on summary conviction before a Resident Magistrate, in the case of a first conviction for such offence, to a fine not exceeding five thousand dollars or to imprisonment for a term not exceeding twelve months, or to both such fine and imprisonment, and in the case of a second or subsequent conviction for such offence, to a fine not exceeding ten thousand dollars or to imprisonment for a term not exceeding two years or to both such fine and imprisonment.

These are the Sections of the *Dangerous Drugs Act* which thousands of our citizens run afoul of and are punished. They are mainly young persons, but there have been cases of

men of advanced years who have been hauled before the courts.

Decriminalisation would require amending the Act in such a way as to allow for possession of small amounts for personal private use by adults.

The Drug Court Act

The Drug Court (Treatment and Rehabilitation of Offenders) Act, consistent with the 1988 Convention, adopts a health-related, rather than a punitive approach to drug use. It provides for the establishment of a Drug Court aimed at facilitating treatment and rehabilitation of drug offenders. It comprises a Resident Magistrate and two Justices of the Peace, one of whom must be a woman, specially appointed by the Minister.

Those brought before the Drug Court must be persons who appear to be dependent on the use of drugs but are of sound mind.

Where ganja is concerned, the Drug Court will hear cases involving smoking or otherwise using the substance, possession of utensils in connection with smoking, and possession of up to eight ounces of the matter. An approved treatment provider will provide the Court with an assessment of the person charged and pleaded guilty, in order to enable the Court to decide whether to order a prescribed treatment. On successful completion of the treatment he will be discharged and the offence not form part of his criminal record, unless convicted more than twice. Failure to comply or to complete the prescribed programme would result in the imposition of sentencing.

If the *Dangerous Drugs Act* were to be amended as indicated above, in order to provide for adult, private use of ganja, the *Drug Court Act* would have to be similarly amended. Provisions could be made to allow entry into the treatment and rehabilitation programme of persons who voluntarily seek such, or who have been referred by a competent authority, such as parents in the case of minors, or medical personnel, where it can be established that ganja is the cause of acts inimical to the safety of others.

But would such amendments be possible without breaching the 1961 *Single Convention* and the 1988 *Convention*?

1961 Single Convention

The 1961 *Convention*, Article 4, is explicit on the general obligations of the parties:

The parties shall take such legislative and administrative measures as may be necessary:

- a. To give effect to and carry out the provisions of this Convention within their own territories;
- b. To co-operate with other States in the execution of the provisions of this Convention; and
- c. Subject to the provisions of this Convention, to limit exclusively to medical and scientific purposes the production, manufacture, export, import, distribution of, trade in, use and possession of drugs.

Under Article 4(c), the use and possession of cannabis, one of the Scheduled substances, is limited to medical and scientific purposes. And again, under Article 28(3), which speaks specifically to the Control of Cannabis, "The Parties shall adopt such measures as may be necessary to prevent the misuse of, and illicit traffic in, the leaves of the cannabis plant"

But it is Article 36, on Penal Provisions, specifically paragraphs 1 (a) and 1 (b), and Article

38, on Measures Against the Abuse of Drugs, that frame in greater detail the obligations of Parties. Article 36, paragraph 1 (a) reads:

Subject to its constitutional limitations, each Party shall adopt such measures as will ensure that cultivation, production, manufacture, extraction, preparation, possession, offering, offering for sale, distribution, purchase, sale, delivery on any terms whatsoever, brokerage, dispatch, dispatch in transit, transport, importation and exportation of drugs contrary to the provisions of this Convention, and any other action which in the opinion of such Party may be contrary to the provisions of the Convention, shall be punishable offences when committed intentionally, and that serious offences shall be liable to adequate punishment particularly by imprisonment or other penalties of deprivation of liberty.

Use is not mentioned here as an offence, thus in theory it could be thought of as being excluded, making it possible to decriminalise use without contravening the Convention.

Paragraph 1 (b) of the Article presents the Parties the choice of conviction and punishment or treatment and rehabilitation. This is followed in greater detail in Article 38, where preventive measures, education, treatment and after-care, and training of personnel are called for.

Legal Expertise

The Commission sought the advice of international law expert, Dr Stephen Vasciannie of the University of the West Indies, and in a well-researched and thorough brief, this is what he wrote relative to the *1961 Single Convention*.

"[W]hen Articles 36 (1) (a) and (b) are read together, the legal situation seems to be as follows: (a) the Single Narcotics Convention requires States to subject certain activities concerning marijuana to criminal sanctions (including the cultivation, production, manufacture, possession, exportation and importation of that drug); (b) the Convention does not require States to prohibit the use (or consumption) of marijuana *per se*; and (c) in the event that an abuser of marijuana has committed an offence that would require criminal sanctions when committed by a non-abuser of the drug, it is open to the State to forego the application of criminal sanctions against the abuser.

On this reading of the Single Narcotics Convention, it would be possible for Jamaica to amend its national legislation in order to decriminalise marijuana use, and make its private use legal, without necessarily placing the country in breach of its obligations under the Convention."

But, notes Dr Vasciannie, the difficulty that would arise from such a step would be the contradiction whereby ganja use would be legal but its procurement illegal. In his opinion, "[t]his seems quite unworkable." However, the Commission has before it the experience of the Dutch, who, without being cited as breaching any of the Conventions, have adopted a contradictory, if pragmatic policy, giving restricted decriminalised status to cannabis distribution and consumption of small quantities, while applying penal sanction to its production, importation and trafficking.

According to *A Guide to Dutch Policy* put out by the Foreign Information Division of The Netherlands Ministry of Foreign Affairs, in cooperation with the Ministries of Health, Welfare and Sport, Justice, and Interior and Kingdom Relations, "[t]he use of drugs is not an offence under international agreements. Nor is it an offence in Germany, Italy, Denmark

or, indeed, most countries of the European Union" (2000, p. 6). The Government sees itself in compliance with the *UN Conventions of 1951, 1971 and 1988*, not to mention other bilateral and multilateral agreements on drugs. The policy is based on the "principle of expediency", whereby authorities are given "discretion to decide, on the grounds of the public interest, not to bring criminal action in a given case." High priority is given to suppressing the sale of hard drugs and trafficking of large quantities of drugs, hard and soft, while low priority is given to curbing the sale and possession of soft drugs for personal use. In this context "soft drugs" refer to cannabis and its derivatives.

Thus, notwithstanding the evident contradiction of decriminalising personal use while suppressing the sale and trafficking, a half-way position, which some would reject, is nonetheless possible under the *1961 Single Convention*, which does not explicitly prohibit use. Noted retired Solicitor General, Dr Kenneth Rattray, in verbal communication with the Chairman of the Commission, argues that the omission of sanctions against personal consumption was not an oversight by the Parties to the Convention, but rather an attempt to set a threshold beyond which actions of the State could be deemed to be in breach of certain fundamental human rights. In this regard, there are three principles of human rights that governed and have governed this and other similar Conventions: the principles of the right to personal privacy, and the right to religious freedom, and the principle of proportionality, by which the sanction should be proportionate to the offence. That the Parties to the Convention would have been mindful of these constraints is clearly evident in the interpretations given the Convention by the Secretary-General's *Commentary* on the Convention and by the International Narcotics Control Board, according to both of which the Single Convention intends the criminalisation of possession for the purposes of illicit trafficking and not for personal use.

Although Dr Vasciannie argues that had the negotiating Parties intended to limit possession to illicit traffic they would have said so, and therefore "[t]he fact that they did not must carry considerable significance in directing us to interpret Article 36(1) in keeping with the plain meaning of its text," Dr Rattray, with considerable experience in international law, emphasises the contextual and interpretive framework of negotiated agreements and treaties. He is therefore of the opinion that the interpretation of the International Narcotics Control Board carries weight.

In addition, Dr Rattray argues, the interpretation of the Conventions must be done in the context of the obligations assumed under International Human Rights Conventions, which have been long recognised as an aid to interpretation, particularly in cases of uncertainty or ambiguity.

He further contends that there is a growing body of international jurisprudence, which recognises that International Human Rights Conventions are of a superior order to obligations under other Conventions, and that in case of a conflict or inconsistency between such obligations, the obligation under the Human Rights Conventions must prevail.

Since Jamaica is a Party to the International Convention on Civil and Political Rights, which protects against invasion of privacy as well as protects freedom of religion, those obligations would have to be considered in the determination as to whether any obligations under the Drug Conventions must yield to Jamaica's obligations under the International Convention on Civil and Political Rights.

In sum, therefore, decriminalisation of possession for personal use and of use itself does not breach the *1961 Single Convention*.

1988 Convention

The *1988 Convention* also does not explicitly criminalise personal consumption, but by bringing under the purview of the criminal justice system cultivation, purchase and possession for personal use, it goes further than the *1961 Single Convention*. The relevant article is Article 3, paragraph 2, which reads:

"Subject to its constitutional principles and the basic concepts of its legal system, each Party shall adopt such measures as may be necessary to establish as a criminal offence under its domestic law, when committed intentionally, the possession, purchase or cultivation of narcotic drugs or psychotropic substances for personal consumption contrary to the provisions of the 1961 Convention, the 1961 Convention as amended or the 1971 Convention."

Translated into practice, it would have to be argued that by the strict letter of the law, the possession of an unlit spliff would constitute a criminal offence, but the smoking of it not. According to Dr Vasciannie, the same contradictions noted in respect of the *1961 Convention* would also apply, for

"Article 3 (2) would mean that all important stages preceding consumption, but not consumption itself, must be subject to the criminal law: the cultivator, the purchaser and the person in possession are all guilty of criminal offences in the perspective of the 1988 Convention. For parties to this Convention, therefore, decriminalisation for personal consumption would appear to be a position possible in form but implausible in practice."

He examines other legal options available to Jamaica. Amendment as a possible route would require the Secretary-General to notify the Council and all the Parties of the amended text. A decision may be taken on the basis of the comments of the Parties, or the Council may convene a conference, whether or not objections are raised. If the amendment is not rejected within eighteen months of its circulation, it enters into force. Given the fact that so many countries have seen it fit to ratify the Conventions (157 in the case of the *1961 Single Convention*, 154 in the case of the *1988 Convention*), and given also the relatively recent adoption of the *1988 Convention*, it is hardly likely, Dr Vasciannie believes, that Jamaica could muster enough support to carry such an amendment.

The other legal option for which provision is made is denunciation. By denunciation, the Secretary-General is advised by written instrument of the withdrawal of consent, which would then take effect the year following its submission. Legally, this is open to Jamaica to do, but, opines Dr Vasciannie, from a geo-political perspective it would make little sense. The Commission agrees.

The Commission does not, however, agree with his conclusion that while "the main drug conventions...do not in themselves require Jamaica to subject criminal sanctions to marijuana use...this does not necessarily permit decriminalisation in a manner that would be workable in Jamaica", and that therefore "the *status quo*, with all its deficiencies, ought to be recommended."

Given the clear intent of the Convention not to violate certain fundamental human rights, a workable if untidy arrangement is possible, which would seek no significant change in the *status quo* at present other than relief to the thousands who annually are brought before the court for personal use. The suppression of the growing, large scale trafficking and export of ganja would and must continue, not least to guard against decertification by the United States. The suppression of public use would also continue. What would cease is the prosecution of adults for the possession of small amounts for private use.

By itself that would not be enough, if we are to allay the fears of our partners that we are reneging on our international obligations or to reduce the abuse of ganja, not to mention

other substances. It would require, also, a sustained education campaign, to deepen the work already going on at community levels and in the schools. Such an approach is actually quite consistent with both the letter and spirit of Article 38 of the *1961 Single Convention, on Measures Against the Abuse of Drugs*.

1. The Parties shall give special attention to and take practicable measures for the prevention of abuse of drugs and for the early identification, treatment, education, after-care, rehabilitation and social reintegration of the persons involved and shall co-ordinate their efforts to these ends.
2. The Parties shall as far as possible promote the training of personnel in the treatment, after care, rehabilitation and social reintegration of abusers of drugs.
3. The Parties shall take all practicable measures to assist persons whose work so requires to gain an understanding of the problems of abuse of drugs and of its prevention, and shall also promote such understanding among the general public if there is a risk that abuse of drugs will become widespread.

In the context of Jamaica, given the place of ganja in social and cultural life, decriminalisation represents the first step towards prevention, early identification, treatment and education. This is the unanimous position of all those working in the area of drug abuse. In the words of the Chief Medical Officer of Health, decriminalisation becomes a platform—one might say the only realistic platform, for demand reduction.

A realistic education campaign would seek to present in as balanced a way as possible the available experience and scientific knowledge of ganja, treating it as distinctly separate from all other substances, legal and illegal. It would continue to target, but now with greater confidence of success, young males who now needing no longer to fear condemnation and ostracism would be more ready to discuss it openly.

Decriminalisation will also require diplomatic efforts to join ranks with a growing number of Parties who unilaterally are taking measures to ameliorate their own anti-marijuana practices with respect to possession and use, our aim being to get the international community appropriately to amend the Conventions. In the Caribbean, where, according to a report by the Caribbean drug control Coordination Mechanism on 1999/2000 drug trends in the region, cannabis "is, in fact, the drug of choice" and "[u]nlike crack cocaine or cocaine...is, to a large extent, socially acceptable," diplomatic initiatives to get CARICOM to adopt a single position will undoubtedly strengthen Jamaica's ability to exert greater influence at the international level.

It will require, finally, practical proof that the country remains committed to the suppression of all drugs. Police interdiction of cocaine trafficking and use would need to be stepped up, which, if the Member of Parliament who appeared before the Commission is to be believed, is a matter of will.

The Commission has good reason to believe that it is the failure to do this that will threaten the country's certification status with the United States, and not the decriminalisation of personal possession and use of ganja. Were even a single cocaine trafficker to be caught, tried and sentenced, it would enhance the country's standing. The decriminalisation being recommended would free up more of Jamaica's human and financial resources to focus on the trafficking of cocaine. According to a well-informed source, this is where the Americans are frustrated with Jamaica.

Human Rights

Decriminalising on the basis that the Conventions do not prohibit use does not constitute the only justifiable rationale. There may be a better way. The Commission is grateful to

Lord Anthony Gifford for opening up the following consideration.

All the relevant articles of the Conventions are prefaced by constitutional limitations, variously phrased. For example, Paragraph 1 (a) of Article 36 of the *1961 Single Convention on Narcotic Drugs*, is qualified by the clause: "Subject to its constitutional limitations, each Party shall adopt such measures as will ensure etc."

Paragraph 2 of Article 3 of the *1988 Convention Against Illicit Traffic* is similarly prefaced: "Subject to its constitutional principles and the basic concepts of its legal system, each Party shall adopt such measures etc." In other words the Conventions pay due regard to the peculiarities of each country, such as would be reflected in its supreme law, the Constitution.

The Constitutional guarantees to individual rights and freedoms could normally have been invoked to allow personal use of ganja, as an expression of religious freedom or of the right to privacy, or other right, without breaching international obligations. Unfortunately, such a loophole would not now apply to Jamaica, because of a saving clause which allows the Jamaican Constitution to be superseded by any statute in existence prior to the appointed day when the Constitution came into effect. In the case of *Dennis Forsythe v. the Director of Public Prosecutions and the Attorney General*, in which Forsythe argued that his constitutional right to freedom of religion as a Rastafarian who used ganja for sacramental purposes, and his right to the privacy of his home were violated when he was charged with possession of the prohibited substance, the Supreme Court handed down judgment which included among other reasons the fact that Section 26 (8) of the Constitution plainly declared that "any law in force immediately before the appointed day shall not be held to be inconsistent with any of the provisions" of Chapter III of the Constitution which sets out the Rights and Freedoms of the Jamaican citizen. *The Dangerous Drugs Act* being in force prior to the appointed day was judged by the Supreme Court to be not inconsistent with the Constitution, and so Dr Forsythe's motion was dismissed. Thus, Jamaica cannot at the present time make use of the constitutional limitation clause allowed by the Conventions.

However, the *Charter of Rights* being debated for adoption by Parliament were it to take effect, would replace the existing chapter of the Constitution, override the saving clause of Section 26 (8) of the Constitution and pave the way for Jamaica to take advantage of the Constitutional Limitation clause. There are two Drafts, one by the governing People's National Party, the other by the Opposition Jamaica Labour Party.

The Government's Draft at Section 13 (2) reads:

Save only for laws that are required for the governance of the State in periods of public emergency, or as may be demonstrably justified in a free and democratic society, Parliament shall pass no law and no public authority or any essential entity shall take any action which abrogates, abridges or infringes--

(b) the right to freedom of conscience, belief and observance of religious and political doctrines;

(1) the right to protection for privacy of home and other property; enjoyment and beneficial ownership of property.

The Opposition Draft at Section 14 (1) reads:

Save only for laws that are required for the governance of the State in periods of public emergency or public disaster or as may be demonstrably justified in a free and democratic

society, Parliament shall pass no law and no organ of the State shall take any action which abrogates, abridges or infringes:

(c) the right to freedom of conscience, belief and observance of religious and political doctrines;

(k) the right to enjoyment and beneficial ownership of property;

(l) the right to respect for private and family life, privacy of the home and of communication.

Ganja could be decriminalised for personal use and justified under the constitutionally protected right of enjoyment of the privacy of one's home, and possession in limited quantities for such private use likewise decriminalised. Also to be decriminalised in like manner would be the possession and use of ganja in pursuit of the right to freedom to manifest religious doctrines.

As Lord Gifford points out in his written submission, in effect supporting the above point of Dr Rattray, international human rights conventions as well as recent judicial decisions in other jurisdictions add some weight to the argument.

The rights to privacy and to the freedom to manifest one's religion as contained in both Drafts of the Charter of Rights are consistent with Articles 17 and 18 of the International Covenant of Civil and Political Rights, and Articles 11.2 and 12.1 of the American Convention on Human Rights. These rights are not absolute, and both Drafts include provisions to override them, although the Opposition Draft Section 19 of the Opposition's Draft goes so far as to make void any law or rule of law if:

(a) it requires or authorizes anything to be done in contravention of any provision of this chapter [i.e. the *Charter*];

(a) it prohibits the exercise of any right or freedom protected by this chapter; or

(b) if it restricts the exercise of any such right or freedom in a manner not authorized by this chapter.

The overriding provisions are, in the first place, those contained in the qualifier "Save only for laws, etc.", which cover emergency situations or such laws "as may be demonstrably justified in a free and democratic society." It is hard to see what kind of emergency could make it necessary to ban the private use of ganja, and equally how, given its cultural entrenchment and medical status, the criminalisation of ganja possession for personal use and the use itself could be "demonstrably justified in a free and democratic society." But the Constitutional Court would be called on to judge.

But secondly—and this is spelt out in the Government's Draft, the private possession and use of ganja would be subject to any law "which is reasonably required—

(a) in the interests of defence, public safety, public order, public morality, public health...;

(d) for the purpose of protecting the rights or freedoms of other persons."

It is conceivable that ganja use, even in private, could be challenged as being against public morality and public health, or for infringing the rights and freedoms of others. But here again the issue would be subject to argument before the Constitutional Court.

Recent decisions in the United States and Canada also strengthen the case for decriminalisation. We quote extensively from Lord Gifford's written submission:

In *US v Bauer and others*, cited as 1996 WL 264776 (9th Cir. [Mont]), the United States Federal Court of Appeal had to consider a plea from Defendants charged with trafficking and possession of marijuana, that they had the right to a 'religious use' defence. They relied on the Religious Freedom Restoration Act, a U.S. statute which guaranteed freedom of religion. The District Court had held that the relevant marijuana law 'substantially burdened the free exercise of the Rastafarian religion', but decided that 'the Government had an overriding interest in regulating marijuana.' The Court of Appeal reversed the District Court's decision. The court held that if the freedom of a person's exercise of religion is substantially burdened, the Government had to meet two tests: (a) a 'compelling governmental interest; and (b) that the application of the law is 'the least restrictive means of furthering that compelling governmental interest.' The Court found that the Government had not shown that a universal law against marijuana was the 'least restrictive means' of preventing the distribution of marijuana. Accordingly the defendants who were charged with simple possession would be re-tried, and they would have a defence if they could show that the use of marijuana was part of their religious practice as Rastafarians. The defendants charged with trafficking would have no such defence, since religious freedom was not involved.

The conclusion drawn by Lord Gifford is that "even in the United States, the possession of marijuana may be found to be legal by the courts if it is associated with the exercise of a fundamental right such as religious freedom."

In the Canadian case of *R v Terrance Parker* (Docket C28372, decided on 31st July 2000), the issue concerned the use of ganja for medical purposes. The Ontario Court of Appeal considered the evidence concerning the harmful as well as the therapeutic effects of ganja, and in making its ruling applied Section 7 of the Charter of Rights, according to which only by virtue of 'the principles of fundamental justice' may the right to liberty and security of the person be infringed.

The Court found that "the marijuana laws did infringe Parker's security in preventing him from undertaking a safe medical treatment for his condition of epilepsy. It held that a blanket prohibition did breach the 'principles of fundamental justice'", and so permitted the possession of marijuana for medical use. Significantly, the Court of Appeal took note of the fact that the United Nations 1988 Convention had, as the Convention stipulated, to be subject to Canada's constitutional principles and basic concepts of its legal system.

A year later, Canada became the first state to pass legislation making "medical marijuana" legal.

Clearly, then, a strong legal case for the decriminalisation of ganja for personal, private use exists once both Government and Opposition are agreed on the terms of the *Charter*, and it becomes law by Act of Parliament. Once it becomes law, the decriminalisation of ganja for personal use, based on the right of privacy of the home, and its decriminalisation for religious use, based on the right of observance of religious doctrines, could then be covered by the Constitutional limitation respected by the United Nations Conventions. Decriminalisation would not remove the patent contradiction exposed by Dr Vasciannie above, but it would be the more satisfactory of the two options in providing a sounder legal basis.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

The National Commission on Ganja accepts that ganja is not entirely safe. Despite its proven folk medicinal qualities, its use can be injurious to health. There is evidence that for those who smoke it the inhalation of tar and other compounds can affect the lungs; that users can experience short term memory loss and delayed reaction time; and that among young people it can retard the learning process. There is also documented evidence that the substance can produce in some people a mentally disturbed state of ganja psychosis.

Notwithstanding these and other ill effects, the Commission is of the view that many, if not most, persons who use ganja in moderation suffer no apparent short or long term debility. Not only that, but its reputation among the people as a panacea and a spiritually enhancing substance is so strong that it must be regarded as culturally entrenched. As a result, the practice of criminalising the users of small quantities does far more harm than good to the society as a whole. The Commission is mindful also that there are legally available substances that have been shown to have physiological and psychological ill-effects that, based on current evidence, are more injurious than those of ganja. Such is the case with alcohol and tobacco.

It is the view of the Commission that the punitive sanctions administered by the justice system to users of small quantities is not only unjust but is a major source of disrespect and contempt for the legal system as a whole. Moreover, the punishment meted out to such offenders has not had and is not likely to have the desired effect of a deterrent. Administering the present laws as they apply to possession and use of small quantities of ganja not only puts an unbearable strain on the relationship of the police with the communities, in particular the male youth, but also ties up the justice system and the work of the police, who could use their time to much greater advantage in the relentless pursuit of crack/cocaine trafficking.

Accordingly the Commission recommends as follows:

1. that the relevant laws be amended so that ganja be decriminalised for the private, personal use of small quantities by adults;
2. that decriminalisation for personal use should exclude smoking by juveniles or by anyone in premises accessible to the public;
3. that ganja should be decriminalised for use as a sacrament for religious purposes;
4. that a sustained all-media, all-schools education programme aimed at demand reduction accompany the process of decriminalisation, and that its target should be, in the main, young people;
5. that the security forces intensify their interdiction of large cultivation of ganja and trafficking of all illegal drugs, in particular crack/cocaine;
6. that, in order that Jamaica be not left behind, a Cannabis Research Agency be set up, in collaboration with other countries, to coordinate research into all aspects of cannabis, including its epidemiological and psychological effects, and importantly as well its pharmacological and economic potential, such as is being done by many other countries, not least including some of the most vigorous in its suppression; and
7. that as a matter of great urgency Jamaica embark on diplomatic initiatives with its CARICOM partners and other countries outside the Region, in particular members of the European Union, with a view (a) to elicit support for its internal position, and (b) to influence the international community to re-examine the status of cannabis.

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ANALYSIS OF THE MARIJUANA POLICY

National Academy Press

The National Academy Press was created by the National Academy of Science to publish the report issued by the Academy and by the National Academy of Engineering the Institute of Medicine, and the National Research Council, all operating under the charter granted in the National Academy of sciences by the Congress of the United states

An Analysis of Marijuana Policy

Committee on Substance Abuse and Habitual Behavior

Commission on Behavioral and Social Sciences and Education

National Research Council

National Academy Press Washington D.C. 1982

NOTICE: The project that is the subject of this report was approved by the Governing Board of the National Research Council, whose members are drawn from the councils of the National Academy of Sciences, the National Academy of Engineering, and the Institute of Medicine. The members of the committee responsible for the report were chosen for their special competences and with regard for appropriate balance.

This report has been reviewed by a group other than the authors according to procedures approved by a Report Review Committee consisting of members of the National Academy of Sciences, the National Academy of Engineering, and the Institute of Medicine.

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National Research Council

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NATIONAL RESEARCH COUNCIL

2101 Constitution Avenue Washington D. C. 20418

Office of the Chairman

June 21, 1982

Dr. William Pollin, Director

National Institute on Drug Abuse

Parklawn Building

Room 10-05

5600 Fishers Lane

Rockville, Maryland 20857

Dear Dr. Pollin:

I transmit, herewith, a report of the National Research Council's Committee on Substance Abuse and Habitual Behavior:

"An Analysis of Marijuana Policy" prepared at the request of the National Institute on Drug Abuse.

The Committee on Substance Abuse and Habitual Behavior, composed of 18 experts in the several relevant disciplines, has weighed carefully the available data regarding the costs, risks, and benefits of the major policy alternatives regarding the control of marijuana use and supply. The Committee is clear in pointing to the deficiencies of this body of evidence and cautions about the hazards of formulating policy recommendations based solely or in part thereon. In this regard, I call your attention to the following statement by Louis Lasagna and Gardner Lindzey contained in the Preface to the report:

The Committee wishes to make clear what it regards as the limits of this report for the selection of policy alternatives. Scientific judgment can estimate the prevalence of different kinds of use, risks to health, economic costs, and the like under current policies and try to project such estimates for new policies. It can come to some conclusions based on those estimates. But selection of an alternative is always a value-governed choice, which can ultimately be made only by the political process.

This caveat notwithstanding, the Committee has derived from its examination of the scientific data a conclusion about the major policy choices facing the nation with respect to

marijuana: complete prohibition, prohibition of supply only, and regulatory approaches. Specifically, the Committee concurs with the judgment of the National Commission on Marijuana and Drug Abuse, rendered in 1971, that a policy of prohibition of supply only is preferable to a policy of complete prohibition of supply and use.

**THE NATIONAL RESEARCH COUNCIL, THE PRINCIPAL OPERATING
AGENCY OF THE NATIONAL ACADEMY OF SCIENCES AND THE
NATIONAL ACADEMY OF ENGINEERING**

Dr. William Pollin

June 21, 1982

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What must be understood by the public, the media, and all who read the Committee's report is that its decision to endorse a policy change was not fashioned from scientific information--old or new--alone. Rather it was the analysis of a combination of factors which affect policy decisions, including the cost and efficacy of enforcement practices. Values were necessarily involved in balancing these factors and there are those within the membership and governing bodies of the Academies and the National Research Council who might not have come to the same policy conclusions, after reviewing the same data.

My own view is that the data available to the Committee were insufficient to justify on scientific or analytical grounds changes in current policies dealing with the use of marijuana. In this respect I am concerned that the Committee may have gone beyond its charge in stating a judgment so value-laden, that it should have been left to the political process.

I have one further concern that cannot go unaddressed. I fear that this report, coming as it does from a well-known and well-respected scientific organization, will be misunderstood by the media and the public to imply that new scientific data are suddenly available that justify changes in public attitudes on the use of marijuana. This would be unfortunate at a time when daily use trends by high school students are down significantly. As the Committee's discussion of marijuana's behavioral and health-related effects clearly demonstrates, there is no new scientific information exonerating marijuana. In fact, the review by our Institute of Medicine, published a few months ago, reevaluated existing scientific evidence and concluded, as have others, that marijuana is a harmful drug whose use justifies serious national concern.

Dr. William Pollin

June 21, 1982

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I wish to remind you that this is a committee report; the only position that can be inferred with respect to the National Research Council on the issue of marijuana policy is that the National Research Council is satisfied that the Committee was competent to examine the issue and diligent in carrying out its task. Despite my personal disagreement, I believe that the Committee has performed a useful service by illuminating many of the complex issues surrounding this highly controversial subject.

Yours sincerely,

Frank Press Chairman

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An Analysis of Marijuana Policy

**National Research Council of the National Academy of Science,
1982**

PREFACE

In 1978 the Committee on Substance Abuse and Habitual Behavior began a study of marijuana policy at the request and with the support of the National Institute on Drug Abuse. Sharp increases in marijuana use along with suggestions for reform of existing marijuana laws from scientists and policy makers prompted a renewed look at those laws. In addition, the National Commission on Marijuana and Drug Abuse, in its 1973 final report, *Drug Use in America: Problem in Perspective*, had recommended that a follow-up commission be appointed to review possible changes in the situation four years later. That recommendation was not implemented, so the Committee took as a framework for its task the assessment that the Commission recommended, especially the assessment of new evidence regarding the effects of recent changes in state marijuana policies.

The Committee conducted its study with awareness of the intensity of past controversies about marijuana use in U.S. society. In the four years since the Committee began its work, there has been an increase in visible concern among many parents about marijuana use among youth, its potential risks to the health of children, and the possibility that heavy use by some young people may seriously threaten their education. Parents who have experienced problems with their own children, or observed those of others, have organized to make marijuana policies a major item on current political agendas. In comparison with the situation at the inception of this study, there is today greater rancor in public discussion, press reports, legislative hearings, and policy-oriented technical meetings related to marijuana use.

This is the context in which the Committee completed its review of the evidence and arguments of earlier studies and weighed the significance of subsequent evidence for the major policy alternatives. Every policy has potentially good and potentially bad effects, and policy choices involve difficult comparisons of such effects. It is important to recognize that to allow the inertia developed by existing policies to prevent change is itself a choice.

The Committee is aware that analyzing a topic that is the subject of heated social debate has its hazards. Many of those participating in the marijuana debate have already selected what they take to be the admissible terms of the discussion and look with disfavor on anyone's insistence on a wider set of considerations. For example, some would settle the issue on physiological grounds alone: whether cannabis products, in the dose ranges customarily used by most people, cause tissue damage. Defenders of marijuana use may seize on the ambiguity or absence of evidence for such damage and ignore any other effects on education or safety; those opposed to marijuana use may emphasize the possibility of

chronic disease that is suggested by some laboratory findings and ignore the social, political, and economic costs of fighting a well-established custom.

This report does not review and analyze every conceivable policy nuance or option. It addresses the major choices--both because these families of alternative policies subsume many variants and because the choice among these major options must be discussed before specific, perhaps new, policy instruments can be designed.

The Committee wishes to make clear what it regards as the limits of this report for the selection of policy alternatives. Scientific judgment can estimate the prevalence of different kinds of use, risks to health, economic costs, and the like under current policies and can try to project such estimates for new policies. It can come to some conclusions based on those estimates. But selection of an alternative is always a value-governed choice, which can ultimately be made only by the political process. The role of scientific evidence in this process is not inconsiderable, even though, at times, the strongest evidence may be pushed aside and the wildest speculation prevail. But the weight of the evidence is only one factor in the process of policy formation; ultimately, that process involves value choices.

In completing its report, the Committee has benefited from many people in formulating, revising, and updating the analyses and data. A very early version of this report was discussed at the Committee's annual conference in 1979, and subsequent versions benefited from comments by staff of the National Institute on Drug Abuse and of the National Research Council. The final draft received close and constructive attention by members of the National Research Council's Commission on Behavioral and Social Sciences and Education, the Institute of Medicine, and the Report Review Committee of the National Academy of Sciences.

We have also maintained a close liaison with the staff and members of the Institute of Medicine's Committee to Study the Health-Related Effects of Cannabis and Its Derivatives, on which three members of our Committee also served, and whose recently published report, *Marijuana and Health*, significantly contributed to our work.

Two former Committee members, Troy Duster and Michael Agar, assisted in the early preparation of the report. At later stages we were very ably assisted by the staff of the Commission on Behavioral and Social Sciences and Education, in particular David Goslin, executive director, and Eugenia Grohman, associate director for reports. Without their help, it is doubtful that we could have completed this task. Finally, we are indebted to the staff and members of the Committee, for their diligence, patience, and commitment to a difficult assignment.

Louis Lasagna, Chair

Gardner Lindzey, Chair, 1977-1980

Committee on Substance Abuse and Habitual Behavior

An Analysis of Marijuana Policy

National Research Council of the National Academy of Science,
1982

INTRODUCTION

Since the early 1960s the use of marijuana as an intoxicant by a growing proportion of the American population has been an issue of major national concern. Despite repeated warnings of possible adverse health consequences and persistent efforts by law enforcement agencies to restrict the supply and use of marijuana, available data indicate that experimentation with or regular use of the drug is no longer restricted to a small minority of Americans. In 1979, for example, 68 percent of young adults between the ages of 18 and 25 reported having tried marijuana; 35.4 percent reported having used marijuana in the last month. Among adults over age 26, the proportion having ever used marijuana has more than doubled since 1971) from 9.2 percent to 19.6 percent (Fishburne et al., 1980; see Table I, below).

Although "the marijuana problem" may be viewed as of recent origin, marijuana is not a new drug. The cannabis plant has been cultivated and used both for its intoxicating properties and for its fiber (hemp) throughout the world for more than 10,000 years (Abel, 1980). At various times and places attempts have been made to restrict its use as an intoxicant; at other times and places its virtues have been extolled for medical purposes, and it has played a significant role in religious ritual. Because cannabis is easily grown--indeed, it is one of the hardiest of all plant species--its resin has been used for centuries along with tobacco, fermented distillates of grains and fruits (alcohol), and opium derivatives as one means of relieving stresses associated with daily life.

Despite its long history) the use of cannabis as an intoxicant was relatively unknown in the United States until the latter part of the nineteenth century) and even then its use as a drug was restricted to a tiny fraction of the population) primarily immigrants from Mexico. The first efforts to restrict its use in this country did not occur until 1911) when Congress) which at that time was considering proposals for federal antinarcotics legislation) listened to arguments that cannabis should be included in the list of illegal drugs. That effort failed) but during the next two decades a number of state legislatures moved to prohibit the possession of marijuana unless prescribed by a physician. It was not until 1937, when the Marijuana Tax Law was enacted) that the federal government became involved in the attempt to control its use. Even this law recognized the industrial uses of hemp and also exempted the seeds of the plant) which were then being sold as bird feed. In 1956, Congress included marijuana in the Narcotics Act of that year and, in 1961, the United Nations adopted the Single Convention on Narcotic Drugs, the terms of which state that each participating country could "adopt such measures as may be necessary to prevent misuse of, and illicit traffic in) the leaves of the cannabis plant." Congress approved participation in the convention in 1967 and three years later passed the Comprehensive Drug Abuse Prevention and Control Act, which provides the basis for current federal prohibitions regarding marijuana use.

Despite this history it was not until the 1960s that most Americans became aware of marijuana. The political and cultural protests of that period focused public attention on young people, their life-styles, and their use of drugs, including marijuana. That period created the context in which public policies regarding marijuana use have been debated since the early 1970s. As Abel (1980) points out, for the first time marijuana use was not restricted to minority groups and fringe elements of society: many of the new users were native-born, middle-class, white college students. Without doubt, the political and cultural context in which marijuana emerged as an issue of national concern has strongly influenced the subsequent policy debate about its use.

The policy debate about marijuana use has also brought into sharp focus two conflicting but deeply held beliefs of large and overlapping segments of the American population. To many, the use of drugs of any kind solely for the purpose of producing states of intoxication is abhorrent, entirely apart from any presumed health effects. At the same time, many people strongly defend the right of individuals to privately indulge their desires, so long as others are not adversely affected. Adding to the complexity of the issues are continuing uncertainties about the health and developmental consequences of marijuana use, concern over the growing number of adolescent users, the social consequences of prosecuting otherwise law-abiding citizens for possession and use of marijuana, the relationship between the distribution of marijuana and that of other illegal drugs, the costs of enforcement of current laws, and the economic implications of the persistence of very large illegal markets.

The next section of this report presents a brief summary of existing evidence regarding the health consequences of marijuana use, drawing heavily on the recently completed study by the Institute of Medicine. The third section summarizes existing federal and state laws relating to the supply and use of marijuana. The fourth section of the report reviews the conclusions of the report of the National Commission on Marijuana and Drug Abuse (1972). The next two sections deal, respectively, with policies regarding the use and the supply of marijuana. The two final sections present a summary of the committee's conclusions regarding major policy options and recommendations for research needed to more adequately assess those options.

An Analysis of Marijuana Policy

**National Research Council of the National Academy of Science,
1982**

THE DANGERS OF MARIJUANA

Marijuana is not a harmless drug. Although available evidence suggests that marijuana may be less likely than opiates, barbiturates, or alcohol to induce psychological and physical

dependence in its users, it has the capacity to reduce the effective functioning of individuals under its influence, and prolonged or excessive use may cause serious harmful biological and social effects in many users.

The recent report, *and Health*, of the Institute of Medicine in the appendix concludes:

The scientific evidence published to date indicates that marijuana has a broad range of psychological and biological effects, some of which, at least under certain conditions, are harmful to human health. Unfortunately, the available information does not tell us how serious this risk may be.

Overall, the report concludes (p. 5):

[W]hat little we know for certain about the effects of marijuana on human health--and all that we have reason to suspect--justifies serious national concern.

The complete summary of the Institute of Medicine report appears as the appendix to this report.

Over the past 40 years, marijuana has been accused of causing an array of antisocial effects, including: in the 1930s, provoking crime and violence; in the early 1950s, leading to heroin addiction; and in the late 1960s, making people passive, lowering motivation and productivity, and destroying the American work ethic in young people. Although beliefs in these effects persist among many people, they have not been substantiated by scientific evidence.

Concerns about how marijuana affects citizenship, motivation, and job performance have become less salient in recent years as marijuana has moved more into the mainstream of society and has become less exclusively associated with radicals, hippies, or disadvantaged minorities. Though there is still widespread belief that heavy marijuana use may be incompatible with a responsible, productive life, evidence that marijuana has not adversely affected either the productivity or the sense of social responsibility of some groups of users (see, e.g., Hochman and Brill, 1973) has tempered earlier fears of a widespread "motivation syndrome." Research that correlates marijuana use with undesirable behavior, such as alienation or inattention to school studies, has not established the direction of causality or ruled out spurious associations (see, e.g., Beachy et al., 1979). This issue, however, continues to be the subject of lively controversy and the Institute of Medicine report (1982:125) concludes that "it appears likely that both self-selection and authentic drug effects contribute to the 'motivational' problems seen in some chronic marijuana users."

Recently, a body of literature has accumulated that reports on links between marijuana use and such health impairments as lung disease, chromosome damage, reduced reproductive function, and brain dysfunction (summarized in Institute of Medicine, 1982, and National Institute on Drug Abuse, 1980). In some areas--for example, effects on the nervous system and behavior and on the cardiovascular and respiratory systems--there is clear evidence that marijuana produces acute short-term effects (Institute of Medicine, 1982:23):

With a severity directly related to dose, marijuana impairs motor coordination and affects tracking ability and sensory and perceptual functions important for safe driving and the operation of other machine8. . . . [It also] increase8 the work of the heart, usually by raising the heart rate and, in some persons, by raising blood pressure.

There is as yet no such clear evidence on the possible long-term effects in these areas, or of other potential health consequences of marijuana use; further research is needed. In

addition) most studies on human populations have been laboratory studies of young, healthy adult males. Differential effects of marijuana use on the elderly, on pregnant women, on groups that are psychiatrically vulnerable or at risk for disease or dysfunction, and particularly on adolescents have not been studied systematically.

In our view, the most troublesome aspects of marijuana use are its potential effects on the development of adolescents. Parents as well as a number of clinicians and researchers are concerned that the social and intellectual development of teenagers may be harmed by chronic marijuana use. There is good evidence that intoxication may seriously impair such important skills as comprehension and retention of newly presented educational materials (Institute of Medicine, 1982). Rapidly growing tissues have been shown to be particularly vulnerable to some, although by no means all, toxic agents, and there is at least a possibility that toxic effects may be subtle and not clearly manifest until adulthood. Scientifically, these are difficult relationships to identify, and the research to date is still insufficient to strongly support any relationship.

Perhaps more significant than any lasting biological effect is the effect of the drug in different patterns of use on emotional development, on the formation of habits, and on the acquisition of coping skills for stress situations. Indeed, although the many issues raised by the use of intoxicants to escape stressful challenge have not been systematically studied, the evident attractiveness of marijuana to many adolescents, and its possible dose-related interference with the study and hard work needed for intellectual development in the crucial high school years, make this a special matter for concern. This is particularly so in light of the fact that, unlike alcohol, marijuana is used by many adolescents during school hours. Finally, reports of the effects of marijuana use on automobile driving skills are worrisome.

This Committee has reviewed the scientific literature surveys of marijuana effects on health and behavior, including the major recent study conducted by the Institute of Medicine (1982) and those by the National Institute on Drug Abuse (1979; 1980), Tashkin et al. (1978), Nahas (1977), and Fried (1977). We agree with the conclusion of the Institute of Medicine report that it is likely that long-term heavy marijuana use will be shown to result in measurable damage to health, just as long-term chronic tobacco and alcohol use have proven to cause such damage. It is evident that the full impact of marijuana use on human health will not be clear without careful epidemiological studies involving substantial populations of users--a matter of some decades--even though it is predictable that this drug--like all others--will cause harm in some of its users, particularly in its heaviest users, and among these, in its heaviest adolescent users. At this time, however, our judgment as to behavioral and health-related hazards is that the research has not established a danger both large and grave enough to override all other factors affecting a policy decision.

An Analysis of Marijuana Policy

**National Research Council of the National Academy of Science,
1982**

OVERVIEW OF CURRENT MARIJUANA POLICIES

Current federal and state marijuana laws are in part governed by international treaty. The major federal law relevant to marijuana is the Comprehensive Drug Abuse Prevention and Control Act of 1970, which repealed all prior federal legislation and reduced federal penalties for possession and sale. Although marijuana possession and sale are still prohibited, possession has been reduced from a felony to a misdemeanor offense; the maximum penalty for a first offense is \$5,000 and one year's imprisonment. The Act also provides for conditional discharge, by which first offenders found guilty of simple possession or casual transfer (which is treated as simple possession) may be placed on probation for up to one year (Congressional Digest, 1979).

The Uniform Controlled Substance Act of 1970, drafted by the National Conference of Commissioners on Uniform State Laws, was designed to make state laws more compatible with the new federal law. Like the federal act, the Uniform Act reclassified marijuana as a hallucinogen rather than a narcotic and reduced the penalty for possession from the felony to the misdemeanor level; a majority of the states have adopted the Uniform Act. Eleven states have withdrawn the criminal sanction from possession for personal use. In these states, arrest has been replaced with a traffic-ticket type of citation, and a small fine is the sole allowable penalty. About 30 states include some provision for conditional discharge of first offenders, and about a dozen of them provide for all records of the offense to be expunged. The Alaska Supreme Court ruled in 1975 that possession for personal use by adults at home was protected by the constitutional right to privacy and hence was not subject to any penalty (Rosenthal, 1979).

State penalties for second-offense possession and for selling marijuana are extremely variable. (See National Organization for the Reform of Marijuana Laws and Center for Study of Non-Medical Drug Use, 1979, for summary tables of state marijuana laws.) Sale is almost always a felony, with maximum sentences ranging from two years to life, although casual transfer, or "accommodation," is sometimes exempt from felony treatment. All but 15 jurisdictions punish cultivation as heavily as they do sale; the Uniform Act includes the two in the same classification (manufacture), with the same penalty provisions.

Federal prohibition of small-scale possession is virtually unenforced. At the March 1977 House of Representatives hearings on decriminalization, the chief of the criminal division of the Department of Justice testified that the federal government no longer effectively prosecutes the use of marijuana, "nor do we, under any conceivable way, in the Federal Government have the resources to do so" (Select Committee on Narcotics Abuse and Control, 1977:13). In terms of its effects from a law enforcement point of view, the present official federal policy of complete prohibition does not differ in fact from a policy of prohibition of supply only. Complete prohibition is the federal law, but partial prohibition is the practice. However, the law, even though partly unenforced, has probably had a restraining influence on the willingness of states to adopt policies of less than complete prohibition. The states traditionally have followed the federal lead in drug abuse legislation, although they are not legally required to do so (see the testimony of Jay Miller, American Civil Liberties Union, to the Select Committee on Narcotics Abuse and Control, 1977). In summary, in most states and according to federal law, U.S. marijuana policy is one of complete prohibition--that is, prohibition of both supply and use.

Major alternatives to complete prohibition include prohibition of supply only--called partial prohibition--and regulation.* Prohibition of supply only means having no or only civil penalties) for use, possession, or, sometimes, "casual transfer" of small quantities of marijuana, while having criminal penalties for manufacture, importation, or commercial sale of marijuana. Regulation means not only eliminating penalties for use but also allowing controlled production and distribution.

Within each of the three broad policy options--complete prohibition, prohibition of supply only, and regulation--numerous subsidiary policy choices exist. For example, a policy of complete prohibition necessitates decisions about the resources to be devoted to enforcement, the appropriate penalties to be imposed for violations, and whether marijuana should be made available for any medical uses. Under a policy of prohibition of supply only, decisions must still be made about penalties and permitted medical uses. In addition, one must also determine how to distinguish between users and suppliers; whether cultivation should be permitted; how stronger preparations of the cannabis plant, such as hashish, should be treated; whether to criminalize small-scale casual transfers, made with or without payment; and what should be done about certain specific behaviors, such as the public use of marijuana and the operation of motor vehicles under the influence of the drug. Under a policy of regulation, some of the issues to be decided are the type of control system (e.g., state monopoly or licensed sale), the rules as to potency and quality, and appropriate penalties for violation of the system's rules.

*In this discussion, we use the terms "complete prohibition," and "prohibition of supply and use" interchangeably. We also use the terms "partial prohibition," "prohibition of supply only," and "decriminalization" as equivalent. We generally prefer the terms "partial prohibition," or "prohibition of supply only" since many people seem to regard decriminalization as the equivalent of legalization or regulation--which it most certainly is not. (The policy of partial prohibition has also been called the vice model.) Finally, we use "regulation" and "legalization" as equivalent terms.

The variety of choices within each of the broad policy options suggests that none can be characterized in a monolithic way. Some regulatory systems could be so stringent as to have results similar to prohibitory laws: e.g., a regulatory system that raised the price drastically above what the illegal market charges. Similarly, lack of enforcement could strongly reduce the impact of a prohibitory option. As we have already noted, this latter effect has already occurred in some jurisdictions in which the law provides for complete prohibition but users are not in fact prosecuted.

An Analysis of Marijuana Policy

**National Research Council of the National Academy of Science,
1982**

A REVIEW OF THE REPORT OF THE NATIONAL COMMISSION ON MARIJUANA AND DRUG ABUSE

An attempt to describe a full array of policy options together with associated benefits and detriments of each of them was made by the National Commission on Marijuana and Drug Abuse in its 1972 report, *Marijuana: A Signal of Misunderstanding*. With respect to the major policy choices, the Commission did a thorough job. The members and staff recognized the limited knowledge base for their deliberations and subsequently recommended that a second commission be appointed to review the situation four years later. Such a follow-up commission was never appointed. It seems appropriate, then, that this Committee reappraise the Commission's work in light of subsequent research findings, especially those relating to recent changes in marijuana policies.

The Commission examined the spectrum of social policies available to control marijuana use and the benefits and detriments of implementing each policy. The legal alternatives presented included those identified above:

complete prohibition; prohibition of supply only; and

regulatory approaches. The Commission emphasized that choosing among the three approaches requires consideration of the social milieu, cultural values, and practicalities of implementation. The Commission considered such social conditions particularly important in examining marijuana controls because both use of the drug and the laws prohibiting supply and use had symbolic importance, representing a clash of values between a dominant culture that opposed marijuana use and a large minority that either used marijuana or condoned its use. The probable effects of the various policies considered by the Commission include changes in use patterns, enforcement costs, and influence on related social concerns such as the marketing of other illicit drugs and general respect for law.

The Commission commented on all three broad policy options. It suggested first that total prohibition has resulted in costly enforcement, alienation of the young, discrimination through selective enforcement, some deterrence of supply (especially to middle-aged and middle-class potential users), but minimal deterrence of use by those with access to the drug. Second, the Commission stated its belief that prohibition of supply only would support the official policy of discouraging use, but at the same time would recognize the practical difficulties of attempting to eliminate use. The report listed a number of choices that might be made under a system of partial prohibition and described some of the practical problems they might entail (e.g., the need to distinguish between casual and commercial distributors). Finally, the Commission described regulation as a policy that only mildly disapproved of occasional use and that concentrated on controlling excessive use, but was mostly designed to lower the costs of prohibiting the drug. The Commission argued that marijuana consumption would increase considerably if complete prohibition were replaced by regulation. In addition, the Commission considered a major drawback of any regulatory system to be that its elimination of the main symbol of society's disapproval--criminal sanctions--would cause resentment among the nonuser majority of the population. Marijuana was described as being symbolic of countercultural lifestyles: "the drug's symbolism creates a risk of strong political reaction to any liberalization of the present laws by older members of the society" (National Commission on Marijuana and Drug Abuse, 1972, Appendix Volume 11:1149).

On balance, the Commission concluded that, since the threat of punishment had not apparently deterred the millions of people who had already used marijuana, the replacement

of complete by partial prohibition would not produce a significant increase in marijuana use. Consequently, the Commission recommended that individual marijuana users should not be subject to criminal prosecution for their private use or possession of small amounts of the drug, and that, on balance, the best policy was one of prohibition of supply only. In accordance with this view, the Commission recommended that federal and state laws should be amended to achieve partial prohibition. In the decade since the Commission report, a number of states have changed their laws in varying ways. These legal changes can be viewed as natural experiments, and one can use the data from them to reassess the Commission's conclusions regarding these policies.

An Analysis of Marijuana Policy

**National Research Council of the National Academy of Science,
1982**

THE USE OF MARIJUANA: COMPARING COMPLETE AND PARTIAL PROHIBITION

To compare the two types of marijuana control policies presently used in the United States--prohibition of supply and use and prohibition of supply only--we need to consider only the one particular in which they differ:

the application of criminal sanctions against marijuana users. To compare the effects of the two policies, we can examine the effects of the prohibition of use and determine whether prohibition results in more costs than benefits or vice versa.

In recent years the prohibition of marijuana use has come under increasing criticism. Many students of the U.S. marijuana situation, including the National Commission on Marijuana and Drug Abuse, members of Congress, political analysts, and legal experts, have suggested that existing laws prohibiting marijuana use be repealed. These suggestions have been prompted by the failure of current policies to deter large numbers of users, the consequent criminalization of large numbers of young Americans, and the high social costs of such law enforcement. A number of professional associations and agencies have also gone on record in support of the removal of all criminal penalties for the private possession and use of marijuana as a means of reducing the economic costs of law enforcement and the social costs of arrest or imprisonment (criminalization) of young people who are otherwise not criminally involved or labeled. The organizations and agencies that have expressed this view include the American Medical Association, the American Bar Association, the American Public Health Association, the Canadian Commission of Inquiry into the Non-Medical Use of Drugs, the National Council of Churches, the National Advisory Commission on Criminal Justice Standards and Goals, the National Commission on Marijuana and Drug

Abuse, among others. Eleven states, with one-third of the nation's population, have adopted some version of partial prohibition or 'decriminalization.' (In Oregon, Alaska, Maine, Colorado, California, Ohio, Minnesota, Mississippi, New York, North Carolina, and Nebraska, citations and small fines have replaced arrests and incarceration for use-only marijuana-related offenses.)

At first glance, criminalizing the selling of marijuana might appear inconsistent with failing to punish its purchase. But in the drafting of laws, a line is often drawn between legal and illegal conduct so that the maximum reduction in the proscribed behavior can be gained at minimum social cost. Frequently it turns out that laws aimed solely at suppressing sales are more cost-effective in reducing both the possession and use of a substance than are laws that attempt to suppress possession directly. There are several reasons for this. First, there are fewer sellers than buyers; this permits a concentration of law enforcement efforts where they do the most good. Second, juries are likely to be more sympathetic to a "mere" user, who may be ill-advised, than to a dealer making a profit from the weaknesses of others. Offenses treated under the vice model (partial prohibition) range from gambling--the person who takes illegal bets is guilty of a crime while the person who places them is not--to the offense of selling new automobiles not equipped with seat belts--the seller, not the buyer, is guilty of an offense. Even Prohibition in 1919 never criminalized the possession or use of alcohol, only its manufacture and sale.

Effects of Partial Prohibition

Probably the most important fact about a policy of prohibition of supply only is that where it has been adopted it has apparently not led to appreciably higher levels of marijuana use than would have existed if use were also prohibited. The National Commission on Marijuana and Drug Abuse's speculations about the lack of change in use patterns resulting from repeal of prohibitions on use have been confirmed by data since 1972. Reports from California, Oregon, and Maine indicate no appreciable increase in use following decriminalization of use, at least in the short term.

Oregon, the first state to repeal prohibition of use (in October 1973) has been studied in a series of Drug Abuse Council surveys (National Governors' Conference, 1977). Surveys in 1974 and 1975 showed no major increase following decriminalization. While the percentage of adults who were current users had increased by January 1977 (from 20 to 24 percent), use had increased similarly nationwide in the same period, suggesting that the causes for the adult increase in Oregon were the same as those for increases in the rest of the country rather than the result of changes in the law. Indeed, the percentage of adult ever-users in Oregon in 1976 (24 percent) was lower than the average percentage of adult ever-users in the western United States (28 percent) in 1975-1976, although higher than the national average (21.3 percent). (It should be noted that aggregate use rates in the western United States are heavily weighted by use rates in California, the largest western state, which had relatively high rates even prior to the state repeal of prohibition of use.) That the increase in use in Oregon from 1973 to 1976 was probably not due to the new law is suggested by other survey data. Only a small proportion of non-users said fear of legal prosecution was a reason for nonuse in 1974, 1975, and 1976 (National Governors' Conference, 1977). On the question of the fear of health dangers) Drug Abuse Council survey data show that such fear decreased significantly over those years but has increased since 1976.

The state of Maine, which repealed criminal penalties for marijuana use in May 1976, surveyed the effects of legislation in July and August 1978 (State of Maine Department of Human Services, 1979). Its study concluded that the change from criminal to civil penalties has not caused a large increase in marijuana use: less than 1 percent of all adults and 3.1 percent of all high school students reported any increase in their use as a result of the new

law; 3.5 percent of adult regular users and 7 percent of high school regular users reported any increase in their use directly attributable to the change in the law. There is also preliminary evidence, based on a nationwide study of high school students between 1975 and 1979, that "any increase in marijuana use in the decriminalized states, taken as a group, was equal to or less than the increases being observed in the rest of the country where decriminalization was not taking place" (Johnston, 1980:5). It could be argued that because *de facto* repeal of prohibition of use has been taking place throughout the country, one should not expect to see larger increases in use in states that legally decriminalize than in others. Even if this is true, however, the important point is that the legal change to decriminalization does not, in itself, appear to lead to increases in use.

This lack of change is not particularly surprising. The statistical chance that any person would be apprehended for his or her use is, in fact, extremely low throughout the United States (though, as we note below, the large number of users is sufficient to generate a substantial volume of arrests in states that do prohibit use). As a result, it is hard to imagine that the deterrent effect of prohibition laws on any given user would be very great.

It has been suggested that repeal of government prohibitions might change attitudes related to health or morals, perhaps symbolizing that health officials certify marijuana use to be safe. The absence of large increases in marijuana use in repeal states, however, indicates that either the change in policy has not had such a symbolic effect, or that, if it has, its causal significance is not appreciable--though it must be acknowledged that changes of this type might take generations to occur.

Costs of Prohibition of Use

The costs of policies directed at the user are not negligible, although actual savings in law enforcement costs attributable to repeal of prohibition of use *per se* are difficult to estimate. The difficulty arises in part because marijuana arrests have decreased nationally in recent years, reflecting the overall tendency to relax enforcement of marijuana laws, and that change could lead to inaccurate estimates of the impact of repeal. Nevertheless, reduced law enforcement activities seem to have led to substantial savings in states that have repealed laws that prohibit use.

California made a careful study of the economic impact of its law repealing prohibition of use, which went into effect in January 1976 (State Office of Narcotics and Drug Abuse, 1977). The law reduced the penalty for personal possession of one ounce or less of marijuana from a possible felony to a citable misdemeanor, punishable as an infraction with a maximum fine of \$100 without regard to prior possession offenses. Criminal custody, booking, and pretrial incarceration procedures were eliminated. Possession of more than one ounce was also made a misdemeanor, with a maximum fine of \$500, six months in jail, or both. According to the study, these changes resulted in a 74 percent reduction in what the state had been spending yearly to enforce its marijuana laws. (Estimates of what the state had been spending ranged from \$35 million to more than \$100 million yearly; see National Governors' Conference, 1977.)

In addition to its economic benefits, repealing prohibition of use saves the social costs of criminalizing the marijuana user. In recent years, close to 400,000 people have been arrested each year for marijuana-related offenses despite the general nonenforcement of criminal sanctions for use (Federal Bureau of Investigation, 1980). Only a small fraction of the arrests are made under federal law, largely for importation of marijuana. About 85 percent of all marijuana-related arrests are for possession, usually of one ounce or less (see, e.g., State Office of Narcotics and Drug Abuse, 1977).

A study by the National Commission on Marijuana and Drug Abuse of a sample

consisting of some 3,000 of the people arrested for marijuana-related offenses in 1970 indicated that the marijuana arrest was usually the arrestee's first experience with the criminal justice system, particularly among juveniles (National Commission on Marijuana and Drug Abuse, 1972). Yet, "it is standard practice for law enforcement agencies to report such offenses to prospective employers, licensing agencies, and other authorities as 'narcotic drug arrests'" (testimony of Jay Miller, American Civil Liberties Union to the Select Committee on Narcotics Abuse and Control, 1977). Thus young users, who are often otherwise law-abiding people, are subject to an arrest record, or even a prison term, with implications extending into many aspects of their lives.

Alienation from the rule of law in democratic society may be the most serious cost of current marijuana laws. The National Commission on Marijuana and Drug Abuse was concerned that young people who see no rational basis for the legal distinction between alcohol and marijuana may become cynical about America's political institutions and democratic process. The American Bar Association report (printed in Select Committee on Narcotics and Drug Abuse, 1977) concurs in the view that marijuana laws that criminalize the millions of Americans who have used marijuana engender disrespect for the law.

Public Attitudes Toward Partial Prohibition

Although the National Commission on Marijuana and Drug Abuse concluded that prohibition of supply only would be a better policy than prohibition of supply and use, it felt that a serious disadvantage of such a course would be the upset and moral outrage such a policy would engender. Hindsight now shows that the Commission was mistaken in predicting a strong uniform public reaction to the adoption of partial prohibition policies. Experience since 1973 has shown that repeal of criminal penalties for use of marijuana has not been accompanied by massive public protest in the states in which it occurred and, in fact, has had the approval of the majority of citizens in those states (National Governors' Conference, 1977).

Nationally, attitude trends are consistent with the experience of the repeal states. Roffman (1978) reports that public opinion surveys indicate a slowly increasing preference for a reduction in penalties for marijuana offenses; a 1975 national survey (National Institute on Drug Abuse, 1975-1976) found that 52 percent of American adults favored only a fine or probation for small marijuana offenses; and a 1977 Gallup poll showed that 28 percent of the public favored legalization, compared with 12 percent in 1969.

An Analysis of Marijuana Policy

National Research Council of the National Academy of Science,
1982

THE SUPPLY OF MARIJUANA: COMPARING PROHIBITED AND REGULATED MARKETS

Policy implementation does not occur in an ideal world. Prohibition of supply has not, in practice, meant that no one has had access to marijuana--though this may have been the intent of those who framed that law. Similarly, regulation of supply does not mean that everyone who uses marijuana will use it moderately, minimizing its harm. Prohibition of supply does make marijuana less accessible than it might otherwise be to a large number of Americans, and thus it almost certainly reduces the total amount of the drug used and the number of users. Such reduction is the purpose of a partial prohibition policy and to some extent it is accomplished. Arguments for a regulated, legal supply of marijuana are largely based on the social costs and incomplete effectiveness of prohibition of supply and on the belief that regulating rather than prohibiting the supply would not lead to an unacceptably large increase in use.

Under a regulatory policy, the cultivation, importation, manufacture, distribution, retailing, and, of course, use of marijuana would no longer be illegal per se. Within this broad category, specific policy options range from a virtual withdrawal of the government from marijuana control (allowing the drug to be freely produced, advertised, and sold, very much as coffee is today--but protecting the consumer against harmful adulterants), to a carefully controlled system of licensing, to a government monopoly on retail sales, wholesale distribution, or manufacture of marijuana. Thus, controls might be placed on such factors as quality, potency, amount purchased, time and place of sales, age of buyers, etc. If marijuana were regulated as is alcohol, restrictions would derive from federal, state, or local statutes, with the majority of them not at the federal level. Regulations might also include legally fixed prices--as in state-controlled alcohol beverage retailing or as a consequence of the levying of excise taxes.

The specific form and content of any proposed regulatory system are very important for those faced with the decision as to whether and under what conditions to remove penalties for the distribution of marijuana, but such details are beyond the scope of this report.

The advantages of a policy of regulation include the disappearance of most illegal market activity, the savings in economic and social costs of law enforcement directed against illegal supply systems, better controls over the quality and safety of the product, and, possibly, increased credibility for warnings about risks. The major disadvantages are a consequence of increased marijuana use--increases in harm to physical health and to individual development and behavior.

Costs of Prohibition of Supply

The number of arrests for violations related to supply is much lower than for those related to use. But enforcement of prohibition of supply is far more costly per arrest. Long undercover investigations, the purchase of expensive hardware, and the major consumption of trial and correctional resources are largely attributable to the prohibition of supply.

The National Institute on Drug Abuse (1975) estimated that in 1974 costs for enforcement of marijuana laws totaled \$600 million for state and local agencies. If we extrapolate from the California data (State Office of Narcotics and Drug Abuse, 1977), about three-fourths of the total is spent enforcing the law against marijuana supply. The total federal drug abuse law enforcement budget was more than \$400 million in 1979, about half of which was the budget for the Drug Enforcement Administration. At the federal level, authorities do not

break down their expenditures on enforcement between marijuana and other drugs; virtually all of the federal resources that are allocated to marijuana are spent in attempting to enforce the laws against supply.

The task of attempting to make the prohibition of supply effective is, of course, formidable. In 1969 Operation Intercept demonstrated the practical difficulty of sealing off the Mexican border. In the weeks the operation lasted, hundreds of thousands of vehicles and passengers were searched every day; ensuing traffic jams caused expenditures by U.S. tourists and commuters to Mexico to drop 50-70 percent below normal (Kaplan, 1971). The situation was intolerable and the program was halted. However, the federal government has continued efforts to improve border surveillance and to penetrate trafficking networks. The White House Strategy Council on Drug Abuse (1979) notes that more than 5.6 million pounds of marijuana was seized at the Mexican border over a 12-month period in 1977-1978; a large increase over the 1.5 million pounds seized during the previous 12 months, "but a fraction of marijuana entering the country." Recently, the Council has suggested strengthening border surveillance by cooperative efforts of the Drug Enforcement Administration, the Customs Service, the Coast Guard, and the Department of State and by the use of the detection capabilities of the armed forces as well.

In our view, the prospects for major success in these ventures are not great. Nor is there much likelihood that some recently suggested measures against marijuana production outside the U.S. would make future prohibition of supply more effective. For example, the White House Strategy Council on Drug Abuse has supported crop eradication programs, provided that the proposed method of eradication is evaluated for possible health and environmental consequences and that a readily distinguishable marker is added to any chemical herbicides that are used, but the political obstacles to this course would be significant. Entirely apart from the views of producer nations, which are likely to be quite negative, the public is unlikely to support the use of chemicals of unknown toxicity on an import product, legal or not, that may be used by large numbers of Americans. And irrespective of the degree of success of controlling imports) the problem of domestic production under a policy of partial prohibition remains. Although the illegal domestic industry is thought to account for only about 15 percent of American marijuana consumption, marijuana grows easily in many parts of the United States. The National Commission on Marijuana and Drug Abuse cited a Department of Agriculture estimate that in 1972 there were 5 million acres containing wild marijuana in the United States and an undetermined but obviously growing number of acres under cultivation.

Law enforcement costs are by no means the only costs of prohibition of supply. There are large amounts of money being made in marijuana--which, like any illegal business, carries with it the likelihood of corruption of public officials and the loss of tax dollars. Violence is also a cost of attempting to prohibit marijuana supply; this problem is not confined to illegal marijuana production abroad. There has been violence in marijuana-growing regions in the United States. The extent of such violence is not known with any precision, but there have been popular press reports of kidnappings, assaults, burglaries, and homicides known to be connected with the marijuana business in northern California and elsewhere.

Another major cost of attempts to prohibit the supply of marijuana is related to the fact that many illegal sellers of marijuana also sell other illegal drugs, e.g., PCP, amphetamine, and barbiturates (Blum, 1971). It is likely, therefore, that prohibition of the supply of marijuana increases access to and use of other illegal drugs through the creation of an illegal marketing system for all drugs. Little is known about the structures and activities of illicit drug markets. It is clear, however, that there are many small-scale marijuana dealers) that many sellers service only their friends and acquaintances, and that those who sell marijuana are thereby more likely to come into contact with users and sellers of more dangerous

drugs, to use such drugs, and to make them available to their clientele (Blum, 1971). Moreover, there is reason to believe that marijuana sellers may become socialized into other illegal activities.

TABLE 1 Lifetime Prevalence and Use in Past Month of Marijuana, 1971-1979, by

Category of User (percentage)	1971	1972	1974	1976	1977	1979
Category of User	1971	1972	1974	1976	1977	1979
Youth: Ages 12-17						
Ever used	14.0	14.0	23.0	22.4	28.0	30.9
Used in past month	6.0	7.0	12.0	12.3	16.6	16.7
Young Adults: Ages 18-25						
Ever used	39.3	47.9	52.7	52.9	59.9	68.2
Used in past month	17.3	27.8	25.2	25.0	27.4	35.4
Older Adults: Ages 26+						
Ever used	9.2	7.4	9.9	12.9	15.3	19.6
Used in past month	1.3	2.5	2.0	3.5	3.3	6.0
(Number)	(3,186)	(3,265)	(4,022)	(3,576)	(4,594)	(7,224)
0						

Costs of Regulating Supply

The wide availability and use of marijuana are not only major factors in the cost of attempts to prohibit the supply of the drug, they also have implications for the likely magnitude of increases in use that could be expected under a regulatory policy. Greater use of marijuana under a regulatory policy is regarded as the most significant cost of such a policy. In an analysis of this potential cost, however, it is important to note that under the present policy of prohibition, prevalence and frequency of marijuana use are substantial and have increased in recent years.*

*The data indicating rates of use are based on self-reports; as such, their reliability and validity may be questioned. Nevertheless, as Radosevich et al. (1979) indicate, studies of questions on drug use have consistently demonstrated reliable responses within the same instrument and over time. Furthermore, there are indications that most drug surveys do not have serious validity problems (see Whitehead and Smart and Abelson and Atkinson, both cited in Radosevich et al., 1979; Johnston et al., 1982).

A National Institute on Drug Abuse general household survey (Fishburne et al., 1980) shows that 35.4 percent of the 18-25-year-olds in the United States report having used marijuana in the month preceding the survey. Yearly surveys show a steady increase from 1971 to 1979 in the percentage of people who report having ever used marijuana as well as in the percentage of people who report being current users (see Table 1). These survey results (Fishburne et al., 1980) also indicate that between 1976 and 1977, the percentage of current users among 12-17-year-olds increased from 12.3 to 16.6 percent; this trend had leveled off by 1979 and has since shown a decline. In an annual survey of national samples of some 17,000 high school seniors, Johnston et al. (1982) found that 7.0 percent of the class of 1981 reported daily marijuana use, compared with 6.0 percent in 1975 and 10.7 percent in 1978, the peak year (see Table 2). There has been a similar trend in initial use at younger ages.

TABLE 2 Trends in Prevalence of Marijuana Use by High School Seniors (percentage)

Class	1975	1976	1977	1978	1979	1980	1981
Prevalence	1975	1976	1977	1978	1979	1980	1981
Ever used	47.3	52.8	56.4	59.2	60.4	60.3	59.5
Used in last							

12 months 40.0 44.5 47.6 50.2 50.8 48.8 46.1

Used in last

30 days 27.1 32.2 35.4 37.1 36.5 33.7 31.6

Used daily in

last 30 days 6.0 8.2 9.1 10.7 10.3 9.1 7.0

51) Daily use defined as using marijuana on 20 or more occasions in the last 30 days.

Although the present policy of prohibition of supply is not preventing the current levels of marijuana use, including use among the very young, it is probable that most strategies under a regulatory policy would result in an overall increase in use. Even more important than overall use rates, however, are likely changes in consumption patterns; such patterns are the most difficult changes to predict. The smallest increases in numbers of users can be expected to occur among those to whom marijuana is now most readily available--the young. Johnston et al. (1982) found that close to 90 percent of the high school seniors in their national sample survey report that marijuana is "fairly easy" or "very easy" for them to get. This percentage remained relatively stable over the seven years, 1975-1981. At the same time, the reported availability of most other illegal drugs (except cocaine) declined considerably. For example, while 46.2 percent of the 1975 high school seniors said that LSD would be "fairly easy" or "very easy" to get, only 32.2 percent of the class of 1978 gave those responses. It would appear, therefore, that the reports of easy availability are not due to a tendency of adolescents to report any illegal drug as easy to get, but reflect their actual access to the drug. It might also be noted that only 13.9 percent of the class of 1978 reported having no friends who smoke marijuana; thus it is reasonable to expect that at least 86 percent have a factual basis for estimating the availability of the drug.

Other survey data corroborate these findings. Radosevich et al. (1979) report that a 1975 national survey by the Drug Abuse Council found that at least 70 percent of the high school students in their sample reported marijuana "easy to get, and O'Donnell et al. (1976) found similar results. There are no contrary reports for recent years. In sum, one can be reasonably confident that, at least with respect to older adolescents, the prohibition against supply does not succeed in suppressing access to marijuana. (The effect on price is discussed below.)

Regulation could be expected to provide the greatest increase in availability to those to whom the drug is now least available, i.e., older adults who are not in contact with marijuana sellers or a drug-using subculture and who are most likely to avoid illegal "connections."

It has been argued that a serious cost of the adoption of a regulatory policy for marijuana is the likelihood that such a change might delude many people into believing that the drug is safe. As noted above, there is no indication that the elimination of penalties for marijuana use has caused the drug to be regarded as any less dangerous. Moreover, alcohol and tobacco are almost universally regarded as involving risks to health, and these drugs are already made available under regulatory systems.

To the extent that marijuana use causes harm, one is necessarily concerned about policy changes that will lead to increases in use. As we have noted, however, it is a fact that marijuana is already widely available despite the legal prohibition of supply and that, despite the best efforts of government under any foreseeable set of conditions, it will continue to be. Though a regulatory policy would increase the availability of the drug, estimates of the size of these increases, and associated increases in harm, must be weighed against estimates of the costs and weaknesses of continuing prohibitions of supply. In pragmatic terms, the issue is whether more harm would be done, overall, by retaining the partly effective, costly prohibition of supply or by moving to a system of legalized regulated sales--wherein

presumably more people would use more marijuana, but some of the costs imposed by prohibition of supply would be removed.

Regulatory Systems: Some Concrete Aspects

To this point, a policy of regulation has been discussed rather abstractly in contrast with the more concrete discussion of prohibition policies. Experimentation with varying systems of regulation followed by adjustment and readjustment based on experience would be necessary before those most appropriate for particular circumstances could be developed. This can be a complex matter. For instance, U.S. alcohol policy, developed with the repeal of Prohibition, consists of an umbrella of national policy and a wide variety of supporting state and local regulation. The national policy umbrella includes controls on importation, taxation, potency, packaging, labeling, advertising, use in federal jurisdictions (e.g., parks, military installations), and use in systems regulated by the federal government (e.g., air transportation); it also provides funds and guidelines for the treatment of casualties of excessive use. Under the umbrella policy, states and local jurisdictions regulate taxes, retail sales, hours of availability, age limits, and the like, where supply is legal, or prohibit sales entirely. Some states have monopoly systems for package sales, others use licensed private stores. Historically, under this system, the strictness of controls has reflected local sentiment about the consumption of alcohol. Although few "dry" jurisdictions exist today, various degrees of local "dryness" were quite widespread until very recently (National Research Council, 1981).

Controlling Use

A regulated system of marijuana sale might attempt to moderate use by inhibiting the frequency of use and the amounts used as well as by prescribing conditions of purchase and use. However, it is likely that under a regulatory system consumption would in great part be controlled by informal social norms--as it is today.

Manipulating the price of the drug is an obvious means of inhibiting use. It has been argued that most adults would be willing to pay a higher price for legal marijuana than they currently pay for illegal supplies in return for not having to seek out "connections" and being relieved of the feeling that they may be supporting organized crime. A high price would be comparatively more restrictive for young people--precisely those whom one would most want to discourage from use--since, though they seem affluent compared with young people in previous times, their budgets are in fact more constrained than those of adults. The possibility of illegal markets selling to young people remains, but today's kind of illegal market for marijuana would probably shrink greatly under a regulatory system in the same way that illegal alcohol distribution systems have become so scarce. Young users would be much more likely to gain access to marijuana by diversion from the legal market--as they do today for alcohol--or from homegrown plants than from a wholly illegal chain of distributors. Such a development would make marijuana selling a less profitable and status-producing occupation among the young.

It has been suggested that if legal limits were imposed on the potency of legally available marijuana, a substantial illegal market for high-potency forms of the drug, including hashish, would still exist. Since it is likely that there would continue to be some users who prefer high-potency forms of cannabis, this is a reasonable concern. But there is no compelling a priori reason to believe that a legal structure for retail marijuana sales, which includes limits on potency, would result in any increase in the availability and use of high-potency products.

Home Cultivation

Cultivation of marijuana by users is another issue that would have to be confronted in

devising a regulatory system. Growing marijuana without payment of a tax might be treated as a revenue offense. Without criminal penalties or vigorous enforcement, however, deterrent effects would be minimal since marijuana can be grown indoors anywhere in the United States using artificial light--and at comparatively little expense. A recent British study of options for marijuana control (Logan, 1979) suggests that, from a law enforcement perspective, it is not feasible to attempt to control home cultivation. Whether users would take the trouble to grow their own marijuana would depend in part on the legal price. The relatively high prices that might be charged in order to discourage use and to increase revenues would also tend to encourage home cultivation. Whatever its disadvantages, however, the use of homegrown marijuana at least would not bring users into contact with those who illegally sell the drug. With respect to young people, moreover, marijuana under cultivation is much harder for children to hide from parents than is the purchased prepared drug, and cultivation by juveniles could remain illegal if age limits on use were imposed. Nonetheless, the treatment of home cultivation represents a major issue for the design of a regulatory system.

Public Education

Excessive use may be discouraged by policies aimed at public education and at the use of the media, including a ban on commercial advertising. Although information on how to use drugs, on drug hazards, and on the attributes of drugs is passed along most effectively through informal channels (see, e.g., Hanneman, 1972), media and education programs can make such information far more readily available.

Research on the communication of messages to the public has identified source credibility as a major factor contributing to the persuasive power of a message (McGuire, 1969). It appears that the public is now extremely wary of some government information programs that attempt to influence health behaviors. The credibility of the federal government may be especially suspect when it issues health warnings about an illegal substance that it is clearly trying to prohibit. Rosenthal (1979) asserts that distrust of the government and the medical establishment has grown because of past exaggerations and distortions of the effects of some mind-altering drugs.

Informal Social Controls

In an assessment of possibilities for governmental controls under a regulatory system, the operation of informal norms for controlling substance use practices must be taken into account (Maloff et al., 1980). National experience with alcohol use, for example, provides evidence that there are informal rituals and sanctions that generally encourage moderation in the use of recreational drugs. Moreover, moderation is encouraged when a drug is introduced gradually, that is, to a growing population of users, like marijuana in the 1960s and early 1970s. One might expect that when a new drug is introduced into a society, governmental control would be particularly important since no informal controls for teaching people appropriate rules for use would have developed. If a potent drug is made widely available precipitously and very cheaply to a novice population, severe societal disruptions may occur: for example, the gin epidemics of early eighteenth-century England (see Clark, 1976). Because in the past two decades informal norms for controlling marijuana use have spread in the United States under conditions of greatly increased availability of marijuana, there is reason to believe that widespread uncontrolled use would not occur under regulation. Indeed, regulation might facilitate patterns of controlled use by diminishing the "forbidden fruit" aspect of the drug and perhaps increasing the likelihood that an adolescent would be introduced to the drug through families and friends who practice moderate use, rather than through their heaviest-using, most drug-involved peers.

Relations Among States

As has historically been the case with respect to alcohol, state governments differ in their approaches to marijuana. So long as present federal law continues to prohibit cultivation and distribution of marijuana, states cannot adopt a regulatory system, although they are legally free to reduce or eliminate their own penalties for sale and are not compelled to enforce federal laws. If federal law were changed, however, the institution of a regulatory system in one state would have reverberations in other states. Residents of states that continued to prohibit marijuana could be expected to cross state lines to purchase the drug in a state with a regulated system, thus further compromising the ability of states to enforce prohibition of supply among its residents. Furthermore, states that attempted to curtail consumption by raising prices might find their populations turning to lower-cost marijuana from neighboring states with lower prices. This is a familiar situation. Large numbers of both cigarettes and guns are smuggled illegally into New York from other states. Moreover, New Yorkers may travel to New Jersey to gamble in a casino, or Virginians to the District of Columbia to buy cheaper liquor. It is difficult to see how state prohibitions could remain effective if the number of states with regulatory systems grew very large unless the changes occurred in only one region of the country. However, there may be advantages in permitting a state-by-state approach. Conditions governing the costs and benefits both of partial prohibition and of regulation vary among the states. In this area of uncertainty, we may learn from experiment. If one regulatory system proved successful, other states would be more likely to adopt similar systems; similarly, if it worked poorly in one state, other states would be less inclined to adopt a regulatory policy.

Effects on Foreign Relations

The 1961 Single Convention on Narcotic Drugs, which now obligates the U.S. government to prevent the importation of marijuana and to prohibit the adoption of a licensing system by any state is a serious (although not an insurmountable) obstacle to the adoption of a federal regulatory policy and the development of state licensing. The treaty allows a signatory to terminate its adherence to the agreement at any time after two years from the date of the convention. Of course the general impact of any move to withdraw from the convention includes a broad foreign policy context, which is beyond the expertise of this Committee to judge.

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CONCLUSIONS

For the last decade, concern with health hazards attributable to marijuana has been rising. The hearts, lungs, reproductive functions, and mental abilities of children have been reported to be threatened by marijuana, and such threats are not to be taken lightly. Heavy use by anyone or any use by growing children should be discouraged. Although conclusive evidence is lacking of major, long-term public health problems caused by marijuana, they are worrisome possibilities, and both the reports and the a priori likelihood of developmental damage to some young users makes marijuana use a cause for extreme concern.

At the same time, the effectiveness of the present federal policy of complete prohibition falls far short of its goal--preventing use. An estimated 55 million Americans have tried marijuana, federal enforcement of prohibition of use is virtually nonexistent, and 11 states have repealed criminal penalties for private possession of small amounts and for private use. It can no longer be argued that use would be much more widespread and the problematic effects greater today if the policy of complete prohibition did not exist. The existing evidence on policies of partial prohibition indicates that partial prohibition has been as effective in controlling consumption as complete prohibition and has entailed considerably smaller social, legal, and economic costs. On balance, therefore, we believe that a policy of partial prohibition is clearly preferable to a policy of complete prohibition of supply and use.

We believe, further, that current policies directed at controlling the supply of marijuana should be seriously reconsidered. The demonstrated ineffectiveness of control of use through prohibition of supply and the high costs of implementing such a policy make it very unlikely that any kind of partial prohibition policy will be effective in reducing marijuana use significantly below present levels. Moreover, it seems likely to us that removal of criminal sanctions will be given serious consideration by the federal government and by the states in the foreseeable future. Hence, a variety of alternative policies should be considered.

At this time, the form of specific alternatives to current policies and their probable effect on patterns of use cannot be determined with confidence. It is possible that, after careful study, all alternatives will turn out to have so many disadvantages that none could command public consensus. To maximize the likelihood of sound policy for the long run, however, further research should be conducted on the biological, behavioral, developmental, and social consequences of marijuana use, on the structure and operation of drug markets, and on the relations of various conditions of availability to patterns of use.

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RECOMMENDATIONS FOR RESEARCH

Health and Behavior

The persistent concern about the health-related effects of marijuana requires both an immediate and a continuing response. First, as the report of the Institute of Medicine (1982:5) recommends, there should be "a greatly intensified and more comprehensive program of research into the effects of marijuana on the health of the American people." An important goal of this research program should be the identification of subgroups at high risk for physiological and psychological damage in relation to patterns of use and doses of marijuana. The report presents a detailed agenda of needed research. Second, to the extent that potential health hazards are identified, policy research should address possible safeguards and precautions to protect the user.

If marijuana use can be scientifically shown to entail grave risks--to the brain, the cardiovascular and respiratory systems, or to reproductive functions, for example--that are currently not known, it can be argued that, as was the case with cigarette smoking, knowledge of those effects will be more effective than criminal enforcement as a deterrent to use.

Drug Markets

Research on the price elasticity of demand in legal and illegal markets is a clear priority. The result of such research will be important in determining the likelihood of controlling heavy use through price mechanisms and in computing the amount of money--if any--that could be realized in taxation of marijuana.

Present knowledge of the structure and activities of drug markets and networks is insufficient to allow prediction of the effects of policy changes on them. Research in this area is difficult but the questions are important. If many dealers who sell cocaine, PCP, amphetamines, and barbiturates as well as marijuana would be put out of business if marijuana were available through legal channels, it might result in a curtailed market for a variety of other drugs. On the other hand, it is also possible that the market structure is so loosely organized, and dealers so transiently involved, that removing marijuana from the illegal markets would have little effect. To be sure, much research on some of these questions could not be conducted unless a regulatory system were in place in some state. Nonetheless, some research, particularly ethnographic and economic studies, should be undertaken now to discover the importance of marijuana profits to drug-dealing networks; the transiency, size, and nature of such networks; etc. It is essential for research in this area to be supported by appropriate government agencies.

Effects on Use

Although many questions remain to be answered before the most informed choices can be made between prohibiting and regulating supply, there are many things that cannot be known unless some jurisdiction tries a regulatory policy. Although adoption of a regulatory policy is likely to result in increased use, little is known about changes in patterns of use that are likely to result. If federal laws prohibiting supply are changed to allow states to

license marijuana sales, epidemiological research programs must be ready to monitor any changes in use and their consequences. To do so, research should be organized and operating well in advance of any such policy changes in order to determine rates of use before the change. Although the shift in the law from complete to partial prohibition in 11 states has apparently had little effect on consumption patterns there, we do not know the degree to which legally available marijuana would attract a larger market. The impact on use of educational campaigns, health warnings, and informal social controls under a regulatory system should be investigated.

In the absence of the opportunity for states to adopt regulatory policies, there can only be educated guesses about which age groups are likely to increase use or whether individuals who now use marijuana will use more, etc. Meanwhile, every bit of analysis to predict the answers to these questions, by surveying public attitudes, assessing past experiences with the spread of drug use in society (e.g., alcohol use following the repeal of Prohibition), and critically reviewing the experience of other societies in which marijuana is more readily available, will be valuable.

Marijuana regulation would permit systematic provision of comprehensive, clearly communicated health warnings on package inserts or covers, in public health education, by medical practitioners, and by public health interest groups as well as by the government. The extent to which such warnings would have more credibility for users than current health warnings, generated in an atmosphere of prohibition, is an important subject for research. Despite widespread pessimism about the failures of drug education campaigns, there are encouraging results in educational approaches based on the Stanford Heart Disease Prevention Program experience. With appropriate, research-based models and techniques, public health education may be an attractive means for limiting excessive use (see, e.g., Maccoby, 1979).

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Appendix

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APPENDIX: SUMMARY OF MARIJUANA AND HEALTH

The Institute of Medicine (IOM) of the National Academy of Sciences has conducted a 15-month study of the health-related effects of marijuana, at the request of the Secretary of Health and Human Services and the Director of the National Institutes of Health. The IOM appointed a 22-member committee to:

analyze existing scientific evidence bearing on the possible hazards to the health and safety of users of marijuana;

analyze data concerning the possible therapeutic value and health benefits of marijuana;

assess federal research programs in marijuana;

identify promising new research directions, and make suggestions to improve the quality and usefulness of future research; and draw conclusions from this review that would accurately assess the limits of present knowledge and thereby provide a factual, scientific basis for the development of future government policy.

This assessment of knowledge of the health-related effects of marijuana is important and timely because marijuana is now the most widely used of all the illicit drugs available in the United States. In 1979, more than 50 million persons had tried it at least once. There has been a steep rise in its use during the past decade, particularly among adolescents and young adults, although there has been a leveling-off in its overall use among high school seniors in the past 2 or 3 years and a small decline in the percentage of seniors who use it frequently. Although substantially more high school students have used alcohol than have ever used marijuana, more high school seniors use marijuana on a daily or near-daily basis (9 percent) than alcohol (6 percent) Much of the heavy use of marijuana, unlike alcohol,

takes place in school, where effects on behavior, cognition, and psychomotor performance can be particularly disturbing. Unlike alcohol, which is rapidly metabolized and eliminated from the body, the psychoactive components of marijuana persist in the body for a long time. Similar to alcohol, continued use of marijuana may cause tolerance and dependence. For all these reasons, it is imperative that we have reliable and detailed information about the effects of marijuana use on health, both in the long and short term.

What, then, did we learn from our review of the published scientific literature? Numerous acute effects have been described in animals, in isolated cells and tissues, and in studies of human volunteers; clinical and epidemiological observations also have been reported. This information is briefly summarized in the following paragraphs.

EFFECTS ON THE NERVOUS SYSTEM AND ON BEHAVIOR

We can say with confidence that marijuana produces acute effects on the brain, including chemical and electrophysiological changes. Its most clearly established acute effects are on mental functions and behavior. With a severity directly related to dose, marijuana impairs motor coordination and affects tracking ability and sensory and perceptual functions important for safe driving and the operation of other machines; it also impairs short-term memory and slows learning. Other acute effects include feelings of euphoria and other mood changes, but there also are disturbing mental phenomena, such as brief periods of anxiety, confusion, or psychosis.

There is not yet any conclusive evidence as to whether prolonged use of marijuana causes permanent changes in the nervous system or sustained impairment of brain function and behavior in human beings. In a few unconfirmed studies in experimental animals, impairment of learning and changes in electrical brain-wave recordings have been observed several months after the cessation of chronic administration of marijuana. In the judgment of the committee, widely cited studies purporting to demonstrate that marijuana affects the gross and microscopic structure of the human or monkey brain are not convincing; much more work is needed to settle this important point.

Chronic relatively heavy use of marijuana is associated with behavioral dysfunction and mental disorders in human beings, but available evidence does not establish if marijuana use under these circumstances is a cause or a result of the mental condition. There are similar problems in interpreting the evidence linking the use of marijuana to subsequent use of other illicit drugs, such as heroin or cocaine. Association does not prove a causal relation, and the use of marijuana may merely be symptomatic of an underlying disposition to use psychoactive drugs rather than a "stepping stone" to involvement with more dangerous substances. It is also difficult to sort out the relationship between use of marijuana and the complex symptoms known as the motivational syndrome. Self-selection and effects of the drug are probably both contributing to the motivational problems seen in some chronic users of marijuana.

Thus, the long-term effects of marijuana on the human brain and on human behavior remain to be defined. Although we have no convincing evidence thus far of any effects persisting in human beings after cessation of drug use, there may well be subtle but important physical and psychological consequences that have not been recognized.

EFFECTS ON THE CARDIOVASCULAR AND RESPIRATORY SYSTEMS

There is good evidence that the smoking of marijuana usually causes acute changes in the heart and circulation that are characteristic of stress, but there is no evidence to indicate that

a permanently deleterious effect on the normal cardiovascular system occurs. There is good evidence to show that marijuana increases the work of the heart, usually by raising heart rate and, in some persons, by raising blood pressure. This rise in workload poses a threat to patients with hypertension, cerebrovascular disease, and coronary atherosclerosis.

Acute exposure to marijuana smoke generally elicits broncho-dilation; chronic heavy smoking of marijuana causes inflammation and pre-neoplastic changes in the airways, similar to those produced by smoking of tobacco. Marijuana smoke is a complex mixture that not only has many chemical components (including carbon monoxide and "tar") and biological effects similar to those of tobacco smoke, but also some unique ingredients. This suggests the strong possibility that prolonged heavy smoking of marijuana, like tobacco, will lead to cancer of the respiratory tract and to serious impairment of lung function. Although there is evidence of impaired lung function in chronic smokers, no direct confirmation of the likelihood of cancer has yet been provided, possibly because marijuana has been widely smoked in this country for only about 20 years, and data have not been collected systematically in other countries with a much longer history of heavy marijuana use.

EFFECTS ON THE REPRODUCTIVE SYSTEM AND ON CHROMOSOMES

Although studies in animals have shown that delta-9-THC (the major psychoactive constituent of marijuana) lowers the concentration in blood serum of pituitary hormones (gonadotropins) that control reproductive functions, it is not known if there is a direct effect on reproductive tissues. Delta-9-THC appears to have a modest reversible suppressive effect on sperm production in men, but there is no proof that it has a deleterious effect on male fertility. Effects on human female hormonal function have been reported, but the evidence is not convincing. However, there is convincing evidence that marijuana interferes with ovulation in female monkeys. No satisfactory studies of the relation between use of marijuana and female fertility and child-bearing have been carried out. Although delta-9-THC is known to cross the placenta readily and to cause birth defects when administered in large doses to experimental animals, no adequate clinical studies have been carried out to determine if marijuana use can harm the human fetus. There is no conclusive evidence of teratogenicity in human offspring, but a slowly developing or low-level effect might be undetected by the studies done so far. The effects of marijuana on reproductive function and on the fetus are unclear; they may prove to be negligible, but further research to establish or rule out such effects would be of great importance.

Extracts from marijuana smoke particulates ("tar") have been found to produce dose-related mutations in bacteria; however, delta-9-THC, by itself, is not mutagenic. Marijuana and delta-9-THC do not appear to break chromosomes, but marijuana may affect chromosome segregation during cell division, resulting in an abnormal number of chromosomes in daughter cells. Although these results are of concern, their clinical significance is unknown.

THE IMMUNE SYSTEM

Similar limitations exist in our understanding of the effects of marijuana on other body systems. For example, some studies of the immune system demonstrate a mild, immunosuppressant effect on human beings, but other studies show no effect.

THERAPEUTIC POTENTIAL

The committee also has examined the evidence on the therapeutic effects of marijuana in a variety of medical disorders. Preliminary studies suggest that marijuana and its derivatives or analogues might be useful in the treatment of the raised intraocular pressure of glaucoma,

in the control of the severe nausea and vomiting caused by cancer chemotherapy, and in the treatment of asthma. There also is some preliminary evidence that a marijuana constituent (cannabidiol) might be helpful in the treatment of certain types of epileptic seizures, as well as for spastic disorders and other nervous system diseases. But, in these and all other conditions, much more work is needed. Because marijuana and delta-9-THC often produce troublesome psychotropic or cardiovascular side-effects that limit their therapeutic usefulness, particularly in older patients, the greatest therapeutic potential probably lies in the use of synthetic analogues of marijuana derivatives with higher ratios of therapeutic to undesirable effects.

THE NEED FOR MORE RESEARCH ON MARIJUANA

The explanation for all of these unanswered questions is insufficient research. We need to know much more about the metabolism of the various marijuana chemical compounds and their biologic effects. This will require many more studies in animals, with particular emphasis on subhuman primates. Basic pharmacologic information obtained in animal experiments will ultimately have to be tested in clinical studies on human beings.

Until 10 or 15 years ago, there was virtually no systematic, rigorously controlled research on the human health-related effects of marijuana and its major constituents. Even now, when standardized marijuana and pure synthetic cannabinoids are available for experimental studies, and good qualitative methods exist for the measurement of delta-9-THC and its metabolites in body fluids, well-designed, studies on human beings are relatively few. There are difficulties in studying the clinical effects of marijuana in human beings, particularly the effects of long-term use. And yet, without such studies the debate about the safety or hazard of marijuana will remain unresolved. Prospective cohort studies, as well as retrospective case-control studies, would be useful in identifying long-term behavioral and biological consequences of marijuana use.

The federal investment in research on the health-related effects of marijuana has been small, both in relation to the expenditure on other illicit drugs and in absolute terms. The committee considers the research particularly inadequate when viewed in light of the extent of marijuana use in this country, especially by young people. We believe there should be a greater investment in research on marijuana, and that investigator-initiated research grants should be the primary vehicle of support.

The committee considers all of the areas of research on marijuana that are supported by the National Institute on Drug Abuse to be important, but we did not judge the appropriateness of the allocation of resources among those areas, other than to conclude that there should be increased emphasis on studies in human beings and other primates. Recommendations for future research are presented at the end of Chapters 1-7 of this report.

CONCLUSIONS

The scientific evidence published to date indicates that marijuana has a broad range of psychological and biological effects, some of which, at least under certain conditions, are harmful to human health. Unfortunately, the available information does not tell us how serious this risk may be.

The major conclusion is that what little we know for certain about the effects of marijuana on human health--and all that we have reason to suspect--justifies serious national concern. Of no less concern is the extent of our ignorance about many of the most basic and important questions about the drug. Our major recommendation is that there be a greatly intensified and more comprehensive program of research into the effects of marijuana on the health of the American people.



Cannabis 1988 Old Drug, New Dangers The Potency Question

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The story of the new, allegedly stronger and more dangerous marijuana was rebirthed in January 1986 by the late Sidney Cohen, M.D., Professor of Psychiatry at UCLA: "... material ten or more times potent than the product smoked ten years ago is being used, and the intoxicated state is more intense and lasts longer." In addition, Cohen (1986) asserted that "the amount of THC [tetrahydrocannabinol] in confiscated street samples averaged 4.1 percent THC during 1984.

The sinsemilla varieties were about 7 percent with some samples reaching 14 percent. ... all marijuana research to date has been done on 1 or 2 percent THC material and we may be underestimating present day smoking practices."

The average potency of marijuana samples seized by the Drug Enforcement Administration (DEA) increased from 0.5 percent THC in 1974 to 3.5 percent in 1985-1986, with sinsemilla (seedless marijuana) at 6.5 to 12 percent, announced Dr. Richard Hawks of NIDA later that year (Kerr 1986: 1). "Parents who experimented in their youth are not aware that the potency is much higher," added Donald M. Delzer, Chairman of the National Federation of Parents for Drug Free Youth (Kerr 1986: 18).

"Now perceived as a hard drug, marijuana has increased 1,400 percent in potency since 1970," proclaimed the flyer of a national conference on marijuana (Henry Ohlhoff Outpatient Programs 1986). Drug abuse treatment professionals soon elaborated on the outcry. Tennant (1986) asserted that the drug of the 1970's contained one to three percent THC, while that of the 1980's contained five to 15 percent. Furthermore, the brain registers the difference exponentially, so the difference between one percent and 10 percent THC was nine percent, but more like 900 percent (Garcia 1986: 3). Smith (1987) stated that Cohen "taught us that marijuana was a lot more dangerous than we originally thought, particularly with the use of more potent preparations by young people." Inaba (1987) added that "this new, stronger marijuana has a more disruptive effect on brain chemistry and body physiology than we had imagined previously," and mentioned heretofore

undescribed side effects among athletes: "Baseball players who get beamed a lot admit to smoking marijuana. It impairs their ability to follow the ball."

In a column for drug abuse counselors, Meyers (1987) advised "supportive therapy" for the effects of the "new" marijuana, which were described as "depersonalization, disorientation, derealization, changes in perception, and alterations in body image . . . acute brain syndromes with temporary clouding of mental processes . . . a change of time sense---where minutes seem like hours---slowed thinking, and feared perception of brain damage." Schick Shadel Health Services drug abuse treatment clinics (Unsigned 1987) now advertise that "marijuana has increased THC content from one percent THC in 1975 to six to fourteen percent THC in 1985 due to hybridization techniques. . . .

For those who have become addicted to marijuana, whether it was years ago, or recently, treatment is necessary---even more critical today."

Despite the respectability of these authorities, none of these alarming claims are new, and neither is the potency issue. There are several claims intertwined: (1) that the marijuana available today is much stronger than that available previously, particularly since the early 1970's; (2) that the effects of this so-called new marijuana are different from effects known earlier; and (3) that all previous marijuana research has been done with weak material and is therefore irrelevant. Before leaping on the bandwagon, one should examine the validity of these assertions.

HISTORICAL PERSPECTIVE

Extremely potent marijuana has been described for 150 years by Western scientists and (with the possible exception of the bean-ball syndrome) so have the effects of the new marijuana. There has been a great deal of research on high-potency cannabis in many countries.

In the paper that introduced cannabis to Western medicine, O'Shaughnessy (1839) discussed the widespread social and medical uses of ganja (sinsemilla) in India and noted symptoms of "delirium which the incautious use of the Hemp preparations often occasions, especially among young men first commencing the practice." Cannabis tinctures soon appeared in Europe and America (Robertson 1847; Savory 1843) and Fitz Hugh Ludlow (1857) described florid psychedelic trips after their oral ingestion, including all the symptoms mentioned by Meyers (1987). The Ohio State Medical Society (McMeens 1860) reviewed some 15 years of clinical experience with the drug and acknowledged the intense but physiologically benign mental effects caused by high doses or idiosyncratic sensitivity.

Wood (1869) reported the subjective effects of a tincture made from North American marijuana, experiencing a distortion in time sense, convulsions and memory loss, but no adverse aftereffects. He reported considerable success with it in the treatment of severe neuralgia. However, 15 years later Wood and Smith (1884) commented on the variable potency of cannabis and outlined appropriate treatment for overdoses in medical practice.

Early investigators (McMeens 1860; Bell 1857) attributed this variability to "defective pharmaceutic processes" employed in foreign countries, and recommended that extracts prepared at home would be preferable. However, extreme variations in locally manufactured preparations were soon recognized in the Dispensary of the United States (Wood & Bache 1868: 379-382). A practical bioassay technique was gradually perfected starting from the systematic observations of Hare (1887), followed by Evans (1894) and Marshall (1898), to compensate for batch-to-batch potency variations.

Pragmatically, the solution to the overdose/potency problem in both the United States (Wood & Bache 1868: 382) and England was to titrate the dose. In London, a patient who signed a letter to the editors of *Lancet*, W.W. (1890) reported a typical case: W.W. had inadvertently been given an overdose of cannabis

for treatment of neuralgia by his doctor and had suffered perceptual distortion, agitation, mood swings, and fear of death. Sir J. Russell Reynolds, M.D., F.R.S., physician to Queen Victoria's household, responded with a recommendation based on 30 years of experience with the drug (Reynolds 1890), stating "that Indian hemp, when pure and administered carefully, is one of the most valuable medicines we possess. . . . a minimum dose should be given to begin with, and . . . the dose should be very gradually and cautiously increased."

During the nineteenth century, social and scientific research on marijuana, as well as tinctures, were conducted with much stronger material than is available on the illicit market today. For example, the Indian Hemp Drugs Commission of 1893-1894 investigated the social, religious and medical uses of bhang (marijuana), ganja (sinsemilla) and charas (hashish). The potencies of varieties from different parts of the subcontinent were evaluated by government chemists and botanists (Evans 1894; Hooper 1894), using the "acknowledged superiority" of Bengal ganja as the standard. The Commission found that the moderate use of even highly potent marijuana caused no significant physical, mental or moral damage (Kaplan 1969; Mikuriya 1968).

In the 1890's, at the peak of medical interest in the drug, British chemists (Wood, Spivey & Easterfield 1899) isolated an impure active principle, cannabinal, using a "red oil" distilled from Indian cannabis as a starting point, which was considered to be the active ingredient until the 1930's (Work, Bergel & Todd 1939; Cahn 1931). In 1909, Marshall demonstrated that oxidation during storage was the primary cause of the drug's variable potency. With this advance the pharmaceutical industry shifted its attention to the production of standard extracts that could be used to assay medicinal compounds (Colson 1920). Because it had long been known that ganja and charas produced the most reliable extracts (Wallich 1883; Robertson 1847), in practical terms this meant the European and American producers had to learn how to grow ganja.

Sinsemilla cultivation by the Indian technique of culling male plants from the fields before female plants could set seeds---the very process to which recent researchers attribute the potency of the new marijuana---was exhaustively described by the British government in India (Kaplan 1969: 59-84; Prain 1893; Kerr 1877). In an effort to promote Bengali ganja, the British Raj imposed an export duty on inferior Bombay ganja at the turn of the century, and pharmacognosists in Europe and the U.S. began learning sinsemilla cultivation (Mair 1900).

Holmes (1900) discussed the potencies of Calcutta and Bombay ganja and recommended that the former be used for pharmaceutical preparations, either by home cultivation of ganja according to the Bengal methods he outlined (Holmes 1902a) or by extracting it immediately in Bengal and shipping it in tightly closed containers (Holmes 1902b). Comparing the potency of cannabis from Uganda, France and India, Holmes (1905) urged that only Indian sinsemilla preparations be admitted to the British Pharmacopoeia.

Likewise, Whineray (1909) and Hooper (1908) described ganja cultivation and manufacture, pointing out that cannabis grown in North America by the Indian methods could be as fully potent as Indian hemp. The National Standard Dispensatory of 1909, which included medicines from the pharmacopoeias of the U.S., Britain and Germany, gave the details of sinsemilla cultivation and featured a drawing of a perfect Calcutta ganja flower top (see Figure 1) as an example to be emulated by Western cultivators (Hare, Caspari & Rusby 1909: 374).

In the U.S., Hamilton and his colleagues (Hamilton 1918; Hamilton 1915; Hamilton, Lescobier & Perkins 1913; Houghton & Hamilton 1908) demonstrated that if care was exercised in cultivating and processing the plant for extraction, American-grown ganja and its extracts were as reliable as those from India and would not deteriorate significantly if stored properly. Information on cultivation of extremely potent seedless marijuana was thus widely disseminated to Western pharmaceutical producers during the first two decades of the twentieth century.

The U.S. government ignored these sensimilla cultivation techniques at the first federal marijuana farm established in 1904 on the Potomac Flats (where the Pentagon now sits) in Washington, D.C. (Silver 1979: 262-263), and as a result the 10-foot marijuana plants grown there and elsewhere in America proved to be much less potent than good samples of Indian hemp (Eckler & Miller 1912). However, private pharmaceutical firms were more successful. The Eli Lilly and Parke-Davis companies ran a cooperative venture at Parkedale (Parke-Davis's farm near Rochester, Michigan) from 1913 until 1938 to develop cannabis extracts for medical use, at first from *Cannabis indica*, but later standardized on a highly potent strain they developed that they called *Cannabis Americana* (Wheeler 1968).

Pharmaceutical companies were marketing cannabis extracts that were uniformly effective at 10 mg dose levels (Parke-Davis & Company 1930: 82) 11 years before its official removal from medicinal availability.

In 1941, cannabis was removed from the United States Pharmacopoeia (USP) at the behest of the Federal Bureau of Narcotics, which suddenly claimed that marijuana had no medical uses (Mikuriya 1973: xx). Yet even the removal of cannabis from the USP did not end scientific and social research on highly potent forms of cannabis, ranging from the red-dirt marijuana of the Midwest to the red oil of the laboratories. Adams, Pease and Clark (1940) described improved procedures for preparing purified red oil from Minnesota wild hemp, and comparison of the potencies of Minnesota marijuana and red oil was of significant interest to Loewe, pharmacological director of the LaGuardia Committee (Mayor's Committee on Marihuana 1944: 186ff). Red oil concentrates were used along with marijuana in the LaGuardia

Committee's experiments on prisoners, under Loewe's personal direction (Mayor's Committee on Marihuana 1944: 32); for a subjective account see Mezzrow and Wolfe (1946: 317ff). In the 1940's, Adams and Loewe in the U.S. and Todd in England isolated other cannabinoids, including THC, which Adams (1940) postulated as the active principle.

Such isolates were the mainstay of marijuana research during the 1940's and 1950's. A potent marijuana oil created as a truth drug for interrogation purposes by the Office of Strategic Services during World War II (Lee & Shlain 1985: 3-5) was the forerunner of later clandestine experiments conducted by the CIA and the Department of Defense at the Edgewood Arsenal in Maryland from the 1950's to the 1970's (Mikuriya 1973: xxii). Experiments with the designer drug synhexyl, a potent analog of delta⁹-THC, were conducted from the 1940's (Adams et al. 1941) until the mid-1970's (Lemberger 1976; Pars & Razdan 1976), but were abandoned before its potential was fully explored.

In the 1960's, the identification of pure delta⁹-THC as the active principle in cannabis (Gaoni & Mechoulam 1964) made it possible to assay the relative potencies of cannabinoids directly in human subjects (Isbell et al. 1967). Although Weil, Zinberg and Nelsen (1968) demonstrated the safety of human marijuana research, much of the U.S. research of the 1970's was conducted with low-potency marijuana because the government would not approve human research with high-potency strains. Indeed, in one early study (Jones & Stone 1970), a THC concentrate was removed from Mexican marijuana and then redistributed back into the bulk marijuana to return its potency to 0.9 percent THC. Outside the U.S., these strictures did not apply: The fact that cannabidiol interferes with the effects of delta⁹-THC was discovered in Brazil, using both purified cannabinoids on humans (Karniol et al. 1974).

The 1960's and 1970's saw a worldwide flowering of cannabis research, including its social, psychological, chemical, botanical and legal aspects as well as covering an enormous range of potencies and dosages. Major botanical work involved potency questions: observing phenotypes at the University of Mississippi (Guterman et al. 1971) and in Canada (Smol 1979); establishing a lectotype for *Cannabis sativa* L. (Stearn 1974); distinguishing *C. sativa* from *C. indica* and *C. ruderalis* (Schultes et al. 1974); and cultivation techniques for increased THC production (Clarke 1981; Frank & Rosenthal 1978).

Thus the claim by Cohen (1986) that "all marijuana research to date has been done on 1 or 2 percent THC material" is not accurate for the 1970's or for any other decade going back to 1839. It ignores much of the laboratory research in the U.S. that was summarized by Cohen himself (Cohen & Stillman 1976), Hollister (1986) and the National Academy of Sciences (1982), and all of the social research on high-potency marijuana in Jamaica (Rubin & Comitas 1975; Bowman & Pihl 1973), Costa Rica (Carter & Doughty 1976), Greece (Fink et al. 1976) and Africa (DuToit 1980). It is difficult to think of any country in which the claim is true.

RECENT ESTIMATES OF POTENCY

Since the advent of quantitative analysis technology, there has been sporadic reportage of the percentage of delta9-THC and other cannabinoids in natural and semisynthetic cannabis products. Notwithstanding the psychophysical effects of other cannabinoids, the amount of THC present in a marijuana sample is believed to determine the drug's potency (National Commission on Marihuana and Drug Abuse 1972: 50), and potency is usually expressed in percent THC by weight. The results of quantitative analyses performed on street samples of marijuana have been published since the late 1960's. These results are generally higher than the alleged 0.5 percent THC content of marijuana cited for the early 1970's.

Lerner and Zeffert (1968) described the development of quantitative analysis for the determination of THC content, and noted much variation among samples of marijuana, hashish, and red oil (still being used experimentally in the 1960's). The THC content of confiscated Mexican marijuana was 0.8 to 1.4 percent, hashish averaged eight percent and red oil 31 percent in 1968.

Quantitative analyses of street samples of marijuana and hashish conducted by Canadian laboratories in 1971 for the Commission of Inquiry into the Non-Medical Use of Drugs (1972: 28-29) showed a range of 0.02 to 3.46 percent THC (median=0.93%) for marijuana, with hashish ranging from 1.0 to 14.3 percent THC (median=4.82%). Samples seized in police raids were less potent: marijuana was 0.05 to 1.65 percent THC (median=0.21%), while hashish was 0.0 to 8.6 percent THC (median=1.3%). The reported difference between confiscated police seizures and street samples submitted to laboratories for analysis may be due to the voluntary samples being submitted precisely because of their extraordinary potency, or that storage conditions in police evidence lockers are hardly optimal for potency stability.

This has a bearing on the potency question because the low potency cited by both Cohen (1986) and Hawks (see Kerr 1986) referred to samples confiscated by the DEA. It has been known since the early days of its isolation (Wollner et al. 1942) that THC oxidizes to cannabinol rapidly in samples stored at room temperature (24°C). Lerner (1963) reported that the concentration of THC in marijuana decreased at a rate of three to five percent under normal room conditions, and Razdan (1970) reported a rate of 10 percent per month.

The influence of temperature, light and age on potency was addressed by Starks (1977: 13-15). The low-baseline percentage of THC reported for the early 1970's may be due to this deterioration in confiscated, stored samples. In any case, the low baseline makes the difference in the THC content of later-reported samples appear much greater than it may have been in actuality, assuming that the marijuana smoked by consumers was fresher than stored police seizures.

For a short while in the early 1970's, PharmChem Laboratories in Palo Alto, California, tested and reported the percent of the THC content in anonymously submitted marijuana samples. For 1973, PharmChem reported an average THC content of 1.62 percent in marijuana, compared with hashish at 4.6 percent and hash oil (a refined extract of hashish) at 13.5 percent (Ratcliffe 1974).

In 1974, the DEA published guidelines that no longer allowed laboratories to provide quantitative results

directly to the sample donors. This, in effect, restricted public access to analysis information to whatever government officials wished to reveal. However, nonspecific summaries of THC percentage ranges were allowed to be published (Unsigned 1974).

The results of an independent examination of gas-liquid chromatographs of street samples of marijuana in California that were submitted to PharmChem during 1973 and 1974 are shown in Table I.

Seeded varieties ranged in THC from an average of 2.2 percent (Mexican) to 4.9 percent (Panama Red), while sinsemilla averaged 2.8 percent for Big Sur "Holy Weed" to above six percent for Thai Sticks and Hawaiian "Maui Wowie." This would appear to be a much more representative sample of the types of marijuana available in California in 1973-1974 than the half-percent grade cited by Cohen (1986) and Hawks (see Kerr 1986), or the one to three percent grade cited by Tennant (1986).

A retrospective summary of street-drug analysis trends from 1969 through 1975 published by PharmChem (Perry 1977) confirms the fact that quite potent forms of cannabis were available on the illicit U.S. market by 1975: "Early quantitative work showed a range of 1.0-2.5 percent THC for average marijuana. In 1975, the range was 1.0-2.5 percent; samples in the range of 5.0-10.0 percent were not uncommon, and some contained as much as 14.0 percent THC. . . . Hash oil (concentrated from hash, usually amber or red in color) and grass oil (from marijuana, dark green or black in color) . . . vary greatly in potency, some samples [containing] up to 40 percent THC." Abundant information on the comparative potencies of cannabis grown in the U.S. and other countries in the mid-1970's was summarized by Starks (1977: 41-87).

In the spring of another election year, 1980, Cohen and DuPont launched a similar campaign, stating that confiscated marijuana in 1975 contained only 0.4 percent THC, while in 1979 the average was four percent, a 10-fold increase (Brody 1980: C1). This data conflicts directly with that published by PharmChem for 1975 street samples (Perry 1977) and that shown in Table I. Perhaps one should be thankful that, according to these estimates, marijuana potency dropped from four percent THC in 1979 to 3.5 percent THC in 1986 (Kerr 1986).

The most recent comparison of cannabis potencies was compiled from published sources from 1972 through 1981 by the National Academy of Sciences (1982: 16), and is summarized in Table II. It again demonstrates the great range of products available legally (i.e., NIDA samples) and illegally during that decade, and may in fact underestimate some potencies. For example, the 2.8 percent THC content cited for Jamaican ganja (Marshman, Popham & Yawney 1976) is slightly lower than the mean 2.96 percent THC material studied by Rubin and Comitas in 1970 through 1972 (Unsigned 1973), and significantly lower than the four to eight percent THC Jamaican ganja cited by the National Commission on Marihuana and Drug Abuse (1972: 50).

The government "research harvests" in Table II (Rosenkrantz 1981) are considerably less potent than the sinsemilla samples that averaged three to 11 percent THC (Turner 1981, 1980). Perhaps this is because cultivators at the government marijuana farm at the University of Mississippi, like their predecessors in 1904, never learned proper sinsemilla cultivation (Turner et al. 1979), while illicit cultivators in California and Hawaii were making it standard for the industry (Frank & Rosenthal 1978: 258-259). If so, this alone could explain the wide discrepancies between the potency of marijuana reported by government sources and that actually being grown in the U.S. during the 1970's and 1980's.

SELF-ADJUSTMENT OF DOSE

An important consideration in regard to the potency issue is autotitration, the adjustment of dose by the individual user to obtain optimal effects and avoid unpleasant ones. As noted above, cautious titration of dose was standard practice when cannabis preparations were used in medicine. Smoking marijuana, customary in present social use of the drug, requires knowledge of when to stop in order to avoid symptoms

of overdose. The smoked route gives rapid feedback to the user with regard to levels of effect because the drug goes directly to the brain from the lungs, unimpeded by the gut or the liver.

Researchers for the Mayor's Committee on Marihuana (1944: 13) were among the first to notice that experienced marijuana smokers in the "tea-pads" of Harlem routinely practiced autotitration. The confirmed user, they noted, "appears to be quite conscious of the quantity he requires to reach the effect called 'high.' Once the desired effect is obtained he cannot be persuaded to consume more. He knows when he has had enough . . . and is ever-conscious of preventing himself from becoming 'too high.'" Similarly the Commission of Inquiry into the Non-Medical Use of Drugs (1972: 48) observed that "great variations in potency are usually accommodated by the experienced user through a 'titration' of dose (intake is reduced or stopped when the smoker reaches the preferred level of intoxication)." For U.S. users, the National Commission on Marihuana and Drug Abuse (1972: 166) commented: "... whatever the potency of the drug used, individuals tend to smoke only the amount necessary to achieve the desired effect."

SUMMARY AND CONCLUSIONS

Observation of the real world of social marijuana use, where autotitration is the norm, renders the scare tactics of the new marijuana proponents not only inaccurate but irrelevant. There is much published evidence about the availability of highly potent varieties of cannabis from the nineteenth century through the present day. The effects attributed to the new marijuana are the same ones debated for centuries in many different cultures. The assertion that "all marijuana research to date has been done on 1 or 2 percent THC material" (Cohen 1968) ignores several thousand years of human experience with the drug. The old medical cannabis extracts were stronger than most of the forms now available, though the potency of illicit hash oils by the mid-1970's was approaching the level of medicinal preparations available before their removal from the USP.

While it may be true that sinsemilla is more widely available than 10 or 15 years ago, its potency has not changed significantly from the 2.4 to 9.5 percent THC materials available in 1973-1974 (see Table I), or the five to 14 percent sinsemilla of 1975 (Perry 1977).

The range of potencies available then (marijuana at 0.1% to 7.8% THC, averaging 2.0% to 5.0% THC by 1975) was approximately the same as that reported now. With such a range, the evidence simply cannot support the argument by Cohen (1986) that marijuana is "ten or more times more potent than the product smoked ten years ago." And to say that marijuana potency has increased 1,400 percent since any date in history is patent nonsense.

It is not legitimate to imply that average low potencies represent the full range of potencies available in reality. Neither is it valid to cite the low end of the range then as a baseline to compare with the high end of the range now. The claimed baseline for THC content in the early 1970's would appear to be too low, probably because confiscated, stored police samples were utilized; and this low baseline makes the claimed difference in potency appear to be greater than it has been in reality.

In sum, the new marijuana is not new and neither is the hyperbole surrounding this issue. The implications of the new disinformation campaign are serious. Many people, particularly the experienced users of the 1960's and their children, will once again shrug off the warnings of drug experts and not heed more reasonable admonishments about more dangerous drugs. This is not only abusive to those who look to science, the medical profession, and government for intelligent leadership, but will sully the reputations of drug educators who wittingly cry wolf, and will inevitably diminish the credibility of drug abuse treatment professionals who pass on such flawed reports.

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INVITED REVIEW

Cannabis and the brain

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Summary

The active compound in herbal cannabis, Δ^9 -tetrahydrocannabinol, exerts all of its known central effects through the CB₁ cannabinoid receptor. Research on cannabinoid mechanisms has been facilitated by the availability of selective antagonists acting at CB₁ receptors and the generation of CB₁ receptor knockout mice. Particularly important classes of neurons that express high levels of CB₁ receptors are GABAergic interneurons in hippocampus, amygdala and cerebral cortex, which also contain the neuropeptides cholecystokinin. Activation of CB₁ receptors leads to inhibition of the release of amino acid and monoamine neurotransmitters. The lipid derivatives anandamide and 2-arachidonylglycerol act as endogenous ligands for CB₁ receptors (endocannabinoids). They may act as retrograde synaptic mediators of the phenomena of depolarization-induced suppression of inhibition or excitation in hippocampus and cerebellum. Central effects of cannabinoids

include disruption of psychomotor behaviour, short-term memory impairment, intoxication, stimulation of appetite, antinociceptive actions (particularly against pain of neuropathic origin) and anti-emetic effects. Although there are signs of mild cognitive impairment in chronic cannabis users there is little evidence that such impairments are irreversible, or that they are accompanied by drug-induced neuropathology. A proportion of regular users of cannabis develop tolerance and dependence on the drug. Some studies have linked chronic use of cannabis with an increased risk of psychiatric illness, but there is little evidence for any causal link. The potential medical applications of cannabis in the treatment of painful muscle spasms and other symptoms of multiple sclerosis are currently being tested in clinical trials. Medicines based on drugs that enhance the function of endocannabinoids may offer novel therapeutic approaches in the future.

Keywords: cannabinoid CB₁ receptor; Δ^9 -tetrahydrocannabinol; rimonabant (SR141716A); anandamide; 2-arachidonylglycerol

Abbreviations: 2-AG = 2-arachidonylglycerol; DSI = depolarization-induced suppression of inhibition; FAAH = fatty acid amide hydrolase; Gi/o = G-proteins negatively linked to adenylate cyclase or to inositol phosphates; LTD = long-term depression; LTP = long-term potentiation; mGlu = metabotropic glutamate; NMDA = *N*-methyl-D-aspartate; THC = Δ^9 -tetrahydrocannabinol

Introduction

A large literature exists on the effects of cannabis, with many of the earlier studies conducted in human subjects (Mendelson *et al.*, 1976; Jones, 1978; Hollister, 1986). Unfortunately, much of this research would now be regarded as inadequately controlled and poorly designed. However, research on cannabis has been stimulated in recent years by the recognition that specific receptors exist in the brain that

recognize cannabinoids, and by the discovery of a series of endogenous cannabinoids that act as ligands for these receptors. As was the case with opiate research in the 1970s, research on a psychoactive drug of plant origin has revealed a hitherto unknown physiological control mechanism. This review will focus mainly on the more recent literature in this field.

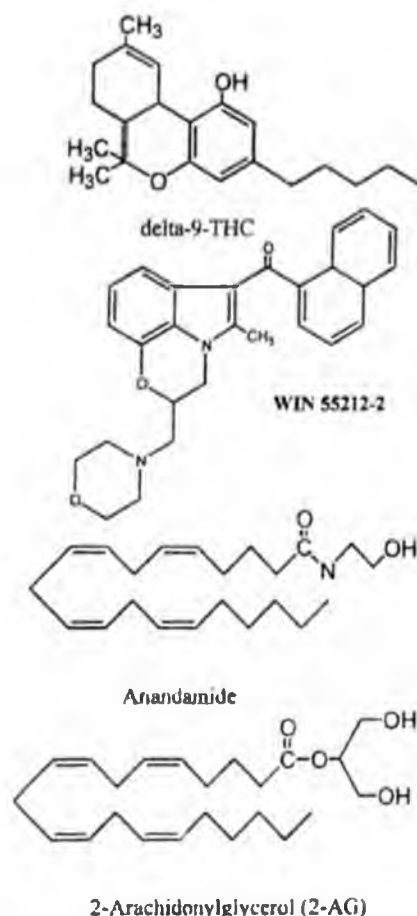


Fig. 1 Chemical structures of THC, the synthetic CB₁ receptor agonist WIN 55,2122 and the endocannabinoids.

The cannabinoid system in brain

Exogenous cannabinoids and their receptors

The principal active component in the complex mixture of cannabinoids present in extracts of the plant *Cannabis sativa* is Δ^9 -tetrahydrocannabinol (THC) (Mechoulam, 1970) (Fig. 1). THC is a sticky resin that is not soluble in water. Smoking remains the most efficient means of delivering the drug and experienced users can titrate the dose by adjusting the frequency and depth of inhalation (Iversen, 2000). THC or cannabis extracts can also be taken orally in fat-containing foods or dissolved in a suitable pharmaceutical oil, but absorption is delayed and variable (Iversen, 2000). A series of man-made synthetic cannabinoids, some of which are more potent and more water soluble than THC, is also available (Pertwee, 1999) (Fig. 1). All of these compounds act as agonists at the CB₁ cannabinoid receptor (Matsuda *et al.*, 1990), which is the only one known to be expressed in the brain. A second cannabinoid receptor, CB₂, is expressed only in peripheral tissues, principally in the immune system (Munro *et al.*, 1993; Felder and Glass, 1998; Pertwee, 1999). THC and

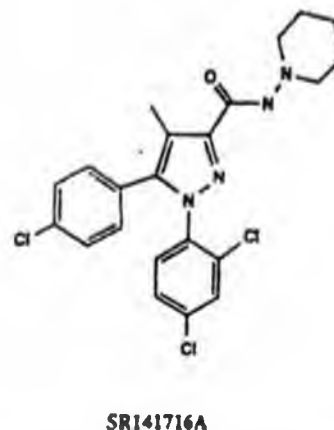


Fig. 2 Chemical structure of the CB₁ selective antagonist drug rimonabant (SR141716A).

the synthetic cannabinoids also act to some extent as agonists at the CB₂ receptor. Both cannabinoid receptors are members of the G-protein coupled class, and their activation is linked to inhibition of adenylyl cyclase activity (Howlett *et al.*, 1988). A series of synthetic drugs is also now available that act as specific antagonists at CB₁ or CB₂ receptors (D'Souza and Kosten, 2001). One of these compounds, rimonabant (SR141716A), which acts selectively to block CB₁ receptors (Rinaldi-Carmona *et al.*, 1994; Compton *et al.*, 1996), has been widely used in studies of the actions of cannabinoids in the CNS (Fig. 2).

Endogenous cannabinoids

Following the discovery of specific cannabinoid receptors, a search was made for naturally occurring ligands of these receptors in mammalian tissues. This led to the discovery of a series of arachidonic acid derivatives with potent actions at cannabinoid receptors. These are: anandamide (*N*-arachidonyl-ethanolamine; Devane *et al.*, 1992), 2-arachidonylglycerol (2-AG; Mechoulam *et al.*, 1995; Sugiura *et al.*, 1995; Stella *et al.*, 1997) and 2-arachidonylglycerol ether (Hanuš *et al.*, 2001) (Fig. 1). Of these, anandamide is the ligand that has been most extensively studied so far. The endogenous cannabinoids known as 'endocannabinoids' are present only in small amounts in the brain or other tissues. Like other lipid mediators (e.g. prostaglandins) they appear to be synthesized and released locally on demand (see below). Anandamide and the other endogenous cannabinoids are rapidly inactivated by a combination of a transporter mechanism and by the enzyme fatty acid amide hydrolase (FAAH) (Di Marzo *et al.*, 1994; Piomelli *et al.*, 1998; Giuffrida *et al.*, 2001). Genetically engineered mice lacking FAAH displayed elevated levels of anandamide in brain and were supersensitive to the biological actions of anandamide (Cravatt *et al.*, 2001). The discovery of agents that could interfere with the inactivation of endogenous cannabinoids may provide a novel means of pharmaco-

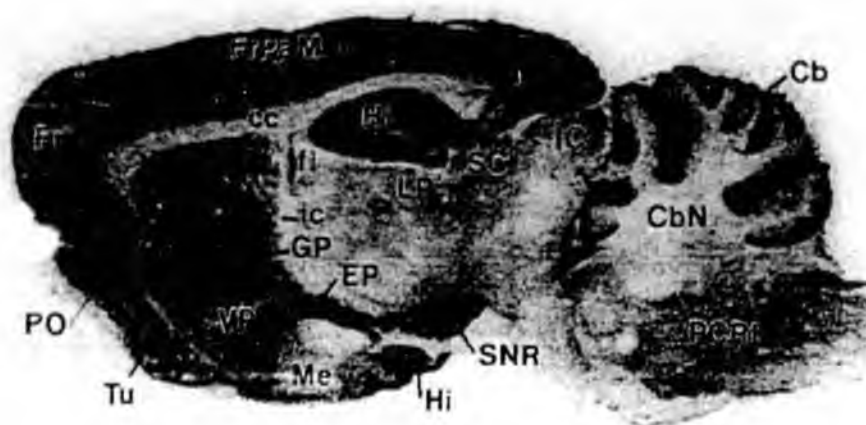


Fig. 3 Distribution of cannabinoid CB_1 receptors in rat brain revealed by an autoradiograph of the binding of radioactively labeled CP-55940 (a high affinity agonist ligand) to a sagittal brain section. The brain regions labelled are: Cb = cerebellum; CbN = deep cerebellar nucleus; cc = corpus callosum; EP = entopeduncular nucleus; fi = fimbria hippocampus; Fr = frontal cortex; FrPaM = frontoparietal cortex motor area; GP = globus pallidus; Hi = hippocampus; IC = inferior colliculus; LP = lateral posterior thalamus; Me = medial amygdaloid nucleus; PO = primary olfactory cortex; PCRt = parvocellular reticular nucleus; SNR = substantia nigra reticulata; Tu = olfactory tubercle; VP = ventroposterior thalamus. Photograph kindly supplied by Dr Miles Herkenham, National Institute of Mental Health, USA.

logically modifying cannabinoid function in the brain (Piomelli *et al.*, 2000).

Neuroanatomical distribution of CB_1 receptors in brain

The distribution of cannabinoid receptors was first mapped in rat brain in autoradiographic studies, using the radioligand [H^3]CP-55,940, which binds with high affinity to CB_1 sites (Herkenham *et al.*, 1991) (Fig. 3). The validity of using this radioligand was confirmed by autoradiographic studies in CB_1 receptor knockout mice, in which no detectable [H^3]CP-55,940 binding sites were observed (Zimmer *et al.*, 1999). More recently, antibodies that target the C- or N-terminal regions of the CB_1 receptor protein have been used for immunohistochemical mapping studies (Egertová *et al.*, 1998; Pettit *et al.*, 1998; Egertová and Elphick, 2000). Immunohistochemistry provides a superior degree of spatial resolution to autoradiography, but the overall pattern of distribution of CB_1 receptors revealed by the two approaches is very similar (Elphick and Egertová, 2001).

The mapping studies in rat brain showed that CB_1 receptors are mainly localized to axons and nerve terminals and are largely absent from the neuronal soma or dendrites. The finding that cannabinoid receptors are predominantly pre-synaptic rather than postsynaptic is consistent with the postulated role of cannabinoids in modulating neurotransmitter release (see below).

In both animals and man the cerebral cortex, particularly frontal regions, contains high densities of CB_1 receptors.

There are also very high densities in the basal ganglia and in the cerebellum (Fig. 3). In the limbic forebrain CB_1 receptors are found particularly in the hypothalamus and in the anterior cingulate cortex. The hippocampus also contains a high density of CB_1 receptors. The relative absence of the cannabinoid receptors from brainstem nuclei may account for the low toxicity of cannabinoids when given in overdose.

The regional distribution of the CB_1 receptor in brain correlates only poorly with the levels of anandamide and other endocannabinoids in different brain regions (Felder *et al.*, 1996; Bisogno *et al.*, 1999). However, measurements of endocannabinoids have yielded variable results, and a strict correlation would not be expected for ligands that are only produced on demand. There is a better correlation between the regional distribution of CB_1 receptors and the enzyme FAAH. FAAH is widely distributed in CNS and other tissues, suggesting that its role is not confined to inactivating endogenous cannabinoids. Nevertheless, particularly high levels of FAAH were found in brain regions that are enriched in CB_1 receptors, and immunohistochemical staining suggested a complementary relationship between FAAH and CB_1 receptors at the synaptic level (Egertová *et al.*, 1998; Elphick and Egertová, 2001). In cerebellum, hippocampus and neocortex FAAH was expressed at high levels in the somato-dendritic regions of neurons that were postsynaptic to CB_1 -positive axon terminals. The close and complementary relationship between CB_1 receptors and FAAH led to the hypothesis that FAAH may participate in the inactivation of endogenous cannabinoids released locally at synapses

(Elphick and Egerová, 2001). These authors postulated a retrograde cannabinoid signalling mechanism, whereby endogenous cannabinoids are released in response to synaptic activation, feedback to presynaptic receptors on these axon terminals, and are subsequently inactivated by FAAH after their uptake into the postsynaptic compartment. This hypothesis has been supported independently by neurophysiological findings, as described below.

Effects of cannabinoids on synaptic function

Inhibition of neurotransmitter release

The presynaptic localization of CB₁ receptors suggests a role for cannabinoids in modulating the release of neurotransmitters from axon terminals, and this has been confirmed by a substantial body of experimental data. Early reports (Gill *et al.*, 1970; Roth, 1978) showed that THC inhibited acetylcholine release from electrically stimulated guinea pig ileum. Similar inhibitory effects of THC and other cannabinoids on the release of a variety of neurotransmitters from CNS neurons have been observed in many subsequent studies (Schlicker and Kathmann, 2001). The neurotransmitters involved include L-glutamate, GABA, noradrenaline, dopamine, 5-HT and acetylcholine. The brain regions most often studied *in vitro*, usually in tissue slice preparations, have been cerebellum, hippocampus or neocortex. Neurotransmitter release has been studied directly in superfused preparations, and indirectly by measuring postsynaptic currents. Although most of these studies involved rat or mouse brain, a few studies have shown similar results using human brain tissue (Katona *et al.*, 2000; Schlicker and Kathmann, 2001). Because THC is only poorly water soluble, the more soluble synthetic CB₁ receptor agonists WIN552123, HU210 or CP55-2940 were used in these *in vitro* studies. The specificity of the cannabinoid effects were confirmed by demonstrating that the inhibitory effects of the agonists were completely blocked by the CB₁-selective antagonist rimonabant.

The cellular mechanisms involved in the inhibition of neurotransmitter release by cannabinoids remain unclear. Some have suggested that there is a direct inhibitory effect of CB₁ receptor activation on N-type Ca²⁺ currents (Caulfield and Brown, 1992; MacKie and Hill, 1992). However, the effect appears more likely to involve sites downstream of voltage-dependent Ca²⁺ channels, since a number of studies have shown that cannabinoids reduce the frequencies of miniature excitatory or inhibitory synaptic currents, which are Ca²⁺ independent, rather than altering their amplitude, which is Ca²⁺ sensitive (Schlicker and Kathmann, 2001). Deadwyler *et al.* (1995) suggested that the inhibitory effect of CB₁ receptor activation on adenylate cyclase activity causes a decreased phosphorylation of A-type K⁺ channels by the cAMP-dependent enzyme protein kinase A. This, in turn, would activate the A-type K⁺ channels and cause a shortening

of the duration of presynaptic action potentials as they invade axon terminals.

Biosynthesis of endocannabinoids

Despite their similar chemical structures, the endocannabinoids are produced through distinct biochemical pathways. The formation of anandamide is thought to result from the hydrolysis of the precursor *N*-arachidonoyl phosphatidylethanolamine, catalysed by the phosphodiesterase enzyme phospholipase D (Di Marzo *et al.*, 1994; Cadas *et al.*, 1997). 2-AG, on the other hand, is produced by cleavage of an inositol-1,2-diacylglycerol, catalysed by phospholipase C. Although both anandamide and 2-AG can activate CB₁ receptors, it is not clear whether both function as endocannabinoids, and whether their synthesis and release are independently controlled. The levels of 2-AG found in brain (2–10 nmol/g) are 50–1000 times higher than those of anandamide (10–50 pmol/g). There is some evidence for separate control of their biosynthesis. Stimulation of glutamate release from Schaffer collaterals in rat hippocampal slices increased levels of 2-AG, but not anandamide (Stella *et al.*, 1997). On the other hand, another study using *in vivo* microdialysis probes showed that local administration of the dopamine D2 receptor agonist quinpirole caused an increased release of anandamide from rat striatum without affecting levels of 2-AG (Giuffrida *et al.*, 1999). Indeed, despite the much higher tissue levels of 2-AG relative to anandamide and the availability of a very sensitive assay, no 2-AG could be detected at all in the striatal dialysate samples. In cultured rat cortical neurons activation of Ca²⁺ influx by stimulation of glutamate *N*-methyl-D-aspartate (NMDA) receptors caused an increase in 2-AG formation but not anandamide (Stella and Piomelli, 2001). However, if NMDA activation was combined with a cholinergic agonist (carbachol) the formation of both endocannabinoids was increased. In both cases Ca²⁺ influx was required for endocannabinoid synthesis. It is clear that much remains to be learned about the relative roles played by the different endocannabinoids. The biosynthesis of the most recently discovered third endocannabinoid, 2-arachidonylglycerol ether, remains to be characterized.

Endogenous cannabinoids act as retrograde signal molecules at synapses

Important new insights into the physiological role of cannabinoids has emerged from neurophysiological studies published independently by three different research groups in 2001. A phenomenon known as depolarization-induced suppression of inhibition (DSI) has been known to neurophysiologists for some years (Alger and Pitler, 1995). It is a form of fast retrograde signalling from postsynaptic neurons back to inhibitory cells that innervate them, and is particularly prominent in the hippocampus and cerebellum. Three prop-

erties of DSI suggested to Wilson and Nicoll (2001) that a cannabinoid mechanism might be involved. First DSI, like endocannabinoid synthesis, requires Ca^{2+} influx into the postsynaptic neuron (Lenz *et al.*, 1998). Secondly, DSI is probably presynaptic, since the sensitivity of the postsynaptic cell to GABA is unaffected (Pitler and Alger, 1992). Finally, DSI is blocked by pertussin toxin, which interacts with the Gi-proteins negatively linked to adenylate cyclase or to inositol phosphates (Gi/o) protein to which the CB_1 receptor is coupled (Pitler and Alger, 1994). Wilson and Nicoll (2001) used slice preparations of rat hippocampus and induced DSI by brief depolarizing steps in the holding potential of voltage clamped CA1 pyramidal neurons. They found that DSI was completely blocked by the cannabinoid CB_1 receptor antagonists AM251 or rimonabant and could be mimicked by application of the CB_1 receptor agonist WIN55,2122, but the continued presence of the agonist prevented DSI by occlusion. Wilson and Nicoll (2001) were also able to show by recording from pairs of nearby CA1 neurons that depolarizing one of these neurons caused DSI to spread and affect adjacent neurons up to 20 μm away. They suggested that the small, lipid-soluble, freely diffusible endocannabinoids act as retrograde synaptic signals that can affect axon terminals in sphere of influence some 40 μm in diameter.

Ohno-Shosaku *et al.* (2001) came to a similar conclusion using a different experimental paradigm. They recorded from pairs of cultured hippocampal neurons with inhibitory synaptic connections. They found that depolarization of the postsynaptic neurons lead to DSI in approximately two-thirds of the neuron pairs, and showed that this was due to inhibition of GABA release. Those that exhibited DSI, but not the others, proved to be sensitive to the CB_1 receptor agonist WIN55,2122, which mimicked the inhibitory effect of DSI. Both DSI and the cannabinoid effect could be blocked by the CB_1 receptor antagonists AM-281 or rimonabant.

Further support for the conclusion that a cannabinoid-mediated mechanism underlies DSI came from Varma *et al.* (2001), who found that DSI was completely absent in hippocampal slices prepared from CB_1 receptor knockout mice (Ledent *et al.*, 1999). Varma *et al.* (2001) also reported that agonists which stimulate metabotropic glutamate (mGlu) receptors enhanced DSI, whereas the broad-spectrum antagonist of mGlu receptors, LY341495, tended to reduce DSI, suggesting that glutamate may also be involved. Interestingly, Varma *et al.* (2001) found that mGlu agonists failed to have any effect on DSI in the CB_1 knockout animals, suggesting that glutamate acts to enhance the endocannabinoid signal.

Retrograde signalling by endocannabinoids is not restricted to the inhibitory inputs to postsynaptic neurons. Kreitzer and Regehr (2001a) showed that depolarization of rat cerebellar Purkinje cells leads to a transient inhibition of excitatory inputs from parallel fibre and climbing fibre inputs, a phenomenon described as depolarization-induced suppression of excitation (DSE). They found that DSE was triggered by Ca^{2+} influx into the Purkinje cells, and could be completely blocked by the CB_1 antagonist AM-251, and mimicked and

occluded by the CB_1 receptor agonist WIN55,2122. Kreitzer and Regehr (2001b) went on to show that inhibitory inputs to rat cerebellar Purkinje cells from basket cells and stellate cells were subject to DSI, and that this was also blocked by AM-251 and occluded by WIN55,2122. The DSE phenomenon in the cerebellum is also linked to mGlu receptors. Maejima *et al.* (2001) reported that mGlu agonists acting on mouse Purkinje cells mimicked DSE, and the effects could be blocked by CB_1 antagonists.

These findings suggest that endocannabinoids are involved in the rapid modulation of synaptic transmission in CNS by a retrograde signalling system that can influence synapses in a local region of some 40 μm diameter, causing inhibitory effects on both excitatory and inhibitory neurotransmitter release that persist for tens of seconds. This may play an important role in the control of neural circuits, particularly in cerebellum and hippocampus (see below). Exogenously administered THC or other cannabinoids cannot mimic the physiological effects of locally released endocannabinoids. Since they cause long-lasting activation of CB_1 receptors in all brain regions, their overall effect is to cause a persistent inhibition of neurotransmitter release from those nerve terminals that express CB_1 receptors, and as a consequence they temporarily occlude and prevent the phenomena of DSI and DSE.

Effects of cannabinoids on CNS function

Psychomotor control

CB_1 receptors are expressed at particularly high densities in the basal ganglia and cerebellum, so it is not surprising that cannabinoids have complex effects on psychomotor function (reviewed by Rodriguez de Fonseca *et al.*, 1998). One of the earliest reports of the effects of cannabis extracts in experimental animals described the awkward swaying and rolling gait caused by the drug in dogs, with periods of intense activity provoked by tactile or auditory stimuli, and followed eventually by catalepsy and sleep (Dixon, 1899). In rodents cannabinoids tend to have a triphasic effect. Thus in rats low doses of THC (0.2 mg/kg) decreased locomotor activity, while higher doses (1–2 mg/kg) stimulated movements, and catalepsy emerged at doses of 2.5 mg/kg (Sañudo-Peña *et al.*, 2000). Similarly in mice, Adams and Martin (1996) described a 'popcorn effect' in animals treated with THC. Groups of mice are sedated by the drug, but will jump in response to auditory or tactile stimuli, as they fall into other animals these in turn jump, resembling corn popping in a popcorn machine. Interestingly, the CB_1 receptor antagonist rimonabant stimulated locomotor activity in mice, suggesting that there is tonic activity in the endocannabinoid system that contributes to the control of spontaneous levels of activity (Compton *et al.*, 1996).

These effects of cannabinoids may be due, in part, to actions at cerebellar or striatal receptors. Patel and Hillard (2001) used tests of specific cerebellar functions to show that

cannabinoids caused increased gait width and the number of slips on a bar cross test. DeSanty and Dar (2001) observed rotarod impairments in mice after direct injection of synthetic cannabinoids into the cerebellum. These defects were no longer seen in animals pretreated with cerebellar injections of an antisense oligonucleotide directed to a sequence in the CB₁ receptor.

In human subjects it is also possible to demonstrate that cannabis causes impaired performance in test of balance (Greenberg *et al.*, 1994), or in tests that require fine psychomotor control, for example tracking a moving point of light on a screen (Manno *et al.*, 1970). Human cannabis users may also seek isolation and remain immobile for long periods.

A number of authors have attempted to combine what is known of the neuroanatomical distribution of the cannabinoid system and the results of behavioural and electrophysiological studies to speculate on the mechanisms underlying cannabinoid modulation of psychomotor function (Breivogel and Childers, 1998; Sañudo-Peña *et al.*, 1999; Giuffrida *et al.*, 2000; Elphick and Egertová, 2001). The CB₁ receptor is expressed particularly by striatal GABAergic medium-spiny projection neurons, and is abundant in regions containing the axon terminals of these cells (globus pallidus, entopeduncular nucleus and substantia nigra reticulata, and in axon collaterals feeding back to medium-spiny projection neurons in striatum). CB₁ receptors are also abundant on the terminals of glutamatergic projection neurons from the subthalamic nucleus to globus pallidus, entopeduncular nucleus and substantia nigra reticulata. Cannabinoids might thus be expected to inhibit GABA release in striatum and GABA and glutamate release in the other nuclei. Sañudo-Peña *et al.* (1999) suggested that the primary role of the endocannabinoid system may be to inhibit tonic release of glutamate in the substantia nigra, regulating levels of basal motor activity. Exogenous cannabinoids also lead to decreased GABA release in substantia nigra, which could lead to a disinhibition of the inhibitory nigral input to the thalamocortical pathway, resulting in inhibition of movement. To what extent the effects of cannabinoids on motor function are due to actions in the cerebellum remains unclear, although as described above it is likely that effects on posture and balance are mediated in this brain region. As described previously, CB₁ receptors are known to occur abundantly on nearly all of the principal excitatory (glutamatergic) and inhibitory (GABAergic) inputs to cerebellar Purkinje cells.

The results of eliminating the expression of CB₁ receptors in knockout mice have yielded conflicting results. The knockout animals studied by Zimmer *et al.* (1999) displayed reduced levels of basal activity, in support of the hypothesis put forward by Sañudo-Peña *et al.* (1999), suggesting that tonic activation of CB₁ receptors promotes movement. However, the CB₁ knockout animals studied by Ledent *et al.* (1999) showed no change in spontaneous activity, and in

some tests they exhibited increased motor activity. This is in line also with the observations of Compton *et al.* (1996) that the CB₁ antagonist SR141716 caused an increase in locomotor activity. The reasons for the discrepant findings in different strains of CB₁ knockout mice are unknown. Clearly, there is as yet only a poor understanding of the actions of cannabinoids in the basal ganglia and cerebellum. Interactions with other chemical signalling systems in the brain are likely to be important. Giuffrida *et al.* (1999) showed, for example, that dopamine D2 receptor agonists caused an increase in anandamide synthesis and release in striatum. Deadwyler *et al.* (1995) described the convergence of multiple presynaptic controls on the terminals of granule cells in cerebellum. In addition to the CB₁ receptor, these terminals also express high densities of kappa opioid, adenosine A₁ and GABA-B receptors, all of which are coupled through a similar Gi/o type G-protein to inhibit adenylyl cyclase and are capable of inhibiting glutamate release. Such complexities are likely to prove the norm.

There is anecdotal evidence that cannabis can relieve muscle pain and spasticity in patients suffering from multiple sclerosis (Consroe *et al.*, 1996). Experimental data obtained by Baker *et al.* (2000) in an animal model of multiple sclerosis appears to support such claims. Mice immunized with myelin antigens develop spasticity and tremor. Both symptoms were ameliorated by administration of cannabinoids, and the symptoms were exacerbated by rimonabant, suggesting the involvement of CB₁ receptors and tonic activity in the endocannabinoid system. Controlled clinical trials of cannabis-based medicines for the treatment of multiple sclerosis are currently under way.

Cannabinoid mechanisms in the hippocampus and effects on memory

One of the well established effects of acute intoxication with cannabis in man is an impairment of short-term memory (the extensive literature on human studies is reviewed by Jones, 1978; Miller and Branconnier, 1983; Solowij, 1998; Earleywine, 2002). Many studies have shown significant effects on short-term memory, particularly when tests were used that depend heavily on attention (Abel, 1971; Mendelson *et al.*, 1976). Animal studies have also found that THC, synthetic cannabinoids and anandamide cause deficits in short-term memory in spatial learning tasks (for a review see Hampson and Deadwyler, 1999). These include delayed matching or non-matching tests in rodents (Mallet and Beninger, 1998; Hampson and Deadwyler, 1999), performance in a radial arm maze (Stiglick and Kalant, 1985; Lichtman and Martin, 1996), and a fixed ratio food acquisition task in squirrel monkeys (Nakamura-Palacios *et al.*, 2000). The effects of both cannabinoids (Lichtman and Martin, 1996) and anandamide (Mallet and Beninger, 1998) were reversed by rimonabant, indicating that they are mediated by the CB₁ receptor.

A probable site for these effects is the hippocampus. Hampson and Deadwyler (1999) claimed that the effects of the treatment of rats with cannabinoids on short-term memory in a delayed non-matching to sample test were equivalent to the effects seen after surgical removal of the hippocampus. In each case the animals were unable to segregate information between trials in the task because of disruptions to the processing of sensory information in hippocampal circuits. CB₁ receptors are expressed at high densities in the hippocampus. They are particularly abundant on the terminals of a sub-set of GABAergic basket cell interneurons, which also contain the neuropeptide cholecystokinin (Katona *et al.*, 1999), and this is also the case in human hippocampus (Katona *et al.*, 2000). These are presumably the GABAergic neurons involved in the endocannabinoid-mediated DSI phenomenon described above. The terminals of these cells surround large pyramidal neuron somata in the CA1-CA4 fields. GABAergic neurons in the dentate gyrus also express CB₁ receptors, with terminals concentrated at the boundary of the molecular and granule cell layers (Egertová and Elphick, 2000). In addition CB₁ receptors are expressed, at a lower level, in the glutamatergic pyramidal cells and their terminals. Cannabinoids can thus inhibit both the release of GABA and glutamate in hippocampal circuits.

The mechanisms underlying synaptic plasticity have been studied more intensely in the hippocampus than in any other brain region. In particular, the electrophysiological phenomena of long-term potentiation (LTP) and long-term depression (LTD) are thought to be involved in memory formation at glutamatergic synapses in the hippocampus. A number of studies have shown clearly that cannabinoids inhibit the induction of both LTP and LTD (for review see Elphick and Egertová, 2001). Cannabinoids appear to work by reducing glutamate release below the level needed to activate NMDA receptors, a requirement for LTP and LTD (Shen *et al.*, 1996; Misner and Sullivan, 1999). Although the actions of cannabinoids in reducing GABA release from hippocampal interneurons might have been expected to increase the level of excitability of hippocampal pyramidal cells, it seems that the cannabinoid-induced reduction in glutamate release predominates. The administration of exogenous cannabinoids is, of course, wholly unphysiological and cannot mimic the effects of endocannabinoids that are released in discrete local regions in response to particular patterns of afferent inputs. CB₁ receptors are capable of regulating both inhibitory and excitatory neurotransmitter release in the hippocampus and are thus capable of subtle control of synaptic plasticity. The CB₁-containing GABAergic interneurons are thought to control oscillatory electrical activity in the hippocampus in the theta and gamma frequencies, which plays a role in synchronizing pyramidal cell activity (Hoffman and Lupica, 2000). CB₁ agonists decrease the power of such oscillations in hippocampal slices (Hajos *et al.*, 2000) and may thus influence the synchronous activity of pyramidal cells. The physiological importance of cannabinoid-mediated DSI may be to decrease GABAergic inhibition of these cells and thus facilitate

learning when hippocampal inputs are active (Wilson and Nicoll, 2001).

One approach to answering the question of what role the tonic release of endocannabinoids may play in hippocampal function has been to examine the effects of CB₁ receptor knockout or of selective CB₁ receptor antagonists. Unfortunately, these studies have so far yielded conflicting results. Bohme *et al.* (2000) reported a significant enhancement of LTP in CB₁ knockout mice, and Reibaud *et al.* (1999) found a significant enhancement of memory in such animals. However, tests with the CB₁ antagonist rimonabant showed no effects on LTP (Terranova *et al.*, 1995) or on learning and memory in a spatial learning task (Mallet and Beninger, 1998), although Terranova *et al.* (1996) reported that rimonabant enhanced memory in a short-term olfactory memory test in rats (social recognition test).

Cannabinoids and the neocortex

Like other intoxicant drugs cannabis causes profound changes in a variety of higher brain functions. The literature on the acute effects of the drug in human subjects is large, and can only be summarized here (for reviews see Jones, 1978; Solowij, 1998; Iversen, 2000; Earleywine, 2002). The distribution of CB₁ receptors in the neocortex has been described in detail (Herkenham *et al.*, 1991; Egertová and Elphick, 2000). As in the hippocampus, the majority of cortical interneurons expressing high levels of CB₁ receptor are GABAergic cells, which also express cholecystokinin (Marsicano and Lutz, 1999). CB₁-positive terminals are concentrated in layers II-III and layers V-VI, with few in layers I or IV. Despite the obvious importance of the abundant CB₁ receptors in the neocortex there have so far been few electrophysiological studies of their effects on neural activity.

The earlier literature, however, contains several reports of the effects of acute and chronic cannabis use on EEG activity, both in man and animals (reviewed by Adams and Martin, 1996; Solowij, 1998). Most studies in man have observed changes consistent with a state of drowsiness, with increases in relative and absolute α power particularly in frontal regions of cortex. In contrast, the CB₁ antagonist rimonabant was shown to induce EEG changes characteristic of arousal in rats, and increased the time spent in wakefulness as opposed to sleep (Santucci *et al.*, 1996). Mechoulam *et al.* (1997) have suggested that anandamide may play a role in the control of the sleep-waking cycle.

Studies of the effects of cannabis on perceptual abilities have yielded a variety of often conflicting results. While users often report a subjective enhancement of visual and auditory perception, sometimes with synesthesia (sounds take on visual colourful qualities), laboratory studies have usually not shown marked changes in visual or auditory perception. One subjective effect that has been confirmed is the sensation that cannabis users experience time as passing more quickly relative to real time. In laboratory tests subjects overestimate

the amount of elapsed time when asked to estimate, or produce shorter than required intervals when asked to signal a period of elapsed time (Hicks *et al.*, 1984; Mathew *et al.*, 1998). This curious effect can also be seen in rats trained to respond for food reward using a fixed interval schedule. When treated with THC or WIN55,2122 the animals shortened their response interval, whereas the antagonist rimobanil lengthened this interval (Han and Robinson, 2001).

There have been many studies of the acute and chronic effects of cannabis on human cognitive function (Jones, 1978; Solowij, 1998; Earleywine, 2002). Performance on a variety of tests of cognitive function is impaired by the drug, but by comparison with alcohol the effects of cannabis are subtle. Whereas even moderate doses of alcohol, for example, impair reaction time, most studies with cannabis have failed to show consistent effects on measures of simple reaction time. Thus the drug's ability to disrupt cognitive function cannot be due to an inability to respond promptly. Among the impairments of cognitive function that have been observed in many, but not all, human studies are: decreased ability to inhibit responses, decreased vigilance, especially for long and boring tasks, decreased ability to perform complex mental arithmetic and impairments in tests of complex reaction times. On the other hand, intoxicated subjects can perform simple arithmetic, learn simple lists of words and recall memories laid down earlier.

Other studies have addressed the question of whether more severe deficits in cognitive function might develop in chronic heavy users of cannabis, or in animals treated for prolonged periods with the drug. The human studies are fraught with difficulties, as described in detail by Earleywine (2002). Among the confounding factors in human studies are that comparisons have to be made between groups of drug users versus non-users, but it is usually impossible to compare the baseline performance of these groups prior to cannabis use to see if they are properly matched. Statistical analysis of such data has often been poor, common errors being the use of so many different tests that the likelihood of finding some significant differences is increased, or the use of inadequate sample sizes. Other drug use can also confound the data. Results have been very variable. Some studies in long-term very heavy users of cannabis (10–20 joints per day for more than 10 years) in Jamaica (Bowman and Pihl, 1973) and Costa Rica (Satz *et al.*, 1976) failed to show any significant difference between users versus non-users using a battery of test assessments of cognitive function, and similar negative results were reported in some studies of US college students (Earleywine, 2002). However, most reports have shown that there are deficits in the performance of complex cognitive tasks in long-term cannabis users, although there is little evidence that these are qualitatively or quantitatively more severe than those seen after acute use of the drug (Earleywine, 2002).

Even more controversial is the question of whether long-term cannabis use can cause irreversible deficits in higher brain function that persists after drug use stops. Many studies have suffered from poor design. It is not sufficient to identify a group

of cannabis users and simply to test them after stopping cannabis use. Pope *et al.* (2001), for example, recruited 63 current heavy users, who had smoked cannabis at least 5000 times in their lives, and 72 control subjects. Subjects underwent a 28-day washout from cannabis use, monitored by urine assays. At days 0, 1 and 7 the heavy users scored significantly below control subjects on a battery of neuropsychological tests, particularly in recall of word lists. However, by day 28 there were virtually no differences between the groups on any of the test results, and no significant association between cumulative lifetime cannabis use and test scores. The fact that drug-induced effects on cognitive performance can persist for up to a week after stopping the drug (perhaps because of the persistence of THC in the body, or because of a subtle withdrawal syndrome) means that many earlier studies that did not allow a sufficiently long washout period may be invalid. On the other hand, some well designed studies have shown subtle persistent cognitive deficits in ex-cannabis users. Solowij (1998) recruited a group of people who had used cannabis regularly for at least 5 years but who had stopped on average 2 years before the experiment. The subjects were given a very difficult task. They had to listen to a series of tones, some in the right ear some in the left; the tones were long or short (but differing by only 51 ms) and high or low pitch (but differing very little). Participants had to press a button as fast as possible in response to longer tones of a specified pitch in the correct ear. Previous research using this paradigm showed that current regular cannabis users had difficulty in discriminating between the tones. Measurements of event-related potentials also revealed small but significant abnormalities in the P300 wave (Solowij, 1998). The ex-users continued to make significant errors in the discrimination task, but they showed normal P300 waves. The conclusion of these and many other studies in ex-users seems to be that regular cannabis use can cause small but significant impairments in cognitive function that may persist after drug use stops. Such impairments appear to be associated with long-term heavy use of the drug and are unlikely to affect most recreational users.

Effects of cannabinoids on hypothalamic control of appetite

Many subjective reports suggest that cannabis intoxication is associated with an increased appetite, particularly for sweet foods, even in subjects who were previously satiated. This effect can be confirmed under laboratory conditions (Hollister, 1971; Mattes *et al.*, 1994), although results from studies in human subjects have tended to be variable, perhaps because the increased appetite is focused on certain types of food. Nevertheless, controlled clinical trials showed that THC (dronabinol) had significant beneficial effects in counteracting the loss of appetite and reduction in body weight in patients suffering from the AIDS-related wasting syndrome (Beal *et al.*, 1995), and this is one of the medical indications for which the drug has official approval in the USA.

THC also stimulates food intake in experimental animals, and again the effect is specific for high-fat or sweet high-fat diets, and is not seen in animals offered standard rat chow (Koch, 2001). The endocannabinoid anandamide also stimulates food intake in rats, and the effect is blocked by rimonabant (Williams and Kirkham, 1999). Conversely the CB₁ antagonist rimonabant given on its own suppressed food intake and led to reduced body weight in adult non-obese rats (Colombo *et al.*, 1998). These results suggest that cannabinoids may play a role in the regulation of food intake and body weight (Mechoulam and Fride, 2001). A possible reciprocal link between endocannabinoid mechanisms and the appetite-suppressing hormone leptin was suggested by Di Marzo *et al.* (2001a). They found that food-deprived CB₁ receptor knockout mice eat less than their wild-type litter mates, and the CB₁ antagonist rimonabant reduced food intake in the wild-type animals but not in the knockouts. Animals with defective leptin signalling (obese db/db or ob/ob mice and Zucker rats) exhibited elevated hypothalamic levels of anandamide and 2-AG. On the other hand, treatment of normal rats or ob/ob (leptin deficient) mice with leptin caused decreases in hypothalamic levels of the endocannabinoids. These findings suggest that hypothalamic endocannabinoids may play an important role in mediating the appetite-suppressant effects of leptin. At some stages during development these effects of endocannabinoids may be of critical importance. Fride *et al.* (2001) found that administration of the CB₁ antagonist rimonabant to new-born mouse pups had a devastating effect in decreasing milk ingestion and growth, continuing treatment with the antagonist led to death within 4–8 days. The effect of rimonabant could be almost fully reversed by co-administering THC.

Cannabinoids as anti-emetic agents

The ability of THC and the synthetic cannabinoid nabilone to control the nausea and vomiting associated with cancer chemotherapy is one of the few well documented medical applications for these drugs (for reviews of the controlled clinical trials see Vincent *et al.*, 1983; British Medical Association, 1997; Joy *et al.*, 1999; and the meta-analysis reported by Tramèr *et al.*, 2001). THC (dronabinol) and nabilone were approved for medical use in the USA, although neither drug has found much utility. The narrow window between the anti-emetic dose and that causing unwanted psychic effects made these drugs difficult to use. The advent of serotonin 5-HT₃ receptor antagonists as new and more powerful anti-emetic drugs that were free of unwanted psychic effects during the 1980s also made the cannabinoids less attractive.

Studies in experimental animals have confirmed that the anti-emetic effects of cannabinoids are mediated through CB₁ receptors (Darmani, 2002), and in some susceptible species (e.g. the least shrew) the CB₁ antagonist rimonabant is emetic, an effect that can be blocked by THC or WIN55,2122 (Darmani, 2001).

Cannabinoids and pain

Cannabis was widely used in 19th century medicine for pain relief and there is renewed interest in cannabis-based medicines, with pain as one of the key therapeutic targets (British Medical Association, 1997; Joy *et al.*, 1999). Endogenous cannabinoids and cannabinoid receptors exist at various levels in the pain pathways, from peripheral sensory nerve endings to spinal cord and supraspinal centres, in a system that is parallel to but distinct from that involving endorphins and opiate receptors.

Systemically administered THC and synthetic cannabinoids have anti-nociceptive and anti-hyperalgesic effects in a variety of animal models of acute and inflammatory pain (for reviews see Pertwee, 2001; Iversen and Chapman, 2002). Since cannabinoids inhibit motor activity this could prevent animals from exhibiting the normal behavioural reactions in analgesic tests; however, a number of studies have also shown that cannabinoids suppress electrophysiological responses of spinal cord neurons to noxious stimulation, and block spinal c-fos expression in response to such stimulation (Walker *et al.*, 1999; Pertwee, 2001; Iversen and Chapman, 2002). Cannabinoids and anandamide also exert anti-nociceptive effects in animal models of inflammatory pain when injected directly into spinal cord, brain stem or thalamus (Pertwee, 2001). Behavioural studies have shown that cannabinoids reduce thermal and mechanical allodynia in rat models of neuropathic pain (Herzberg *et al.*, 1997; Fox *et al.*, 2001; Iversen and Chapman, 2002). Furthermore, noxious stimulation evoked an increased release of anandamide in the periaqueductal grey region of brainstem, a key site for modulating nociceptive information (Walker *et al.*, 1999). The anti-nociceptive effects of cannabinoids are blocked by the CB₁ antagonist rimonabant, but the antagonist itself does not alter basal pain thresholds, suggesting that these are not controlled by tonic activity in the endocannabinoid system (Compton *et al.*, 1996).

Results obtained with CB₁ receptor knockout mice, however, suggest that not all of the anti-nociceptive effects of THC or anandamide are mediated via CB₁ receptors. Thus, although Di Marzo *et al.* (2000) found that the anti-nociceptive effects of THC were virtually absent in the knockout animals, anandamide continued to show analgesic activity in the hot-plate test. It is possible that the analgesic effects of anandamide are mediated in part through an action at other as yet ill-defined cannabinoid receptors (Breivogel *et al.*, 2001; Hájos *et al.*, 2001). Alternatively, it has been proposed that the effects of anandamide might be mediated through its ability to bind to the vanilloid VR1 receptor, which is present in primary afferent neurons and known to play an important role in nociceptive responses (Di Marzo *et al.*, 2001b). To complicate matters further, Zimmer *et al.* (1999), in a different strain of CB₁ receptor knockout mice, found that THC continued to exert some anti-nociceptive actions in hot-plate and formalin tests in the knockout animals. The reasons for the discrepant results obtained

with different strains of CB₁ receptor knockout mice are unknown.

There is evidence for an interaction between cannabinoid and opioid mechanisms. In tests of acute pain (Fuentes *et al.*, 1999) and chronic inflammatory pain (Welch and Stevens, 1992; Smith *et al.*, 1998) THC and morphine acted synergistically—one potentiated the anti-nociceptive actions of the other. This potentiation could be blocked by either rimonabant or by naloxone, indicating that both CB₁ and opiate receptors were involved (Fuentes *et al.*, 1999). Meng *et al.* (1998) showed that temporary inactivation of neural activity in the rostral ventromedial medulla (RVM) in rat brainstem prevented the analgesic effects of systemically administered cannabinoids, while leaving their effects on motor activity unaffected. An electrophysiological analysis of the effects of cannabinoids on single cell firing patterns in RVM revealed that the effects of cannabinoids were similar to those elicited by morphine. The authors concluded that cannabinoids may produce analgesia through activation of a brainstem circuit that is also required for opiate analgesia, although the two mechanisms are pharmacologically distinct.

Basic research into the role of cannabinoids and endocannabinoids in pain mechanisms is progressing rapidly. Clinical progress, however, has been slow. A meta-analysis of clinical trials of cannabinoids as analgesics concluded that there was not enough evidence to justify their use in this indication (Campbell *et al.*, 2001). However, this may merely reflect the paucity of data from adequately sized controlled clinical trials, and cannabis-based medicines may yet find genuine medical applications in this field.

Cannabis as an intoxicant and drug of dependence

Cannabis intoxication

Despite being illegal, cannabis is one of the most widely used intoxicants; almost half of all 18 year olds in the USA and in most European countries admit to having tried it at least once, and ~10% of that age group are regular users (Iversen, 2000). There have been many subjective accounts of the cannabis 'high' (see Iversen, 2000; Earleywine, 2002). The experience is highly variable, depending on the dose of drug, the environment and the experience and expectations of the drug user. A typical 'high' is preceded initially by a transient stage of tingling sensations felt in the body and head accompanied by a feeling of dizziness or lightheadedness. The 'high' is a complex experience, characterized by a quickening of mental associations and a sharpened sense of humour, sometimes described as a state of 'fatuous euphoria'. The user feels relaxed and calm, in a dreamlike state disconnected from real world. The intoxicated subject often has difficulty in carrying on a coherent conversation, and may drift into daydreams and fantasies. Drowsiness and sleep may eventually ensue. The feelings of heightened perception, increased appetite and distortion of the sense of time have already been referred to.

A survey of 1333 young British cannabis users (Atha and Blanchard, 1997) reported that the most common positive benefits reported were relaxation and relief from stress (25.6%), insight/personal development (8.7%) and euphoria (4.9%); more than half reported some positive benefits. But 21% of the users also attributed some adverse effects to cannabis use, including impaired memory (6.1%), paranoia (5.6%) and amotivation/laziness (4.8%).

As with other intoxicant drugs, little is known about the brain mechanisms that underlie the cannabis 'high'. The intoxicant effects are clearly mediated via CB₁ receptors. Huestis *et al.* (2001) carried out a well controlled study in 63 healthy cannabis users, who received either rimonabant or placebo and smoked either a THC-containing or placebo marijuana cigarette. The CB₁ antagonist blocked the acute psychological effects of the active cigarettes. Interestingly rimonabant itself when given alone (with placebo cigarette) produced no significant psychological effects. Mathew *et al.* (1997) used H₂¹⁵O and PET to measure changes in regional cerebral blood flow in a double blinded study in 32 volunteers comparing THC with placebo. Self ratings of cannabis intoxication correlated most markedly with increased blood flow in the right frontal region.

Endocannabinoids and CB₁ receptors are present in many regions of the limbic forebrain. For example, Katona *et al.* (2001) reported that CB₁ receptors were expressed in high densities in lateral and basal nuclei in the rat amygdala. As in hippocampus, the CB₁ receptors in these regions were located presynaptically on the terminals of cholecystokinin-containing GABAergic interneurons. Electrophysiological experiments showed that cannabinoids modulated GABAergic synaptic transmission. The authors suggested that such effects might underlie some of the actions of cannabinoids on emotional behaviour. Other experiments have revealed that, in common with other euphoriant drugs, THC selectively activates dopaminergic neurons in the ventral tegmental area. In an electrophysiological study French *et al.* (1997) reported that low doses of THC increased the firing of these cells. Tanda *et al.* (1997) used microdialysis probes to show that low doses of THC (0.15 mg/kg intravenously) caused an increased release of dopamine from the shell region of the nucleus accumbens, an effect that is also seen after administration of heroin, cocaine, d-amphetamine and nicotine. Tanda *et al.* (1997) found that the increased release of dopamine provoked by THC could be blocked by administration of the μ -opiate receptor antagonist naloxonazine, suggesting the involvement of an opiate mechanism.

Tolerance and dependence

Many animal studies have shown that tolerance develops to most of the behavioural and physiological effects of THC (for review see Pertwee, 1991). The earlier clinical literature suggested that tolerance also occurs after repeated administration of THC in man, although many of these studies were poorly controlled (for reviews see Jones, 1978, 1987;

Hollister, 1986). But for many years cannabis was not considered to be a drug of addiction. Withdrawal of the drug did not lead to any obvious physical withdrawal symptoms either in people or in animals, and animals failed to self-administer the drug, a behaviour usually associated with drugs of addiction.

Attitudes have changed markedly in recent years. The DSM-IV (American Psychiatric Association, 1994) defines 'substance dependence' and 'substance abuse' rather than 'addiction'. When the DSM-IV criteria are applied to populations of regular cannabis users surprisingly high proportions appear to be positive by these definitions. Swift *et al.* (2001) undertook a survey of 10 641 Australians aged 18 years and older. They reported that almost one-third of regular cannabis users fell within the definitions of 'substance abuse' (10.7%) or 'substance dependence' (21%). In the USA, Anthony *et al.* (1994) reported the results obtained from a large scale survey which indicated that some 46% of those interviewed had ever used cannabis and 9% of users became dependent. More carefully controlled studies have also shown that a reliable and clinically significant withdrawal syndrome does occur in human cannabis users when the drug is withdrawn. The symptoms include craving for cannabis, decreased appetite, sleep difficulty and weight loss, and may sometimes be accompanied by anger, aggression, increased irritability, restlessness and strange dreams (Budney *et al.*, 2001).

The existence of dependence on cannabinoids in animals is also much more clearly observable because of the availability of CB₁ receptor antagonist drugs that can be used to precipitate withdrawal. Thus, Aceto *et al.* (1996) described a behavioural withdrawal syndrome precipitated by rimonabant in rats treated for only 4 days with doses of THC as low as 0.5–4.0 mg/kg per day. The syndrome included scratching, face rubbing, licking, wet dog shakes, arched back and ptosis—many of the same signs are seen in rats undergoing opiate withdrawal. Similar withdrawal signs could be elicited by rimonabant in rats treated chronically with the synthetic cannabinoids CP-55,940 (Rubino *et al.*, 1998) or WIN55,2122 (Aceto *et al.*, 2001). Rimnabant-induced withdrawal after 2 weeks of treatment of rats with the cannabinoid HU-120 was accompanied by marked elevations of release of the stress-related neuropeptide corticotropin-releasing factor in the amygdala, a result also seen in animals undergoing heroin withdrawal (Rodriguez de Fonseca *et al.*, 1997). An electrophysiological study showed that precipitated withdrawal was also associated with reduced firing of dopamine neurons in the ventral tegmental area of rat brain (Diana *et al.*, 1998). These data indicate clearly that chronic administration of cannabinoids leads to adaptive changes in the brain, some of which are similar to those seen with other drugs of dependence. The ability of THC to cause a selective release of dopamine from the nucleus accumbens (Tanda *et al.*, 1997) also suggests some similarity between THC and other drugs in this category.

Furthermore, although many earlier attempts to obtain reliable self-administration behaviour with THC were unsuccessful (Pertwee, 1991), some success has been achieved

recently. Squirrel monkeys were trained to self-administer low doses of THC (2 µg/kg per injection), but only after the animals had first been trained to self-administer cocaine (Tanda *et al.*, 2000). THC is difficult to administer intravenously and these authors succeeded perhaps in part because they succeeded in delivering the drug intravenously in doses comparable to those to which human cannabis users are exposed. The potent synthetic cannabinoids are far more water soluble than THC, which makes intravenous administration easier. Mice could be trained to self-administer intravenous WIN55,2122, but CB₁ receptor knockout animals failed to exhibit this behaviour (Ledent *et al.*, 1999). Another way of demonstrating the rewarding effects of drugs in animals is the conditioned place preference paradigm, in which an animal learns to approach an environment in which it had previously received a rewarding stimulus. Rats demonstrated a positive THC place preference after doses as low as 1 mg/kg (Lepore *et al.*, 1995).

A number of studies have suggested that there may be links between the development of dependence to cannabinoids and to opiates (Manzanares *et al.*, 1999). Some of the behavioural signs of rimnabant-induced withdrawal in THC treated rats can be mimicked by administration of the opiate antagonist naloxone (Kaymakçalan *et al.*, 1977). Conversely, the withdrawal syndrome precipitated by naloxone in morphine-dependent mice can be partly relieved by administration of THC (Hine *et al.*, 1975) or by endocannabinoids (Yamaguchi *et al.*, 2001). Rats treated chronically with the cannabinoid WIN55,2122 became sensitized to the behavioural effects of heroin (Pontieri *et al.*, 2001). Such interactions can also be demonstrated acutely. A synergy between cannabinoids and opiate analgesics has already been described above. THC also facilitated the anti-nociceptive effects of RB 101, an inhibitor of enkephalin inactivation (Valverde *et al.*, 2001). These authors found that acute administration of THC caused an increased release of Met-enkephalin into microdialysis probes placed into the rat nucleus accumbens.

The availability of receptor knockout animals has also helped to illustrate cannabinoid-opioid interactions. CB₁ receptor knockout mice exhibited greatly reduced morphine self-administration behaviour and less severe naloxone-induced withdrawal signs than in wild-type animals, although the anti-nociceptive actions of morphine were unaffected in the knockout animals (Ledent *et al.*, 1999). The rimnabant-precipitated withdrawal syndrome in THC-treated mice was significantly attenuated in animals with knockout of the pro-enkephalin gene (Valverde *et al.*, 2000). Knockout of the μ -opioid receptor also reduced rimnabant-induced withdrawal signs in THC-treated mice, and there was an attenuated naloxone withdrawal syndrome in morphine dependent CB₁ knockout mice (Lichtman *et al.*, 2001a, b).

These findings point clearly to interactions between the endogenous cannabinoid and opioid systems in CNS, although the neural circuitry involved remains unknown. Whether this relationship is relevant to the so-called 'gateway' theory is unclear. The US National Household survey of Drug Abuse (US Department of Health and Human Services,

1999) indicated that respondents aged 22 years or older who had started cannabis use before the age of 21 years were 24 times more likely than non-cannabis users to initiate use of hard drugs. But the proportion of cannabis users who progress in this way remains very small (~1% or less), and mathematical modelling using the Monte Carlo method suggested that the association between cannabis use and hard drug use need not be causal but could relate to some common predisposing factor, e.g. 'drug-use propensity' (Morrall *et al.*, 2002).

Adverse effects of cannabis on the CNS *Is cannabis neurotoxic?*

Although there have been claims that chronic cannabis use may permanently damage the brain, there is little scientific evidence to support these claims (for reviews see Dornbush *et al.*, 1976; Hollister, 1986, 1998; Zimmer and Morgan, 1997). As described above, some studies have revealed a modestly impaired ability to focus attention and filter out irrelevant information in ex-cannabis users (Solowij, 1998), but other studies failed to find any impairments in cognitive function (Pope *et al.*, 2001). There is little evidence that cannabis use impairs work performance or leads to an 'amotivational syndrome' (Dornbush *et al.*, 1976; Hollister, 1986; Abood and Martin, 1992), nor is there any convincing evidence for neuropathological changes in the brains of cannabis users (Hollister, 1986). The earlier studies have been complemented by the application of powerful modern neuroimaging methods. For example, an MRI study compared 18 current, frequent, young adult cannabis users with 13 comparable non-users and found no evidence of cerebral atrophy or regional changes in tissue volumes (Block *et al.*, 2000).

Animal studies have yielded conflicting results. Treatment of rats with high doses of THC given orally for 3 months (Scallet *et al.*, 1987) or subcutaneously for 8 months (Landfield *et al.*, 1988) was reported to lead to neural damage in the hippocampal CA3 zone, with shrunken neurons, reduced synaptic density and loss of cells. However, in another study the potent synthetic cannabinoid WIN55,2122 was administered twice daily (2 mg/kg) to rats and led to an apparent increase in hippocampal granule cell density, and increased dendritic length in the CA3 zone. In perhaps the most severe test of all, rats and mice were treated with THC 5 days each week for 2 years and no histopathological changes were observed in brain, even after 50 mg/kg/day (rats) or 250 mg/kg/day (mice) (Chan *et al.*, 1996). Although claims were made that exposure of a small number of rhesus monkeys to cannabis smoke led to ultrastructural changes in septum and hippocampus (Harper *et al.*, 1977; Heath *et al.*, 1980), subsequent larger scale studies failed to show any cannabis-induced histopathology in monkey brain (Scallet, 1991).

Studies of the effects of cannabinoids on neurons *in vitro* have also yielded inconsistent results. Exposure of rat cortical

neurons to THC was reported to decrease their survival, with twice as many cells dead after 2 h exposure to 5 μ M THC than in control cultures (Downer *et al.*, 2001). Concentrations of THC as low as 0.1 μ M had a significant effect. The effects of THC were accompanied by release of cytochrome *c*, activation of caspase-3 and DNA fragmentation, suggesting an apoptotic mechanism. All of the effects of THC could be blocked by the antagonist AM-251 or by pertussis toxin, suggesting that they were mediated through CB₁ receptors. Toxic effects of THC have also been reported on hippocampal neurons in culture, with 50% cell death after 2 h exposure to 10 μ M THC or after 5 days exposure to 1 μ M drug (Chan *et al.*, 1998). The antagonist rimonabant blocked these effects, but not pertussis toxin. The authors proposed a toxic mechanism involving arachidonic acid release and formation of free radicals. However, other authors failed to observe any damage in rat cortical neurons exposed for up to 15 days to 1 μ M THC, although they found that this concentration of THC killed rat C6 glioma cells, or human astrocytoma U373MG and mouse neuroblastoma N18TG12 cells (Sánchez *et al.*, 1998). In a remarkable study injections of THC into solid tumours of C6 glioma in rodent brain led to increased survival times, and a complete eradication of the tumours was evident in 20–35% of the treated animals (Galve-Roperh *et al.*, 2000). The anti-proliferative effects of cannabinoids has suggested a potential utility for such drugs in cancer treatment (Guzmán *et al.*, 2001).

Some studies have reported neuroprotective actions of cannabinoids. Administration of WIN55,2122 was found to reduce cerebral damage in rat hippocampus or cerebral cortex after global ischaemia or focal ischaemia models *in vivo* (Nagayama *et al.*, 1999). The endocannabinoid 2-AG protected against damage elicited by closed head injury in mouse brain, and the protective effects were blocked by rimonabant (Panikashvili *et al.*, 2001). THC had a similar effect *in vivo* in protecting against damage elicited by ouabain (Van der Stelt *et al.*, 2001). Rat hippocampal neurons in tissue culture were protected against glutamate-mediated damage by low concentrations of WIN55,2122 or CP-55,940 and these effects were mediated through CB₁ receptors (Shen and Thayer, 1998). But not all of these effects seem to require mediation via cannabinoid receptors. Nagayama *et al.* (1999) reported protective effects of WIN55,2122 that did not require either cannabinoid receptor in cortical neurons exposed to hypoxia, and similar findings were reported for the protective actions of anandamide and 2-AG in cortical neuron cultures (Sinor *et al.*, 2000). Both THC and cannabidiol, which is not active on cannabinoid receptors, protected rat cortical neurons against glutamate toxicity (Hampson *et al.*, 1998) and these effects, were also independent of CB₁ receptors. The authors suggested that the protective effects of THC in their studies might be due to the antioxidant properties of these polyphenolic molecules, which have redox potentials higher than those of known antioxidants (e.g. ascorbic acid).

The mixed reports of neurotoxic and neuroprotective effects of cannabinoids are confusing. While it may be possible to demonstrate neurotoxic actions after exposure of neurons to high concentrations of cannabinoids *in vitro*, there is little evidence for any significant neural damage *in vivo* after the administration of pharmacologically relevant doses of these drugs.

Cannabis and psychiatric illness

A temporary form of drug-induced psychosis can occur in some cannabis users. In some of the psychiatric literature this is referred to as 'cannabis psychosis' (or 'marijuana psychosis'). Research psychiatrists, particularly in Britain (Thomas, 1993; Hall and Degenhardt, 2000; Johns, 2001), have studied this condition carefully. It nearly always results from taking large doses of the drug, often in food or drink, and the condition may persist for some time, perhaps as the accumulated body load of THC is washed out. The acute toxic psychosis that is sometimes caused by cannabis can be sufficiently serious to lead to the subject being admitted to hospital, and the initial diagnosis can be confused with schizophrenia, since the patients may display some of the characteristic symptoms of schizophrenic illness. These include delusions of control (being under the control of some outside being or force), grandiose identity, persecution, thought insertion, auditory hallucinations (hearing sounds, usually non-verbal in nature), changed perception and blunting of the emotions. Not all symptoms will be seen in every patient, but there is a considerable similarity to paranoid schizophrenia. This has led some to propose a 'cannabinoid hypothesis of schizophrenia', suggesting that the symptoms of schizophrenic illness might be caused by an abnormal over-activity of endogenous cannabinoid mechanisms in the brain (Enrich *et al.*, 1997).

A number of studies have addressed the more contentious question of whether cannabis use can precipitate long-term psychiatric illness. The strongest evidence seemed to come from a study in Sweden that involved taking detailed medical records and information about the social background and drug-taking habits of 45 570 conscripts on entry to the Swedish army at age 18 years and following up of their subsequent medical history over a 15-year period (Andreasson *et al.*, 1987). A total of 4293 of the conscripts admitted having taken cannabis at least once, but the cannabis users accounted for a disproportionate number of the 246 cases of schizophrenic illness diagnosed in the overall group on follow-up. The relative risk of schizophrenia in those who had used cannabis was 2.4 times greater than in the non-users. In the small number of heavy users (who had taken the drug on more than 50 occasions) the relative risk of schizophrenia increased to 6.0. The authors concluded that cannabis was an independent risk factor for schizophrenia. There have been other similar reports (Mathers and Godse, 1992; Hall and Degenhardt, 2000; Johns, 2001). Hambrecht and Hafner (2000), for example, studied 232 patients in Germany with

first-episode schizophrenia. They found that 13% of these had a history of cannabis use, a rate twice that of matched normal controls. At first viewing these findings seem convincing, but they do not prove any cause-and-effect relationship with cannabis. It may simply be that both cannabis use and schizophrenia are related to some common predisposing factor, such as personality. Indeed some psychologists and psychiatrists believe that they can identify psychological traits that are described as 'schizotypy' and which may predict an increased risk of developing clinical psychosis. Some studies in healthy adults have reported that those subjects who used cannabis scored higher on schizotypy scales than non-users (Williams *et al.*, 1996; Skosnik and Spatz, 2001). Half of the cannabis-using subjects in the original Swedish study had used cannabis more than 10 times and subsequently developed schizophrenia had also taken amphetamine, a drug known to be capable of inducing a schizophrenia-like psychosis. The cannabis users also came from deprived social backgrounds, another known risk factor of schizophrenia. More detailed follow-ups of some of the original Swedish cohort, however, claimed to have answered some of these criticisms (Andreasson *et al.*, 1989; Zammit *et al.*, 2002). In addition, further reports from New Zealand (Arseneault *et al.*, 2002; Fergusson *et al.*, 2003), Australia (Patton *et al.*, 2002) and France (Verdoux *et al.*, 2003) add weight to the hypothesis that the development of cannabis dependence in young people is associated with increased rates of psychiatric symptoms, both of psychosis and depression and anxiety (Patton *et al.*, 2002).

Nevertheless, the existence of a causative relationship between cannabis use and long-term psychotic illness remains unproven. If cannabis use did precipitate schizophrenia one might expect to have seen a large increase in the numbers of sufferers from this illness as cannabis use became more common in the West during the past 30 years. However, a detailed review of the epidemiological evidence up to 1996 appeared to show that this has not been the case (Thornicroft, 1990).

On the other hand, it is clear that cannabis can exacerbate the symptoms of existing psychotic illness. While schizophrenic patients seem to use cannabis and other psychoactive drugs as a form of 'self-medication', cannabis can make the key symptoms of delusions and hallucinations worse and it tends to counteract the anti-psychotic effects of the drugs used to treat the illness (Negrete *et al.*, 1986; Linzen *et al.*, 1994). On the other hand, one Swedish study reported that cannabis use made schizophrenic patients less withdrawn and more likely to speak (Peralta and Cuesta, 1992). It would seem prudent, nevertheless, to discourage the use of cannabis in patients with existing psychotic illness.

Conclusion

The discovery of the endocannabinoids and the availability of new pharmacological tools, together with the development of strains of genetically engineered knockout mice that lack

functional cannabinoid receptors, has revitalized the field of cannabis research in the past few years. The effects of administering THC or other cannabinoids can never simulate the highly localized function of the endocannabinoids, which appear to act as a fine control system to regulate neurotransmitter release at the synaptic level. There has been renewed interest in the potential therapeutic applications of cannabis-based medicines (British Medical Association, 1997; Joy *et al.*, 1999; Robson, 2001). THC or other cannabinoid agonists all suffer from the problem of a narrow therapeutic window between the desired clinical benefits and the unwanted psychic side-effects. It is possible that the pharmacological manipulation of the endocannabinoid system, boosting function, for example by drugs that inhibited the inactivation of the endocannabinoids, may offer a safer and more subtle approach to cannabis-based medicines in the future (Piomelli *et al.*, 2000).

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CANNABIS: OUR POSITION FOR A CANADIAN PUBLIC POLICY
REPORT OF THE SENATE SPECIAL COMMITTEE ON ILLEGAL DRUGS
SUMMARY

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SEPTEMBER 2002

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Glossary of key terms

Abuse

Vague term with a variety of meanings depending on the social, medical and legal contexts. Some equate any use of illicit drugs to abuse: for example, the international conventions consider that any use of drugs other than for medical or scientific purposes is abuse. The *Diagnosis and Statistical Manual of the American Psychiatric Association* defines abuse as a maladaptive pattern of substance use leading to clinically significant impairment or distress as defined by one or more of four criteria (see Chapter 7). In the Report, we prefer the term excessive use (or harmful use).

Acute effects

Refers to effects resulting from the administration of any drug and specifically to its short term effects. These effects are distinguished between central (cerebral functions) and peripheral (nervous system). Effects are dose-related.

Addiction

General term referring to the concepts of tolerance and dependency. According to WHO addiction is the repeated use of a psychoactive substance to the extent that the user is periodically or chronically intoxicated, shows a compulsion to take the preferred substance, has great difficulty in voluntarily ceasing or modifying substance use, and exhibits determination to obtain the substance by almost any means. Some authors prefer the term addiction to dependence, because the former also refers to the evolutive process preceding dependence.

Agonist

A substance that acts on receptor sites to produce certain responses.

Anandamide

Agonist neurotransmitter of the endogenous cannabinoid system. Although not yet fully understood in research, these neurotransmitters seem to act as modulators as THC increases, the liberation of dopamine in nucleus accumbens and in the cerebral cortex.

At-risk use

Use behaviour which makes users at risk of developing dependence to the substance.

Cannabinoids

Endogenous receptors of the active cannabis molecules, particularly Delta 9-THC. Two endogenous receptors have been identified: CB1 densely concentrated in the hippocampus, basal ganglia, cerebellum and cerebral cortex, and CB2, particularly abundant in the immune system. The central effects of cannabis appear to be related only to CB1.

Cannabis

Three varieties of the cannabis plant exist: *cannabis sativa*, *cannabis indica*, and *cannabis ruderalis*. *Cannabis sativa* is the most commonly found, growing in almost any soil condition. The cannabis plant has been known in China for about 6000 years. The flowering tops and leaves are used to produce the smoked cannabis. Common terms used to refer to cannabis are pot, marijuana, dope, ganja, hemp. Hashish is produced from the extracted resin. Classified as a psychotropic drug, cannabis is a modulator of the central nervous system. It contains over 460 known chemicals, of which 60 are cannabinoids. Delta-9-tetrahydrocannabinol, referred to as THC, is the principal active ingredient of cannabis. Other components such as delta-8-tetrahydrocannabinol, cannabinal and cannabidiol are present in smaller quantities and have no significant impacts on behaviour or perception. However, they may modulate the overall effects of the substance.

Commission on narcotic drugs (CND)

The Commission on Narcotic Drugs (CND) was established in 1946 by the Economic and Social Council of the United Nations. It is the central policy-making body within the UN system for dealing with all drug-related matters. The Commission analyses the world drug abuse situation and develops proposals to strengthen international drug control.

Chronic effects

Refers to effects which are delayed or develop after repeated use. In the report we prefer to use the term consequences of repeated use rather than chronic effects.

Decriminalization

Removal of a behaviour or activity from the scope of the criminal justice system. A distinction is usually made between *de jure* decriminalization, which entails an amendment to criminal legislation, and *de facto* decriminalization, which involves an administrative decision not to prosecute acts that nonetheless remain against the law. Decriminalization

concerns only criminal legislation, and does not mean that the legal system has no further jurisdiction of any kind in this regard. Other, non-criminal, laws may regulate the behaviour or activity that has been decriminalized (civil or regulatory offences, etc.).

Diversion

The use of measures other than prosecution or a criminal conviction for an act that nonetheless remains against the law. Diversion can take place before a charge is formally laid, for example if the accused person agrees to undergo treatment. It can also occur at the time of sentencing, when community service or treatment may be imposed rather than incarceration.

Depenalization

Modification of the sentences provided in criminal legislation for a particular behaviour. In the case of cannabis, it generally refers to the removal of custodial sentences.

Dependence

State where the user continues its use of the substance despite significant health, psychological, relational, familial or social problems. Dependence is a complex phenomenon which may have genetic components. Psychological dependence refers to the psychological symptoms associated with craving and physical dependence to tolerance and the adaptation of the organism to chronic use. The American Psychiatric Association has proposed seven criteria (see Chapter 7).

Dopamine

Neuromediator involved in the mechanisms of pleasure.

Drug

Any chemical agent that alters the biochemical or physiological processes of tissues or organisms. In this sense, the term drug refers better to any substance which is principally used for its psychoactive effects. Also used to refer to illicit rather than licit (such as nicotine, alcohol or medicines) substances.

European Monitoring Centre on Drugs and Drug Addiction (EMCDDA)

The European Monitoring Centre was created in 1993 to provide member states within the EU objective, reliable and comparable information on drugs, drug addictions and their consequences. Statistical information, documents and techniques developed in the

EMCDDA are designed to give a broad perspective on drug issues in Europe. The Centre only deals with information. It relies on national focal points in each of the Member States.

Fat soluble

Characteristic of a substance to irrigate the tissues quickly. THC is highly fat-soluble.

Gateway / Gateway Theory

Theory suggesting a sequential pattern in involvement in drug use from nicotine to alcohol, to cannabis and then to "hard" drugs. In regard to cannabis, the theory rests on a statistical association between the use of hard drugs and the fact that these users have generally used cannabis as their first illicit drug. This theory has not been validated by empirical research and is considered outdated.

Half-life

Time needed for the concentration of a particular drug in blood to decline to half its maximum level. The half-life of THC is 4.3 days on average but is faster in regular users than in occasional users. Because it is highly fat soluble, THC is stored in fatty tissues, thus increasing its half-life to as much as 7 to 12 days. Prolonged use of cannabis increases the period of time needed to eliminate it from the system. Even one week after use, THC metabolites may remain in the system. They are gradually metabolised in the urine (one third) and in feces (two thirds). Traces of inactive THC metabolites can be detected as long as 30 days after use.

Hashish

Resinous extract from the flowering tops of the cannabis plant transformed into a paste.

International conventions

Various international conventions have been adopted by the international community since 1912, first under the League of Nations, then under the United Nations, to regulate the possession, use, production, distribution, sale, etc., of various psychotropic substances. Currently, the three main conventions in force are the 1961 Single Convention, the 1971 Convention on Psychotropic Substance and the 1988 Convention against Illicit Traffic. Canada is a signatory to all three conventions. Subject to countries' national constitutions, these conventions establish a system of regulation where only medical and scientific uses are permitted. This system is based on the prohibition of source plants (coca, opium and cannabis) and the regulation of synthetic chemicals produced by pharmaceutical companies.

International Narcotics Control Board (INCB)

The Board is an independent, quasi-judicial organization responsible for monitoring the implementation of the UN conventions on drugs. It was created in 1968 as a follow up to the 1961 Single Convention, but had predecessors as early as the 1930s. The Board makes recommendations to the UN Commission on Narcotics with respect to additions or deletions in the appendices of the conventions.

Intoxication

Disturbance of the physiological and psychological systems through substance use. Pharmacology generally distinguishes four levels of intoxication: light, moderate, serious and fatal.

Joint

Cigarette of marijuana or hashish with or without tobacco. Because joints are never identical, scientific analyses of the effects of THC in their use are more difficult, especially to determine the therapeutic benefits of cannabis and to examine its effects on driving.

League of Nations

International organisation organization of Sstates until in existence until 1938; now the United Nations.

Legalization

Legislating under a regulatory system the culture, production, marketing, sale and use of substances. Although no such provision currently exist in relation to "street-drugs" (as opposed to alcohol or tobacco which are regulated products), a legalization system could take two forms: free of state control (free markets) and with state controls (regulatory regime).

Marijuana

Mexican term originally referring to a cigarette of poor quality. Has now become a synonym for cannabis in popular language usage.

Narcotic

Substance which can induce stupor or artificial sleep. Usually restricted to opiates. Sometimes used incorrectly to refer to all drugs capable of inducing dependence.

Office of National Drug Control Policy (ONDCP) USA

Created in 1984 under the Reagan administration, the Office is under the direct authority of the White House. It coordinates US policy on drugs. Its budget is currently US \$18 billion.

Opiates

Substance derived from the opium poppy. The term opiate excludes synthetic opioids such as heroin and methadone.

Prohibition

Historically, the term most often refers to the period of national interdiction of alcohol sales in the United States between 1919 and 1933. By analogy, the term is now used to describe UN and State policies aiming for a drug-free society. Prohibition is based on the interdiction to cultivate, produce, fabricate, sell, possess, use, etc., some substances except for medical and scientific purposes.

Psychoactive substance

Substance which alters mental processes such as thinking or emotions. We prefer to use this term as it is more neutral than the term "drug" and does not refer to the legal status of the substance.

Psychotropic substance (see also psychoactive)

Used synonymously with psychoactive substance, however the term refers to drugs primarily used in the treatment of mental disorders, such as anxiolytics, sedatives, neuroleptics, etc. More specifically, the term refers to the substances covered in the 1971 Convention on Psychotropic Substances.

Regulation

System of control specifying the conditions under which the cultivation, production, marketing, prescription, sales, possession or use of a substance are allowed. Regulatory approaches may rest on interdiction (as for illegal drugs) or controlled access (as for medical drugs or alcohol). Our proposal of an exemption regime under the current legislation is a regulatory regime.

Tetrahydrocannabinol (D9-THC)

Main active component of cannabis, Δ^9 -THC is highly fat-soluble and has a lengthy half-life. Its psychoactive effects are modulated by other active components in cannabis. In its natural state, cannabis contains between 0.5% to 5% THC. Sophisticated cultivation methods and plant selection, especially female plants, lead to higher levels of THC concentration.

Tolerance

Reduced response of an organism and increased capacity to support the effects of a substance after a more or less lengthy period of use. Tolerance levels are extremely variable between substances, and tolerance to cannabis is believed to be lower than for most other drugs, including tobacco and alcohol.

Toxicity

Characteristic of a substance which induces intoxication, i.e., "poisoning". Many substances, including some common foods, have some level of toxicity. Cannabis presents almost no toxicity and cannot lead to an overdose.

United Nations Drug Control Program (UNDCP)

Established in 1991, the Program works to educate the world about the dangers of drug abuse. The Program aims to strengthen international action against drug production, trafficking and drug-related crime through alternative development projects, crop monitoring and anti-money laundering programs. UNDCP also provides accurate statistics through the Global Assessment Programme (GAP) and helps to draft legislation and train judicial officials as part of its Legal Assistance Programme. UNDCP is part of the UN Office for Drug Control and the Prevention of Crime.

World Health Organization (WHO)

The World Health Organization, the United Nations' specialized agency for health, was established on April 7, 1948. WHO's objective, as set out in its Constitution, is the attainment by all peoples of the highest possible level of health. Health is defined in WHO's Constitution as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.

Introduction

The Senate Special Committee on Illegal Drugs addressed the question of drugs just as

everyone else does, with the same preconceptions, attitudes, fears and anxieties we all share. Of course, we had at our disposal the 1996 study our colleagues conducted on government legislation dealing with illegal drugs, which had enabled them to hear a number of witnesses over several months. We also knew at the outset that research expertise would be available to us, but it is still difficult to overcome attitudes and opinions that we have long taken for granted. Whether one is in favour of enhanced enforcement or, on the contrary, greater liberalization, opinions often resist the facts and in a field such as this the production of facts, even through scientific research, is not necessarily a neutral undertaking. We, like you, have our prejudices and preconceptions. Together we must make the effort to go beyond such predispositions. That is one of the objectives of this report.

The public policy regime we propose expresses the fundamental premise underlying our report: *in a free and democratic society, which recognizes fundamentally but not exclusively the rule of law as the source of normative rules and in which government must promote autonomy as far as possible and therefore make only sparing use of the instruments of constraint, public policy on psychoactive substances must be structured around guiding principles respecting the life, health, security and rights and freedoms of individuals, who, naturally and legitimately, seek their own well-being and development and can recognize the presence, difference and equality of others.*

We are aware, as much now as we were at the start of our work, that there is no pre-established consensus in Canadian society on public policy choices in the area of drugs. In fact, our research has shown us that there are few societies where there is a broadly shared consensus among the general public, let alone between the public and experts. We are well aware, perhaps more so than at the outset, that the question of illegal drugs, viewed from the standpoint of public policy, has a broad international context and that we cannot think or act in isolation. We know our proposals are provocative, that they will meet with resistance. However, we are also convinced that Canadian society has the maturity and openness to welcome an informed debate.

Part I – General Orientation

Chapter 1 – Our mandate

"That a special committee of the Senate be struck to examine:

- the approach taken by Canada to cannabis, its preparations, derivatives and similar synthetic preparations, in context;
- the effectiveness of this approach, the means used to implement it and the monitoring of its application;
- the related official policies adopted by other countries;
- Canada's international role and obligations under United Nations agreements and conventions on narcotics, in connection with cannabis, the Universal Declaration of Human Rights and other related treaties; and

- the social and health impacts of cannabis and the possible consequences of different policies;

That the special committee consist of five senators, three of whom shall constitute a quorum;

That the Honourable Senators Banks, Kenny, Nolin, Rossiter and (a fifth Senator to be named by the Chief Government Whip) be named to the committee;

That the committee be authorized to send for persons, papers and records, to hear witnesses, to report from time to time, and to print from day to day such papers and evidence as may be ordered by it;

That the briefs and evidence heard during consideration of Bill C-8, An Act respecting the control of certain drugs, their precursors and other substances and to amend certain other Acts and repeal the Narcotic Control Act in consequence thereof, by the Standing Senate Committee on Legal and Constitutional Affairs during the 2nd Session of the 35th Parliament be referred to the committee;

That the documents and evidence compiled on this matter and the work accomplished by the Special Senate Committee on Illegal Drugs during the 2nd Session of the 36th Parliament be referred to the committee;

That the committee be empowered to authorize, if deemed appropriate, the broadcasting on radio and/or television and the coverage via electronic media of all or part of its proceedings and the information it holds;

That the committee present its final report no later than August 31, 2002; and that the committee retain the powers necessary to publicize its findings for distribution of the study contained in its final report for 30 days after the tabling of that report;

That the committee be authorized, notwithstanding customary practice, to table its report to the Clerk of the Senate if the Senate is not sitting, and that a report so tabled be deemed to have been tabled in the Senate."

The Committee's mandate is a continuation of the evolution of drug legislation passed by the Parliament of Canada in 1996, the *Controlled Drugs and Substances Act*. While this legislation was being studied by the Sub-Committee on Bill C-7 of the Standing Committee on Health of the House of Commons in 1994 and 1995, the vast majority of witnesses were highly critical of the bill. The most common criticisms concerned three points: first, the lack of basic principles or an expressed statement as to the purpose of the act; second, the fact that the bill perpetuated the prohibition system of the 1920s, and third, the absence of any emphasis on harm reduction and prevention criteria. Despite the amendments made by the Sub-Committee of the House, the testimony heard by the Senate Committee was equally critical. Witnesses noted that the Act did not categorize drugs on the basis of the dangers they represented, that it did not contain any specific, rational criteria and that it was impossible, particularly in view of the Act's complexity, to determine how it would be implemented in practice. All of these criticisms led that Senate Committee to "*propose energetically*" the creation of a Joint Committee of the House of Commons and the Senate that would review all Canadian drug legislation, policies and programs. However, the 1997 federal election intervened. Senator Nolin, convinced of the need for action and faced with the inaction of the House of Commons, tabled his first motion in 1999 - that a Senate Committee be struck and given a mandate to examine the legislation, policies and programs

on illegal drugs in Canada. The motion was adopted by the Senate in April 2000.

However, that Committee was dissolved by general election of October 2000, and was restructured on March 15, 2001, with an amended mandate: the scope of its work was now restricted to cannabis "in its context". We chose to interpret this sentence broadly.

Chapter 2 – Our Work

At the Committee's public hearings, the Chair presented the research program as follows:

"In order to fully satisfy the mandate conferred upon the committee, the committee has adopted an action plan. This plan centres around three challenges. The first challenge is that of knowledge. We will be hearing from a wide variety of experts, both from Canada and afar, from academic settings, the police, legal specialists, medical specialists, the government sector and social workers. (...)

The second challenge, surely the most noble challenge, is that of sharing knowledge. The committee hopes that Canadians from coast to coast will be able to learn and share the information that we will have collected. In order to meet this challenge, we will work to distribute this knowledge and make it accessible to all. We would also like to hear the opinions of Canadians on this topic and in order to do so, we will be holding public hearings in the spring of 2000 throughout Canada.

And finally, the third challenge for this committee will be to examine and identify the guiding principles on which Canada's public policy on drugs should be based."

In view of our mandate, including an obligation to provide Canadians with objective and rigorous information, we have emphasized rigour and openness throughout the entire process, an approach that was all the more important as opinions on all sides of the illegal drugs issue are strong and often categorical. But rigour is not enough. For the information to reach Canadians, we could not reserve it for our exclusive use, hence the second principle that guided us: openness. From the outset, we insisted that all our work be made available as soon as possible on our Web site and we entered into direct dialogue with our fellow citizens as well as with experts.

The Committee approved a research program divided into five major axes of knowledge, sub-dividing each one into specific issues:

- the socio-historical, geopolitical, anthropological, criminological and economic issues of the use and regulation of cannabis;
- the medical and pharmacological aspects of the consumption, use and regulation of cannabis;
- the legal aspects from a national perspective;
- the legal and political issues in an international perspective; and
- the ethical issues and Canadians' moral and behavioural standards.

In an attempt to answer these questions in the most effective and economical manner possible, the Committee agreed to perform two tasks concurrently: conduct a research program and hear expert witnesses—complementary activities. We asked the Parliamentary Research Branch and other researchers to produce syntheses and analyses of the relevant literature. In all, the Committee received 23 reports and benefited from summaries of work conducted in other countries, including attendance at international conferences. In all, the Committee held more than 40 days of public hearings in Ottawa and 10 other Canadian communities, hearing more than 100 witnesses from all backgrounds, from across Canada and abroad.

The second component of our program of work was to examine public opinion. That meant we had two closely related responsibilities. The first was a duty to inform, indeed, to educate. We hope those who are offended by that term will pardon our presumption, but we are convinced that on public policy topics that are societal issues, it is the duty of political leaders to transmit information that educates, not merely convinces. The level of knowledge about drugs, even about cannabis, perhaps the best known drug, is often limited and clouded by myth. Our second responsibility in taking public opinion into account was to go out and discover it. We did so in three ways. We publicized our work as widely and as openly as possible to enable everyone to learn about it and react to it. Many chose to write us, although they were relatively few compared with the number of people in this country. We commissioned a qualitative public opinion study. The focus groups conducted across the country as part of that study are described in detail in Chapter 10. We also held public hearings in eight communities across the country, enabling citizens to come and tell us what they thought, what they knew and what they had experienced.

In order to be able to interpret all this knowledge and come to conclusions and recommendations, the third component of our work focussed on guiding principles.

Chapter 3 – Guiding principles

It has now been thirty years since the Royal Commission of Inquiry on the Non-Medical Use of Drugs, the Le Dain Commission, studied issues similar to those we are studying today. Its report on cannabis, whose scientific conclusions on the effects of the drug were generally accepted by all members of the Commission, led to three reports: a majority report by three of the members, and two minority reports. Each expressed a different concept of the role of the State and of criminal law, and the roles of science and ethics in the choices that had to be made. Having examined each of these subjects, we have elected to set down the guiding principles that clarify the concept we have of the roles that the state, criminal law, science and ethics must play in the development of a public policy on cannabis.

Ethical considerations take us through what is, that is the realm of facts, to the realm of what should be, what would be desirable, moving from recognized facts to standards, then more importantly to values and finally to the means of passing on and above all implementing these values. This is why ethics was our first subject. As a guideline, we have adopted the principle that an ethical public policy on illegal drugs, and on cannabis in particular, must **promote reciprocal autonomy built through a constant exchange of dialogue within the community.**

We always find ourselves in paradoxical situations where, to a certain degree, each person has the free will to make decisions and makes free decisions for himself, while at the same

time rules are established in order to regulate interaction with others, a complex and more or less formal, but appropriate approach. The goal of governance is freedom, and not control. It is a question of defining the goals of society through policies and programs of action that are then implemented through systems and processes and upheld by those who govern that permits the encouragement and affirmation of those goals for human action. The law, as a vehicle of choice of governance, does not merely express rules or limitations passed for the benefit of and on behalf of citizens, but seeks a reciprocal process of building social relationships through which people, citizens and governments, can constantly adjust their expectations of behaviour. We therefore accept as a guiding principle for governance that **all of the means the State has at its disposal must work towards facilitating human action, particularly the processes allowing for the building of arrangements between government of the citizenry and governance of the self.**

On the whole, the legal basis of the criminal law is weak where the prescribed standard first, does not concern a relationship with others and where the characteristics of the relationship do not establish a victim and a perpetrator able to recognize his/her actions; second, has to find its justification outside fundamental social relationships; and third, results in the form of enforcement, the harmful effects of which undermine and challenge the very legitimacy of the law. Where criminal law is involved in these issues, the very standard prescribed by the law turns the perpetrator into the victim and tries to protect him from himself, something it can do only by producing a never-ending stream of knowledge that remains constantly out of his reach. In this context **only offences involving significant direct danger to others should be matters of criminal law.**

The Committee's Report - especially the second part - puts great emphasis on research-based knowledge. This focus is an attempt to do justice to the knowledge that has been developed over the past few decades. We considered it important and indeed necessary to give it detailed consideration. Indeed, the Committee recommends that the drive to acquire knowledge on specific issues we deem important be continued. We do not claim, however, to have answered the fundamental question of why people consume psychoactive substances, such as alcohol, drugs or medication. We were indeed surprised, given the quantity of studies conducted each year on drugs, that this area has not been covered. It is almost as if the quest for answers to technical questions has caused science to lose sight of the basic issue!

Scientific knowledge cannot replace either personal reflection or the political decision-making process. It supports those processes, science's greatest contribution to public drug policy. Our guiding principle is that science, **which must continue to explore specific areas of key issues and reflect on overarching questions, supports the public policy development process.**

These principles have guided our interpretation of the available information as well as our choice of recommendations; the reader should always keep them in mind when reading our report.

Chapter 4 – A changing context

This chapter puts the Committee's work in context. In recent years, in fact, in the past few months, events of some significance have taken place; some directly linked to illegal drugs, others far removed from them. Obviously, September 11 comes to mind. In social and political terms, the claims of medical users, of recreational users, within the changing context of drug use and, more generally, inter-generational conflict, have to be taken into account.

Legislation passed in the aftermath of September 11, some provisions of which could affect police drug investigations, the fight against organized crime and the trial of the Hells Angels in Quebec, must also be taken into account. In legal terms, court decisions have had a direct effect on medical use and a decision will be rendered in the next few months by the Supreme Court on recreational use. In international terms, the fragility of the UNDCP and the development of a continental drug policy for the Americas are relevant to an understanding of certain issues that may even overdetermine national policy. Finally, globalization and the more extreme forms of economic liberalism have been factors too, primarily in western societies but worldwide as well, in the increase of addictive behaviours, be they the use of drugs or other substitutes for social life.

Part II – Cannabis: Effects, types of use, attitudes

Chapter 5 – Cannabis: from plant to joint

This chapter first describes the cannabis plant and the various forms in which it becomes a consumer drug. We then take a brief look at the geographical origin of the cannabis plant and the routes along which it circulates in the modern world, noting at the same time current modes of production (soil-based and hydroponic) that have developed in certain regions of Canada. We then describe the pharmacokinetics of the cannabis plant, in particular its main active ingredients, and their metabolism in the body.

Available information on cannabis markets is weak and contradictory. Since 1997, the RCMP's annual reports on drugs suggest that 800 tons of cannabis circulate in Canada each year. Yet, many people told us that cannabis production has increased significantly and that cannabis has become more available than ever in this country. Data on the economic value of the cannabis market are no more reliable. We noted that:

- The size of the national production has significantly increased, and it is estimated that 50% of cannabis available in Canada is now produced in the country;
- The main producer provinces are British Columbia, Ontario and Quebec;
- Estimates of the monetary value of the cannabis market are unreliable. For example, if 400 tons are grown yearly in Canada, at a street value of \$225 per ounce, the total value of the Canadian production would be less than \$6 billion per year, less than the often quoted value of the BC market alone;
- An unknown proportion of national production is exported to the United States; and
- A portion of production is controlled by organized crime elements.

We heard many alarmist comments on the increased level of active ingredient (THC) in cannabis, however, it is currently impossible to estimate the average content of cannabis available in the market. More sophisticated growing methods have likely contributed to increasing the THC concentration. We observed that:

- In its natural state, cannabis contains between 0.5% and 3% THC. Sophisticated growing methods and genetic progress have made it possible to increase THC content in recent years, but it is impossible to estimate the average content of cannabis available in the market; it is reasonable to consider that content varies between 6% and 31%.
- THC is fat soluble and readily spreads in the innervated tissues of the brain; it reaches a peak in the blood plasma in less than nine minutes and falls to approximately 5% after one hour.
- The body is slow to eliminate THC and inactive THC metabolites can be detected in urine up to 27 days after use in the case of regular users.
- Psychoactive effects generally last two to three hours and may last as many as five to seven hours after use.

Chapter 6 – Users and uses: form, practice, context

Who uses cannabis? How do the patterns of use in Canada compare to those in other countries? In what context is cannabis used? Why? What populations are most vulnerable? What are the social consequences of cannabis, specifically on delinquency and criminal behaviour? Most important, what trajectories do cannabis users follow, specifically with respect to consumption of other drugs?

At the very least, partial answers to these questions are prerequisite to establishing policy on a substance. In Canada, knowledge of patterns and contexts of cannabis use verges on the abysmal. In the early 1980s, the USA, the United Kingdom, and Australia introduced monitoring systems for the general population and the student population. In the last five years, a number of European countries have introduced data collection systems as part of the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA). Canada, by contrast, has carried out only two epidemiological general population surveys specific to drugs (in 1989 and 1994), and only some provinces conduct surveys of the student population, using different methods and instruments that preclude data comparison. Furthermore, few sociological or anthropological studies are conducted on the circumstances or context of illegal drug use, specifically for cannabis. The result is that our pool of knowledge on users and characteristics of use is sorely lacking.

We have no explanation for this situation, at least no satisfactory explanation. In the 1970s, following up on the work done by the Le Dain Commission, Canada could have set up a trend monitoring system. In the 1980s, when Canada's Anti-Drug Strategy was adopted, to which the federal government allocated \$210M over five years, a data collection system could well have been created. The fact that it was not could be due to an absence of leadership or vision, a fear of knowing, the division of powers among levels of government, or the absence of a socio-legal research tradition within the departments responsible for justice and health. In fact, all of the above are probable factors. Whatever the case, it is our contention that this situation, unacceptable by definition, requires timely remedial action. We must resign ourselves to working with the scarce Canadian data available, and, more significantly, the virtually non-existent comparable data. We will also look at studies and data from other countries.

The chapter is divided into four sections. The first covers consumption patterns in the

population as a whole, then specifically in the 12-18 year age group and compares the patterns in various countries. In the adult population we observed that:

- The epidemiological data available indicates that close to 30% of the population (12 to 64 years old) has used cannabis at least once;
- Approximately 2 million Canadians over age 18 have used cannabis during the previous 12 months, approximately 600,000 have used it during the past month, and approximately 100,000 use it daily. Approximately 10% used cannabis during the previous year; and
- Use is highest between the ages of 16 and 24.

For youth in the 12-17 age group, we observed that:

- Canada would appear to have one of the highest rates of cannabis use among youths;
- Approximately 1 million would appear to have used cannabis in the previous 12 months, 750,000 in the last month and 225,000 would appear make daily use; and
- The average age of introduction to cannabis is 15.

The second section looks at what we know about reasons for and details on use, including origins and cultural differences. The third section deals specifically with cannabis user trajectories, including escalation. We have observed the following:

- Most experimenters stop using cannabis;
- Regular users were generally introduced to cannabis at a younger age. Long-term users most often have a trajectory in which use rises and falls;
- Long-term regular users experience a period of heavy use in their early 20s;
- Most long-term users integrate their use into their family, social and occupational activities; and
- Cannabis itself is not a cause of other drug use. In this sense, we reject the gateway theory

The fourth and last section covers the relationship between cannabis use and delinquency and crime. Based on research evidence, we concluded that:

- Cannabis itself is not a cause of delinquency and crime; and
- Cannabis is not a cause of violence.

Chapter 7 – Cannabis: Effects and Consequences

When it comes to cannabis, one hears anything and its opposite. While in some areas more research is needed and in others research results are contradictory, there exists nevertheless a strong basis of information contradicting many of the myths that continue to be perpetuated.

This chapter is divided into five sections. The first is a collection of statements on the presumed effects of marijuana that the Committee heard or became aware of through its research. The following three sections examine the acute effects of cannabis, followed in turn by the physiological and neurological consequences, the psychological consequences and the social consequences. Then, because of its significance and the central place it holds in social and political concerns, we turn our attention specifically to the question of any possible dependence arising from prolonged use of cannabis.

With respect to the effects of cannabis, the Committee observed that:

- The immediate effects of cannabis are characterized by feelings of euphoria, relaxation and sociability; they are accompanied by impairment of short-term memory, concentration and some psychomotor skills; and
- Long term effects on cognitive functions have not been established in research.

The Committee has distinguished between use, at-risk use and excessive use. Quantities used, psychosocial characteristics of the users and factors related to use contexts and quality of the substance all come into play to explain the passage from one category to the other. On at-risk use, the Committee observed that:

- Most users are not at-risk users insofar as their use is regulated, irregular and temporary, rarely beyond 30 years of age;
- For users above 16, at-risk use is defined as using between 0.1 to 1 gram per day; and
- Available epidemiological data suggests that approximately 100,000 Canadians might be at-risk users.
- The Committee feels that, because of its potential effects on the endogenous cannabinoid system and cognitive and psychosocial functions, any use in those under age 16 is at-risk use.

With respect to excessive use we observed that:

- More than one gram per day over a long period of time is heavy use, which can have certain negative consequences on the physical, psychological and social well-being of the user. According to the epidemiological data available, there is reason to believe that approximately 80,000 Canadians above age 16 could be excessive users;
- For those between the ages of 16 and 18, heavy use is not necessarily daily use but use

in the morning, alone or during school activities;

- Heavy use can have negative consequences for physical health, in particular for the respiratory system (chronic bronchitis, cancer of the upper respiratory tract);
- Heavy use of cannabis can result in negative psychological consequences for users, in particular impaired concentration and learning and, in rare cases and with people already predisposed, psychotic and schizophrenic episodes;
- Heavy use of cannabis can result in consequences for a user's social well-being, in particular their occupational and social situation and their ability to perform tasks; and
- Heavy use of cannabis can result in dependence requiring treatment; however, dependence caused by cannabis is less severe and less frequent than dependence on other psychotropic substances, including alcohol and tobacco.

Chapter 8 – Driving under the influence of cannabis

If there is one issue, other than the effects of cannabis use on young people or the effects of substance abuse, that is likely to be of concern to society and governments, then it is certainly the effect of the use of cannabis on the ability to drive a vehicle. We are already familiar with the effects of alcohol on driving and the many accidents involving injuries or deaths to young people. In spite of the decreases in use noted in recent years, one fatal accident caused by the use of a substance is one accident too many.

Next to alcohol, cannabis is the most widely used psychoactive substance, particularly among young people in the 16-25 age group. Casual use occurs most often in a festive setting, at weekend parties, often accompanied by alcohol. People in this age group are also the most likely to have a car accident and are also susceptible to having an accident while impaired.

Cannabis affects psychomotor skills for up to five hours after use. The psychoactive effects of cannabis are also dependent on the amount used, the concentration of THC and the morphology, experience and expectations of users. But what are the specific effects of cannabis on the ability to drive motor vehicles? What are the effects of alcohol and cannabis combined? And what tools are available to detect the presence of a concentration of THC that is likely to significantly affect the psychomotor skills involved in vehicle operation?

This chapter is divided into three sections. The first considers the ways of testing for the presence of cannabinoids in the body. The second analyzes studies on the known prevalence of impaired driving, in both accident and non-accident contexts. The third and last summarizes what is known about the effects of cannabis on driving based on both laboratory and field studies. As in the other chapters, the Committee then draw its own conclusions.

The Committee feels it is quite likely that cannabis makes users more cautious, partly because they are aware of their deficiencies and compensate by reducing speed and taking fewer risks. However, because what we are dealing with is no longer the consequences on the users themselves, but the possible consequences of their behaviour on others, the Committee feels that it is important to **opt for the greatest possible caution** with respect to the issue of driving under the influence of cannabis.

Given what we have seen, we conclude the following:

- Between 5% and 12% of drivers may drive under the influence of cannabis; this percentage increases to over 20% for young men under 25 years of age;
- Cannabis alone, particularly in low doses, has little effect on the skills involved in automobile driving. Cannabis leads to a more cautious style of driving. However it has a negative impact on decision time and trajectory. This in itself does not mean that drivers under the influence of cannabis represent a traffic safety risk;
- A significant percentage of impaired drivers test positive for cannabis and alcohol together. The effects of cannabis when combined with alcohol are more significant than is the case for alcohol alone;
- Despite recent progress, there does not yet exist a reliable and non intrusive rapid roadside testing method;
- Blood remains the best medium for detecting the presence of cannabinoids;
- Urine cannot screen for recent use;
- Saliva is promising, but rapid commercial tests are not yet reliable enough;
- The visual recognition method used by police officers has yielded satisfactory results; and
- It is essential to conduct studies in order to develop a rapid testing tool and learn more about the driving habits of cannabis users.

Chapter 9 - Use of marijuana for therapeutic Purposes

There has been renewed interest in the issue of the use of marijuana for therapeutic purposes in recent years, particularly in Canada. In the wake of an Ontario Court of Appeal ruling which found the provisions of the *Controlled Drugs and Substances Act* to be unconstitutional pertaining to the therapeutic use of marijuana, the federal Minister of Health made new regulations in July 2001 that give people with specified medical problems access to marijuana under certain conditions.

However, the scientific community, the medical community in particular, is divided on the real therapeutic effectiveness of marijuana. Some are quick to say that opening the door to medical marijuana would be a step toward outright legalization of the substance.

But none of that should matter to physicians or scientists. It is not a question of defending general public policy on marijuana or even all illegal drugs. It is not a question of sending a symbolic message about "drugs". It is not a question of being afraid that young people will use marijuana if it is approved as a medicine. The question, and the only question, for physicians as professionals is whether, to what extent and in what circumstances, marijuana

serves a therapeutic purpose. Physicians should have to determine whether people with certain diseases would benefit from marijuana use and weigh the side effects against the benefits. If they do decide the patient should use marijuana, they then have to consider how he or she might get it.

This chapter is devoted to the history of the use of marijuana for therapeutic purposes and the status of contemporary knowledge of marijuana and synthetic cannabinoids. We then give a brief account of compassion clubs and other organizations that supply marijuana for therapeutic use, as well as various public policy regimes. We conclude with our views on medical use of marijuana. In a later chapter, we discuss which public policy regime would be most appropriate given the status of medical use of marijuana

We observed that:

- There are clear, though non-definitive indications of the therapeutic benefits of marijuana in the following conditions: analgesic for chronic pain, antispasm for multiple sclerosis, anticonvulsive for epilepsy, antiemetic for chemotherapy and appetite stimulant for cachexi;
- There are less clear indications regarding the effect of marijuana on glaucoma and other medical conditions;
- Marijuana has not been established as a drug through rigorous, controlled studies;
- The quality and effectiveness of marijuana, primarily smoked marijuana, have not been determined in clinical studies;
- There have been some studies of synthetic compounds, but the knowledge base is still too small to determine effectiveness and safety;
- Generally, the effects of smoked marijuana are more specific and occur faster than the effects of synthetic compounds;
- The absence of certain cannabinoids in synthetic compounds can lead to harmful side effects, such as panic attacks and cannabinoid psychoses;
- Smoked marijuana is potentially harmful to the respiratory system;
- People who smoke marijuana for therapeutic purposes self-regulate their use depending on their physical condition and do not really seek the psychoactive effect;
- People who smoke marijuana for therapeutic purposes prefer to have a choice as to methods of use;
- Measures should be taken to support and encourage the development of alternative practices, such as the establishment of compassion clubs;
- The practices of these organizations are in line with the therapeutic indications arising from clinical studies and meet the strict rules on quality and safety;

- The studies that have already been approved by Health Canada must be conducted as quickly as possible;
- The qualities of the marijuana used in those studies must meet the standards of current practice in compassion clubs, not NIDA standards;
- The studies should focus on applications and the specific doses for various medical conditions; and
- Health Canada should, at the earliest possible opportunity, undertake a clinical study in cooperation with Canadian compassion clubs.

Chapter 10 - Canadians' Opinions and Attitudes

It is always difficult to gauge the public's opinions, attitudes and concerns. The traditional method of surveying a representative sample of the population was too expensive for our resources. Surveys also have limits that we discuss in more detail. However, we did commission a qualitative study using focus groups, the results of which are presented in this chapter. We also report the results of other surveys that we researched and considered. As well, many Canadians wrote to us or sent us e-mails, and others came out to our public hearings to participate. Obviously we cannot draw solid conclusions from this. The people who wrote to us were probably those to whom the issue is very important, regardless of which way they may lean. Some are cited in our Report but we must reiterate that no conclusion should be drawn from these opinions in terms of representativeness. No account of Canadians' opinions on and attitudes toward drugs in general would be complete without an examination of the role of the media in shaping those opinions and attitudes. In recent years, as a result of this Committee's work and other initiatives, various Canadian newspapers and magazines have run stories or have written editorials on the issue. These are the focus of the first part of the chapter. The next part presents the results of surveys and polls, including the survey we commissioned and surveys conducted in different provinces. The last part covers our understanding of what Canadians told us.

We observed the following:

- Public opinion on marijuana is more liberal than it was 10 years ago;
- There is a tendency to think that marijuana use is more widespread and that marijuana is more available than it used to be;
- There is a tendency to think that marijuana is not a dangerous drug;
- The concern about organized crime is significant;
- Support for medical use of marijuana is strong;
- There is a tendency to favour decriminalization or, to a lesser degree, legalization;
- People criticize enforcement of the legislation in regards to simple possession of

marijuana; and

- There is a concern for youth and children.

part iii -- policies and practices in canada

Chapter 11 - A National Drug Strategy?

Based on the importance of the subject, it would probably surprise many Canadians to learn that only from 1987 to 1993 did Canada have a fully funded national drug strategy. It is true that Canada has had legislation dealing with the use of psychoactive substances since the passage of the *Opium Act* in 1908. This Act was followed by several pieces of criminal legislation over the years that increased federal enforcement powers over psychoactive substances and expanded the list of illicit substances. These pieces of legislation have historically focused on the supply of psychoactive substances, adopting a prohibitionist approach to use. It is widely acknowledged now, however, that a more balanced approach is required if one is to deal effectively with those who abuse psychoactive substances.

This chapter recounts the development and implementation of the 1987 National Drug Strategy, which had as an objective the promotion of a balanced approach to the problem of psychoactive substance abuse. This is followed by a discussion of what became of the national strategy and what goals have been achieved.

We observed the following:

- Canada urgently needs a comprehensive and coordinated national drug strategy for which the federal government provides sound leadership;
- Any future national drug strategy should incorporate all psychoactive substances, including alcohol and tobacco;
- To be successful, a national drug strategy must involve true partnerships with all levels of government and with non-governmental organizations;
- Over the years, the intermittency of funding has diminished the ability to coordinate and implement the strategy; adequate resources and a long-term commitment to funding are needed if the strategy is to be successful;
- Clear objectives for the strategy must be set out, and comprehensive evaluations of these objectives and the results are required;
- At the developmental stage, there is a need to identify clear and shared criteria for "success";
- The core funding for the Canadian Centre on Substance Abuse (CCSA) has been insufficient for it to carry out its mandate; proper funding for the CCSA is essential;

- There is a need for an independent organization – the CCSA – to conduct national surveys at least every second year; there is also a need to achieve some level of consistency, comparability and similar time frames for provincially-based school surveys;
- Coordination at the federal level should be given to a body that is not an integral part of one of the partner departments; and
- Canada's Drug Strategy's should adopt a balanced approach – 90% of federal expenditures are currently allocated to the supply reduction.

Chapter 12 - The National Legislative Context

Drugs have been prohibited for fewer than a hundred years; cannabis for slightly more than 75 years. It is tempting to think that the decisions made over the years to use criminal law to fight the production and use of certain drugs are in keeping with social progress and the advancement of scientific knowledge about drugs. But is this really the case? The history of legislation governing illegal drugs in Canada, like the analysis in Chapter 19 of the structure of international conventions, suggests that it is highly doubtful. To what extent is such reasoning really rational? Is the rationale of the system of controls acceptable in the eyes of civil society, users as well as abstainers? What criteria motivated legislator decisions? Indeed, were there criteria? What motivated parliamentarians from Canada and elsewhere to prohibit certain substances, to control access to certain others, and to permit still others to be sold over the counter?

Knowing where we have been helps in understanding where we are going. That is the goal of this chapter, retracing the evolution of Canadian drug laws from 1908 to the present day. We have identified three legislative periods. The first, and longest, spans 1908 to 1960, the period of hysteria. We were told that drugs were made criminal because they are dangerous. Analysis of debates in Parliament and in media accounts clearly shows how far this is from truth. When cannabis was introduced in the legislation on narcotics in 1923, there was no debate, no justification, in fact many members did not even know what cannabis was.

The second period, much shorter, runs from 1961 to 1975, the search for lost reason. Following the explosion in drug use in the early 1960s and demands for reform from various sectors of society, governments appointed a commission of inquiry in Canada, the Le Dain Commission. Last comes the contemporary period at the beginning of the 1980s. Reform is not on the policy agenda any more and anti-drug policies have forged ahead.

In summary, we observed that:

- Early drug legislation was largely based on a moral panic, racist sentiment and a notorious absence of debate;
- Drug legislation often contained particularly severe provisions, such as reverse onus and cruel and unusual sentences; and
- The work of the Le Dain Commission laid the foundation for a more rational approach to illegal drug policy by attempting to rely on research data. The Le Dain Commission's

work had no legislative outcome until 1996 in certain provisions of the *Controlled Drugs and Substances Act*, particularly with regard to cannabis.

Chapter 13 - Regulating Therapeutic Use of Cannabis

Cannabis has an extremely long history of therapeutic use, going back several thousands of years. It was often used for the same medical conditions it is used for today. With the development of the pharmaceutical industry in the last century, the medical community has gradually discontinued its use. Various factors may explain this. Developments in the pharmaceutical industry provided the medical community with more stable and better tested medication. The practice of medicine itself has changed and so has our conception of health. Then, at the turn of the 20th century, the plants from which opium, cocaine and cannabis are derived were banned by the international community, except for medical and scientific purposes. In the case of cannabis, no rigorous study had been done until recently.

Further to the social rediscovery of cannabis and the identification of its molecular composition and chemical elements in the 1960s, renewed interest in the therapeutic applications of cannabis grew in the early 1970s. More people began using the plant for its therapeutic benefits and many demanded a relaxation of the prohibitionist rules governing cannabis.

Partly because its safety and effectiveness have yet to be reviewed in clinical trials, cannabis has not been approved for sale in Canada as a medical product. Despite this lack of approval, many use cannabis for its therapeutic purposes without legal authorization. In addition, because of the many claims regarding its therapeutic benefit, a growing number of people have called for a less restrictive approach and are demanding access to cannabis for people who could benefit from its use.

This chapter reviews the events that prompted the recent enactment of the *Marihuana Medical Access Regulations*. One of the objectives of the regulations is to provide a compassionate framework of access to marijuana for seriously ill Canadians while research regarding its therapeutic application continues. Also discussed is the implementation of these regulations, which came into force on 30 July 2001.

We have observed the following:

- The MMAR are not providing a compassionate framework for access to marijuana for therapeutic purposes and are unduly restricting the availability of marijuana to patients who may receive health benefits from its use;
- The refusal of the medical community to act as gatekeepers and the lack of access to legal sources of cannabis appear to make the current regulatory scheme an "illusory" legislative exemption and raises serious Charter implications;
- In almost one year, only 255 people have been authorized to possess marijuana for therapeutic purposes under the MMAR and only 498 applications have been received – this low participation rate is of concern;
- Changes are urgently needed with regard to who is eligible to use cannabis for

therapeutic purposes and how such people gain access to cannabis;

- Research on the safety and efficacy of cannabis has not commenced in Canada because researchers are unable to obtain the product needed to conduct their trials;
- No attempt has been made in Health Canada's current research plan to acknowledge the considerable expertise currently residing in the compassion clubs;
- The development of a Canadian source of research-grade marijuana has been a failure.

Chapter 14 - Police Practices

Views on police priorities regarding enforcement of laws on illicit drugs are, at the very least, inconsistent, if not contradictory. Some believe that too much police time, effort and resources are spent in investigating illicit drug offences and, more specifically, possession offences, even more specifically, cannabis possession offences. Others, including the police themselves, claim that police priorities are already focused on traffickers and producers, and that possession charges are laid as a result of police presence to deal with other criminal activity. Thus, they maintain that the vast majority of cannabis possession charges are incidental to other police responsibilities.

This chapter reviews the key organizations that are responsible for enforcing Canada's current illicit drugs legislation, the *Controlled Drugs and Substances Act* (CDSA). It includes a discussion of the powers they have been granted, and the investigative techniques used, in relation to illicit drug investigations. Finally, key police-related statistics are explored. This information should help clarify some of the misconceptions related to enforcement of laws on illicit drugs.

The Committee found that:

- The annual cost of drug enforcement in Canada is estimated to be between \$700 million and \$1 billion;
- Reduced law enforcement activities resulting from amendments to the drug legislation on cannabis could produce substantial savings or a significant reallocation of funds by police forces to other priorities;
- Due to the consensual nature of drug offences, police have been granted substantial enforcement powers and have adopted highly intrusive investigative techniques; these powers are not unlimited, however, and are subject to review by Canadian courts;
- Over 90,000 drug-related incidents are reported annually by police; more than three-quarters of these incidents relate to cannabis and over 50% of all drug-related incidents involve possession of cannabis;
- From 1991 to 2001, the percentage change in rate per 100,000 people for cannabis-related offences is +91.5 – thus, the rate of reported cannabis-related offences has almost doubled in the past decade;

- The number of reported incidents related to the cultivation of cannabis increased dramatically in the past decade;
- Reported incident rates vary widely from province to province;
- Cannabis was involved in 70% of the approximately 50,000 drug-related charges in 1999. In 43% of cases (21,381), the charge was for possession of cannabis.;
- The rate of charges laid for drug offences vary significantly from province to province;
- The uneven application of the law is of great concern and may lead to discriminatory enforcement, alienation of certain groups within society, and creation of an atmosphere of disrespect for the law; in general, it raises the issue of fairness and justice; and
- Statistics on seizure seem to confirm an increase in cannabis cultivation in Canada and also a shift in police priorities regarding this offence.

Chapter 15 - The Criminal Justice System

The previous chapter examined how people first come into contact with the criminal justice system through the enforcement of criminal legislation. Several questions remain, however. What happens once a person has been charged with a drug offence? Who is responsible for prosecuting drug cases? What type of punishment do people receive? Who ends up with a criminal record? Have there been any challenges to the constitutional validity of drug legislation? These issues and others related to the criminal justice system are reviewed in this chapter

We have observed the following:

- The cost of prosecuting drug offences in 2000-2001 was \$57 million with approximately \$5 million or roughly 10% of the total budget relating to prosecuting cannabis possession offences;
- In 1999, it was estimated that Canadian criminal courts heard 34,000 drug cases, which involved more than 400,000 court appearances;
- The Drug Treatment Court initiatives seem very encouraging, although comprehensive evaluations are needed to ensure such programs are effective;
- Disposition and sentencing data with respect to drug-related offences are incomplete and there is an urgent need to correct this situation;
- Correctional Service Canada spends an estimated \$160 million annually to address illicit drugs through incarceration, substance abuse programs, treatment programs and

security measures; expenditures on substance abuse programs are unreasonably low, given the number of inmates who have substance-abuse dependence problems;

➤ A criminal conviction can negatively affect a person's financial situation, career opportunities and restrict travel. In addition, it can be an important factor in future dealings with the criminal justice system; and

➤ Provincial courts of appeal have so far maintained the constitutionality of cannabis prohibition. They have found that because there is some evidence of harm caused by marijuana use that is neither trivial nor insignificant, Parliament has a rational basis to act as it has done, and the marijuana prohibition is therefore consistent with the principles of fundamental justice in section 7 of the Charter. These decisions have been appealed, and the Supreme Court of Canada will soon decide whether cannabis prohibition is constitutionally sound.

Chapter 16 - Prevention

Viewed in theory, at least, as a public health issue, a policy on illegal drugs should call for a strong prevention strategy. Nothing, however, is more fluid, vague, or even controversial, than prevention. When it comes to illegal drugs, the legal and political context makes the issue of prevention even harder to clarify and actions even harder to define. The national legal context surrounding illegal drugs and the interpretation of international drug policies are such that because they are defined *a priori* as harmful substances, illegal drugs must not be used. Another way of putting it is that any use is abuse. If use is abuse, if individuals or organizations involved in prevention are unable to make distinctions that are essential in setting objectives and devising preventive measures, what hope is there of establishing successful prevention programs? There are, as this chapter will show, many prevention programs that are not aimed solely or even particularly at the prevention of use, but rather the prevention of at-risk behaviour. Harm reduction, for example, is not only a general strategy for dealing with psychoactive substances, but is also a preventive approach that seeks to lower the risks associated with drugs and drug control without requiring abstinence. However, harm reduction is the subject of much controversy and criticism because it is based on the premise that use of drugs is a social reality. Addressing the issue of prevention means considering at the same time government policies on illegal drugs. Any discussion of prevention entails discussion of the limits of government intervention and of how one conceives of human action. How far should government interventions go in identifying groups at risk without further stigmatizing groups already at risk? To what extent are humans rational beings who act in their best interest provided they are given the right information?

This chapter on prevention begins with a statement that will come as no surprise to health or justice experts: when it comes to prevention, there is lots of talk, but the resources allocated are small and the initiatives weak. The second section asks the question: what prevention? We look at current knowledge of the factors underlying prevention initiatives and the effectiveness of some preventive measures, with special emphasis on one of the most important weapons in the war on drugs, the DARE program. The third section looks at the harm reduction approach to prevention. As in the other chapters, our conclusions are in the form of observations that may serve to guide future actions.

The Committee found that:

- Prevention is not designed to control but rather to empower individuals to make informed decisions and acquire tools to avoid at-risk behaviour;
- A national drug strategy should include a strong prevention component;
- Prevention strategies must be able to take into account contemporary knowledge about drugs;
- Prevention messages must be credible, verifiable and neutral;
- Prevention strategies must be comprehensive, cover many different factors and involve the community;
- Prevention strategies in schools should not be led by police services or delivered by police officers;
- The RCMP should reconsider its choice of the DARE program that many evaluation studies have shown to be ineffective;
- Prevention strategies must include comprehensive evaluation of a number of key elements;
- A national drug strategy should include mechanisms for widely disseminating the results of research and evaluations;
- Evaluations must avoid reductionism, involve stakeholders in prevention, be part of the program, and include longitudinal impact assessment;
- Harm reduction strategies related to cannabis should be developed in coordination with educators and the social services sector; and
- Harm reduction strategies related to cannabis should include information on the risks associated with heavy chronic use, tools for detecting at-risk and heavy users and measures to discourage people from driving under the influence of marijuana.

Chapter 17 - Treatment practices

With the exception of the treatment given to offenders imprisoned in federal institutions and Aboriginals, the care available to individuals who are substance-dependent is essentially the responsibility of the provinces and territories. This chapter is therefore brief since we received only a few submissions and heard few witnesses on this question.

In Chapter 7 we determined that physical dependency on cannabis was rare and insignificant. Some symptoms of addiction and tolerance can be identified in habitual users but most of them have no problem in quitting and do not generally require a period of withdrawal. As far as forms of psychological dependency are concerned, the studies are still incomplete but the international data tend to suggest that between 5% and 10% of regular

users (using at least in the past month) are at risk of becoming dependent on cannabis. We estimated that approximately 3% or 600,000 adult Canadians have consumed cannabis in the past month and that approximately 0.5% or 100,000 use it on a daily basis. This indicates that somewhere between 30,000 and 40,000 people might be at-risk and 5,000 to 10,000 might make excessive use. For those aged 16 and 17, the numbers were between 50,000 and 70,000 at-risk and 8,000 to 17,000 potentially excessive users. The data also indicated that the peak period for intensive use is between the ages of 17 and 25 years. These broad parameters indicate where to look to prevent dependency and offer treatment services for those in need.

What form does cannabis dependency take? Most authors agree that psychological dependency on cannabis is relatively minor. In fact, it cannot be compared in any way with tobacco or alcohol dependency and is even less common than dependency on certain psychotropic medications.

We have observed that:

- The expression 'drug addiction' should no longer be used and we should talk instead of substance abuse and dependency;
- Between 5% and 10% of regular cannabis users are at risk of developing a dependency;
- Physical dependency on cannabis is virtually non-existent;
- Psychological dependency is moderate and is certainly lower than for nicotine or alcohol;
- Most regular users of cannabis are able to diverge from a trajectory of dependency without requiring treatment;
- There are many forms of treatment but nothing is known about the effectiveness of the different forms of treatment for cannabis dependency specifically;
- As a rule, treatment is more effective and less costly than incarceration;
- Studies of the treatment programs should be conducted, including treatments programs for people with cannabis dependency; and
- Studies should be conducted on the interaction of the cannabinoid and the opioid systems.

Chapter 18 - Observations on practices

Previous chapters have described public action by dividing it into the major sectors of involvement. Before closing the third part of this report, we make some general observations that cut across the individual areas we have examined. The first concerns difficulties in harmonizing the various levels and sectors of involvement; the second, the difficulty in co-

ordinating their various approaches; and the third, the costs of drugs and public policy.

A study published by CCSA in 1996 but based on 1992 data had identified the following costs of substance abuse:

- The costs associated with all illegal drugs were \$1.4 billion, compared with \$7.5 billion in the case of alcohol and \$9.6 billion in the case of tobacco.
- Expressed as a percentage of the gross domestic product, the total costs for all substances was 2.67%. Of this, 0.2% was for illegal drugs, 1.09% for alcohol and 1.39% for tobacco.
- The principal costs of illegal drugs are externalities, that is, loss of productivity - \$823 million, health care - \$88 million, and losses in the workplace - \$5.5 million, for a total of about 67% of all costs related to illegal drugs.
- The cost of public policies, or opportunity costs, represent about 33%.
- The cost of enforcing the law represents about 29.2% of all costs, or about 88% of all policy costs. The balance goes to prevention, research and administration.

Previous studies conducted in British Columbia in 1991, in Ontario in 1988 and in Quebec in 1988, using different methodologies, established costs of \$388 million, \$1.2 billion and \$2 billion respectively, for a total cost of \$3.5 billion in these three provinces alone. These figures demonstrate the extent to which such estimates can vary, according to the methodology selected and the availability of data.

Nevertheless, with the CCSA study taken as the standard, two comments must be made. First, loss of productivity – the major cost – is measured in mortality - \$547 million and morbidity - \$275 million. Except in the case of traffic fatalities, cannabis is not a cause of death and involves none of this type of social cost. Morbidity corresponds to losses attributed to problems caused by drug use as measured by the difference between the average annual income of users and of the population in general. Here, two further observations about cannabis should be noted. A large proportion of cannabis users are young people who are not yet part of the workforce and cannabis use involves none of the addiction and attendant problems that follow from heroin or cocaine use. Therefore, the costs that can be attributed to cannabis in this regard are likely minimal. If one accepts the methodology of the authors, **cannabis in itself entails few externalities**, which are the main measures of the social cost of illegal drugs.

However, it should also be noted that the study did not calculate the costs of substance-related crime. Alcohol is well known for its frequent association with crimes of violence (at least 30% of all cases), as well as with impaired driving, which results in major social and economic losses. Crime related to illegal drugs is of several types: organized crime, crimes against property committed in order to pay for drugs, true mainly in the case of heroin and cocaine, and crimes of violence committed under the influence of drugs. With the exception of organized crime and driving under the influence, cannabis involves few of the factors that generate criminal behaviour.

Secondly, according to the CCSA's study, the main cost of illegal drugs, after loss of

productivity, is the cost of law enforcement, which the study estimates at approximately \$400 million. In Chapters 14 and 15, we note that police and court costs are certainly much higher than this figure, and probably total between \$1 and \$1.5 billion. The proportion of these costs attributable to cannabis is impossible to determine for certain. But, insofar as 77% of all drug-related offences involve cannabis, and of these 50% simple possession, and given that about 60% of incidents result in a charge, of which some 10% to 15% of cases the accused receives a prison sentence, it is clear that a considerable proportion of the drug-related activity addressed by the penal justice system is concerned with cannabis. While admitting this to be a very rough estimate, we suggest that about 30% of the activity of the justice system is tied up with cannabis. On the basis of our estimates and the lowest cost of law enforcement, or \$1 billion, it costs about \$300 million annually to enforce the cannabis laws.

In effect, the main social costs of cannabis are a result of public policy choices, primarily its continued criminalization, while the consequences of its use represent a small fraction of the social costs attributable to the use of illegal drugs.

Overall, we observed the following:

- The lack of any real national platform for discussion and debate on illegal drugs prevents the development of clear objectives and measurement indicators;
- The absence of a national platform makes exchange of information and best practices impossible;
- Practices and approaches vary considerably between and within provinces and territories;
- The conflicting approaches of the various players in the field are a source of confusion;
- The resources and powers of enforcement are greatly out of balance compared with those of the health and education fields and the civil society;
- The costs of all illegal drugs had risen to close to \$1.4 billion in 1992;
- Of the total costs of illegal drugs in 1992, externalities (social costs) represented 67% and public policy costs 33%;
- The social costs of illegal drugs and the public policy costs are underestimated ;
- The cost of enforcing the drug laws is more likely to be closer to \$1 billion to \$1.5 billion per annum;
- The principal public policy cost relative to cannabis is that of law enforcement and the justice system; which may be estimated to represent a total of \$300 to \$500 million per annum;
- The costs of externalities attributable to cannabis are probably minimal - no deaths, few hospitalizations, and little loss of productivity;

- The costs of public policy on cannabis are disproportionately high given the drug's social and health consequences; and
- The Canadian Centre on Substance Abuse is seriously under-funded; its annual budget amounts to barely 0.1% of the social costs of illegal drugs alone (alcohol not included). Its budget should be increased to at least 1%; that is, approximately \$15 million per annum.

Part IV-Public Policy Options

Chapter 19 - The International Legal Environment

This chapter could begin and end with the same words: The international drug control conventions are, at least with respect to cannabis, an utterly irrational restraint that has nothing to do with scientific or public health considerations.

Three points bear making concerning the substance of the current conventions.

The first has to do with the absence of definitions. The terms drugs, narcotics and psychotropics are not defined in any way except as lists of products included in schedules. It follows that any natural or synthetic substance on the list of narcotics is, for the purposes of international law, a narcotic, and that a psychotropic is defined in international law by its inclusion in the list of psychotropics. The only thing that the 1961 Convention tells us about the substances to which it applies is that they can be abused. The 1971 Psychotropics Convention, which reversed the roles in that the synthetic drug producing countries wanted narrower criteria, indicates that the substances concerned may cause dependence or central nervous system stimulation or depression and may give rise to such abuse as to "constitute a public health problem or a social problem that warrants international control."

The second point, following from the first, relates to the arbitrary nature of the classifications. While cannabis is included, along with heroin and cocaine, in Schedules I and IV of the 1961 Convention, which carry the most stringent controls, it is not even mentioned by name in the 1971 Convention, though THC is listed as a Schedule I psychotropic along with mescaline, LSD and so on. The only apparent criterion is medical and scientific use, which explains why barbiturates are in Schedule III of the 1971 Convention and therefore subject to less stringent controls than natural hallucinogens. These classifications are not just arbitrary, but inconsistent with the substances' pharmacological classifications and their danger to society.

Third, if there was so much concern about public health based on how dangerous "drugs" are, one has to wonder why tobacco and alcohol are not on the list of controlled substances.

We conclude from these observations that the international regime for the control of psychoactive substances, beyond any moral or even racist roots it may initially have had, is **first and foremost a system that reflects the geopolitics of North-South relations in the 20th century**. Indeed, the strictest controls were placed on organic substances – the coca bush, the poppy and the cannabis plant – which are often part of the ancestral traditions of the countries where these plants originate, whereas the North's cultural products, tobacco and alcohol, were ignored and the synthetic substances produced by the North's

pharmaceutical industry were subject to regulation rather than prohibition. It is in this context that the demand made by Mexico on behalf of a group of Latin American countries during the negotiations leading up to the 1988 Convention, that their use be banned, must be understood. It was a demand that restored the balance to a degree, as the countries of the South had been forced to bear the full brunt of the controls and their effects on **their own people** since the inception of drug prohibition. The result may be unfortunate, since it reinforces a prohibitionist regime that history has been shown to be a failure, but it may have been the only way, given the mood of the major Western powers, to demonstrate the irrationality of the entire system in the longer term. In any case, it is a short step from there to question the legitimacy of instruments that help to maintain the North-South disparity yet fail miserably to reduce drug supply and demand.

We make the following observations:

- The series of international agreements concluded since 1912 have failed to achieve their ostensible aim of reducing the supply of drugs;
- The international conventions constitute a two-tier system that regulates the synthetic substances produced by the North and prohibits the organic substances produced by the South, while ignoring the real danger the substances represent for public health;
- When cannabis was included in the international conventions in 1925, there was no knowledge of its effects;
- The international classifications of drugs are arbitrary and do not reflect the level of danger they represent to health or to society;
- Canada should inform the international community of the conclusions of our report and officially request the declassification of cannabis and its derivatives.

Chapter 20 - Public Policies in Other Countries

The vast majority of Canadians have heard about the "war on drugs" which the USA is conducting and about its prohibitionist approach, but many would be surprised to see the major variations between states, indeed between cities, within that country. Even fewer know that Sweden enforces a prohibitionist policy at least as strict as that of the US, but through other means. Many of us have, in one way or another, heard about the "liberal" approach introduced in the Netherlands in 1976. Fewer people know of the Spanish, Italian, Luxembourg or Swiss approaches, which are even more liberal in certain respects. More recently, Canadians learned of the decision by the UK's Minister of the Interior to reclassify cannabis as a Class C drugs, but it is not clear that we know precisely what that means. In view of the preconceptions that many may have in relation to France with regard to wine, many may be surprised to learn that its policy on cannabis appears more "conservative" than that of neighbouring Belgium, for example. As may be seen, after the overall framework of the puzzle has been established by the international community, the ways the pieces are put together vary widely among states, and at times among the regions of a single state.

That is why, in order to learn about the experience and approaches of other countries, the Committee commissioned a number of research reports on the situations in other countries and heard representatives of some of those countries in person. We of course had to make some choices, such as limiting ourselves to the western countries of the northern hemisphere. This is a weak point in our Report, we agree, but our resources were limited. In addition, as we wanted to compare public policies with data on use trends and judicial practices, we were forced to choose countries with an information base. In our hearings with representatives of those countries, we were mainly limited by time and cost.

In this chapter, we describe the situations in five European countries — France, the Netherlands, the United Kingdom, Sweden and Switzerland — and in Australia and the United States.

Chapter 21 - Public policy options

Public policy is not just a matter of enabling legislation, in this case criminal legislation. Nonetheless, when it comes to illegal drugs, criminal legislation occupies a symbolic and determinative place. It is as if this legislation is the backbone of our public policy. Public discussions of cannabis do not deal so much with such matters as public health, user health, prevention of at-risk or excessive use, but with such questions as the pros and cons of decriminalization, establishing a civil offence or maintaining a criminal offence, or possible legalization and the extent thereof.

In respect of illegal drugs, where the key issues are, first and foremost, matters of public health and culture (including education and research), and where criminal law should be used only as a last resort, public policy must be based primarily on clear principles and objectives. For this to come about, public policy must be equipped with a set of tools designed to deal with the various issues that drugs represent to societies. Legislation is only one such tool. The social and economic costs of illegal drugs affect many aspects of society through lower productivity and business loss, hours of hospitalization and medical treatment of all kinds, police time and prison time, and broken or lost lives. Even if no one can pinpoint the exact figures, a portion of these costs arise, not from the substances themselves, but from the fact that they are criminalized. In fact, more than for any other illegal drug, its criminalization is the principal source of social and economic costs. However, in spite of the fact that the principal social costs of drugs affect business, health and family, the emphasis on the legal debate tips the scales of public action in favour of law enforcement agencies. No one can deny that their work is necessary to ensure public order and peace and fight organized crime. At the same time, over 90% of resources are spent on enforcing the law, the most visible actions with respect to drugs in the public sphere are police operations and court decisions and, at least with respect to cannabis, the law lags behind individual attitudes and opinions, thus creating a huge gap between needs and practice.

Most national strategies display a similar imbalance. The national strategies that appear to have the greatest chance of success, however, are those that strive to correct the imbalance. These strategies have introduced knowledge and observation tools, identified indicators of success with respect to their objectives, and established a veritable nerve centre for implementing and monitoring public policy. The law, criminal law especially, is put in its proper place as one method among many of reaching the defined objectives, not an aim in itself.

This chapter is divided into three sections. The first examines the effectiveness of legal measures for fighting drugs, and shows that legal systems have little effect on consumption or supply. The second section describes the various components of a public policy. The

third considers the direction of criminal policy, and defines the main terms used: decriminalization, depenalization, diversion, legalization, and regulation.

In our view, it is clear that if the aim of public policy is to diminish consumption and supply of drugs, specifically cannabis, all signs indicate complete failure. One might think the situation would be worse if not for current anti-drug action. This may be so. Conversely, one might also think that the negative impact of anti-drug programs that are currently centre stage are greater than the positive effect, specifically non-compliance with laws that are inconsistent with majority attitudes and behaviour. One of the reasons for this failure is the excessive emphasis placed on criminal law in a context where prohibition of use and a drug-free society appear to remain the omnipresent and determining direction of current public policies.

We think that a public policy on psychoactive substances must be both integrated and adaptable, target at-risk uses and behaviours and abuses based on a public health approach that neither trivializes nor marginalizes users. Implementation of such a policy must be multifaceted.

Some say that decriminalization is a step in the right direction, one that gives society time to become accustomed to cannabis, to convince opponents that chaos will not result, to adopt effective preventive measures. We believe however that **this approach is in fact the worst case scenario, depriving the State of a necessary regulatory tool for dealing with the entire production, distribution, and consumption network, and delivering hypocritical messages at the same time.**

In our opinion, the data we have collected on cannabis and its derivatives provide sufficient grounds for our general conclusion that the regulation of the production, distribution and consumption of cannabis, inasmuch as it is part of an integrated and adaptable public policy, is best able to respond to the principles of autonomy, governance that fosters human responsibility and limitation of penal law to situations where there is demonstrable harm to others. A regulatory system for cannabis should permit, specifically:

- *more effective targeting of illegal traffic and a reduction in the role played by organized crime;*
- *prevention programs better adapted to the real world and better able to prevent and detect at-risk behaviour;*
- *enhanced monitoring of products, quality and properties;*
- *better user information and education; and*
- *respect for individual and collective freedoms, and legislation more in tune with the behaviour of Canadians.*

In our opinion, Canadian society is ready for a responsible policy of cannabis regulation that complies with these basic principles.

Conclusions and recommendations

The Senate Special Committee on Illegal Drugs' mandate was to examine Canada's public policy approach in relation to cannabis and assess its effectiveness and impact in light of the knowledge of the social and health-related effects of cannabis and the international context. Over the past two years, the Committee has heard from Canadian and foreign experts and reviewed an enormous amount of scientific research. The Committee has endeavoured to take the pulse of Canadian public opinion and attitudes and to consider the guiding principles that are likely to shape public policy on illegal drugs, particularly cannabis. Our report has attempted to provide an update on the state of knowledge and the key issues, and sets out a number of conclusions in each chapter.

This final section sets out the main conclusions drawn from all this information and presents the resulting recommendations derived from the thesis we have developed namely: *in a free and democratic society, which recognizes fundamentally but not exclusively the rule of law as the source of normative rules and in which government must promote autonomy as far as possible and 'herefore make only sparing use of the instruments of constraint, public policy on psychoactive substances must be structured around guiding principles respecting the life, health, security and rights and freedoms of individuals, who, naturally and legitimately, seek their own well-being and development and can recognize the presence, difference and equality of others.*

Le Dain –thirty years ago Already

Thirty years ago, the Le Dain Commission released its report on cannabis. This Commission had far greater resources than we did. However, we had the benefit of Le Dain's work, a much more highly developed knowledge base since then and of thirty years' historical perspective.

The Commission concluded that the criminalization of cannabis had no scientific basis. Thirty years later, we confirm this conclusion and add that continued criminalization of cannabis remains unjustified based on scientific data on the danger it poses.

The Commission heard and considered the same arguments on the dangers of using cannabis: apathy, loss of interest and concentration, learning difficulties. A majority of the Commissioners concluded that these concerns, while unsubstantiated, warranted a restrictive policy. Thirty years later, we assert that the studies done in the meantime have not confirmed the existence of the so-called amotivational syndrome and add that most studies rule out this syndrome as a consequence of the use of cannabis.

The Commission concluded that not enough was known about the long-term and excessive use of cannabis. We assert that these types of use exist and may present some health risks; excessive use, however, is limited to a minority of users. Public policy, we would add, must

provide ways to prevent and screen for at-risk behaviour, something our policies have yet to do.

The Commission concluded that the effects of long-term use of cannabis on brain function, while largely exaggerated, could affect adolescent development. We concur, but point out that the long-term effects of cannabis use appear reversible in most cases. We note also that adolescents who are excessive users or become long-term users are a tiny minority of all users of cannabis. Once again, we would add that a public policy must prevent use at an early age and at-risk behaviour.

The Commission was concerned that the use of cannabis would lead to the use of other drugs. Thirty years' experience in the Netherlands disproves this clearly, as do the liberal policies of Spain, Italy and Portugal. And here in Canada, despite the growing increase in cannabis users, we have not had a proportionate increase in users of hard drugs.

The Commission was also concerned that legalization would mean increased use, among the young in particular. We have not legalized cannabis, and we have one of the highest rates in the world. Countries adopting a more liberal policy have, for the most part, rates of usage lower than ours, which stabilized after a short period of growth.

Thirty years later, we note that:

- Billions of dollars have been sunk into enforcement without any greater effect. There are more consumers, more regular users and more regular adolescent users;
- Billions of dollars have been poured into enforcement in an effort to reduce supply, without any greater effect. Cannabis is more available than ever, it is cultivated on a large scale, even exported, swelling coffers and making organized crime more powerful; and
- There have been tens of thousands of arrests and convictions for the possession of cannabis and thousands of people have been incarcerated. However, use trends remain totally unaffected and the gap the Commission noted between the law and public compliance continues to widen.

It is time to recognize what is patently obvious: our policies have been ineffective, because they are poor policies.

Ineffectiveness of the current approach

No clearly defined federal or national strategy exists. Some provinces have developed strategies while others have not. There has been a lot of talk but little significant action. In the absence of clear indicators accepted by all stakeholders to assess Canadian public policy, it is difficult to determine whether action that has been taken is effective.

Given that policy is geared to reducing demand (i.e. drug-use rates) and supply (by reducing the availability of drugs and pushing up drug prices), both these indicators may be used. A look at trends in cannabis use, both among adults and young people, forces us to

admit that current policies are ineffective. In Chapter 6, we saw that trends in drug-use are on the increase. If our estimates do indeed reflect reality, no fewer than 2 million Canadians aged between 18 and 65 have used cannabis at least once over the past 12 months, while at least 750,000 young people between the ages of 14 and 17 use cannabis at least once per month, one third of them on a daily basis. This proportion appears, at least in the four most highly-populated provinces, to be increasing. Statistics suggest that both use and at-risk use is increasing.

Of course, we must clearly establish whether the ultimate objective is a drug-free society, at least one free of cannabis, or whether the goal is to reduce at-risk behaviour and abuse. This is an area of great confusion, since Canadian public policy continues to use vague terminology and has failed to establish whether it focuses on substance abuse as the English language terminology used in several documents seems to suggest or on drug-addiction as indicated by the French language terminology.

It is all very well to criticize the "trivialization" of cannabis in Canada, to "explain" increases in use, but it must also be established why, if this is indeed the case, this trivialization has occurred. It is also important to identify the root cause of this trivialization against a backdrop of mainly anti-drug statements. The courts and their lenient attitude might be blamed for this. Perhaps the judiciary is at the forefront of those responsible for cannabis policies and the enforcement of the law. It must also be determined whether sentences are really as lenient as some maintain. A major issue to be addressed is whether harsher sentences would indeed be an effective deterrent given that the possibility of being caught by the police is known to be a much greater deterrent. Every year, over 20,000 Canadians are arrested for cannabis possession. This figure might be as high as 50,000 depending on how the statistics are interpreted. No matter what the numbers, they are too high for this type of conduct. However, even those numbers are laughable numbers when compared to the three million people who have used cannabis over the past 12 months. We should not think that the number of arrests could be significantly increased even if billions more dollars were allocated to police enforcement. Indeed, such a move should not even be considered.

A look at the availability and price of drugs, **forces us to admit that supply-reduction policies are ineffective.** Throughout Canada, above all in British Columbia and Quebec, the cannabis industry is growing, flooding local markets, irritating the United States and lining the pockets of criminal society. Drug prices have not fallen but quality has improved, especially in terms of THC content – even if we are sceptical of the reported scale of this improvement. Yet, police organizations already have greater powers and latitude – especially since the September 11, 2001 tragedy – in relation to drugs than in any other criminal matter. In addition, enforcement now accounts for over 90 % of all spending related to illegal drugs. To what extent do we want to go further down this road?

Clearly, current approaches are ineffective and inefficient. Ultimately, their effect amounts to throwing taxpayers' money down the drain in a crusade that is not warranted by the danger posed by the substance. It has been maintained that drugs, including cannabis, are not dangerous because they are illegal but rather are illegal because they are dangerous. This is perhaps true of other types of drugs, but not of cannabis. We should state this clearly once and for all, for public good: it is time to stop this crusade.

Public policy based on guiding principles

However much we might wish good health and happiness for everyone, we all know how

fragile they are. Above all, we realize that health and happiness cannot be forced on a person, especially not by criminal law based on a specific concept of what is morally 'right'. No matter how attractive calls for a drug-free society might be, and even if some people might want others to stop smoking, drinking alcohol, or smoking joints, we all realize that these activities are part of our social reality and the history of humankind.

Consequently, what role should the State play? It should neither abdicate responsibility and allow drug markets to run rife, nor should it impose a particular way of life on people. We have opted, instead, for a concept whereby public policy **promotes and supports freedom for individuals and society as a whole**. For some, this would undoubtedly mean avoiding drug use. However, for others, the road to freedom might be via drug use. For society as a whole, in practice, this concept means a State that does not dictate what should be consumed and under what form. Support for freedom necessarily means flexibility and adaptability. It is for this reason that public policy on cannabis has to be clear while at the same time tolerant, to serve as a guide while at the same time avoiding imposing a single standard. This concept of the role of the State is based on the **principle of autonomy and individual and societal responsibility**. Indeed, it is much more difficult to allow people to make their own decisions because there is less of an illusion of control. It is just that: an illusion. We are all aware of that. It is perhaps sometimes comforting, but is likely to lead to abuse and unnecessary suffering. An ethic of responsibility teaches social expectations, expectations not to use drugs in public or sell them to children and responsible behaviour, recognizing at-risk behaviour and being able to use moderately, and supports people facing hardship by providing a range of treatment.

From this concept of government action ensues a limited role for criminal law. As far as cannabis is concerned, **only behaviour causing demonstrable harm to others should be prohibited**: illegal trafficking, selling to minors and impaired driving.

Public policy shall also draw on available knowledge and scientific research but without expecting science to provide the answers to political issues. Indeed, scientific knowledge does have a major role to play **in supporting decision-making**, at both the individual and government levels. But science should play no greater role. It is for this reason that the Committee considers that a drug and dependency monitoring agency and a research program should be set up to help future decision-makers.

A clear and coherent federal strategy

Although the Committee has focused on cannabis, we have nevertheless observed inherent shortcomings in the federal drug strategy. Quite obviously, there is no real strategy or focused action. Behind the assumed leadership provided by Health Canada there emerges a lack of necessary tools for action, a patchwork of ad hoc approaches varying from one substance to another and piecemeal action by various departments. Of course, co-ordinating bodies do exist, but lack real tools and clear objectives, each focusing its action according to its own particular priorities. This state of affairs has resulted in a whole series of funded programs being developed without any tangible cohesion.

Many stakeholders have expressed their frustration to the Committee at the apparently vanishing pieces of the puzzle and at the whole gamut of incoherent decisions, that cause major friction on the front lines. Various foreign observers also expressed their surprise that a country as rich as Canada, which is not immune to psychoactive substance-related

problems, did not have a "champion", a spokesperson or a figure of authority able to fully grasp the real issues and obtain genuine cooperation from all of the stakeholders.

It is for this reason that we are recommending the creation of the position of National Advisor on Psychoactive Substances and Dependency to be attached to the Privy Council. We do not envisage this as a superstructure responsible for managing budgets and action related to psychoactive substances. We favour an approach similar to that of the *Mission interministérielle à la drogue et à la toxicomanie* in France over one modelled on that of the United States' Office of National Drug Control Policy. The Advisor would have a small dedicated staff, the majority of whom would be on assignment from various federal departments and bodies involved in drug issues.

The Advisor would be responsible: for advising the Cabinet and the Prime Minister on national and international psychoactive substance-related issues; for ensuring coordination between federal departments and agencies; for overseeing the development of federal government psychoactive substance-related objectives and ensuring these objectives are satisfied; and to serve as a Canadian government spokesperson on issues related to psychoactive substances at an international level.

Recommendation 1

The Committee recommends that the position of National Advisor on Psychoactive Substances and Dependency be created within the Privy Council Office; that the Advisor be supported by a small secretariat and that the necessary staff be assigned by federal departments and agencies involved with psychoactive substances on request.

National strategy sustained by adequate resources and tools

A federal policy and strategy do not in themselves make a national strategy. Provinces, territories, municipalities, community organizations and even the private sector all have a role to play in accordance with their jurisdiction and priorities. This is necessary and this diversity is worth encouraging. However, some harmonization and meaningful discussion on practices and pitfalls, on progress and setbacks, and on knowledge are to be encouraged. Apart from those provided by the resource-starved piecemeal actions of the Canadian Centre on Substance Abuse, there are all too few opportunities and schemes to promote exchanges of this type. **The current and future scale of drug and dependency-related issues warrants that the Canadian government earmark the resources and establish the tools with which to develop fair, equitable and considered policies.**

Like the majority of Canadian and foreign observers of the drug situation, we were struck by the relative lack of tools and measures for determining and following up on the objectives of public psychoactive substance policy. One might not agree with the numbers-focused goals set out by the Office of National Drug Control Policy for the reduction of drug use or for the number of drug treatment programs set up and evaluated. However, we have to admit that at least these figures serve as guidelines for all stakeholders and as benchmarks against which to measure success.

Similarly, one might not feel totally comfortable with the complex Australian goal-definition

process, whereby the whole range of partners from the various levels of government, organizations and associations meet at a conference every five years to review goals. However, at least those goals agreed upon by the various stakeholders constitute a clear reference framework and enable better harmonization of action.

The European monitoring system with its focal points in each country of the European Union under the European Monitoring Centre for Drugs and Drug Addiction umbrella might seem cumbersome; and the American system of conducting various annual epidemiological studies might appear expensive. We might even acknowledge that there are problems with epidemiological studies, which are far from providing a perfect picture of the psychoactive substance use phenomena. However, at least these tools, referred to and used throughout the western world, permit the development of a solid information base with which to analyse historical trends, identify new drug-use phenomena and react rapidly. In addition, it allows for an assessment of the relevance and effectiveness of action taken. No system of this type exists in Canada, which is the only industrialized western country not to have such a knowledge structure.

It is for these reasons that the Committee recommends that the Government of Canada support various initiatives to develop a genuine national strategy. Firstly, the Government should call a national conference of the whole range of partners with a view to setting out goals and priorities for action over a five-year period. This conference should also identify indicators to be used in measuring progress at the end of the five-year period. Secondly, the Canadian Centre on Substance Abuse needs to be renewed. Not only does this body lack resources but it is also subject to the vagaries of political will of one Minister, the Minister of Health. The Centre should have a budget in proportion with the scale of the psychoactive substance problem and should have the independence required to address this issue. Lastly, a Canadian Monitoring Agency on Drugs and Dependency should be created within the Centre.

Recommendation 2

The Committee recommends that the Government of Canada mandate the National Advisor on Psychoactive Substances and Dependency to call a high-level conference of key stakeholders from the provinces, territories, municipalities and associations in 2003, to set goals and priorities for action on psychoactive substances over a five-year period.

Recommendation 3

The Committee recommends that the Government of Canada amend the enabling legislation of the Canadian Centre on Substance Abuse to change the Centre's name to the *Canadian Centre on Psychoactive Substances and Dependency*; make the Centre accountable to Parliament; provide the Centre with an annual basic operating budget of \$15 million to be increased annually; require the Centre to table an annual report on actions taken, key issues, research and trends in Parliament and in the provincial and territorial legislatures; mandate the Centre to ensure national coordination of research on psychoactive substances and dependency and to conduct studies into specific issues; and mandate the Centre to

undertake an assessment of the national strategy on psychoactive substance and dependency every five years.

Recommendation 4

The Committee recommends that, in the legislation creating the Canadian Centre on Psychoactive Substances and Dependency, the Government of Canada specifically include provision for the setting up of a Monitoring Agency on Psychoactive Substances and Dependency within the Centre; provide that the Monitoring Agency be mandated to conduct studies every two years, in cooperation with relevant bodies, on drug-use trends and dependency problems in the adult population; work with the provinces and territories towards increased harmonization of studies of the student population and to ensure they are carried out every two years; conduct ad hoc studies on specific issues; and table a bi-annual report on drug-use trends and emerging problems.

A public health policy

When cannabis was listed as a prohibited substance in 1923, no public debate or discussion was held on the known effects of the drug. In fact, opinions expressed were disproportionate to the dangers of the substance. Half a century later, the Le Dain Royal Commission of Inquiry on the Non-Medical Use of Drugs held a more rational debate on cannabis and took stock of what was known about the drug. Commissioners were divided not so much over the nature and effects of the drug but rather over the role to be played by the State and criminal law in addressing public health-related goals. Thirty years after the Le Dain Commission report, we are able to categorically state that, **used in moderation, cannabis in itself poses very little danger to users and to society as a whole, but specific types of use represent risks for users.**

In addition to being ineffective and costly, criminalization leads to a series of harmful consequences: users are marginalized and exposed to discrimination by the police and the criminal justice system; society sees the power and wealth of organized crime enhanced as criminals benefit from prohibition; and governments see their ability to prevent at-risk use diminished.

We would add that, **even if cannabis were to have serious harmful effects, one would have to question the relevance of using the criminal law to limit these effects.** We have demonstrated that criminal law is not an appropriate governance tool for matters relating to personal choice and that prohibition is known to result in harm which often outweighs the desired positive effects. However, current scientific knowledge on cannabis, its effects and consequences are such that this issue is not relevant to our discussion.

Indeed available data indicate that the scale of the cannabis use phenomenon can no longer be ignored. Chapter 6 indicated that no fewer than 30% of Canadians (12 to 64 years old) have experimented with cannabis at least once in their lifetime. In all probability, this is an underestimation. We have seen that approximately 50% of high school students have used cannabis within the past year. Nevertheless, a high percentage of them stop using, and the vast majority of those who experiment do not go on to become regular users. Even among regular users, only a small proportion develop problems related to excessive use, which may include some level of psychological dependency. Consumption patterns among cannabis

users do not inevitably follow an upward curve but rather a series of peaks and valleys. Regular users also tend to have a high rate of consumption in their early twenties, which then either drops off or stabilizes, and in the vast majority of cases, most often ceasing altogether in their thirties.

All of this does not in any way mean, however, that cannabis use should be encouraged or left unregulated. Clearly, it is a psychoactive substance with some effects on cognitive and motor functions. When smoked, cannabis can have harmful effects on the respiratory airways and is potentially cancerous. Some vulnerable people should be prevented, as much as possible, from using cannabis. This is the case for young people under 16 years of age and those people with particular conditions that might make them vulnerable, for example those with psychotic predispositions. As with alcohol, adult users should be encouraged to use cannabis in moderation. Given that, as for any substance, at-risk use does exist, preventive measures and detection tools should be established and treatment initiatives must be developed for those who use the drug excessively. Lastly, it goes without saying that education initiatives and severe criminal penalties must be used to deter people from operating vehicles under the influence of cannabis.

As for any other substance, there is at-risk use and excessive use. There is no universally accepted criterion for determining the line between regular use, at-risk use and excessive use. The context in which use occurs, the age at which users were introduced to cannabis, substance quality and quantity are all factors that play a role in the passage from one type of use to another. Chapters 6 and 7 identified various criteria, which we have collated in table form below.

Proposed Criteria for Differentiating Use Types

Experimental / Occasional

Curiosity

Variable

A few times over lifetime

None

Regular

Recreational, social

Mainly in evening

Mainly in a group

A few joints

Less than one gram per month

A few times per month

Spread over several years but rarely intensive

At-risk

Recreational and occupational (to go to school, to go to work, for sport...) Alone, in the morning

Under 16 years of age

Between 0.1 and 1 gram per day

A few times per week, evenings, especially weekends

Spread over several years with high intensity periods

Excessive

Occupational and personal problems

No self regulation of use

Over one gram per day

More than once per day

Spread over several years with several months at a time of high intensity use

Even if cannabis itself poses very little danger to the user and to society as a whole, some types of use involve risks. It is time for our public policy to recognize this and to focus on preventing at-risk use and on providing treatment for excessive cannabis users.

Recommendation 5

The Committee recommends that the Government of Canada adopt an integrated policy on the risks and harmful effects of psychoactive substances covering the whole range of substances (medication, alcohol, tobacco and illegal drugs). With respect

to cannabis, this policy should focus on educating users, detecting and preventing at-risk use and treating excessive use.

A regulatory approach to cannabis

The prohibition of cannabis does not bring about the desired reduction in cannabis consumption or problematic use. However, this approach does have a whole series of harmful consequences. Users are marginalized, and over 20,000 Canadians are arrested each year for cannabis possession. Young people in schools no longer enjoy the same constitutional and civil protection of their rights as others. Organized crime benefits from prohibition and the criminalization of cannabis enhances their power and wealth. Society will never be able to stamp out drug use – particularly cannabis use.

Some might believe that an alternative policy signifies abandoning ship and giving up on promoting well-being for Canadians. Others might maintain that a regulatory approach would fly in the face of the fundamental values of our society. We believe, however, that the continued prohibition of cannabis jeopardizes the health and well-being of Canadians much more than does the substance itself or the regulated marketing of the substance. In addition, we believe that the continued criminalization of cannabis undermines the fundamental values set out in the *Canadian Charter of Rights and Freedoms* and confirmed in the history of a country based on diversity and tolerance.

We do not want to see cannabis use increase, especially among young people. Of note, the data from other countries that we compared in Chapters 6 and 20 indicate that countries such as the Netherlands, Australia and Switzerland, which have put in place a more liberal approach, have not seen their long-term levels of cannabis use rise. The same data also clearly indicate that countries with a very restrictive approach, such as Sweden and the United States, are poles apart in terms of cannabis use levels and that countries with similar liberal approaches, such as the Netherlands and Portugal, are also at opposite ends of the spectrum, falling somewhere between Sweden and the United States. We have concluded that public policy itself has little effect on cannabis use trends and that other more complex and poorly understood factors play a greater role in explaining the variations.

An exemption regime making cannabis available to those over the age of 16 could probably lead to an increase in cannabis use for a certain period. Use rates would then level off as interest wanes and as effective prevention programs are set up. A roller coaster pattern of highs and lows would then follow, as has been the case in most other countries.

This approach is neither one of total abdication nor an indication of abandonment but rather a vision of the role of the State and criminal law as **developing and promoting but not controlling human action** and as **stipulating only necessary prohibitions** relating to the fundamental principle of respect for life, other persons and a harmonious community, and as **supporting and assisting others, not judging and condemning difference.**

We might wish for a drug-free world, fewer smokers or alcoholics or less prescription drug dependency, but we all know that we shall never be able to eliminate these problems. More importantly, we should not opt to criminalize them. The Committee believes that the same healthy and respectful approach and attitude should be applied to cannabis.

It is for this reason that the Committee recommends that the Government of Canada amend the *Controlled Drugs and Substances Act* to create a criminal exemption scheme, under which the production and sale of cannabis would be licensed. Licensing and the production

and sale of cannabis would be subject to specific conditions, which the Committee has endeavoured to specify. For clarity's sake, these conditions have been compiled at the end of this section. It should be noted at the outset that the Committee suggests cigarette manufacturers should be prohibited from producing and selling cannabis.

Recommendation 6

The Committee recommends that the Government of Canada amend the *Controlled Drugs and Substances Act* to create a criminal exemption scheme. This legislation should stipulate the conditions for obtaining licences as well as for producing and selling cannabis; criminal penalties for illegal trafficking and export; and the preservation of criminal penalties for all activities falling outside the scope of the exemption scheme.

Recommendation 7

The Committee recommends that the Government of Canada declare an amnesty for any person convicted of possession of cannabis under current or past legislation.

A compassion-based approach for therapeutic use

In Chapter 9, we noted that cannabis has not been approved as a medicinal drug in the pharmacological sense of the word. In addition to the inherent difficulties in conducting studies on the therapeutic applications of cannabis, there are issues arising from the current legal environment and the undoubtedly high cost to governments of conducting such clinical studies.

Nevertheless, we do not doubt that for some medical conditions and for certain people cannabis is indeed an effective and useful therapy. Is it more effective than other types of medication? Perhaps not. Can physicians currently prescribe cannabis at a known dosage? Undoubtedly not. Should persons suffering from certain physical conditions diagnosed by qualified practitioners be permitted to use cannabis if they wish to do so? Of this, we are convinced.

The regulations made in 2001 by Health Canada, even though they are a step in the right direction, are fundamentally unsatisfactory. They do not facilitate access to therapeutic cannabis. They do not consider the experience and expertise available in compassion clubs. These regulations only govern marijuana and do not include cannabis derivatives such as hashish and cannabis oils.

It is for these reasons that the Committee recommends that Health Canada amend the *Marihuana Medical Access Regulations* in order to allow compassionate access to cannabis and its derivatives. As in the previous chapter, proposed rules have been compiled at the end of this chapter.

Recommendation 8

The Committee recommends that the *Marijuana Medical Access Regulations* be amended to provide new rules regarding eligibility, production and distribution with respect to cannabis for therapeutic purposes. In addition, research on cannabis for therapeutic purposes is essential.

Provisions for operating a vehicle under the influence of cannabis

In Chapter 8, we discussed the fact that research has not clearly established the effects of cannabis when taken alone on a person's ability to operate a vehicle. Nevertheless, there is enough evidence to suggest that operating a vehicle while under the influence of cannabis alters motor functions and affects a person's ability to remain in his or her lane. We have also established that the combined effects of cannabis and alcohol impair faculties even more than does alcohol taken alone. Epidemiological studies have shown that a certain number of cannabis users do drive under the influence of the substance and that a large proportion of these people, mainly the young, appear to believe that cannabis does not impair their ability to drive.

This chapter also indicated that no reliable and non-intrusive roadside detection tools exist. Saliva-based equipment is a promising development but for the time being, provide random results. We have also established that a visual recognition system, which has mainly been developed and assessed in the United States, is a reliable way of detecting drug-induced impaired driving faculties.

Recommendation 9

The Committee recommends that the Criminal Code be amended to lower permitted alcohol levels to 40 milligrams of alcohol per 100 millilitres of blood, in the presence of other drugs, especially, but not exclusively cannabis; and to admit evidence from expert police officers trained in detecting persons operating vehicles under the influence of drugs.

Research

Research on psychoactive substances, and particularly on cannabis, has undergone a boom over the past 20 years. The Committee was able to fully grasp the actual extent of this increase since we faced the challenge of summarizing it. Not all research is of the same quality and the current political and legal climate governing cannabis hampers thorough and objective studies. Nevertheless, a solid fact base was available to the Committee, on which to establish its conclusions and recommendations.

However, more research needs to be done in a certain number of specific areas. In Chapter 6, we established that a lack of practical research on cannabis users has resulted in only a limited amount of information on contexts of use being available. It is also currently difficult to establish criteria on the various types of cannabis use in order to guide those responsible for prevention. The Committee suggests that cannabis use of over one gram per day constitutes excessive use and that between 0.1 and one gram per day equates to at-risk

use. We also suggest that any use below 16 years of age is at-risk use. This is of course enlightened speculation, but speculation nevertheless, which remains to be explored.

In Chapters 16 and 17, we referred to the fact that we know very little about the most effective prevention practices and treatment. Here also, the current context hindered. As far as prevention is concerned, the more or less implicit "*just say no*" message and the focus on cannabis use prevention are strategies that have been dictated by the prohibition-based environment. In terms of treatment for problem users, abstinence-based models have long been the dominant approach and continue to sit very poorly with harm-reduction-based models. Thorough assessment studies are required.

The Canadian Centre on Psychoactive Substances and Dependency must play a key role in co-ordinating and publishing the results of studies. The Centre does not have to conduct research itself. This can and indeed must sometimes be carried out by academics. The Health Research Institutes are also natural players. However, it is important to clearly identify a single central body to collect research information. This will enable the information to be distributed as widely possible and, we hope, used.

Recommendation 10

The Committee recommends that the Government of Canada create a national fund for research on psychoactive substances and dependency to fund research on key issues, more particularly on various types of use, on the therapeutic applications of cannabis, on tools for detecting persons operating vehicles under the influence of drugs and on effective prevention and treatment programs; that the Government of Canada mandate the Canadian Centre on Psychoactive Substances and Dependency to co-ordinate national research and serve as a resource centre.

Canada's international Position

The Committee is well aware that were Canada to choose the rational approach to regulating cannabis we have recommended, it would be in contravention of the provisions of the various international conventions and treaties governing drugs. We are also fully aware of the diplomatic implications of this approach, in particular in relation to the United States.

We are keen to avoid replicating, at the Canada - US border, the problems that marked relations between the Netherlands, France, Belgium and Germany over the issue of drug tourism between 1985 and 1995. This is one of the reasons that justifies restricting the distribution of cannabis for recreational purposes to Canadian residents.

We are aware of the fact that a proportion of the cannabis produced in Canada is exported, mainly to the United States. We are also aware that a considerable proportion of heroin and cocaine comes into Canada via the United States. We are particularly cognisant of the fact that Canadian cannabis does not explain the increase in cannabis use in the United States. It is up to each country to get its own house in order before criticizing its neighbour.

Internationally, Canada will either have to temporarily withdraw from the conventions and treaties or accept that it will be in temporary contravention until the international community

accedes to its request to amend them. The Committee opts for the second approach, which seems to us to be more consistent with the tradition and spirit of Canadian foreign policy. In addition, we have seen that international treaties foster the imbalanced relationship between the northern and southern hemispheres by prohibiting access to plants, including cannabis, produced in the southern hemisphere, while at the same time developing a regulatory system for medication manufactured by the pharmaceutical industry in the northern hemisphere. Canada could use this imbalanced situation to urge the international community to review existing treaties and conventions on psychoactive substances.

Canada can and indeed should provide leadership on drug policy. Developing a national information and action infrastructure would undoubtedly be key to this. **Canada must also play a leading role in the Americas.** We believe that Canada enjoys a favourable international reputation and that it can promote the development of fairer and more rational drug, in particular cannabis policies. We also contend that Canada should strive for the creation of a European observatory style Drug and Dependency Monitoring Agency for the Americas within the Organization of American States.

Recommendation 11

The Committee recommends that the Government of Canada instruct the Minister of Foreign Affairs and International Trade to inform the appropriate United Nations authorities that Canada is requesting an amendment to the conventions and treaties governing illegal drugs; and that the development of a Drugs and Dependency Monitoring Agency for the Americas be supported by the Government of Canada.

Proposals for implementing the regulation of cannabis for therapeutic and recreational purposes

Amendments to the *Marijuana Medical Access Regulations* (Production and sale of cannabis for therapeutic purposes)

A. Eligible person

A person affected by one of the following: wasting syndrome; chemotherapy treatment; fibromyalgia; epilepsy; multiple sclerosis; accident-induced chronic pain; and some physical condition including migraines and chronic headaches, whose physical state has been certified by a physician or an individual duly authorized by the competent medical association of the province or territory in question, may choose to buy cannabis and its derivatives for therapeutic purposes. The person shall be registered with an accredited distribution centre or with Health Canada.

B. Licence to distribute

A Canadian resident may obtain a licence to distribute cannabis and its derivatives for therapeutic purposes. The resident must undertake to only sell cannabis and its derivatives to eligible persons; to only sell cannabis and its derivatives purchased from producers duly licensed for this purpose; to keep detailed records on the medical conditions and their development, consumption and the noted effects on patients; to take all measures needed to ensure the safety of the cannabis products and to submit to departmental inspections.

C. Licence to produce

A Canadian resident may obtain a licence to produce cannabis and its derivatives for therapeutic purposes. The resident must undertake: to not hold a licence to produce cannabis for non therapeutic purposes; to take the measures necessary to ensure the consistency, regularity and quality of crops; to take the measures necessary to ensure the security of production sites; to know and document the properties and concentrations of each harvest with respect to Delta 9 THC; to sell only to accredited distribution centres and to submit to departmental inspections.

D. Other proposals

- Ensure that expenses relating to the use of cannabis for therapeutic purposes will be eligible for a medical expenses tax credit;
- Establish a program of research into the therapeutic applications of cannabis, by providing sufficient funding; by mandating the Canadian Centre on Psychoactive Substances and Dependency to co-ordinate the research program; and by providing for the systematic study of clinical cases based on the documentation available in organizations currently distributing cannabis for therapeutic purposes and in future distribution centres; and
- Ensure that the advisory committee on the therapeutic use of cannabis represents all players, including distribution centres and users.

**Amendment to the *Controlled Drugs and Substances Act* (CDSA)
(Production and sale of cannabis for non therapeutic purposes)**

A. General aims of the bill

- To reduce the injurious effects of the criminalization of the use and possession of cannabis and its derivatives;
- To permit persons over the age of 16 to procure cannabis and its derivatives at duly licensed distribution centres; and
- To recognize that cannabis and its derivatives are psychoactive substances that may present risks to physical and mental health and, to this end, to regulate the use and trade of these substances in order to prevent at-risk use and excessive use.

B. Licence to distribute

Amend the Act to create a scheme providing for exemption to the criminal offences provided in the CDSA with respect to the distribution of cannabis. A Canadian resident may obtain a licence to distribute cannabis. The resident must undertake **not to distribute to persons under the age of 16; must never have been sentenced for a criminal offence, with the exception of offences related to the possession of cannabis, for which an amnesty will be declared;** and must agree to procure cannabis only from duly licensed producers. In addition, in accordance with potential restrictions under the *Canadian Charter of Rights and Freedoms*, licensed distributors shall not display products explicitly and shall not advertise in any manner.

C. Licence to produce

Amend the Act to create an exemption to the criminal offences provided in the CDSA with respect to the production of cannabis. A Canadian resident may obtain a licence to produce cannabis. The resident must undertake to only sell to duly licensed distributors; to sell only marijuana and hashish with a THC content of 13% or less; to limit production to the quantity specified in the licence; to take the measures needed to ensure the security of production sites; to keep detailed records of quantities produced, crops, levels of THC

concentration and production conditions; and to submit to departmental inspections. No person charged with and sentenced for criminal offences, with the exception of the possession of cannabis, for which an amnesty will be declared, shall be granted a licence. No person or legal entity, directly or indirectly associated with the production, manufacture, promotion, marketing or other activity connected with tobacco products and derivatives shall be granted a licence. In accordance with potential restrictions under the *Canadian Charter of Rights and Freedoms*, cannabis products and their derivatives shall not be advertised in any manner.

D. Production for personal use

Amend the Act to create an exemption to the criminal offences provided in the CDSA in order to permit the personal production of cannabis so long as it is not sold for consideration or exchange in kind or other and not advertised or promoted in any other way. In addition, quantities shall be limited to ensure production is truly for personal consumption.

E. Consumption in public

Consumption in public places frequented by young people under 16 years of age shall be prohibited.

F. International trade

All forms of international trade, except those explicitly permitted under the Act shall be subject to the penalties provided in the CDSA for illegal trafficking.

G. Other proposals

- Ensure the establishment of a National Cannabis Board with duly mandated representatives of the federal government and the governments of the provinces and territories. The Board would keep a national register on the production and sale of cannabis and its derivatives, set the amount and distribution of taxes taken on the sale of cannabis products and ensure the taxes collected on the production and sale of cannabis and derivatives are directed solely to prevention of at-risk use, treatment of excessive

users, research and observation of trends and the fight against illegal trafficking.

- The provinces and territories would continue to develop prevention measures that should be directed at at-risk use, as a priority. The Canadian Centre on Psychoactive Substances and Dependency should be mandated to collect best treatment practices and ensure an exchange of information on effective practices and their evaluation.
- The provinces and territories would continue to develop support and treatment measures that should be directed at excessive use, as a priority. The Canadian Centre on Psychoactive Substances and Dependency should be mandated to collect best prevention practices and ensure an exchange of information on effective practices and their evaluation.
- Resources available to police and customs to fight smuggling, export, in all its forms and cross-border trafficking should be increased.

CANNABIS : OUR POSITION FOR A CANADIAN PUBLIC POLICY
REPORT OF THE SENATE SPECIAL COMMITTEE ON ILLEGAL DRUGS
VOLUME I : PARTS I and II

Chairman: Pierre Claude Nolin
Deputy Chairman: Colin Kenny

SEPTEMBER 2002

ORDER OF REFERENCE

Extract from the Journals of the Senate of March 15, 2001:

Resuming debate on the motion of the Honourable Senator Nolin, seconded by the Honourable Senator Molgat:

That a special committee of the Senate be struck to examine:

- The approach taken by Canada to cannabis, its preparations, derivatives and similar synthetic preparations, in context;
- The effectiveness of this approach, the means used to implement it and the monitoring of its application;
- The related official policies adopted by other countries;
- Canada's international role and obligations under United Nations agreements and conventions on narcotics, in connection with cannabis, the Universal Declaration of Human Rights and other related treaties; and
- The social and health impacts of cannabis and the possible consequences of different policies;

That the special committee consist of five senators, three of whom shall constitute a quorum;

That the Honourable Senators Banks, Kenny, Nolin, Rossiter and (a fifth Senator to be named by the Chief Government Whip) be named to the committee.

That the committee be authorized to send for persons, papers and records, to hear witnesses, to report from time to time, and to print from day to day such papers and evidence as may be ordered by it;

That the briefs and evidence heard during consideration of Bill C-8, *An Act respecting the control of certain drugs, their precursors and other substances and to amend certain other Acts and repeal the Narcotic Control Act in consequence thereof*, by the Standing Senate Committee on Legal and Constitutional Affairs during the Second Session of the Thirty-fifth Parliament be referred to the committee;

That the documents and evidence compiled on this matter and the work accomplished by the Special Senate Committee on Illegal Drugs during the Second Session of the Thirty-sixth Parliament be referred to the committee;

That the committee be empowered to authorize, if deemed appropriate, the broadcasting on radio and/or television and the coverage via electronic media of all or a part of its proceedings and the information it holds;

That the committee present its final report no later than August 31, 2002, and that the committee retain the powers necessary to publicize its findings for distribution of the study contained in its final report for 30 days after the tabling of that report;

That the committee be authorized, notwithstanding customary practice, to table its report to the Clerk of the Senate if the Senate is not sitting, and that a report so tabled be deemed to have been tabled in the Senate.

After debate,

The question then being put on the main motion as amended, it was adopted.

Extract from the Journals of the Senate of May 9, 2002:

The Honourable Senator Nolin moved, seconded by the Honourable Senator Stratton,

That the date of presentation by the Special Senate Committee on Illegal Drugs of the final report on its study into reassessing Canada's anti-drug legislation and policies, which was authorized by the Senate on March 15, 2001, be extended from August 31, 2002 to September 13, 2002.

The question being put on the motion, it was adopted.

ATTEST:

Paul C. Bélisle

Clerk of the Senate

A Word of Thanks

I am very proud of the report on cannabis being made public today by the Senate Special Committee on Illegal Drugs. It marks a stage in Canada's public policy on drugs, and I have no doubt that it will find an attentive readership, despite its impressive size.

The report is the product of a team effort over a period of two years. At the risk of leaving anyone out, and I hope I will be pardoned should I do so, I would like to express my gratitude to those most closely involved with the project.

I would first thank all Canadians, who, from near and far, shared in our efforts, by writing us, by attending our hearings and our open forums in the regions, by watching us on television and, quite simply, by taking the time to learn about this important social policy issue. Their contributions, their questions and their comments were a source of inspiration. We will not forget the welcome given us by the Chiefs of the Piapot tribe in Saskatchewan. The ceremony they held for us was truly healing.

The Committee could not have done its work without the immense contribution of its research team. This small group was under the able direction of sociologist Dr Daniel Sansfaçon, whose rigour and devotion enabled the Committee to meet the highest standards of quality in its work and in the drafting of its report. Mr Gérald Lafrenière and Ms Chantal Collin, researchers with the Parliamentary Research Branch of the Library of Parliament working with him, provided invaluable support. I would take the opportunity to thank the Parliamentary Research Branch and its Director General specifically for their diligence and professionalism in responding to our imposing program of work. Finally, I wish to mention the contributions by Ms Barbara Buston Wheelok, assistant to Senator Rossiter, to Mr François Dubois, my research assistant, and to Messrs Jean-Guy Desgagné and David Newman in Communications.

The Committee benefited in its work from the expertise and the generosity of the many experts who testified before it or whom it met privately, and whose names are appended. I would thank them one and all.

We were also able to draw on the competence of the committee clerks and on the efficiency of their administrative personnel in organizing our many working and public meetings. My thanks to Blair Armitage, Daniel Charbonneau and Adam Thompson.

Our report, with its great concern for transparency and rigour, exemplifies the highest standards maintained by the Senate. I would thank my colleagues in the Senate, who entrusted us with this mandate. In concluding, I would like to express my gratitude to my colleagues who took part in our work and especially to each of the members of the Senate Special Committee on Illegal Drugs: its Deputy Chair, Senator Colin Kenny, and Senators Tommy Banks, Shirley Maheu and Eileen Rossiter. They did a remarkable job.

My colleagues, I believe Canadians may rightly be proud of our parliamentary institution.

Pierre Claude Nolin
Senator
Chair, Senate Special Committee on Illegal Drugs

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1. MEMBERS OF THE SENATE SPECIAL COMMITTEE ON ILLEGAL DRUGS

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Glossary of key terms

Abuse

Vague term with a variety of meanings depending on the social, medical and legal contexts. Some equate any use of illicit drugs to abuse: for example, the international conventions consider that any use of drugs other than for medical or scientific purposes is abuse. The *Diagnosis and Statistical Manual of the American Psychiatric Association* defines abuse as a maladaptive pattern of substance use leading to clinically significant impairment or distress as defined by one or more of four criteria (see chapter 7). In the report, we prefer the term excessive use (or harmful use).

Acute effects

Refers to effects resulting from the administration of any drug and specifically to its short term effects. These effects are distinguished between central (cerebral functions) and peripheral (nervous system). Effects are dose-related.

Addiction

General term referring to the concepts of tolerance and dependency. According to WHO addiction is the repeated use of a psychoactive substance to the extent that the user is periodically or chronically intoxicated, shows a compulsion to take the preferred substance, has great difficulty in voluntarily ceasing or modifying substance use, and exhibits determination to obtain the substance by almost any means. Some authors prefer the term addiction to dependence, because the former also refers to the evolutive process preceding dependence.

Agonist

A substance that acts on receptor sites to produce certain responses.

Anandamide

Agonist neurotransmitter of the endogenous cannabinoid system. Although not yet fully understood in research, these neurotransmitters seem to act as modulators, THC increasing the liberation of dopamine in nucleus accumbens and cerebral cortex.

At-risk use

Use behaviour which makes users at-risk of developing dependence to the substance.

Cannabinoids

Endogenous receptors of the active cannabis molecules, particularly 9-THC. Two endogenous receptors have been identified: CB1 densely concentrated in the hippocampus, basal ganglia, cerebellum and cerebral cortex, and CB2, particularly abundant in the immune system. The central effects of cannabis appear to be related only to CB1.

Cannabis

Three varieties of the cannabis plant exist: *cannabis sativa*, *cannabis indica*, and *cannabis ruderalis*. *Cannabis sativa* is the most commonly found, growing in almost any soil condition. The cannabis plant has been known in China for about 6000 years. The flowering tops and leaves are used to produce the smoked cannabis. Common terms used to refer to cannabis are pot, marihuana, dope, ganja, hemp. Hashish is produced from the extracted resin. Classified as a psychotropic drug, cannabis is a modulator of the central nervous system. It contains over 460 known chemicals, of which 60 are cannabinoids. Delta-9-tetrahydrocannabinol, referred to as THC, is the principal active ingredient of cannabis. Other components such as delta-8-tetrahydrocannabinol, cannabitol and cannabidiol are present in smaller quantities and have no significant impacts on behaviour or perception. However, they may modulate the overall effects of the substance.

Chronic effects

Refers to effects which are delayed or develop after repeated use. In the report we prefer to use the term consequences of repeated use rather than chronic effects.

Commission on narcotic drugs (CND)

The Commission on Narcotic Drugs (CND) was established in 1946 by the Economic and Social Council of the United Nations. It is the central policy-making body within the UN system for dealing with all drug-related matters. The Commission analyses the world drug abuse situation and develops proposals to strengthen international drug control.

Decriminalization

Removal of a behaviour or activity from the scope of the criminal justice system. A distinction is usually made between *de jure decriminalization*, which entails an amendment to criminal legislation, and *de facto decriminalization*, which involves an administrative

decision not to prosecute acts that nonetheless remain against the law. Decriminalization concerns only criminal legislation, and does not mean that the legal system has no further jurisdiction of any kind in this regard: other, non-criminal, laws may regulate the behaviour or activity that has been decriminalized (civil or regulatory offences, etc.).

Diversion

The use of measures other than prosecution or a criminal conviction for an act that nonetheless remains against the law. Diversion can take place before a charge is formally laid, for example if the accused person agrees to undergo treatment. It can also occur at the time of sentencing, when community service or treatment may be imposed rather than incarceration.

Depenalisation

Modification of the sentences provided in criminal legislation for a particular behaviour. In the case of cannabis, it generally refers to the removal of custodial sentences.

Dependence

State where the user continues its use of the substance despite significant health, psychological, relational, familial or social problems. Dependence is a complex phenomenon which may have genetic components. Psychological dependence refers to the psychological symptoms associated with craving and physical dependence to tolerance and the adaptation of the organism to chronic use. The American Psychiatric Association has proposed seven criteria (see chapter 7).

Dopamine

Neuromediator involved in the mechanisms of pleasure.

Drug

Generally used to refer to illicit rather than licit substances (such as nicotine, alcohol or medicines). In pharmacology, the term refers to any chemical agent that alters the biochemical or physiological processes of tissues or organisms. In this sense, the term drug refers better to any substance which is principally used for its psychoactive effects.

European Monitoring Centre on Drugs and Drug Addiction (EMCDDA)

The European Monitoring Centre was created in 1993 to provide member states objective, reliable and comparable information within the EU on drugs, drug addictions and their

consequences. Statistical information, documents and techniques developed in the EMCDDA are designed to give a broad perspective on drug issues in Europe. The Centre only deals with information. It relies on national focal points in each of the Member States.

Fat soluble

Characteristic of a substance to irrigate quickly the tissues. THC is highly fat-soluble.

Gateway (theory)

Theory suggesting a sequential pattern in involvement in drug use from nicotine to alcohol, to cannabis and then "hard" drugs. The theory rests on a statistical association between the use of hard drugs and the fact that these users have generally used cannabis as their first illicit drug. This theory has not been validated by empirical research and is considered outdated.

Half-life

Time needed for the concentration of a particular drug in blood to decline to half its maximum level. The half-life of THC is 4.3 days on average but is faster in regular than in occasional users. Because it is highly fat soluble, THC is stored in fatty tissues, thus increasing its half life to as much as 7 to 12 days. Prolonged use of cannabis increases the period of time needed to eliminate it from the system. Even one week after use, THC metabolites may remain in the system. They are gradually metabolised in the urine (one third) and in feces (two thirds). Traces of inactive THC metabolites can be detected as many as 30 days after use.

Hashish

Resinous extract from the flowering tops of the cannabis plant and transformed into a paste.

International Conventions

Various international conventions have been adopted by the international community since 1912, first under the Society of Nations and then under the United Nations, to regulate the possession, use, production, distribution, sale, etc., of various psychotropic substances. Currently, the three main conventions are the 1961 Single Convention, the 1971 Convention on Psychotropic Substances and the 1988 Convention against Illicit Traffic. Canada is a signatory to all three conventions. Subject to countries' national constitutions, these conventions establish a system of regulation where only medical and scientific uses are permitted. This system is based on the prohibition of source plants (coca, opium and

cannabis) and the regulation of synthetic chemicals produced by pharmaceutical companies.

International Narcotics Control Board (INCB)

The Board is an independent, quasi-judicial organisation responsible for monitoring the implementation of the UN conventions on drugs. It was created in 1968 as a follow up to the 1961 Single Convention, but had predecessors as early as the 1930s. The Board makes recommendations to the UN Commission on Narcotics with respect to additions or deletions in the appendices of the conventions.

Intoxication

Disturbance of the physiological and psychological systems resulting from a substance. Pharmacology generally distinguishes four levels: light, moderate, serious and fatal.

Joint

Cigarette of marijuana or hashish with or without tobacco. Because joints are never identical, scientific analyses of the effects of THC are more difficult, especially in trying to determine the therapeutic benefits of cannabis and to examine its effects on driving.

Legalisation

Regulatory system allowing the culture, production, marketing, sale and use of substances. Although none currently exist in relation to « street-drugs » (as opposed to alcohol or tobacco which are regulated products), a legalisation system could take two forms: without any state control (free markets) and with state controls (regulatory regime).

Marijuana

Mexican term originally referring to a cigarette of poor quality. Has now become equivalent for cannabis.

Narcotic

Substance which can induce stupor or artificial sleep. Usually restricted to designate opiates. Sometimes used incorrectly to refer to all drugs capable of inducing dependence.

Office of national drug control policy (ONDCP) USA

Created in 1984 under the Reagan presidency, the Office is under the direct authority of the White House. It coordinates US policy on drugs. Its budget is currently US \$18 billion.

Opiates

Substance derived from the opium poppy. The term opiate excludes synthetic opioids such as heroin and methadone.

Prohibition

Historically, the term designates the period of national interdiction of alcohol sales in the United States between 1919 and 1933. By analogy, the term is now used to describe UN and State policies aiming for a drug-free society. Prohibition is based on the interdiction to cultivate, produce, fabricate, sell, possess, use, etc., some substances except for medical and scientific purposes.

Psychoactive substance

Substance which alters mental processes such as thinking or emotions. More neutral than the term "drug" because it does not refer to the legal status of the substance, it is the term we prefer to use.

Psychotropic substance (see also psychoactive)

Much the same as psychoactive substance. More specifically however, the term refers to drugs primarily used in the treatment of mental disorders, such as anxiolytic, sedatives, neuroleptics, etc. More specifically, refers to the substances covered in the 1971 Convention on Psychotropic Substances.

Regulation

Control system specifying the conditions under which the cultivation, production, marketing, prescription, sales, possession or use of a substance are allowed. Regulatory approaches may rest on interdiction (as for illegal drugs) or controlled access (as for medical drugs or alcohol). Our proposal of an exemption regime under the current legislation is a regulatory regime.

Society of Nations (SDN)

International organisation of States until 1938; now the United Nations.

Tetrahydrocannabinol (D9-THC)

Main active component of cannabis, Δ^9 -THC is very fat-soluble and has a lengthy half-life. Its psychoactive effects are modulated by other active components in cannabis. In its natural state, cannabis contains between 0.5% to 5% THC. Sophisticated cultivation methods and plant selection, especially female plants, leads to higher levels of THC concentration.

Tolerance

Reduced response of the organisms and increased capacity to support its effects after a more or less lengthy period of use. Tolerance levels are extremely variable between substances, and tolerance to cannabis is believed to be lower than for most other drugs, including tobacco and alcohol.

Toxicity

Characteristic of a substance which induces intoxication, i.e., "poisoning". Many substances, including some common foods, have some level of toxicity. Cannabis presents almost no toxicity and cannot lead to an overdose.

United Nations Drug Control Program (UNDCP)

Established in 1991, the Programme works to educate the world about the dangers of drug abuse. The Programme aims to strengthen international action against drug production, trafficking and drug-related crime through alternative development projects, crop monitoring and anti-money laundering programmes. UNDCP also provides accurate statistics through the Global Assessment Programme (GAP) and helps to draft legislation and train judicial officials as part of its Legal Assistance Programme. UNDCP is part of the UN Office for Drug Control and the Prevention of Crime.

World Health Organization (WHO)

The World Health Organization, the United Nations specialized agency for health, was established on 7 April 1948. WHO's objective, as set out in its Constitution, is the attainment by all peoples of the highest possible level of health. Health is defined in WHO's Constitution as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.

Introduction

The question of illegal drugs is one of the societal issues that can readily become a moral and indeed emotional matter. Who among us does not have an opinion on drugs and "drug addicts"? Who does not have a parent, friend, young cousin or uncle who has had personal problems at school or at work, perhaps even run-ins with the police and the criminal justice system, as a result of using drugs? Who has not heard of drug traffickers, veritable anti-

heroes, whom we find both repulsive and fascinating, all of whom we consider the worst kind of scum, who grow rich by selling adulterated and dangerous products to our children? Every day brings its share of newspaper articles and television news reports on anti-drug operations conducted by police forces: sometimes massive, and almost always spectacular arrests, huge seizures of drugs, cash and weapons of all kinds. Every day we also see articles on money laundering and the corruption of honest men through the illegal drug market. Even closer to home, the events of September 11 shed new light on the ambiguous and alleged relations between the drug trafficking world and the financing of "terrorist" networks. Security is now the key buzz word.

The drug issue involves the political values of life in society. In what kind of society do we want to live? What place should, and can, drugs occupy in it? For some, drugs are substances that keep individuals in a state of dependence. Using them weakens their moral fibre, makes them more malleable, more subject in particular to (bad) outside influences, and reduces their ability to be productive individuals in society. If they don't bring about human downfall, drugs do prevent the full achievement and realization of human potential. For others, drugs are tools to achieving greater productivity, being more competitive and thus better positioned in a hyper-competitive world. The obvious example of this is doping among elite athletes. For still others, drugs are a preferred means of entering into contact with other aspects of their being, spiritual, artistic aspects, or simply peace and serenity. The history of art is full of examples. These almost diametrically opposed conceptions often leave little room for dialogue and result in considerable prejudice on all sides.

In the past 20 years, we have introduced stringent anti-tobacco programs. And we have definitely achieved a measure of success. We have also adopted stricter measures to put a stop to impaired driving. Here too, we believe we have made significant inroads. The fight against drugs is a kind of metaphor for the type of social policies we expect of governments: policies based on the improved well-being of citizens.

Of course, everything depends on what each person means by the word "drugs". The term is clearly not neutral: it elicits varying degrees of fear and anxiety. And we do not necessarily all include the same substances under that heading. The examples cited above concern illegal drugs, alcohol, tobacco and performance-enhancing substances. A number of psychotropic drugs could also be included. And yet, when we think of drugs, the first things that come to mind are illegal substances: cocaine and heroin, of course, crack and amphetamines for the more sophisticated among us, and, obviously, cannabis and hashish. However, an increasing number of scientific studies and government policies strive to show the interrelationships between different drugs, discussing at-risk behaviours in relation to each drug. As will be seen below, the mere fact of considering alcohol as one drug among others signifies a genuine cultural revolution in a country such as France, a major producer and consumer of wine. And tobacco companies would certainly object to comparing nicotine to heroine.

The members of the **Senate Special Committee on Illegal Drugs** addressed the question of drugs as everyone else does, that is to say with the same preconceptions, with the same basic attitudes, the same fears and the same anxieties. Of course, we had at our disposal the study which a number of our colleagues had conducted in 1996 on government legislation dealing with illegal drugs, which had enabled them to hear a number of witnesses over several months. We also knew at the outset that research expertise would be available to us, but let there be no mistake, it is nevertheless difficult to go beyond attitudes and opinions that have long been taken for granted. Whether one is in favour of enhanced enforcement or, on the contrary, greater liberalization, opinions tend to resist the facts, particularly since, in a field such as this, the production of facts, even through scientific research, is not necessarily a neutral enterprise. It follows then that we too, like you, have our prejudices and

preconceptions. And together we must make the effort to go beyond them. That is one of the objectives of this report.

Our report is divided into four parts. Part I outlines our general orientations and comprises four chapters. Chapter 1 describes the Committee's origins and mandate, while Chapter 2 outlines the work we have undertaken, explaining certain choices we have made. Chapter 3 is central to the entire architecture of the report and, as it were, provides a "reading grid". In it, we state what we have called the **guiding principles** for a public policy on illegal drugs. Lastly, Chapter 4 offers a broad overview of the present situation with regard to illegal drugs, placing our efforts in the context of the changes that are occurring in various countries and on the international scene more generally.

Part II is the heart of our report. It provides a comprehensive outline of scientific research findings and the opinions of the experts we heard. Chapter 5 describes the plant from which smokable cannabis and hashish are derived and the pharmacological properties of the cannabinoids, which are their active ingredient. It also provides some figures on sources of production of cannabis and its main trafficking routes. Chapter 6 contains information on uses and users: who uses cannabis, in what circumstances, what do we know about their user trajectories and, in particular, the highly controversial question as to whether cannabis use leads to the use of other drugs. Chapter 7 describes the physiological and psychological effects and consequences of cannabis, focusing as well on the important issues of cannabis dependence and tolerance. Chapter 8 deals specifically with the important issue of driving under the influence of cannabis. Given the current debates on the issue of therapeutic uses of cannabis, Chapter 9 reviews existing findings. Chapter 10, the last chapter in the section, addresses public opinion, outlining public opinion polls and surveys, reporting also what we were told in the consultations we held in the regions following the publication of our discussion paper in May 2002.

Part III concerns public policy and practices in Canada. When we think of drugs, we immediately think of the legislation governing them. In so doing, we forget that the law is never more than one of a number of elements involved in a public policy. Chapter 11 focuses on the National Drug Strategy, which was in effect in Canada between 1987 and 1997. It must be considered since only in this period in the history of our public drug policies was an attempt made to adopt a comprehensive and integrated strategy. Chapter 12 then describes the history of Canadian drug legislation. Chapter 13 examines the current regulatory regime for therapeutic uses of cannabis. The following four chapters deal with the various components of the implementation of the public policies on illegal drugs. Chapters 14 and 15 discuss respectively police practices and legal practices central to the implementation of those statutory provisions, while Chapters 16 and 17 briefly examine prevention practices and health care practices. Finally, in Chapter 18, we conclude this third part of our report with a series of three observations on these practices, examining in particular the economic costs and unexpected consequences of current public policies.

Part IV addresses public policy options. When it comes to drugs, we cannot avoid the architecture of the international conventions that have governed these substances since 1912. This is the subject of Chapter 19. However, beyond this global framework, countries have chosen different approaches to respond to drug related issues and problems. Chapter 20 describes in detail the public policy frameworks in seven industrialized countries. Finally, chapter 21 is key to understanding our recommendations and their links with our guiding principles. This chapter shows that the criminal law is but one of the tools of public policy in this field. It then distinguishes between the various legal options and clarifies heavily loaded terms such as decriminalisation and legalisation. Finally, based on the accumulated knowledge, our reading of public opinion and our principles, this chapter explains our framework for a comprehensive public policy on cannabis.

Based on all this knowledge gathered, we state a certain number of conclusions and offer our recommendations, which express the fundamental premise underlying our report: *in a free and democratic society, which recognizes fundamentally but not exclusively the rule of law as the source of normative rules and in which government must promote autonomy insofar as possible and therefore make only sparing use of the instruments of constraint, public policy on psychoactive substances must be structured around guiding principles respecting the life, health, security and rights and freedoms of individuals, who, naturally and legitimately, seek their own well-being and development and can recognize the presence, difference and equivalence of others.*

We are aware, as much now as we were at the start of our work, that there is no pre-established consensus in Canadian society on public policy choices in the area of drugs. In fact, as we have seen, there are few societies where there is a broadly shared consensus among the general public and between the public and experts. We are also aware, perhaps more so than at the outset, that the question of illegal drugs, viewed from the standpoint of the public policies that govern them, is part of a broader international context and that we cannot think or act in isolation. We are aware that our proposals are provocative, that they may meet with some resistance. However, we are convinced that Canadian society has the maturity and openness to welcome this informed debate.

In this, as in so many other areas of public policy, we say that action must be taken and that the knowledge accumulated fully supports the orientations we propose, but that first and foremost the sharing of knowledge and public debate are both necessary and desirable in the democratic life in our society.

Part I

General Orientation

Chapter 1

Our Mandate

Wording

On April 16, 2000, pursuant to a motion by Senator Pierre Claude Nolin, the Senate adopted the following order of reference:

That a Special Committee of the Senate be appointed to reassess Canada's anti-drug legislation and policies, to carry out a broad consultation of the Canadian public to determine the specific needs of various regions of the country, where social problems associated with the trafficking and use of illegal drugs are more in evidence, to develop proposals to disseminate information about Canada's anti-drug policy and, finally, to make recommendations for an anti-drug strategy developed by and for Canadians under which all levels of government work closely together to reduce the harm associated with

the use of illegal drugs;

That, without being limited in its mandate by the following, the committee be authorized to:

- Review the federal government's policy on illegal drugs in Canada, its effectiveness, and the extent to which it is fairly enforced;
- Develop a national harm reduction policy in order to lessen the negative impact of illegal drugs in Canada, and make recommendations regarding the enforcement of this policy, **specifically the possibility of focusing on use and abuse of drugs as a social and health problem;** []
- Study harm reduction models adopted by other countries and determine if there is a need to implement them wholly or partially in Canada;
- Examine Canada's international role and obligations under United Nations conventions on narcotics and the Universal Declaration of Human Rights and other related treaties in order to determine whether these treaties authorize it to take action other than laying criminal charges and imposing sentences at the international level;
- Explore the effects of cannabis on health and examine whether alternative policy on cannabis would lead to increased harm in the short and long term;
- Examine the possibility of the government using its regulatory power under the Contraventions Act as an additional means of implementing a harm reduction policy, as is done in other jurisdictions;
- Examine any other issue respecting Canada's anti-drug policy that the committee considers appropriate to the completion of its mandate.

Upon adoption of the motion, the Committee chairman asked the Senate to name the members who would form the Committee. The following senators were thus appointed: Pierre Claude Nolin, Chair, Sharon Carstairs, Deputy Chair, Colin Kenny, Lucie Pépin and Eileen Rossiter.

The Committee thus constituted approved a work program and a budget, which it then submitted to its peers in the upper Chamber. The Committee's budget was approved in June 2000, thus making it possible to hire the scientific and administrative personnel who would support its work. The Committee organized its program of hearings of expert witnesses and held its first hearings on October 16, 2000.

However, the Committee was dissolved when the general election was called in October 2000, and restructured on March 15, 2001, but with an amended mandate: the scope of its work was now restricted to cannabis. The Committee's mandate in its present form therefore reads as follows:

That a special committee of the Senate be struck to examine:

- The approach taken by Canada to cannabis, its preparations, derivatives and similar synthetic preparations, in context;
- The effectiveness of this approach, the means used to implement it and the monitoring of its application;
- The related official policies adopted by other countries;
- Canada's international role and obligations under United Nations agreements and conventions on narcotics, in connection with cannabis, the Universal Declaration of Human Rights and other related treaties; and
- The social and health impacts of cannabis and the possible consequences of different policies;

That the special committee consist of five senators, three of whom shall constitute a quorum;

That the Honourable Senators Banks, Kenny, Nolin, Rossiter and (a fifth Senator to be named by the Chief Government Whip) be named to the committee;

That the committee be authorized to send for persons, papers and records, to hear witnesses, to report from time to time, and to print from day to day such papers and evidence as may be ordered by it;

That the briefs and evidence heard during consideration of Bill C-8, An Act respecting the control of certain drugs, their precursors and other substances and to amend certain other Acts and repeal the Narcotic Control Act in consequence thereof, by the Standing Senate Committee on Legal and Constitutional Affairs during the 2nd Session of the 35th Parliament be referred to the committee;

That the documents and evidence compiled on this matter and the work accomplished by the Special Senate Committee on Illegal Drugs during the 2nd Session of the 36th Parliament be referred to the committee;

That the committee be empowered to authorize, if deemed appropriate, the broadcasting on radio and/or television and the coverage via electronic media of all or part of its proceedings and the information it holds;

That the committee present its final report no later than August 31, 2002; and that the committee retain the powers necessary to publicize its findings for distribution of the study contained in its final report for 30 days after the tabling of that report;

That the committee be authorized, notwithstanding customary practice, to table its report to the Clerk of the Senate if the Senate is not sitting, and that a report so tabled be deemed to have been tabled in the Senate.

Origins

The Committee's mandate is a continuation of the history of drug legislation passed by the Parliament of Canada in 1996, the *Controlled Drugs and Substances Act*. That legislation, which revised drug statutes in Canada by repealing the *Narcotic Control Act* and certain sections of the *Food and Drugs Act*, grew out of a relatively lengthy history of which we will provide only a brief overview here, since Chapter 12 is devoted to a detailed history of drug laws in Canada.

Bill C-7, which was tabled by the newly elected government in February 1994, proposed a revision of illegal drug legislation, in particular to make it more coherent and to render national legislation consistent with Canada's obligations under the *United Nations Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances* signed in 1988. Following prorogation, it was reintroduced in the House of Commons at the start of the 2nd Session, on March 6, 1996, as Bill C-8. It was adopted by the House on the same day and was referred to the Standing Senate Committee on Legal and Constitutional Affairs which conducted a detailed study of it and heard a number of witnesses.

In its report, the Senate Committee on Legal and Constitutional Affairs proposed 15 amendments as well as the striking of a joint parliamentary committee of the House of Commons and the Senate, which would review Canada's drug policy. Bill C-8 was passed and received Royal Assent on June 20, 1996, and is thus Canada's current illegal drug legislation.

While this legislation was being studied by the Sub-Committee on Bill C-7 of the Standing Committee on Health of the House of Commons in 1994 and 1995, *"the vast majority of witnesses (...) were highly critical of the bill. The most general criticisms concerned three points: first, the lack of basic principles or an express statement as to the purpose of the act; second, the fact that the bill followed the prohibition system of the 1920s, subsequently codified in the Narcotic Control Act, and third, the absence of any emphasis on damage reduction and prevention criteria which form the basis of Canada's Drug Strategy."*[2]

Despite the amendments made by the Sub-Committee of the House, the testimony of the persons heard by the Senate Committee was equally critical. Witnesses noted that the Act did not categorize drugs on the basis of the dangers they represented, that it did not contain any specific, rational criteria and that it was impossible, particularly in view of the Act's complexity, to determine how it would be implemented in practice.

All of these criticisms led the Senate Committee to *"propose energetically"* the creation of a Joint Committee of the House of Commons and the Senate that would review all Canadian drug legislation, policies and programs.[3]

However, the 1997 federal election rendered this suggestion moot. Senator Nolin, convinced of the need for action and faced with the inaction of the House of Commons, thus tabled his first motion in 1999 - that a Senate Committee be struck and given a mandate to examine the legislation, policies and programs on illegal drugs in Canada. The motion was adopted by the Senate in April 2000. In support of the motion, Senator Nolin had commissioned a study on drugs and drug policy in Canada. The purpose of this study, in particular, was *"to assist in analyzing policy on the control of drug use from a new angle, without being influenced by the often unfounded prejudices that Canadian society has of drug addicts"*. [4] Senator Nolin wrote further that a Senate Special Committee *"would be charged, first, with transmitting to the Canadian public accurate and objective information on the use of illegal drugs, their effects on individuals and society and control measures in*

place. Second, it could conduct consultations on desirable amendments that Parliament should make to legislation on the control of drug use in the years to come."[5]

Interpretation

Our mandate comprises four components:

1. Examine the federal government policy on cannabis, the means used to implement it, its control and its effectiveness;
2. Examine the policies and approaches followed in other countries;
3. Examine the implications of the international conventions and treaties; and
4. Examine the social and health effects of cannabis and the possible impacts of different policies.

We chose to interpret our mandate in the broadest manner possible. Some asked us whether it was our ambition to be a second Le Dain Commission.[6] Others told us we did not have the resources to be so exhaustive and rigorous in our examination. Still others regretted the fact that we were restricted in the first phase of our work to cannabis, as though the various substances could be separated and their users classified accordingly.

Chapter 2, on our work program, will show that we were motivated by a desire to be rigorous and to cast our net wide. We are nevertheless aware of the scope and limits of our role as a Senate Committee, all the more so since the means put at our disposal were as limited as our ambition was generous.

The question of the distinction among substances is more problematical for various reasons. First, recent research shows that it is more important to distinguish between user behaviours than between substances. Based on this view, it is thus not so much the drugs themselves that should be distinguished as the different ways in which they are used and the environments in which those uses take place, and hence the risks a certain number of users run. Here we will discuss at-risk behaviours[7], which are not determined so much by the characteristics of the substances as by those of the users and the conditions in which they are used. Second, the distinctions between substances have no clear scientific basis. Thus, entirely different classifications are arrived at depending on how one views the pharmacological properties of the various drugs, their effects on physical health and their origins or cultivation methods. And third, a comprehensive and integrated drug policy cannot be put forward on the basis of this distinction between substances.

However, the result of this decision, which forced us to limit our work to cannabis, was something more than just disadvantages and limits. We should admit, first of all, that embracing the entire field of illegal drugs with so little in the way of resources would have been a monumental undertaking. And as recent commissions of inquiry and international scientific conferences have chosen, as we did, to survey the state of knowledge on cannabis, we were able both to make use of their work and to compare it to our own. Lastly, and more

particularly, experiments conducted in other countries, in particular the Netherlands, demonstrate the merit in treating cannabis separately, in a "market separation" approach.

In short, while restricting our work to cannabis, we invited the witnesses not to limit themselves to it alone and to show us the links between it and the various at-risk behaviours of users when they occur. We also bore in mind the necessity of addressing drugs in the context of an integrated policy, particularly with regard to the major parameters of public policy, legislation or knowledge infrastructure, for example.

[1] Emphasis in the original.

[2] Allain, J. (1997) *Bill C-8: Controlled Drugs and Substances Act*. Ottawa, Library of Parliament, page 35.

[3] Standing Senate Committee on Legal and Constitutional Affairs, Eleventh rapport, June 1996, page 8.

[4] Nolin, P.C. (1998) Preface. In Riley, D. (1998), *Drugs and Drug Policy in Canada. A Brief Review and Commentary*. Ottawa, page 10.

[5] *Ibid.*, page 11.

[6] The Le Dain Commission, which investigated illegal drugs in the early 1970s, will be discussed more fully in Chapter 12. See Canada (1970), *Interim Report of the Commission of Inquiry into the Non-Medical Use of Drugs*. (Le Dain Commission) Ottawa: Queen's Printer.

[7] See among others: Reynaud, M., P.J. Parquet et G. Lagrue (1999) *Les pratiques addictives. Usage, usage nocif et dépendance aux substances psychoactives*. Rapport préparé à la demande du Directeur général de la Santé. Paris: Secrétariat d'État à la Santé et aux Affaires Sociales.

Chapter 2

Our Work

Designing, developing and implementing public policy is the very essence of the role of government, of political life in the broad sense. This fundamental activity presupposes a choice between various alternatives and, in a democratic system, an explanation and justification of the choice that has been made. A public policy, regardless of its object, stands at the confluence of various influences: partisan political considerations of course, economic considerations as well, even increasingly so. However, if it lays claim to a certain degree of rationality and citizen support, a public policy must also be based on rigorous and objective data, preferably from scientific research, and on an understanding of society's expectations and resistance. Lastly, a public policy, in our view, should be founded on, and at the same time promote, guiding principles. By that, we mean a clear and express vision of the principles that guided the choice among various alternatives and that reflect a conception of government and of the relationship between government institutions and civil society.

From the outset, our Committee chose to remain above partisan issues. This is the advantage of belonging to the Senate, which makes it possible to take, on various questions, a more objective view not influenced by concern for re-election. Economic considerations affected us in two different ways. The first, a trivial matter, was related to the budgets allocated to us,

which necessarily limited the scope of our work, the second to the economic impact of various public policy options which are discussed in Chapters 18 and 21.

Our work thus focused on the other three sources that should influence a choice of public policy on illegal drugs: knowledge, public opinion and guiding principles.

At the Committee's public hearings, the Chair presented the research program as follows:

In order to fully satisfy the mandate conferred upon the committee, the committee has adopted an action plan. This plan centres around three challenges. The first challenge is that of knowledge. We will be hearing from a wide variety of experts, both from Canada and afar, from academic settings, the police, legal specialists, medical specialists, the government sector and social workers. (...)

The second challenge, surely the most noble challenge, is that of sharing knowledge. The committee hopes that Canadians from coast to coast will be able to learn and share the information that we will have collected. In order to meet this challenge, we will work to distribute this knowledge and make it accessible to all. We would also like to hear the opinions of Canadians on this topic and in order to do so, we will be holding public hearings in the spring of 2000 throughout Canada.

And finally, the third challenge for this committee will be to examine and identify the guiding principles on which Canada's public policy on drugs should be based. [1]

This chapter describes the various measures we took to ascertain the state of knowledge and public opinion on cannabis and to determine guiding principles. Chapter 3 presents our guiding principles in detail, while Parts II and III outline all the information we were able to gather. First, however, a few words on two working principles which we considered essential to the complete realization of this Committee's mandate.

Two working principles

In view of the formulation of our mandate, which included an obligation to provide Canadians with objective and rigorous information, we have emphasized rigour and openness throughout the entire process.

It was all the more imperative that we do our work in a rigorous manner since opinions on all sides of the illegal drugs issue are strong and often categorical. Like everyone else, we too had our opinions and preconceptions regarding illegal drugs when we began our work. How could it be otherwise? Like you, we have children. We have had friends and relatives whose lives have been ruined by addiction problems. Our study of the government bill (C-8), which afforded us the opportunity to hear from a certain number of stakeholders and experts, provided us with information, of course, but also revealed major gaps in our knowledge. It then seemed clear to us that opinions were often based on partial and at times

incorrect information. On what basis can it be said that cannabis leads to the use of other drugs? What is the empirical basis that supports the notion of cannabis dependence? What leeway does a nation have under the provisions of the international conventions governing the production, trafficking in and possession of illegal drugs?

One cannot assert both one thing and its opposite. However, on the subject of drugs, and specifically cannabis, such very assertions were made to us, and with conviction. How to determine who was right? And to tell opinions from facts?

These findings convinced us that the highest degree of rigour was necessary in the course of our work, as will be seen in the next section.

But rigour is not enough. For this information to reach Canadians, we could not reserve it for our exclusive use, hence the second principle that guided us: openness. From the outset, we insisted that all our work be made available as soon as possible on our Web site. There was nothing new in posting witnesses' testimony to a Web site, since this is common practice for most parliamentary committees. However, in addition to this testimony, we also posted a number of studies we had commissioned, many from the Parliamentary Research Branch of the Library of Parliament. These studies, which are often not made public until after a Committee's report is published, were made available to Canadians as they were completed.

Being legislators, we would of course like our work to have an impact on public policy. We also believe it important to provide Canadians with information that is as factual as possible to allow them to benefit from it.

State of knowledge

When the Commission of Inquiry into the Non-medical Use of Drugs conducted its work in the early 1970s, like most commissions of inquiry, it had a large staff and budgets enabling it to carry out a vast research program. That was all the more necessary since, at the time, no large pool of knowledge on illegal drugs existed. Virtually nothing was known about the active ingredients of cannabis or even about the pharmacological properties of more traditional drugs, such as heroin and cocaine, and little was known about user trajectories; criminological studies on the relationship between drugs and crime were virtually non-existent, and public policy impact studies were in their earliest stages.

To say the situation has completely changed would be an understatement. In all scientific disciplines, from molecular biology to anthropology, countless studies have been conducted over the past 25 years on illegal drugs in general, and cannabis in particular. They come from the United States, of course, but also from Australia, England, France, Switzerland, Italy, Germany, Sweden, Finland and Denmark to name only a few. They have been conducted by academics interested in these questions on a purely individual basis, by pharmacological laboratories and by research groups within organizations operating in the drug addiction field and in the context of scientific commissions appointed by the governments of various countries.

The Committee asked the Parliamentary Research Branch to prepare a survey of illegal drug

research under way or completed in the past five years at the federal level and in the provinces and territories.[2] That survey, which lays no claim to being exhaustive, but offers an overview of the extent and scope of recent research, clearly shows that, despite minuscule budgets compared to those allocated in the United States, research on illegal drugs is doing relatively well in Canada. We can only imagine that it would be a formidable task to survey the studies under way in the United States on the question of illegal drugs.

Ascertaining the state of knowledge on the subject thus first meant finding the means to prepare a rigorous synthesis. To that end, the Committee adopted a research program focusing on all aspects. However, as it lacked the financial resources to produce an extensive series of studies, and also wishing to ensure that the information was broadly transmitted to the public, the Committee designed a program of public hearings of expert witnesses who would likely be able to assist in more clearly determining the state of current knowledge on the subject.

The Committee approved a research program divided into five major axes of knowledge, sub-dividing each one into specific issues:

❖ *The socio-historical, geopolitical, anthropological, criminological and economic issues of the use and regulation of cannabis.* This axis of work will establish the context for a better understanding of modern practices in the production and use of cannabis. The main questions are:

- What are the key historical patterns in the production, use, consumption and circulation of cannabis?
- Is there a relationship between cannabis use and religious or cultural practices?
- What are the relationships between the production, use, consumption, and circulation of cannabis and the socio-demographic characteristics of populations? More specifically, what do we know about cannabis users?
- What are the key domestic and international drug routes and how are they related to national and international political and policy issues?
- What are the relationships between various drugs and how have current distinctions between licit and illicit drugs been created?
- What are the relationships between the production, use, consumption, circulation and regulation of drugs and criminality?
- What are the key economic issues in the production, use, consumption, circulation and regulation of cannabis?

❖ *The medical and pharmacological aspects of the consumption, use and regulation of cannabis.* The use of cannabis for medicinal purposes occupies an important place in current debates on regulatory systems governing it. The idea here is to produce state of the

art reviews on knowledge related to the physiological and psychological effects of various drugs. The key research questions are:

- How has cannabis been used for medicinal purposes?
- What is the state of knowledge on the therapeutic properties of cannabis?
- What is the state of knowledge on the physiological effects of cannabis, especially in respect of addictive capacity?
- What is the state of knowledge on the psychological effects of cannabis, especially in respect of dependence?
- What is the current state of knowledge on the effects of various forms of treatment for dependence and addiction problems, their impacts and their costs?

❖ *The legal aspects from a national perspective.* Federal legislative mechanisms exist in Canada to control the use, consumption, production and circulation of drugs, even though treatment and other areas, for example, are under the jurisdiction of the provinces and territories. Additionally, the courts have interpreted the relevant acts and regulations, particularly regarding policing powers. Overall, this section will examine the legislative and control arsenal, its rationality and objectives, from the standpoints of criminology, law, history, sociology and economics. The key questions guiding this third axis of the research program are:

- What are the history of and logic to the different regulatory and control modes of cannabis in Canada?
- What are the history and logic behind criminalization and penalization in Canada?
- What is the state of case law in respect of the legislative and regulatory arsenal relating to the production, use, consumption and circulation of drugs in Canada?
- What is the state of case law on police powers and sentences in relation to drug issues?
- What are the effects of criminalization and penalization in matters of drugs on the justice system (and its various components), the prison system and the criminal careers of delinquents?
- What are the economic and social costs of the various modes of regulation, control and criminalization in matters of drugs?
- What are the relations among justice and public health policies and government departments in matters of drugs?

❖ *The legal and political issues in an international perspective.* Canada is a party to various treaties and conventions on the production, trafficking and possession of psychoactive substances. It was important to assess how precise and binding these instruments are on domestic legislation. Also, these treaties and conventions are themselves part of a larger array of international instruments, especially on human and political rights; it was essential to determine the interrelationships between these instruments. Finally, drugs are an issue in international relations, in particular in relations between Canada and the United States. Although not legally binding, these factors may influence policy reorientations and will thus be interesting to look at. The key questions are:

- What are the main treaties and conventions in matters of drugs, their history and their provisions?
- What constraints, if any, do these treaties and conventions impose on Canada?
- Beyond treaties and conventions, what other aspects of international relations have implications for Canada in adopting a regulatory mode in matters of drugs?
- What are the regulatory approaches adopted by other countries, what are their impacts, and to what extent are they pertinent for Canada?

❖ *The ethical issues and Canadians' moral and behavioural standards.* Ethical issues and knowledge of the standards adopted by Canadians are also relevant in determining policy and legislative orientations. The key questions are:

- What are the ethical principles relevant to examining issues related to the production, use, consumption, circulation and control of drugs?
- What are the pertinent ethical principles in relation to the medicinal use of cannabis and the medical and psychological treatment of drug addiction and dependence?
- What are the current norms of behaviour of Canadians in relation to cannabis production, consumption, use and circulation?
- What are the norms of tolerance of Canadians?
- To what extent do ethical principles and norms of tolerance in the population accord?

As can be seen, the undertaking was a vast one. In an attempt to answer these questions in the most effective and most economical manner possible, the Committee agreed to perform two tasks concurrently: conduct a research program and hear expert witnesses—complementary activities.

Research program

Lacking both a research budget that would have enabled us to commission studies and a full-time research staff, we asked the Parliamentary Research Branch to produce syntheses and analyses of the relevant literature.[3] The research is divided into three major categories:

- ❖ Legal studies: analyses of case law and international conventions and treaties;
- ❖ Socio-criminological studies: analyses of the relationship between drugs and crime, of developments in denunciations, charges and sentences; cannabis use practices; economic aspects of drugs;
- ❖ Comparative studies: syntheses of public policies in certain countries.

We also received a synthesis of the literature on the physiological and psychological effects of cannabis.[4] Lastly, we commissioned a qualitative study on Canadians' opinions and attitudes by a public survey firm.[5]

In all, the Committee received 23 reports and benefited from summaries of work conducted in other countries, particularly through its attendance at international conferences.

Expert Witnesses

Aware of the research program's limits, and particularly of the need to question some of the researchers whose work was cited in the studies conducted and to compare their analyses with those of other researchers and with the positions of other expert organizations (police forces, for example), we conducted a series of hearings of expert witnesses in Ottawa and certain other cities across the country.[6]

The hearings began on October 16, 2000 during the 36th Parliament and resumed on April 30, 2001, during the 37th. They ended on June 10 of this year with presentations from the principal departments responsible for illegal drug policy in Canada. As far as possible, the Committee maintained a rate of one hearing every two weeks.

In every case, the Committee asked the witnesses to prepare a written brief responding to specific questions. The Committee did not expect the experts to give their opinion or tell it what to think. The expert witness hearings were part of an effort to increase members' knowledge. Knowing that our ability to conduct studies was limited and acknowledging that research data were incomplete, if not contradictory, we wanted to take full advantage of this exceptional opportunity to clarify and better disseminate certain findings.

Who were these experts? How did the Committee select them? These are important questions to the extent that a certain number of stakeholders questioned the Committee's credibility as a result of certain choices it made. First, we wanted to cover each of the major fields of investigation. Consequently, we heard sociologists and lawyers, psychologists and physicians, police officers and criminologists. Second, we wanted to hear as many Canadian

experts as possible from those various research areas. Third, for the most part, we selected experts known for their publications in the field. The researchers included Professors Harold Kallant and Marie-Andrée Bertrand, who were closely involved in the work of the Le Dain Commission 30 years ago and researchers closely associated with such major institutes as the Ontario Centre on Mental Health and Addiction (the former Addiction Research Foundation) and the Canadian Centre on Substance Abuse. Lastly, we were interested in inviting experts who, in certain cases, could speak on behalf of major institutions such as the Canadian Medical Association, the Federation of Canadian Municipalities, the Canadian Association of Chiefs of Police and the Royal Canadian Mounted Police. It will be seen from a close look at the list of experts heard and the subjects of their presentations that they coincided with all our areas of concern.

When the hearings focused on the situation in other countries, we sought to strike a balance between those persons who could describe public policy and researchers whose work was recognized in their country and internationally. As the number and length of our hearings were limited, we had to make choices. At most we could hear four persons per hearing. As a general rule, we tried to choose a senior government official and three researchers.

One could also question our choice of countries heard: France, the Netherlands and Switzerland. We had initially intended to hear representatives from England, particularly because that country's public drug policies have been examined in many high-quality studies. Unfortunately, changes under way in there prevented us from holding those hearings. Similarly, we did not have enough time to hear from Sweden or Australia. However, we had the Parliamentary Research Branch prepare syntheses on each of those countries.

The case of the United States deserves particular attention. Chapter 20 describes American drug policy. However, at our hearings on the United States, which is much more complex and less monolithic than is often thought, we were unable to hear from those responsible within the U.S. government, although not for lack of trying. The Director of the prestigious National Institute on Drug Abuse (NIDA) had tendered his resignation a week before the scheduled date of the hearings, after accepting our invitation. And the Director of the Office of National Drug Control Policy in Washington declined our invitation. In short, we are dissatisfied at having been unable to hear the senior officials responsible for drug policy in the United States. Nevertheless, on June 10 2002, we held a private meeting with Dr. Hanson, the new Director of NIDA, and on June 11 we had an *in camera* meeting with Mr. Walters, the Director of ONDCP and some of his key advisors in Ottawa.

In all, the Committee held more than 40 days of public hearings in Ottawa and other Canadian cities, hearing more than 100 persons from all backgrounds.

One further note. It can be said that we did not handle the testimony of researchers and those of practising experts in the same way. That is true in part. To the extent that researchers presented data lending itself to critical review, containing verifiable data, which does not mean proof, on specific subjects, making it gradually possible to answer our empirical questions, we attached a certain degree of importance to them, which will be reflected in the passages cited throughout this report. The information from practitioners is not in itself any less significant or important in our view. However, the practitioners more often tended to express opinions than to present study data. They also did not have the same concern to give precise answers to the questions put to them. Those opinions are important, as are those of the Canadians whom we heard and who wrote to us, but they are nevertheless opinions, not cold hard data.

The challenge of synthesis

Faced with this massive amount of information, the greatest challenge was to synthesize it. The scientific literature on all of the topics addressed, particularly those concerning the effects of cannabis and users and types of use, is abundant. Experts reported to us on their research and that of other researchers. The reports prepared at our request are full of information, and our research team stayed on the look-out for recent publications and attended various international scientific conferences. In short, the task was to make sense of all this data, which, in addition, contained contradictory information at times.

At the same time, the data on certain subjects are still fragmentary. This is the case of data on trends in the use of cannabis and other drugs in Canada (Chapter 6), on the specific nature of therapeutic applications of cannabis, evidence of which often does not go beyond the anecdotal (Chapter 9) and simply on police practices (Chapter 14) or the decisions of Canadian courts (Chapter 15).

Synthesizing this information thus also meant making choices. While fully respecting the diverse range of perspectives, we nevertheless had to draw conclusions, accepting that some of the conclusions might be preliminary and that they might be contradicted by subsequent research. It is in the very nature of science that it is constantly in motion, and we accept that state of affairs. As a result, we are aware that we have left ourselves open to criticism. So much the better, we might add, first, because criticism will stimulate public debate, second, because it will undoubtedly pique the curiosity of researchers, who will verify some of our findings empirically, thus improving the state of our present knowledge, and, third, because our choices will be made plain in light of the guiding principles that are outlined in the next chapter.

Taking opinions into account

Public opinion is hard to grasp, first, because it does not exist in itself but is created by the manner in which the pollsters' questions are asked, by the manner in which the media report a debate, and by a broader context of representations the actual determinants of which are never precisely known.

Understanding public opinion on a complex subject such as drugs is not a simple matter such as discovering what type of laundry detergent respondents will buy at the supermarket. A seemingly simple question quickly becomes complex once Pandora's box is opened. A public opinion poll may ask the public whether they are in favour of decriminalizing cannabis. However, do we know whether every respondent understands the term "decriminalization" in the same way? The complex nature of this term is addressed in Chapter 21. Do we know whether respondents are for or against decriminalization for the same reasons? And once it has been determined that a majority is for or against it, do we know how that public policy choice would be implemented?

If it is the case, taking opinions into account is a necessity in a democracy. For us, taking

opinions into account meant we had two closely related responsibilities: first, it meant we had a duty to inform, indeed to educate, although we hope those who are offended by that term will pardon us for using it, but we are convinced that on public policy topics, which are societal issues, it is the duty of political leaders to transmit information that educates, not merely convinces. The level of knowledge about drugs, even about cannabis which is the best known drug, is often limited and wrapped up in numerous myths. Our second responsibility in taking public opinion into account was to go and discover it. We did so in three ways.

First, we publicized our work as widely and as openly as possible to enable everyone to learn about it and react to it. Many chose to do so by writing to us, although they were relatively few compared with the number of people in this country.

Second, we commissioned a qualitative public opinion study. The focus groups conducted across the country as part of that study are described in detail in Chapter 9.

Third, we held public hearings in various cities across the country (eight in all), thus enabling a certain number of citizens to come and tell us what they thought, what they knew and what they had experienced.

We are aware that informing and seeking public opinion also means having a hand in forming it. It is thus not a neutral activity.

Interpreting in light of principles

All this knowledge, in the form of research and public opinion, still needs to be interpreted. Scientific knowledge is subject to constant verification. It at times contains contradictions, as will be seen in Chapters 7 and 8 in particular. Knowledge of public opinion necessarily remains fragmentary and evolving. Thus the importance of interpretation.

Beyond this, a public policy, as noted above, is not based on knowledge alone, no matter how rigorous. Guiding principles are necessary, principles that can permit an informed interpretation of data and assist in the establishment of conclusions. This is the subject of the next chapter, which will describe the method we used to determine our guiding principles and the principles themselves.

[1] Senate of Canada (2001) *The Proceedings of the Special Committee on Illegal Drugs*, Issue No. 1, page 23.

[2] Leduc, D., et al., (2001) *Federal Research on Illegal Drugs and Related Issues*. Ottawa: Library of Parliament; and Miller Chenier, N., & S. Norris (2002) *Territorial Research on Illegal Drugs and Related Issues*. Ottawa: Library of Parliament. Reports prepared for the Senate Special Committee on Illegal Drugs. Available at www.parl.gc.ca/illegal-drugs.asp.

[3] A complete list of the studies produced by the Parliamentary Research Branch is

provided in Appendix 3. All the research reports are available on line at the Committee's Web site: www.parl.gc.ca/illegal-drugs.asp. The Committee wishes to express its appreciation of the work performed for it by the Parliamentary Research Branch.

[4] Wheelock, B. (2002) *The Physiological and Psychological Effects of Cannabis: A Survey of the Literature*. Document prepared for the Senate Special Committee on Illegal Drugs. (The Committee particularly wishes to thank Senator Rossiter, who made the preparation of this paper possible.)

[5] Léger Marketing (2002) *An Exploratory Study Among Canadians on the Use of Cannabis*. Montréal: author. Report prepared for the Senate Special Committee on Illegal Drugs. Available at www.parl.gc.ca/illegal-drugs.asp.

[6] A complete list of the witnesses heard as well as subjects, places and dates is provided in Appendix 2. All the evidence and certain supplementary documents provided by witnesses are available on line at the Committee's Web Site.

Chapter 3

Our guiding principles

What should public policy on illegal drugs consist of, policy here being understood in the strict sense of the word, as government through public debate and not party politics? As we are part of the Senate of Canada and therefore of Parliament, and having legislative authority, one might wonder why we ask ourselves the question. As legislators, are we not guided by the principles of good government, that is to say by public interest? In fact, what is public interest, and how is it determined? Does our position as Senators give us the *de facto* ability to say what is, or what should be, in the interest of Canada? We do not believe so.

When faced with social issues such as illegal drugs, we are like all Canadians, struggling with our beliefs, our knowledge, our values, our doubts and our myths. Our special access to some one hundred expert witnesses, our reading of numerous research papers and our discussions with dozens of people across the country have forced us to confront our preconceived ideas and images about drugs and to compare them with those of "others", and if not to change them, at least to refine them along the way. However, this is not sufficient to determine what is in the public interest. Experts, no more so than the many citizens we heard from, do not determine what is in the public interest. Studies show only the most superficial aspects of what Canadians think. In addition, when polls that are more sophisticated provide us with a more in-depth picture of public opinion, we will be no further ahead in trying to decide on the direction that public policy on cannabis should take. This is primarily because the greater good is not determined by polling to see which way the winds of public opinion are blowing, and also because, as is the case with our personal opinions, public opinion relies on unverified information, on preconceived ideas that are sometimes biased, and on values that are not always clear.

We heard quite frequently that the public policy decisions should be based on the future of our children, on the kind of society in which we wish to live and that we wish to leave them. Over the last two decades, Canadian society has implemented costly anti-smoking programs. Do we want to be in conflict with these by allowing the smoking of cannabis? Cannabis is a psychoactive substance that can impair certain cognitive abilities linked to learning in young people. Do we want to send the message that it is okay for them to take drugs?

Others said that the fundamental values of Canadian society, values of respect for people's rights and freedoms, of tolerance and openness towards diversity, were compromised by existing legislation on cannabis. They added that these laws are no longer in step with society, reflecting an inter-generational conflict between adults and youth, they bring about more harmful consequences than good, and on top of being ineffective they are iniquitous.

This is an issue of values, therefore, which opposes various ideas about public health, of community health, meaning both the physical well-being of people as well as of the entire community, of its moral fiber as well as the model of inter-relationships that it proposes. However, we do not all share the same values.

In the fragmented, disillusioned world in which we live, a world open to the sharing of cultures and of identities, albeit not always by choice, the issue of values is constantly at stake, and from this the very meaning of social life. Even the transcendental values that we all share, of sacred respect for life and of immanent justice, are not readily turned into public policy: abortion or capital punishment, for example. As for other values, such as freedom, truth or law, they are the subjects of constant debate in democratic societies and they are precisely the kinds of values that are at stake in a public policy on illegal drugs.

It has now been thirty years since the Royal Commission of Inquiry on the Non-Medical Use of Drugs, the Le Dain Commission, named for its Chairman, studied issues similar to those we are studying today. Its report on cannabis, whose scientific conclusions on the effects of the drug were generally accepted by all members of the commission, nevertheless led to ... three reports: a majority report by three of the members, and two minority reports. During our first day of public hearings, Professor Line Beauchesne presented the fundamental differences of opinion among the members:

The dissension stems primarily from different visions of the values that should underlie a drug policy. I will refer to the report to illustrate the three positions that can be taken on drug use.

The first position, based on legal moralism, is that advocated by Ian Campbell. This public policy approach founded on legal moralism justifies the current prohibition and resulting repression on the grounds that it protects common values. (...) Briefly put, the government is perceived as having the responsibility of establishing common values, which are then imposed on society with a view to achieving optimum social harmony. If everyone thinks the same way, then there will be fewer problems.

(...) The second position, held by the majority of the Le Dain Commission members, is based on legal paternalism. Public policy based on legal paternalism justifies current prohibitions on the grounds that the State has a responsibility to protect non-independent persons, particularly young persons.

(...)

When we come to the third position, that taken by Marie-Andrée Bertrand advocating the legalization of cannabis, this brings us around to the whole question of values (...). Legal liberalism implies that the government maintains some responsibility for preserving individual autonomy to the maximum extent possible. (...) A public drug policy based on legal liberalism is founded on the premise that the government's role is to maximize

opportunities for each individual to be a full citizen and to ensure that criminal law is never used. [1]

Moralism is an affirmation of a set of shared values. Paternalism is protection of the weak. Liberalism is maximization of the independence of citizens. These three categories do not include all of the possibilities: communitarianism, for example, represents another approach. In some areas of public policy, at certain times, these various approaches can co-exist. Nevertheless, each one expresses a different concept of the role of the State and of criminal law, and the roles of science and ethics in the choices that must be made.

Having examined each of these subjects, we have elected to set down the guiding principles that clarify the concept we have of the roles that the state, criminal law, science and ethics must play in the development of a public policy on cannabis. These principles will then help us in our analysis of the information resulting from the research and current practices in Canada, and most of all, influence our recommendations. In this way, the reader will have the benefit of our attempts to make explicit the principles which all too often remain implicit, therefore giving the opportunity to all to take us to task for inconsistency, or to voice their disagreement with our conclusion, because they do not share these principles. We feel this exercise has the virtue of being both clear and transparent.

In order to assist our preparations for this work on the guiding principles, we asked four Canadian academics, well known both in their respective fields and for their independence, to prepare issue papers on each of the four main themes: governance, criminal law, science and ethics.[2] We strongly encourage Canadians to read these texts, which are of an exceptional richness and quality. We will use these texts freely, without pretending to render the complexity of their thinking, but neither will we simply echo their sentiments. Just as we did not ask witnesses to tell us what to think, but rather to share their knowledge with us while being as rigorous and as precise as possible, whether their knowledge comes from research or from experience, so we asked for issue papers and not for answers to our questions. We must formulate our own responses to the illegal drug issues before us, and that is what is expected of us.

We will begin with a reflection on ethics. We feel that such an examination, insofar as it affects the very bedrock of our values, as it imposes a requirement for communication and dialogue[3], is the cornerstone upon which the other guidelines are based. Our principles dealing with governance – that is to say the role of the State – and with criminal law as a tool for achieving social conditions, then, hinge on this ethical concept. We will conclude with thoughts on the role of science, or more specifically of knowledge.

Ethics, or the principle of reciprocal autonomy

Let us assume that science, with supporting evidence, had shown the harmfulness of a given drug – say tobacco – and that it is a “cause” of serious, indeed fatal illnesses. To what extent are doctors, judges, and in the end, the State, authorized to go to ensure that people do not smoke? What limits are there on intervention? This is the question posed by ethics, more specifically the ethics of “health”. Should we simply ban tobacco and punish both its

users and its producers? Should we educate people through prevention campaigns? Should we discourage smokers through their pocketbooks, for example with a surtax for the hospital care that their habit could make necessary?

We see that ethical reflections take us through what is, through the realm of facts, to the realm of what should be, of what would be desirable. Moving therefore from recognized facts (that cigarettes "cause" lung cancer) to standards (the majority recognizes that smoking is harmful), but, more important than standards, to values (health is the greater good) and finally to the means of passing on and above all implementing these values (smoking is forbidden and subject to a fine). At any of these steps, one could speak out and say just a minute, I do not agree. I do not agree with the statement of fact: what is the basis of what studies support this "finding", one might ask. I do not agree with the standard: even though a public opinion poll may show that most people believe cigarettes cause lung cancer, is that reason enough to put an end to the debate? I do not agree with the established values: freedom is the greater good and not health - what is the use of being in good health under a totalitarian regime? Finally, disagreeing with the means chosen to implement the value - it being unacceptable to ban cigarettes under the pretext that they cause cancer because the means is disproportionate to the fact.

Anyone who has followed the debates on cannabis to any degree will have drawn a parallel. Because cannabis "causes" health problems (both physical and moral), the standard states that its use is "dangerous" and, under the banner of public health values (and of the protection of the most vulnerable: children, adolescents, etc.), its production, manufacture, sale and use, etc. will be prohibited. This is the basis of the existing public policy.

As Professor Malherbe reminds us, this way of setting out the cannabis problem - as in fact is true for other substances - encourages us to rethink our ideas on health, medicine and science. Moreover, going one step further, it obliges us to consider the issue of risk and of life itself in society.

We live in a risk-taking society, but in a paradoxical manner. On the one hand, we place great value on risk-taking: venture capital, risk management, putting no limits on success. We see this as much in the appreciation of certain kinds of political or corporate decisions, as in the emulation of certain kinds of risky activities, such as Formula 1 racing, paragliding, and other extreme sports. On the other hand, we are becoming intolerant of risks of life in society, of the risks that others represent to our individual lives. It is a search for safety, both individually and collectively, vis-à-vis the smalltime crook or the terrorist. Risk would be in conflict with safety and security as illness would be in conflict with health.

Between these two apparently opposed attitudes towards risk, a subtle change in connotation slips in and partly explains the paradox. In the first sense (risks we like to take or will accept others taking), the issue is clearly risk. Here, risk is seen as being positive, and offers a number of options: when faced with this kind of risk, the person can decide to forge ahead, to wait, or to give up. In any case, there is a broadening of possibilities, therefore of autonomy, an extension that is no doubt linked to the admiration these people elicit, which is also tinged with envy as we observe this action that our position as "mere mortals" rarely permits us. The shift in meaning happens with the second sense, which does not relate to our ideas on safety but rather of danger. Safety is a collective and individual good, as in food or occupational safety. Danger, on the other hand, is usually a loss or a limitation of freedom of action: when faced with danger, most of us stop, and withdraw from the scene. In this sense, danger reduces the range of autonomy. Therefore, it is not safety that is in conflict with risk, but rather danger.[4] The distinction is fundamental, because it refers us to the degree-whether real or perceived-to which we control our own existence. We sense that the "crazy Canuck" bombing down the slopes is at least in relative control of the risks

he is taking; danger is different in that it implies loss of control.

We are collectively learning how to manage this risk/danger equation. The "risk" here, if one can put it this way, is thinking of risk as a kind of acquired individual autonomy and of danger as a limitation of this very autonomy by "the other", bringing about in its wake withdrawal, intolerance, and concisely, fear. For if risk is the source of intense pleasure, danger generally gives rise to fear. If risk points to the improvement of the means that allow me to be more in control of my safety, danger points to threats coming from the outside, chiefly from the 'other', over which I have little control.

Some concepts in medicine, and in science in general, add to this paradox when they address risk factors, such as when smoking is considered a risk factor for lung cancer. This is also the case with delinquency: dropping out of school is a risk factor as regards delinquency. Within these meanings, risk here becomes a danger factor, the ultimate danger, of course, being death (cancer). This mechanistic and causalist concept of prevention erases the fundamental difference between the body-machine we occupy and the body-subject we are, to use the distinctions proposed by Professor Malherbe. There is, in fact, no direct link between the "objective" characteristics of our environment (including the personal traits of genetic history, family and culture, etc.) and the subjective perception we have of ourselves and of our relationship with our environment. In other words, it is precisely why two children born in a similar environment, in the same era and friends from a very young age, will take two entirely different paths in life. We have a body with a genetic inheritance and pre-dispositions; what we do with it and how we interact with others and our environment is something else entirely. Just as there is no immediate transfer of the recognized fact to the norm, neither is there any direct translating my biopsychological make-up into actions and thoughts.

The scientific approach searching to identify a statistical "norm" – the correlation between two facts – does not take into account the fact that we are not all equal in the face of this risk/danger equation. What for some would constitute a risk – going down an icy mountain on skis – would represent a real danger for another.

[Translation] Despite all we think we know about addiction, a considerable number of well-informed subjects "happily continue committing suicide" through their dependencies. While health education is largely thwarted, and not only in the field of toxic substances, it is because human subjects are in fact subjects, that is to say "subjective" beings whose behavioural reactions are linked much more to the meaning they attach to their behaviours than to the objective mechanical-medical consequences which statistical analysis claims to define.

Some risks are no doubt worth taking for life to be worth the trouble of being lived, for it not to dissolve into a maniacal and fearful sequence of endless precautions (...). Lastly, what is most human (the most autonomy, we dare wonder): succumbing to fearful hypochondria and enclosing oneself in a cocoon of universal prevention (to the point of death by asphyxiation and loss of will) or living one's life through risks freely chosen and accepted. [5]

This is where the central position of the concept of autonomy comes in. Autonomy, however, is to be understood here in a critical manner as *reciprocal autonomy*, and not as autonomy where isolated individuals establish standards to their own liking. It should be

borne in mind that autonomy, etymologically speaking, means "establishing one's own laws". This is not a question of arbitrary legislation, created for oneself, but of laws that permit, whenever possible, the successful interaction with others, which is the very bedrock of society. This autonomy is based on the ability to recognize the existence, the difference, and the equivalence of the other, allowing one to assume solitude, finiteness and uncertainty, respectively, to then move on to practice solidarity, dignity and liberty in return.[6]

The "dependent" person is not autonomous, some would say. Indeed, in their dependency, the drug addict, the alcoholic and the inveterate smoker are not. Neither the emotionally dependent person nor the person addicted to gambling, money or sex is fully autonomous. Next comes the question of the extent to which the state or society can intervene to encourage the slow achievement of this autonomy, and how to go about it. What are the respective roles of collective governance and criminal law as mechanisms of this governance? How can science contribute to this emancipation?

In any case, we note Professor Malherbe's comment, that:

[Translation] (...) the fundamental problem of our civilization is not whether it is acceptable to prohibit the trade in cannabis derivatives or even their use, but rather not to repress the expression of anxiety when it arises and, even better, to invent new ways of taming it. On this point, it is useful to recall that every unjustified restriction, which adds to the already heavy burden of civilized individuals, can only increase their sense of being the object of some form of totalitarianism rather than the subject of their own destiny. From this standpoint, anti-drug campaigns seem decidedly like attempts to deny death rather than recognize its presence in collective and individual life. (...) In this respect, we agree with N. Bensaïd, who says that preventive medicine conceals our fear of death by making us die of fear. [7]

From this base ensues a definition of ethics as *"constant work, to which we can consent and which we perform with one another in order to reduce, as far as possible, the inevitable difference between our values as practiced and our values as stated."*[8] With one another, indeed, thereby imposing constraints so that reciprocity and equivalence of the 'other' can be realized; this is the role of governance.

As a guideline, we will adopt the principle that an ethical public policy on illegal drugs, and on cannabis in particular, must **promote reciprocal autonomy built through a constant exchange of dialogue within the community.**

Governance: maximizing the actions of individuals

We are social beings. It is a trivial assertion, however it must be stated because it means that, *necessarily*, we always find ourselves in paradoxical situations where to a certain degree,

each person has the free will to make decisions, and makes free decisions for himself, while at the same time, in order to regulate interactions with others, rules are established, a normativity, that is more or less complex or more or less formal, as is appropriate. This is true of relationships between couples, families, in sports, and at work, as it is of relationships between citizens and the government. Self-governance – acquired through the arrival of liberal democracy – is never complete and inevitably yields in part to the governance of the community.

Governance is relatively easy to develop within simple relationships: within couples, families, or businesses. This is not to say that its practice is easy: anyone with any experience of relationships as a couple will be well aware of how difficult it can be to make implicit rules explicit, and to agree on the rules of a shared life. However, the standards that are established between friends, between lovers, between parents and children, are in fact a set of relatively simple rules, and most importantly, rules whose effectiveness does not require the intervention of other parties, except in the case of a break-up or of abuse.

In feudal, pre-modern or pre-democratic societies, the prevailing rules for even the simplest social relationships were stipulated from the outside: by the sovereign, the lord, the church representative, the father or forefather, the head of the business, each one could issue orders and expect to be obeyed, being all powerful in his domain. The establishment of normativity was largely done without the involvement of "subjects", without their consent, and without any input on their part; they were excluded from the power relationship. Over the centuries, during which our modern-day democracies were built, we have moved on to styles of governance of ourselves and others that allow people to participate more and more in the development of the rules of life, both personal and social. We have also moved on from a situation whereby each person's life was decided by his or her destiny, and limited to the narrow prospects dictated by the place of birth and status, to an "indeterminate" life situation, which is open to the building a personal identity and history.

These are therefore (1) changes in the sources of normativity and their operationalization in society, and (2) changes in our relationship to these norms. In the first case, we are slowly becoming involved in the external formalization of the sources of behavioural norms. As they no longer ensue from divine right, from the sovereign or the church prelate, they are built through the political manifestation of the will of the people. They are entrenched in national constitutions, in legal decisions (in British Common Law) or in legal codes (the Civil Code). It follows that the supra-legal normativity (inherited from divine right) or the infra-legal (not set out in law), lose both their symbolic value and their real influence on social relationships, to the benefit of legal rules that are registered according to a recognized and legitimate procedure in the social system by means of statutory provisions. Modern societies are legal societies, that is to say societies that base their management of relationships between people and between individuals, groups and institutions, on the rule of law. Never completely incorporated into the legal system, other sources of normativity have not disappeared completely but the pre-legal or infra-legal sources of normativity are less apparent, and sometimes less legitimate.

With this change of source comes a change in operation: while the sovereign or the church representative could convict, or even execute, without challenge to the legitimacy or rationality of their decision – except by risking the same fate – the means of expressing the will of the people, setting it out in the legal system, is now in the hands of judges and the legal system entirely. The legal establishment of norms is set in motion either by the public authority provided in the legislation (civil and criminal cases, for example) or by citizens themselves (private and civil lawsuits) and is put in effect primarily by the courts. Remedies exist, and most importantly, these remedies are theoretically the same for, and accessible to,

one and all.

The relationship that a person has to the norms, and through this to all aspects of social life, is the third change. Choice and uncertainty have both increased, to the point that, today, the connection is not so much to the other person, but to the risk represented by being in contact with them. Normativity in and of itself is no longer considered inevitable, nor even a duty. Without being rejected, social normativity is called into question based on personal experience and worldview. The gap between the subject of the norm and the norm itself seems to be widening, while conflict resolution models are being made more formal.

Through the conjunction of these processes, governance becomes more and more instrumental. The mechanisms of formal normativity, i.e. lawyers, judges and the courts, sometimes take on a greater importance than the actual substance of the norms themselves: the immediate personal question is whether I have access to the recognized mechanisms of conflict resolution, or if, through my condition or my actions, I am excluded in one way or another. In other words, the means is replacing the end, the rule of law is replacing the requirement for a connection to the other, which is the very basis of normativity and of social life itself.

Modern societies are therefore faced with a series of sometimes paradoxical injunctions. Collective governance must: (1) allow social relationships to be regulated in the most orderly but least restrictive manner possible, (2) give expression to the norms and values shared by the community and (3) give each person the opportunity to define themselves in relationship to these norms and values. How can these seemingly obvious opposites be reconciled?

Based on Professor Taylor's work[9], we can say that there are two central spheres or preferred means of governance: the governance of relationships with others, and the governance of the self. The governance of collective relations is obviously part of the traditionally recognized areas of intervention of the state, even if the form and substance change. On the other hand, governance of the self does not come immediately or systematically under the jurisdiction of the state.

Collective governance

The state is far from the only source of normativity. But the fact that democratic states must act in accordance with the law and that most public policies come in the form of legislative texts, produces a kind of short-circuit whereby the source of law and the state appear as one.

Yet, as Professor MacDonald rightly points out, if the actions of the state are subject to the rule of law, the legal sphere is not limited to the State. In all known societies, rules have always been established for the governance of the self and of collective relations. They are implicit or explicit, formal or informal, all-encompassing or limited in their application, codified or recorded in the collective memory, extensive or limited to certain spheres of activity. In every case, whatever the nature or specific form of the rules, they serve to express for members of the community the conditions of collective life. They deal with marriage and parenthood, the ways in which one respects the life and property of others, as well as the connections to the invisible and the beyond. They take the form of prescriptions and bans, are implemented by the bishop or the mullah, by the king or his representative, or by the judge. Much as we might like to believe, we in modern times have not invented the codification of laws because the first legal code goes back to Hammurabi, the King of

Babylon. In Roman law, Justinien was the first to suggest a code of laws, not to mention the Ten Commandments "handed down" to Moses.

In this sense, we agree with Professor MacDonald as concerns legal pluralism, according to which there are multiple sources of normativity and therefore of rules of action that are not exhausted by formal legislation. This is the distinction between law and "juridicity". As we mentioned above, juridicity can be derived as much from the family as from business, from school as from the trade union, from political parties as from religion. In this sense, juridicity "is the business of subjecting action to rules-based governance". [10]

Juridicity, of course, co-exists with other ways of governing individual and community actions: the brute exercise of power and war are examples of other forms. One of the main differences, however, between juridicity and other forms comes from the nature and the origin of its legitimacy. The establishment of legal rules of action involves a form of consent, if not of active participation, in the development and implementation of the rule, qualities that are not needed nor sought out in the case of domination by a tyrant or an occupying army.

The development of a formal juridicity, in the form of legal texts passed by legislative assemblies prescribing both objective and subjective rights, is at the very heart of modernity. It is in fact around these kinds of issues that the more specific question of the role of the State arises: when and to what extent should formal legal rules be developed, and how should they be enforced?

Modern societies are unique in that they have, amongst other things, given precedence to the formal rule of law over other sources of juridicity as regards the governance of social relationships, established the need for these formal laws to be adopted and implemented by legislative and executive arms of the State, and set up arbitration systems in the form of courts of law born of the State but having an arm's length relationship with the former two.

This formality of the law, or to be more precise, the legal normativity found in the legislative texts passed by the State, in no way signifies the disappearance of the other forms of normativity. Here Professor MacDonald gives us a relevant example of this:

For example, activity that the official criminal law sanctions and stigmatizes may be rewarded and valued in certain other normative communities. In socio-economically impoverished neighbourhoods where economic opportunities are limited, the manufacture and sale of illicit drugs may be an attractive means of escaping poverty. For those who are successful in the enterprise, the consequent advancement in social standing may more than offset the potential harms visited by criminal sanctions. Similarly, in an international context, in countries where the raising of traditional crops which are capable of being converted into illicit drugs is an indigenous cultural activity, and where conditions of poverty are such that the attendant economic benefits are necessary for subsistence, the criminal law (whether domestic or international) has little purchase. [11]

In other words, juridicity is not exhausted in the formal law, and the role of the State is not limited to the processes of passing, enforcing and arbitrating formal legislation.

Governance of the self

Historically, juridicity has often been equated with moral standards, or has tried to model itself on them. These standards could come from religion, from philosophy, from an ethic, or a universal theory of nature as in Plato. In every case, they tried to say what constituted the "good life", how to conform one's life with the immanent rules of life, ending the cycle of reincarnations, or avoiding eternal damnation. In every case as well, the good life corresponded more or less to "life" in the most abstract sense, that is to say the focus was not so much on the destiny of the individual, but on that of the community, the group, the clan.

It is only as of the second half of the second millennium, during what we refer to as the Age of Enlightenment, that individual life slowly began to register as a primary concern in the governance of the community. This major change resulted in what Taylor calls "ordinary life", that of the "average sensual man", at the heart of which we find his connection to the world and his manner of connecting with it through the agency of family and work, being suddenly recognized. Having had no means by which to participate in the development of juridicity in general until then, the "citizen" acquired some legal authority and right to active participation (to simplify things, we could give as an example the right to vote), not only as a member of the community but as a whole and unique individual.

Up until that time, communities had a juridicity that was largely based on relationships with others, granting strong objective rights (the right to life: you shall not kill; the right to property: you shall not steal; etc.), with a weak cognitive component; while admitting that it continues (unfortunately one might add), to pose certain problems (take racial or sexual inequality) even throughout the twentieth century, - accepting respect for life as a universal norm has not met with great opposition. It is in this sense that we speak here, particularly following Pires' work discussed in the following section, of norms with weak cognitive components. These fundamental norms, which certain philosophers of law have said are natural laws, do not require a strong empirical justification. The same cannot be said of other norms concerning conduct such as homosexuality, abortion... or taking drugs. These norms are an issue of what we might call subjective rights that relate to individual behaviours that express personal choices achieved through a consensual exchange and thus being of little or less direct concern to the community. This is why we could say this is an issue of norms with a strong cognitive component: in order to be imposed as negative laws, that is to say as constraints or prohibitions, these standards need an exogenous justification drawn from the external knowledge of juridicity itself.

In this way, parallel to the process of legal formalization of the norms of governance in the community described in the preceding sub-section, the modern individual has acquired more and more room for governance of the self. This space is no longer, as in the past, entirely dictated by the determinations stemming from one's birth in a given place, in a given family, with given genetic "baggage". Except in some totalitarian regimes, neither is this space for the governance of the self entirely subjected to collective or religious rules. This space consists of a vast area of uncertainty that, in part, precisely explains why it is sometimes called "disenchantment with the world", or more prosaically "loss of sense" or "lack of values". In fact, we would say that neither comes into play, so much as a process of slow and hesitant reinvention of social life, in and through new ways of relating as individuals.

The role of governance

Governance is part of both the spheres of collective governance of the State and of

governance of the self. If the State's chosen vehicle is formal law, the passing of legislation does not exhaust all the possibilities in terms of collective governance. Moreover, governance of the self is the slow discovery – in the strong sense of the term – of the juridicity that underlies human action.

Professor MacDonald addresses the issue eloquently:

How ought law and legal institutions to be deployed to achieve the symbolic governance of human agency in a manner that facilitates the just achievement of individual and collective human purposes? [12]

The issue brings us back to the purposes of community governance, which is to facilitate human relationships and self-realization, with a minimum of interference in such a way as to stimulate individuals' discovery of the source of normativity rather than having it dictated by an external body. It is not the responsibility of State governance to ensure either the health or the happiness of its citizens. It is, however, its duty to ensure that the rules that it enacts and the way in which they are carried out do the least possible harm to the individual's ability to develop his or her own moral code. Not a single morality, or at least a morality for everyone, as the majority position of the Le Dain report maintained, but a facilitation of access to morality for citizens, morality here being understood in the sense of the ethical discovery of fundamental laws regarding relationships with others, as Professor Malherbe pointed out.

Professor MacDonald proposes a definition of governance that is drawn from the work of the Law Reform Commission, which gives guidance: the goal of governance is freedom, and not control. It is a question of defining the goals of society through policies and action programs that are then implemented through systems and processes and upheld by actors, allowing for the encouragement and affirmation of human action. The law, vehicle of choice of governance, does not seek instrumental purposes of simple expressiveness of rules or limitations passed for and on behalf of citizens, but a reciprocal process of building social relationships through which people, citizens and governments, can constantly adjust their expectations in terms of behaviour.

We therefore accept as a guiding principle for governance that **all of the means the State has at its disposal must work towards facilitating human action, particularly the processes allowing for the building of arrangements between collective government and governance of the self.**

Criminal law and the limits of prohibition

During the course of this report, we will have plenty of opportunity to describe the degree to which criminal law is at the very heart of any discussion of illegal drugs. It has come to the point that debates between those we refer to as prohibitionists on the one hand, and liberalists on the other, have overshadowed all other considerations. The Italian sociologist

Pareto (1848-1923), quoted by Professor Pires in his issues paper, said of human beings that even if we would like to believe that we are rational, we are above all argumentative beings, that is to say that we want "to give a logical aspect to behaviours that do not have the substance thereof." [13] In the context of the debate on cannabis, this sentiment takes on its fullest meaning: both sides hurling their arguments at the other, claiming they are recognized "truths".

Any discussion on the role and the place of criminal law as concerns illegal drugs, here being a question of cannabis, in effect poses questions regarding principles of the appropriateness of turning to criminal law. In general, both sides are quick to escape this stringent argument on the principles to turn to justifications. As is true of both sides, justification has nothing to do with the mechanism itself, being the criminal law, but with the target, being cannabis. The result is the litany of "proofs" of the effects of cannabis. For some, the effects are significant enough to "justify" turning to the criminal law, and to list the risks associated with the use of cannabis: addiction, learning difficulties, delinquency, and impaired driving. For others, these same risks are so minimal, or are already covered by other criminal legislation (driving under the influence), that they do not justify the use of the criminal law. Whatever the case may be, the debate is no longer in relation to the principles but on justification.

This reflection on the role of criminal legislation is specifically intended to bring us back to principles of the appropriateness of turning to criminal law. The central issue is to attempt to identify the criteria that will help us decide in what circumstances society can—or must—turn to criminal law. It must then be determined if these criteria justify the use of the criminal law in relation to cannabis.

Requirement for distinctions

Raising the question as to whether or not the use of criminal law as concerns cannabis is justified necessarily brings us back to a primary observation: the use of criminal law is not justified in all cases, but, in some cases, it must be. This observation is supported by three findings: (1) that most social relationships are regulated without the use of criminal law; (2) that certain behaviours are forcibly within the sphere of criminal law; and (3) that certain behaviours legislation has criminalized, at certain points in time, have since been excluded from this domain. The possibility of including or excluding human actions from the sphere of criminal legislation rests on the ability to make distinctions.

However, a significant difficulty arises as soon as this principle of distinction is accepted *in practice*, and not simply in theory. Once an act has been recognized as being a "crime", it becomes part of the body of what defines all offences: behaviours against society. According to the internal logic of criminal law, the only eligible distinction would *precede* the decision to incorporate a behaviour into the law or not. If the behaviour at issue is one that goes against the common good, it is a crime. Otherwise, it would be an uncivilized act, perhaps even an immoral one, but certainly not a crime. Once such a decision is taken, the only remaining distinctions to make would be with respect to form: the kind of procedure to follow and the severity of the punishment according to the nature of the offence.

Everything is done as if there were no positive distinctions made within criminal law between offences, as if the distinction was made only from the outside, before making the act an offence. In fact, distinctions between types of offences do exist. These are the distinctions made by Professor Pires, between standard prohibited behaviours and "two-sided" prohibited behaviours. It is more usual to distinguish between "victimless" crimes

and crimes "with victims", but this categorization is incorrect. On the one hand, under criminal law, the victim is all of society. There are certainly individual victims, but by some kind of extension, the harm has in fact been done to all of society. This would explain the principle of deterrence, in criminal legal theory: by punishing a guilty party, we try to dissuade all those who might be tempted to behave in the same way.

On the other hand, this categorization brings us back to a single aspect, the subject of the offence, losing view of the other processes by which criminal law distinguishes between different kinds of offences. In this way, another kind of distinction that is intrinsic to criminal law falls under the modes of justification. A decision to criminalize homicide does not require, as Professor Pires stresses, the undertaking of comparative studies in order to determine if one kind of murder is more or less harmful than another to the victim. The cognitive component is weak: here, there is no need to turn to external arguments to justify the criminalization. The act, in and of itself – this is the concept of *malum in se* – is enough to establish the legitimacy of the criminal standard. There is no such thing when the issue is drugs: since the beginning of prohibition, external justifications were needed regarding the harm caused by drug use. These subjects of criminalization have a strong cognitive component, in that they require a higher level of justification.

The distinction between kinds of prohibitive behaviours is therefore an analytical tool that is necessary in order to understand and think about the role of the criminal law as concerns drugs. What then are the criteria we can use in order to make these distinctions? This is the goal of the following sub-section.

Criteria for distinction

Professor Pires proposes seven criteria allowing for distinctions to be made between the various kinds of prohibitive behaviours in criminal law.

Seven criteria to distinguish between offences

Nature of the offence

Is this an issue of a conflict or an exchange?

Capacity of the law for discernment

Can the law see a victim and distinguish them from the deviant?

Referentiality

Is the actor able to appreciate the consequences of his actions on another person?

Limitation on natural liberty

Is it possible that there could be limitation of the freedom of the person to act?

Justification of the offence

Must the law turn to outside knowledge in order to justify the enacted standard?

Application of the law

Does application of the law require any active intervention?

Effects of the law

Can the effects of applying of the law compromise the standard?

We will briefly examine these, one at a time.

The nature of the offence

In order for there to be an offence, harm must have been done, which brings us to the victim. As we said above, in the broadest sense, criminal law sees society as the ultimate victim of any offence. The direct victim of an assault or theft is a witness, in the technical sense of the law. However, at a concrete level, the law recognizes direct victims. In certain cases, the concept of victim falls somewhere between the two: it is the neighbourhood or the surrounding area, for example, in the case of nuisance caused by solicitation for the purposes of prostitution. However, these nuisance situations are themselves at the limit of criminal law, in a sort of gray area between standard offences and two-sided offences.

What is remarkable is that the criminal law cannot take all three levels into account at the same time. If it recognizes the direct victim, then society becomes invisible. If it considers the neighbourhood, it becomes even more evident that it can no longer recognize a direct victim or society as a whole. Finally, and above all, if it takes the perspective of society as a whole, then it loses sight of not only the direct victim, but what is more, it loses its specificity. In effect, in the latter case, one could say that civil law also protects society: without respect for sales contracts and debts, society would go down the drain.

It is therefore not only the harm caused, nor even the presence of a victim that gives certain acts their criminal character, but the fact that they bear witness to conflict, abuse of power, infringement of one social actor upon another. Obviously, civil law also serves to resolve conflicts, from which comes the need for more criteria.

Capacity of the law for discernment

Is the law able to differentiate a victim from a perpetrator? In the case of standard prohibited behaviours, it generally can. For example, the victim of a homicide can clearly be distinguished from the perpetrator. Of course, there are exceptions to these standard scenarios, for example, where the victims themselves face criminal charges. A case in point would be where a victim of sexual assault is convicted of contempt of court for refusing to testify against her attacker.

When faced with two-sided prohibited behaviours, criminal law is hard-pressed to distinguish the victim from the perpetrator. Or, it finds the perpetrator to be the victim that must be protected from himself. Consequently the perpetrator becomes the victim of his/her own behaviour.

Alternatively, cognisant of the limitations and difficulty involved in punishing the victim - for example, a prostitute - criminal law shifts from the phenomenological world (the facts) to a different mode of reasoning. It moves from an analysis-based mode of reasoning (evidence enabling deduction) to one based on consequentialism or teleology (the goals underlying behaviour). For instance, criminal law justifies its intervention by the need to protect children. Consequently, it loses, and causes us to lose, sight of the (ultimately inexplicable) reasons why the offence was brought before the courts in the first place.

Referentiality

This term refers to the capacity of perpetrators of the offence to recognize –despite “explanations”, denial or other self-justification methods - the harm caused to others by their actions. Even in case of some borderline standard prohibited behaviours, such as cruelty to animals, the perpetrator of the offence – who, for example, has hanged his neighbour's dog from a tree – may recognize the harm caused by his/her action to the animal's owner. The criminal act in the case of two-sided prohibited behaviours may be self-destructive, but is not motivated by maliciousness towards others, since it does not create a direct relationship with others. Indeed, the sociologist A. Ehrenberg raises the issue of the absence of a relationship with others exhibited in all types of drug use when interpreted as a form of withdrawal from the world. However, this is already beyond the issue of criminal law into to the realm of political discussion on democracy.

Limitation on natural liberty

We shall deal only briefly with this issue here since it is discussed at greater length later. Suffice it to say, however, that the law places special restrictions on what Kant called the “unfettered freedom of action”: criminal law restricts an individual's liberty to take the life or property of others. Consequently, it institutes specific rights and freedoms, i.e. the right to enjoy life and property. Fundamental problems arise where the law seeks to restrict the very rights and freedoms that it provides. A case in point is prostitution, where the law seeks to restrict the very right to enjoy one's own body and the freedom provided for by the law.

Justification of the offence

Criminal law very seldom uses external sources to justify the criminalization of offences. A good example to illustrate this is our original homicide scenario. Criminal law does not refer to sociology, anthropology, history, economics or medicine to establish the various effects of different types of homicides and various ways of taking life. The same rationale can be applied to sexual assaults, theft, fraud, etc. The cognitive component in the justification process is weak. The rationale underpinning the standard prohibited behaviour is deeply rooted in the social relationship. It is quite clear that any society even considering legalizing homicide would become untenable and would cease to be a society at all. Consequently, our society does not question the validity of the criminalization of homicide. The sole issue that

arises in some countries, but which was addressed in Canada a long time ago, is the sentence society imposes on murderers.

Quite the opposite situation exists for two-sided prohibited behaviours. They require empirical demonstration and justification with a strong cognitive component. As one might expect, this issue is central to any debate on drugs. Indeed, this report accords a great deal of importance to this matter.

Below professor Pires deals with this issue in graph form.

As professor Pires points out, the criterion here is not to establish whether there is consensus or "dissensus" on the criminal standard or on the terms relating to the type and

possibility of democratic debate but rather to determine whether the source of the legitimacy of the standard is endogenous or exogenous. In the case of standard prohibited behaviours, the source is endogenous. In the case of two-sided prohibited behaviours, it is exogenous. However, the criminal law creation process remains the same, i.e. democratic debate resulting in the adoption of enabling legislation. It is for this reason that it is all too easy to lose sight of the fact that the two types of offences are not in fact of the same nature.

[Translation] The important point to remember is that all two-sided prohibited behaviours to which this criterion applies exhibit certain specific problems. (i) They all have a more precarious, more ideological or more fragile endogenous basis because they are not rooted in a concrete, conflictual deviance and because the norms are not sufficiently detached from certain forms of (purely moral or religious) knowledge or are not sufficiently unaffected by knowledge of facts. (ii) They are therefore more subject to a process of selection from the available knowledge and to the actual value of the knowledge that we select or that is available to us in respect of them at a particular point in time. That means that a critical and serious examination of the knowledge is of crucial importance. (iii) They are, to all intents and purposes, more polemical and subject to public debate at a particular point in time, and more likely to be based on major cultural or cognitive misapprehensions. [14]

Application of the law

In the vast majority of cases involving standard prohibited behaviours, offences are brought to the attention of the police by way of a complaint. Complaints to the police most often involve theft, sexual assault and homicide. Indeed, approximately 90% all offences that come to the attention of the police do so through complaints. In the case of two-sided prohibited behaviours, close to 100% of offences are discovered pro-actively.

One might point to the increase in complaints from people living near cannabis plantations in British Columbia. However, these people's complaints perhaps deal either with the very real danger of fire – since the illegal nature of cannabis production forces producers to illegally tap into electricity lines – or with pressure on them from criminals to keep quiet – also because producers are forced to operate illegally.

The pro-active application of the criminal law in the case of two-sided prohibited behaviours has harmful consequences, including social and human costs but also the possibility of discriminatory application of the law or police corruption. This raises the question of whether the endogenous basis of the offence warrants these consequences.

Effects of the law

The effects of the law stem, to a certain extent, from the previous criterion and all the others before it. This criterion relates to the legitimacy of the standard. The difficulties and criticism arising from pro-active police action, changes in social normativity or in the knowledge base, make the law counter-productive, which, in turn, raises questions *sui generis* as to its basic tenets and legitimacy.

We have compiled Professor Pires' suggested criteria under three headings. Each criterion includes an "action-related" and a "law-related" element, which can be used in distinguishing between various criminal offences.

Nature of the offence. The action here refers to the relationship between the "victim" and the "perpetrator", i.e. are they in a conflict or exchange-type situation? The law-related criterion focuses on establishing whether criminal law is able to distinguish between the victim and the perpetrator.

Justification. The action in this case is to determine whether perpetrators are able to recognize the harm caused to others by their actions. The legal aspect of the equation deals with determining the basis of the legitimacy of the standard.

Operativity. The action relates to identifying whether the application of the appropriate standard is triggered by the victim or witness or whether pro-active action is required by law-enforcement agencies. The legal side of the equation is to establish whether the enforcement of the standard could potentially sabotage itself.

It is our view that the analysis of *Criminal Code* offences based on these three criteria addresses the fundamental issue of whether limiting the liberty of an individual to act is justified in the criminal law. It is for this reason that we are less concerned about the criteria themselves than about the result of the application of these criteria to the criminal law standard.

Application to illegal drugs issues

Are illegal-drug-related offences two-sided prohibited behaviours under criminal law? Undoubtedly so.

The offence created implies an exchange-type situation and it is relatively unimportant whether the subject of the transaction is a prohibited substance or not. It is deemed to be a consented exchange between two parties. In the case of cannabis use – or the personal use of the opium or cocaine that just happens to be growing in my garden, - no exchange with another party takes place. Nevertheless, possession is prohibited in Canada, as is use in certain other countries.

Criminal law is hard pressed to find a victim. With respect to impaired driving endangering the lives of others, the *Criminal Code* contains a provision for the punishment of an individual operating a vehicle under the influence of any substance. The argument that cannabis poses enforcement difficulties is not valid. The same difficulties apply to driving under the influence of prescription drugs. What about the issue of children? It is difficult to see how cannabis use harms children, except where an "uncontrolled" market, brought about either by a lack of regulations or by the current illegality of cannabis fostering illegal markets, does cause harm to children.

In relation to referentiality, a user or even a seller does not see himself or herself as causing harm to others. At least, this is the case for cannabis derivatives. Of course, a situation where "grass" is mixed with other substances and adulterated substances are sold to users is reminiscent of the era of prohibition and is one of the reasons why prohibition was scrapped. To justify behavioural standards and the offence, criminal law has to refer to external sources over which – and the interpretation of which – it exerts no control.

The operativity of the standard raises both application problems and on-going questions as to the legitimacy of the standard itself.

On the whole, the legal basis of the criminal law is weak where the prescribed standard (1) does not concern a relationship with others and where the characteristics of the relationship do not create a victim and a perpetrator able to recognize his/her actions; (2) has to find its justification outside fundamental social relationships; and (3) results in a form of enforcement, the harmful effects of which, undermine and challenge the very legitimacy of the law. (Where criminal law is involved in these issues, the very standard prescribed by the law makes the perpetrator the victim and tries to protect him from himself, which it can do only by producing a never-ending stream of knowledge, which remains constantly out of his reach.)

This analysis indicates to us that **only offences involving significant direct danger to others should be matters of criminal law.**

Science or approximate knowledge

The public is generally willing to leave the choice of control methods to the interaction between health care experts and government agencies because they recognize that the drug is being used essentially for their well-being and they rely on expert knowledge to decide the best way to protect that.

(...)

Therefore, in formulating social policy on non-medical use, you must consider not only at the harm done by the law or at the harm done by the drug, but as far as possible a full cost/benefit analysis of drug use and the control measures, and any change in control measures that you may contemplate. This is a matter for all of society to decide - not for experts to decide as a matter of scientific knowledge. [15]

From the very outset of the Committee's proceedings, we have been aware that knowledge - even science-based, is not of itself a sufficient basis for the development of public policy on illegal drugs, in particular cannabis. One might be tempted to think that a Special Committee on Illegal Drugs - in this case, cannabis - should base its conclusions and recommendations solely on knowledge. However, no amount of knowledge alone could determine public policy. There are several reasons for this.

Firstly, the process of knowledge development is ongoing. This process is by definition a continuing study of the unknown. The pursuit of knowledge, in view of the scale and complexity of the task, is always approximate - or, as the French anthropologist Claude Lévi-Strauss would have put it, cobbled-together. To search for knowledge is to acknowledge our ignorance of fundamental questions, which by definition remain open-ended. According to Professor de Koninck:

[Translation] It is appropriate for us to celebrate the ignorance we have at last discovered because it is now part of our known ignorance (ordinary ignorance, in the classical vocabulary), as opposed to unknown ignorance (twofold ignorance) - thanks to neuroscience, oceanography, astrophysics, but also to depth psychology, the history of religion (to cite only two of the advanced "humanities") and to other disciplines which have particularly progressed in our era. We must celebrate it with the wonder and puzzlement which are still the necessary prerequisite of all discovery. [16]

This situation might seem ironic, since never at any other time has such a wealth of information been produced - in all areas of human culture but also specifically on the issue of drugs - than in the modern era. So much knowledge has been gained in fact, that experts, such as economists, sociologists, criminologists, psychologists, and geneticists have become necessary players in the whole public policy justification process. It is only thanks to the ability of a team of scientists to successfully influence decision-makers that the greenhouse effect and the global warming phenomena have been acknowledged as real and that action has been taken to protect our environment. Governments' macro-economic decisions will be explained to the public on the nightly news by a senior economist. Where urban violence occurs or a serial killer is on the rampage, psychologists and criminologists are brought in to explain what is taking place, or to justify the thrust of criminal policy. The mass production of information and reference to experts in policy development give the public decision-making process at least credibility, if not legitimacy. Consequently, people who feel disenfranchised or even disillusioned by what they perceive as the disparity between the real world and the world presented to them in the media, will feel less inclined to challenge political decisions which are based on the "authority of knowledge". Information is becoming knowledge, the learned are becoming experts and politicians, (who are increasingly allergic to independent reflection on principles and fundamental issues), have come to rely on this handy army of "experts", who are ever ready to proffer advice.

However, information is not knowledge. Indeed, knowledge cannot be reduced to mere information. The Internet teems with information, but no one would dare contend that all of it could be deemed knowledge.

Secondly, the knowledge production process is fragmented and, like modern life itself, has difficulty addressing the issue of meaning. No better knowledge is produced with the addition of academic disciplines all studying issues through the lens of their own field of expertise than is produced when one of these disciplines works in isolation. The promotion of inter-disciplinary and trans-disciplinary approaches will remain as meaningless as calls for a social "partnership", until there is genuine resolve to grasp the issues of meaning and comprehension. Prestigious institutes such as NIDA may have huge research budgets and conduct research, which in itself, is both fascinating and useful, but they function as if their sole goal were to demonstrate the bio-psychological mechanisms of "drug addiction" and the dangerous abuse that results from the consumption of "drugs of abuse", as they call them.

However, the reasons for particular practices cannot be reduced to the sum of their constituent parts, or a jumble of re-enactments. Remarkable knowledge about cell mechanisms and genetics does not provide answers to the ethical and political issues raised by cloning. In the same way, knowledge about the mechanisms of the atom and nuclear fission did not provide answers to the issue of the manufacture and use of nuclear weapons. The highly abstract and math-based discipline of economic "science" is so far removed from reality that it is no longer able to explain the gulf that exists between nations or

between extravagant wealth and human misery.

Researchers seem more concerned with mathematical equations and abstractions, and as a result, fail to ask fundamental questions. Their fields of knowledge are patchy and highly compartmentalized and there often remains a confusion between knowledge, information and technology. To ask fundamental questions, is to link issues and to re-acknowledge the complex nature of these issues in an attempt to identify the underlying reasons. There are on-going debates between scientists and philosophers over linking issues and over the shift towards an integrated knowledge base of human beings. [17]

Thirdly, this raises the whole issue of the so-called "learned idiot" "experts".

[Translation] Idiots is the right word (from the Latin *idiotia*, meaning "ignorant person", borrowed from the Greek *idiōtēs*, of the same meaning, as opposed to *pepaideumenos*, "cultivated man"). What is unfortunate is that their unearned reputation as experts extends all the more the influence of this "idiocy" in societies such as ours where "science" exercises a magic power and "that power appears increasingly legitimized by 'learned' experts," as Jacques Testart notes. "Indeed, the expert provides reassurances and citizens are reluctant to decry the absurdity or cynicism of a political decision approved by 'the most qualified experts'." [18]

We are not trying to take issue with science but rather to challenge the difficulty scientists have in reflecting on their research. It is one thing to conduct cutting-edge research on specific issues, but it is quite another to claim to use the resultant fragmented knowledge to provide "explanations". It is yet another to attempt to provide answers that science is quite simply not able to provide. It is one thing to conduct studies of the behaviour of laboratory rats, which have been administered a dose of Delta 9-THC (the principal active component in cannabis), but it is quite another to claim that this type of experiment is useful in understanding cannabis use and its effects on human beings. It is still another issue to contend that this research can provide an answer to cannabis public policy-related issues.

Drug use is a social action and forms part of a particular individual's behavioural pattern and as such, cannot be reduced to mere neuro-psychological mechanisms. It might be useful to understand the mechanisms involved but this knowledge alone will not explain the reasons underlying drug use in our society.

Fourthly, the colonization of the mind by the authority of experts-acting as mediators between politicians and the community – equates to the dangerous colonization of social sciences by natural sciences. This is nothing new. This process began in the 19th century but significantly accelerated during the 20th century. The most significant manifestation of this process is the ever-closer links between psychology and neuro-science. Consequently, a transposition of methods and problem-approach systems has taken place. As a result, human sciences have now taken on a quantitivist-reductionist approach, which in turn has led to a knowledge crisis. A sample of 100 young people chosen at random to undergo a battery of psychological tests aimed at determining why they use cannabis will provide apparently serious anecdotal research and a series of correlations, which are unlikely to

reveal the reasons behind drug use.

In some academic and decision-making circles, it is fashionable to refer to "evidence-based" policies. By this, we mean policies based on "scientific" evidence of approaches that work. One of the most striking examples of this approach was the Crime Reduction Strategy implemented in the United Kingdom in 1998 by the then newly-elected Labour government. Under this scheme, considerable money was earmarked to support those crime prevention initiatives that studies had shown to be effective with the goal of reducing various types of crime by a specified percentage over a five-year period.[19] Despite this scheme, the United Kingdom is currently facing a crime "crisis", in part because crime rates have risen, and the Crime Reduction Strategy is a shambles.

It is tempting to ask how the outcome could have been any different. Social engineering strategies in areas such as population control and crime prevention date back to the 19th century and have rarely provided tangible results. These initiatives, which are built on one or two "formulae", themselves drawn from a small number of controlled experiments, do not take account of the complex nature of the modern world, with its ever-growing, increasingly fluid and intangible interdependent and multi-level relationships. Is it in an attempt to flee this reality that we seek refuge in the mathematical abstraction of correlations between supposedly predictive variables?

The Committee's report - especially the second part - has put great emphasis on research-based knowledge. This focus is an attempt to do justice to the knowledge that has been developed over the past few decades. We considered it important and indeed necessary to give it detailed consideration. Indeed, the Committee recommends that the drive for knowledge acquisition on specific issues that we deem to be important be continued.

We do not claim, however, to have answered the fundamental question of why people consume psychoactive substances, such as alcohol, drugs or medication. We were indeed surprised, given the quantity of studies conducted each year on drugs, that this area has not been covered. It is almost as if the quest for answers to technical questions has caused science to lose sight of the basic issue!

Scientific knowledge cannot replace either reflection or the political decision-making process. It supports the process. Indeed, we consider that its greatest contribution to public drug policy is in doing so. Our guiding principle is that **science, which must continue to explore specific areas of key issues and reflect on overarching questions, supports the public policy-development process. No more, but no less.**

Conclusions

One of the greatest challenges for modern societies is to collectively invent new forms of social life and community belonging that stretch beyond the tools of formal law. As individuals with objective and subjective rights, people can participate fully in the development - we would even go as far as to say the conquest - of the collective project of creating a society. It is no longer sufficient just to develop legislation and for people to automatically accept this legislation just because it was democratically decided by

Parliament. We need to promote ethical participation - through discussion - in the development of collective and individual governance. The groups from civil society, whether they oppose the "behind-closed-doors" globalization process or support promoting fair and sustainable development, are asking how we can collectively develop a joint-participation normativity process, in which collective governance and individual governance are mutually supportive.

This discussion brings us to the conclusion that public policy on illegal drugs, specifically cannabis, ought to be based on an ethic of reciprocal autonomy and a resolve to foster human action. It ought to defer to criminal law only where the behaviour involved poses a significant direct danger to others. It ought to promote the development of knowledge conducive to guiding and fostering reflection and action.

[1] Professor Line Beauchesne, witness appearing before the Special Committee on Illegal Drugs, Senate of Canada, Second session of the Thirty-sixth Parliament, October 16, 2000, Issue 1, pages 33-36.

[2] They are: R. Macdonald, Professor of Public and Constitutional Law, McGill University, *The Governance of Human Agency*; A.P. Pires, Professor of Criminology, University of Ottawa, *Legislative Policy and "Two-Sided" Crimes: Some elements of a pluridimensional theory of the criminal law*; T. de Koninck, Professor of Philosophy, University of Laval, *The Role of Knowledge and Culture in Public Policy on Illegal Drugs*; and J.F. Malherbe, Professor of Social Work, Université du Québec à Montréal, *The Contribution of Ethics in Defining Guiding Principles for a Public Drug Policy*. These texts are available on line at: www.parl.gc.ca/illegal-drugs.asp.

[3] On this subject, see the work of the German sociologist and philosopher Jürgen Habermas, particularly *De l'éthique de la discussion*. Paris : Cerf. The author presents the process of ethical discussion as follows: Through debates, all participants must acknowledge that, in principle, each person participates fully, freely and equally, in the cooperative search for truth in which the unlimited strength of the best argument will carry the day. Practical discussion is considered as a demanding form of argumentative training of the will, which (...) must guarantee, through the universal presuppositions on communication, the fairness of all possible normative agreements negotiated under these conditions. (...) Furthermore, practical discussion is considered to be a process of inter-comprehension in which, due to its own nature, all participants ideally adopt a role. Therefore, the individual and ideal adoption of a role played by each person in particular and *privatim* is transformed into a practical public operation by all, intersubjectively and in common. (pages 18-19).

[4] There is an interesting discussion on the subject in Professor Pires: pages 41 *passim*.

[5] Malherbe, J.F. (2002) *op. cit.*, page 7.

[6] See Malherbe's discussion of the subject on pages 23-26.

[7] *Ibid.*, page 21.

- [8] *Ibid.*, pages 27-28.
- [9] Among others: Taylor, C., (1989) *Les sources du moi*. Montréal: Boréal..
- [10] MacDonald, *op. cit.*, page 24 of the English version.
- [11] *Ibid.*, page 25.
- [12] MacDonald, *op. cit.*, page 78.
- [13] Quoted in Pires, A.P. (2002), *op. cit.* page 8.
- [14] Pires, A.P., (2002) *op. cit.*, page 59.
- [15] Evidence by Dr. Harold Kalant, professor at the University of Toronto, before the Senate Special Committee on Illegal Drugs, Senate of Canada, first session of the thirty-seventh Parliament, issue no 4, pages 69 and 78.
- [16] De Koninck, T., (2002) *op. cit.*, page 25.
- [17] Based on a very eloquent exchange between a philosopher and a neurobiologist: Changeux, J.P. et P. Ricoeur (1998) *What makes us Think* (translation of: *Ce qui nous fait penser. La nature et la règle*. Paris: Odile Jacob), pages 77-78
- [18] De Koninck, T. (2002) *op. cit.*, page 6.
- [19] Chapter 20 discusses this issue in greater detail since the strategy includes a drug-related initiative.

Chapter 4

A Changing Context

Our work is being conducted at a time in history, in a given historical period. That history is not simply a field external to us, something outside us, exercising no influence on what we do. It is closely bound up with our actions, influencing them in various subtle ways. At the same time, because we are living through and making that history, we do not have the necessary distance from it to reconstitute all its elements or to understand all its implications. However, to re-situate our work in its complexity and uncertainty, we have a responsibility to attempt to ascertain certain elements of this history-in-the-making. This brief chapter is an attempt to identify certain historical elements we think are relevant to our effort. We have identified six elements which we have divided into two spheres, international and national, recognizing that those two spheres necessarily interact with each other. The international elements are: the globalization of markets and the trend toward economic and even political integration; the spiralling increase in discourse on safety and the drug-crime equation; and the aspects of change becoming apparent in certain countries with regard to drug policies. The national elements are judicial activism, which is reflected in significant court decisions at least with regard to the therapeutic use of cannabis; the adoption of the National Strategy on Community Safety and Crime Prevention; and the fight against organized crime.

Changes in the international sphere

The last two decades have witnessed significant changes in the international arena and in the structure of national states. The idea here is not to write the history of or to analyze this period. A few of those changes, however, have had a definite impact on drugs.

Globalization and integration

Since the early 1980s, with market deregulation, we have witnessed a globalization of trade and a more significant degree of continental integration. The end of the Cold War and the disappearance of the Soviet Bloc, as well as the opening of China to capitalist markets, have merely increased the pace of these movements. As a result, we have seen, in particular, an increasing degree of integration of the European economy under the Maastricht accords and in the North American Free Trade Agreement between Canada, the United States and Mexico.

At the same time, rapid technological change, particularly through the Internet and satellite communications, has helped to further open borders, although in varying ways and to various degrees, depending on the level of development in the various countries, to the movement of goods and capital. Similarly, the increase in population flows and travel has led, at times by default or even against the will of certain states, to freer movement of people.

These changes have had a significant impact on the illegal drug markets. The opening of markets and borders has of course created new money laundering opportunities, while making it more difficult to monitor borders and transportation. However, we all too often forget certain effects of macro-economic policies governing global capital flows and expected structural adjustments, particularly in developing countries. One study produced for the United Nations International Drug Control Program clearly shows this.

Efforts to achieve (balance of payments) stability often aim to reduce the external deficit by reducing the level of domestic consumption. Macroeconomic stabilization often requires a reduction in expenditure by government and/or the private sector.

In situations of reduced money growth, an infusion of hard currency can bolster a country's foreign reserves, ease the hardship associated with expenditure-related policies, and moderate foreign indebtedness. Drug money could in this light be perceived as a potentially stabilizing force, a source of capital without the strings of conditionality attached. Clearly, there are "benefits" which accrue to countries which serve as reservoirs of the revenues from the international drug trade. [1]

In addition, the trend toward the privatization of entire sectors of national economies, particularly in Eastern European countries after the fall of the Berlin Wall, but also in a number of Latin American and Asian countries, in an environment in which internal regulation measures are weak and bank credit tight, fosters the inflow of money from

organized crime particularly through the laundering of drug money. It has been observed moreover that the concentration of industrial production in those countries is not necessarily reduced following privatization, thus further favouring penetration by organized crime.[2]

Observers also too often forget the role of investors from the developed countries, where the push for deregulation and market liberalization originates. In those countries, as Campodónico has noted, "*(r)are indeed are prosecutions against drug traffickers or financial institutions of the industrialized world, which is precisely where most of the proceeds of drug trafficking are kept.*"[3] The result is a kind of dual discourse in which the necessity of liberalization of capital for multinationals makes it impossible to distinguish between clean and dirty money. The example of Peru developed by Campodónico and that of Russia examined by Keh show striking structural similarities.

The end of the Cold War also meant that the countries allied to the Soviet Bloc, or internal guerrilla groups, had to turn to other sources of financing. This is the analysis of the Geopolitical Drug Watch and its founder Alain Labrousse, who appeared before the Committee on May 28, 2001, citing the example of Kosovo:

What happened in Kosovo is a good example in this regard. The creation of the KLA was financed by intense heroin traffic from Istanbul. The heroin was sold in Switzerland to buy Kalashnikovs and handguns. They were more or less freely available and were stored in the Albanian part of Macedonia. [4]

And as though to make the connection with the perverse effects of liberalization and the involvement of macroeconomics, Mr. Labrousse wrote in an earlier book:

[Translation] According to estimates, drug trafficking in the world generates between 420 and 577 billion francs in business annually. The growing role that these funds play in the democratization and economic restructuring process is leading to an explosion in drug production and trafficking in Asia, Africa and the East. It is this windfall, drawn on by local powers of all kinds, that fuels nationalist, ethnic and religious conflicts in the Third World and countries of the former Communist Bloc. Drugs, an economic issue and a tool of power, are now a given in international relations. Apart from a few major traffickers, the banking systems of the rich countries, the IMF and the major international organizations are involved. [5]

Like other analysts, Mr. Labrousse observes that the developed countries are not immune to criticism since they "close their eyes" when their interests, particularly strategic and economic, are at stake.

[Translation] An incident occurred and was reported by the press when the international financial action group prepared a list of countries suspected of engaging in money laundering; it did not include either the Anglo-Norman island of Jersey or the Principality of Monaco, which surprised everyone. It was subsequently discovered that France and England had negotiated with each other to ensure neither appeared on the relatively

infamous list. [6]

This is also the case of European interests in Morocco and Africa more generally, as well as American interests elsewhere, in tax havens.

Chapter 1 of the 2001 report of the International Narcotics Control Board (INCB), a UN agency responsible for monitoring implementation of international drug control treaties, concerns the effects of globalization and new technologies. The agency writes that, apart from their "innumerable benefits" globalization and new technologies have had perverse effects: undermined cultural identities, political and social itemization, marginalization and growing poverty in certain sectors. According to the Board, *"these disparities are exploited by drug dealers and traffickers in their attempts to develop new markets. Moreover, in the course of the last decade, the growth in trade and financial activity has provided criminals with greater possibilities for concealing the illicit transfer of goods such as internationally controlled drugs and precursor chemicals and for disguising the proceedings therefrom."*[7] According to the report, drug traffickers use new technologies to enhance the effectiveness of product delivery and distribution, to protect themselves and their illegal activities and to commit conventional offences using new methods or to commit new types of offences.[8] Among other things, the Board also notes:

- The Inter-American Drug Abuse Control Commission noted for 1999-2000 that the Internet had become the most widely used medium for expanding the production of synthetic drugs in some countries of that region;
- According to the International Criminal Police Organization (Interpol), in 2000, over 1,000 Web sites world-wide offered to sell illicit drugs, mostly cannabis;
- Increasing recourse to electronic means of financial transfer, together with a massive growth in the volume and speed of monetary flows, lead to reduced capability for detecting illicit capital movements; and
- The Financial Action Task Force on Money Laundering (FATF) has warned that there are three characteristics of Internet use that could aggravate certain conventional money-laundering risks: ease of access, depersonalization of contact and rapidity of electronic transactions.[9]

In short, while the search for greater coherence, and indeed for better predictability of international markets, is highly promising, particularly as regards the developing countries, it also has untoward effects, regardless of all other geopolitical considerations. Moreover, these characteristics also afford "unexpected" benefits... for organized criminal groups.

Difficulties of the security debate

Over the same period, in various Western countries, a preoccupation for domestic security has gradually arisen in response to the perceived or actual increase in crime and to the public's feelings of insecurity. The effects of this have been observed in election campaigns

based on law and order and in a shift toward measures considered repressive by some, such as zero-tolerance policies. [10]

With regard to drugs, this social discourse has had two main components. The first, starting in the early 1980s under Ronald Reagan's presidency, was the "war on drugs", which went far beyond U.S. borders. The second, starting in the late 1980s, an attitude increasingly emerged that equated drugs with crime.

The war on drugs made it possible to allocate unprecedented resources to the effort. It was at this time, it will be remembered, that Canada launched the first phase of its anti-drug strategy with a budget of \$210 million over five years. In its "war on drugs" the United States allocated 17 times that amount, increasing federal spending alone from \$100 million in the early 1970s to more than \$17 billion in 2002. The combined spending of the federal government and the states on the war against drugs was estimated at more than \$40 billion in 2002. [11] As a result, that war led to a quadrupling of the American prison population, from 500,000 inmates in the early 1980s to more than two million in the late 1990s.

During the 1990s, corrections constituted one of the fastest growing line items in state budgets. On average, corrections consumed 7 percent of state budgets in 2000. Today, it is costing states, counties and the federal government nearly \$40 billion to imprison approximately two million state and local inmates, up from \$5 billion in combined prison and jail expenditures in 1978. Twenty-four billion of that was spent on the incarceration of non-violent offenders. Despite the modest recent decline in state prison populations, the massive growth in state prisoners over the past two decades has meant that **one out of every 14 general fund dollars spent in 2000 was spent on prisons.** (...) The expansion of America's prisons has been largely driven by the incarceration of non-violent offenders. The percentage of violent offenders held in state prisons declined from 57 percent in 1978 to 48 percent in 1999. From 1980 to 1997, the number of violent offenders committed to state prison nearly doubled (up 82 percent), the number of non-violent offenders tripled (up 207 percent) while the number of drug offenders increased 11-fold (up 1040 percent). [12]

In Canada, as will be seen in Chapter 14, while the overall crime rate has been declining regularly in the past 10 years, the percentage of drug-related incidents has constantly increased, and the overall prison population has remained stable. There are even grounds to suggest that the percentage of inmates with addiction-related problems has in fact risen.

This discourse has resulted in a host of national and international measures, in particular increased policing powers in the war against drugs in various countries, a reinforced international police infrastructure, use of the war against drugs in international diplomacy and its reflection in UN proceedings, particularly at the United Nations' extraordinary session on drugs in 1998.

The other aspect of the debate is the drug-crime equation. For a significant proportion of citizens, drug use is associated with crime, when it is not simply reduced to one of its major causes. Witness the following comments:

We cannot continue to apply policies and programs that do not deal with the root causes of substance abuse and attendant crime. [13]

In countries that have adopted permissive policies toward drug use, violent crime and organized criminal activity have increased proportionately to the drug trade. [14]

The social harm from other illicit drugs (such as cannabis - ed.) presents a different picture. In some communities or neighbourhoods across the country, the harm caused to innocent victims of violent crime and property crime is very great. (...) This results from drug-addicted users committing crimes to get money to feed their habit. [15]

Deeply rooted in perceptions and attitudes, this belief, which is discussed later in Chapter 6, and which research data support only in part, has resulted in a series of measures including the creation of special drug treatment courts and the introduction of treatment orders for offenders with known dependence problems, the spread of urine testing programs in the work place and in prisons, as well as the remodelling of socio-community intake systems.

This association of drugs and crime sprang from fertile ground, for a number of reasons: changes caused by globalization and the realignment of the role of the state, which explain at least in part the increased social and economic inequalities between North and South, but also within countries, in the North and in the South; the increased insecurity of general living conditions following the 30 years, from 1945 to 1975, of unprecedented prosperity and employment security; divisions within communities caused by uncertainty and inability to manage mixed populations. For all these reasons the increase in "ordinary" crime (break and enter, car theft, vandalism and so on) has become the perfect metaphor for the insecurity of living conditions. Being an easy target that has considerable, very real impact on everyday life in neighbourhoods already subject to other social and economic problems, minor crime now elicited a stern, repressive response. Hence, in all Western countries, the number of prison terms and length of sentences increased starting in the mid-1980s. In addition to this collective security "crisis", there was a division between generations, as a result of which youths as a group came to be viewed as a source of concern, if not simply potential criminals. For example, during that period, Canada experienced an unprecedented increase in its reliance on detention for minors, placing it at the top of the list of industrialized countries in that regard. [16] Since young people are the principal drug users, the rest of equation was quickly established.

From anti-drug policies to drug policies

However, the advent of AIDS in the 1980s helped to cast doubt on prohibitionist policies on illegal drugs. Toward the end of the decade, it was discovered that intravenous drug users had a high rate of HIV and other pathologies such as hepatitis. In fact, intravenous drug use was the second leading cause of infection among men, after homosexual and bisexual practices, and the second leading cause as well among heterosexual women. [17] Repressive policies, based on prohibition of use, do not make it possible to adequately inform users or to adopt risk reduction and preventive measures, such as needle exchanges or supervised injection sites. The increase in harm reduction practices in a number of countries would be based on this new reality.

The creation of agencies monitoring illegal drug use trends was another factor in the questioning of drug policies. Until the mid-1980s, the U.S.A., England and Australia were virtually the only countries with systems for regular and repeated epidemiological surveying of drug use trends in the population. Starting in 1993, the European Union developed its tools to monitor trends in use and policy responses with the establishment of the European Monitoring Centre for Drugs and Drug Addiction and its focal points in individual EU countries. This regular monitoring system showed, among other things, that drug use trends may not vary so much with public policies as with social, cultural and symbolic factors.

Lastly, some states began to question their public policies on the basis of impact assessment studies. That was the case in particular of Australia and Switzerland as well as certain American states. Apart from the often emotional rhetoric, it was discovered in those studies that, in addition to having little impact on drug use, policies had significant untoward effects and high economic costs. It was moreover the results of certain cost benefit studies that led California and other U.S. states to review their highly repressive approaches (involving, for example, automatic incarceration on the third offence, whatever it might be). [18]

While national legislation on illegal drugs, particularly cannabis, did not in fact change, there was nevertheless a distinct trend toward questioning practices, particularly legal practices, and seeking alternatives while still complying with the international conventions. That was the case of Spain, Italy, certain Australian states, Belgium and, more recently, Portugal and Switzerland.

Changes in Canada

We have identified three major causes of change in Canada over the same period which have had at times paradoxical effects: the judicial activism resulting from the coming into force of the Canadian Charter of Rights and Freedoms in 1982, the adoption of the National Strategy on Community Safety and Crime Prevention and the fight against organized crime. Since we will be discussing each of these causes more fully in subsequent chapters of this report, we will only briefly sketch out the broader context here.

Judicial activism

With regard to cannabis, there is undoubtedly no better example than the decision by the Ontario Court of Appeal in the *R. v. Parker*. [19] In that case, the Ontario Appeal Court considered the constitutional validity of the prohibition against marijuana under the *Controlled Drugs and Substances Act* in the context of its use for medicinal purposes. The Court unanimously held that Terrance Parker's allegations that the prohibition violated his fundamental rights under section 7 of the Canadian Charter of Rights and Freedoms were founded. Rosenberg J.A., writing for the majority, found that Mr. Parker needed marijuana to control the symptoms of his epilepsy and that the prohibition against marijuana possession was accordingly unconstitutional. The Court thus held that the statutory provision was null and void. However, they suspended the declaration of invalidity for one

year, thus giving the government time to amend the act accordingly. In July 2001, as a result of that decision, the government made regulations circumscribing the use of cannabis for medicinal purposes.

Other judicial decisions altered the applicability of drug legislation in various ways, particularly regarding police powers. Certain of these decisions are briefly reviewed in Chapters 14 and 15.

Generally speaking, it has been observed that, since the Charter came into force, the courts have played an increasingly significant role in Canadian political life, and the drug issue has not fallen outside the scope of this judicial activism. Moreover, a decision on the issue of the use of cannabis for non-medicinal purposes is to be rendered by the Supreme Court of Canada in the coming months.

A national crime prevention strategy

In 1999, as a result of the work of the National Crime Prevention Council, the federal government introduced the National Strategy on Community Safety and Crime Prevention. The purpose of this national strategy, originally allocated an annual budget of \$35 million, which increased to approximately \$65 million this year, is to prevent crime through social development actions in the communities by taking action in particular on risk factors among children and youths. While the Strategy does not specifically mention prevention of drug use, a certain number of its projects and activities have focused on that issue in various ways.

The Centre has seen fit to fund two special drug treatment court pilot projects, in Toronto and Vancouver, for the purpose of preventing repeat drug abuse and related criminality. The Centre also supports an initiative of the Federation of Canadian Municipalities to introduce drug-free communities in a certain number of cities. It is also supporting the evaluation of alternative measures programs for youths accused of cannabis possession.

The fight against organized crime

If there is one legal subject that has given rise to extensive public debate, led to the passage of new legislation granting greater powers to police forces and resulted in spectacular police operations and no less spectacular trials, it is organized crime, in particular criminalized motorcycle gangs in Quebec, the Italian-Canadian Mafia in Montreal and the Asian heroin rings on the West Coast.

In 1995, Parliament passed Bill C-95 granting police officers more effective tools for investigating and prosecuting individuals taking part in gang activities. Four years later, three problems led the government to propose amendments to the *Criminal Code* and other statutes: the problems involved in implementing the act, the growing influence of organized crime in Canada and the illegal activities committed by police officers in undercover operations. In 1999, in passing Bill C-51 (an omnibus bill amending the *Criminal Code*), Parliament granted immunity from prosecution to police officers who had to commit offences related to money laundering in the course of an investigation or in performing other duties. According to the government, the purpose of that amendment was to support police officers in the fight against organized crime and money laundering.

In addition, on October 19, 2000, the Sub-Committee on Organized Crime of the House of Commons Standing Committee on Justice and Human Rights tabled a report proposing a series of amendments that could be made to the *Criminal Code* to facilitate the fight against criminal organizations. The Sub-Committee began its work in April 2000, and, in view of the nature of the subject under study, its members decided at the outset to perform their work in camera. Among other things, the Committee recommended that the *Criminal Code* be amended in such a way as to group together all provisions concerning activities relating to organized crime in a specific part entitled "Organized crime, designated substance offences, gangs and money laundering". A number of the Committee's recommendations were incorporated into Bill C-24, which received Royal Assent in December 2001.

A societal debate

These considerations of the global environment help put the drug issue in context. Always considered as a public security question, this issue more fundamentally concerns the upheavals societies are currently experiencing as a result of globalization. The place of drugs in those societies, which are shifting painfully from the modern to the post-modern world, attempting to reinvent society after individual destiny, so central to the cultural "revolutions" of the 1960s, has replaced family and collective destiny, raises questions about the boundaries of the individual and his relationship to others and about the very possibility of community given the significance of the individual. As the sociologist A. Ehrenberg has emphasized:

[Translation] (...) drugs appear as the condenser of uncertain responsibility. For democratic societies, it is the opportunity for a consideration of the limits of private freedom, that is to say of the tension between minimum contact with one's self, without which one cannot enter into relations with others, and minimum distance from self, without which one cannot make a society. [20]

In another way, this is also what B. Alexander said in a brief he submitted to the Senate Committee:

Because western society is now based on free-market principles which mass-produce dislocation, and because dislocation is the precursor to addiction, addiction to drug use and to other substitute life styles within western society is not the pathological state of a few, but, to a greater or lesser degree, the general condition. Because free-market society increasingly provides the model for globalization, addiction is becoming more and more prevalent everywhere on earth (...). [21]

As may be seen, the drug issue cannot simply be raised in terms of criminalization or decriminalization because it refers to much deeper societal issues relating to the role of government of the self in a context in which political government of the community is changing, and to the relationship between the two. Reducing the drug issue to a question of more or less repressive or more or less liberal criminal legislation is to rule out broader questions and to play the game of the particular interests of institutions which have every interest in reducing the figure of the addict to that of the "other", the deviant, the pathological case, and drugs to mere illegal drugs, whereas the faces of drugs are many and diverse. As the International Narcotics Control Board states in its 2000 report, trafficking in licit psychoactive drugs and their increased use are, in many respects, much more disturbing phenomena than the illegal drug market. There is a great risk that we will mistake the tip of the iceberg for the iceberg as a whole and allow ourselves to drift away on notions as simplifying as they are dangerous for a true public policy on drugs.

[1] Keh, D.I. (1996) *Drug Money in a Changing World. Economic Reform and Criminal Finance*. Vienna: UNDCP, technical paper no. 4.

[2] *Ibid.*, pages 11-13.

[3] Campodónico, H. (1996) "Drug trafficking, laundering and neo-liberal economics: Perverse effects for a developing country." in Dorn, N. *et al.* (eds) *European Drug Policies and Enforcement*. London: Macmillan Press, page 231.

[4] Senate of Canada (2001) Proceedings of the Special Committee on Illegal Drugs, Ottawa: Senate of Canada, Issue No. 3, page 27. The reports of the OGD may also be consulted at: www.ogd.fr.

[5] Labrousse A. and A. Wallon (1993) *La Planète des drogues: organisations criminelles, guerres et blanchiment*. Paris: Seuil.

[6] Labrousse, *op. cit.*, pages 28-29.

[7] *Report of the International Narcotics Control Board for 2001*. Vienna: author, page 1.

[8] *Ibid.*, page 2.

[9] *Ibid.*, pages 2-4.

[10] On this point, see, for example, the work of Wacquant, L. (2000) *Les prisons de la misère*. Paris.

[11] McNamara, J.D. (2000) "Commentary: Criminalization of Drug Use." *Psychiatric Times*, Vol. XVII, No. 9.

[12] Greene, J. and V. Schiraldi (2002) *Cutting Correctly: New Prison Policies for Times of Fiscal Crisis*. Washington, D.C.: The Justice Policy Institute. See also Schiraldi, V., Holman, B. and P. Beatty (2000) *Poor Prescription: The Costs of Imprisoning Drug Offenders in the United States*. Washington, D.C.: Justice Policy Institute. Available on line at: www.cjcj.org.

[13] McCaffrey, B.R., Remarks before the First Annual Criminal Justice and Substance

Abuse Conference, Albany, New York, June 29, 1999.

[14] Testimony of Mr. Dale Orban, for the Canadian Police Association, before the Senate Special Committee on Illegal Drugs, in Senate of Canada, Issue No. 3, May 28, 2001, page 49.

[15] Testimony of Mr. Michael J. Boyd, for the Canadian Association of Chiefs of Police, before the Senate Special Committee on Illegal Drugs, Senate of Canada, Issue No. 14, March 11, 2002, page 76.

[16] On this point, see, *inter alia*, the work of Bala, N. (2002) *Juvenile Justice Systems. An International Comparison of Problems and Solutions*. Toronto: Thompson Educational Publishing.

[17] Riley, D., *op. cit.*, page 14.

[18] See, for example, the study by Rydell, C.P. and S.S. Everingham (1994) *Controlling Cocaine: Supply vs. Demand Programs*. Rand: Santa Monica.

[19] R. v. Parker 49 O.R. (3d) 481.

[20] Ehrenberg, A. (1995) *L'individu incertain*. Paris: Calman Lévy, page 163.

[21] Alexander, B.K. (2000) "The globalization of addiction." *Addiction Research*, Vol. 8, No. 6, page 504.

CANNABIS : OUR POSITION FOR A CANADIAN PUBLIC POLICY

REPORT OF THE SENATE SPECIAL COMMITTEE ON ILLEGAL DRUGS

VOLUME II : PART III

Chairman: Pierre Claude Nolin

Deputy Chairman: Colin Kenny

SEPTEMBER 2002

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Glossary of key terms

Abuse

Vague term with a variety of meanings depending on the social, medical and legal contexts. Some equate any use of illicit drugs to abuse: for example, the international conventions consider that any use of drugs other than for medical or scientific purposes is abuse. The Diagnosis and Statistical Manual of the American Psychiatric Association defines abuse as a maladaptive pattern of substance use leading to clinically significant impairment or distress as defined by one or more of four criteria (see chapter 7). In the report, we prefer the term excessive use (or harmful use).

Acute effects

Refers to effects resulting from the administration of any drug and specifically to its short term effects. These effects are distinguished between central (cerebral functions) and peripheral (nervous system). Effects are dose-related.

Addiction

General term referring to the concepts of tolerance and dependency. According to WHO addiction is the repeated use of a psychoactive substance to the extent that the user is periodically or chronically intoxicated, shows a compulsion to take the preferred substance, has great difficulty in voluntarily ceasing or modifying substance use, and exhibits determination to obtain the substance by almost any means. Some authors prefer the term addiction to dependence, because the former also refers to the evolutive process preceding dependence.

Agonist

A substance that acts on receptor sites to produce certain responses.

Anandamide

Agonist neurotransmitter of the endogenous cannabinoid system. Although not yet fully understood in research, these neurotransmitters seem to act as modulators, THC increasing the liberation of dopamine in nucleus accumbens and cerebral cortex.

At-risk use

Use behaviour which makes users at-risk of developing dependence to the substance.

Cannabinoids

Endogenous receptors of the active cannabis molecules, particularly 9-THC. Two endogenous receptors have been identified: CB1 densely concentrated in the hippocampus, basal ganglia, cerebellum and cerebral cortex, and CB2, particularly abundant in the immune system. The central effects of cannabis appear to be related only to CB1.

Cannabis

Three varieties of the cannabis plant exist: *cannabis sativa*, *cannabis indica*, and *cannabis ruderalis*. *Cannabis sativa* is the most commonly found, growing in almost any soil condition. The cannabis plant has been known in China for about 6000 years. The flowering tops and leaves are used to produce the smoked cannabis. Common terms used to refer to cannabis are pot, marihuana, dope, ganja, hemp. Hashish is produced from the extracted resin. Classified as a psychotropic drug, cannabis is a modulator of the central nervous system. It contains over 460 known chemicals, of which 60 are cannabinoids. Delta-9-tetrahydrocannabinol, referred to as THC, is the principal active ingredient of cannabis. Other components such as delta-8-tetrahydrocannabinol, cannabinal and cannabidiol are present in smaller quantities and have no significant impacts on behaviour or perception. However, they may modulate the overall effects of the substance.

Chronic effects

Refers to effects which are delayed or develop after repeated use. In the report we prefer to use the term consequences of repeated use rather than chronic effects.

Commission on narcotic drugs (CND)

The Commission on Narcotic Drugs (CND) was established in 1946 by the Economic and Social Council of the United Nations. It is the central policy-making body within the UN system for dealing with all drug-related matters. The Commission analyses the world drug abuse situation and develops proposals to strengthen international drug control.

Decriminalization

Removal of a behaviour or activity from the scope of the criminal justice system. A distinction is usually made between *de jure decriminalization*, which entails an amendment to criminal legislation, and *de facto decriminalization*, which involves an administrative decision not to prosecute acts that nonetheless remain against the law. Decriminalization concerns only criminal legislation, and does not mean that the legal system has no further jurisdiction of any kind in this regard: other, non-criminal, laws may regulate the behaviour or activity that has been decriminalized (civil or regulatory offences, etc.).

Diversion

The use of measures other than prosecution or a criminal conviction for an act that nonetheless remains against the law. Diversion can take place before a charge is formally laid, for example if the accused person agrees to undergo treatment. It can also occur at the time of sentencing, when community service or treatment may be imposed rather than incarceration.

Depenalisation

Modification of the sentences provided in criminal legislation for a particular behaviour. In the case of cannabis, it generally refers to the removal of custodial sentences.

Dependence

State where the user continues its use of the substance despite significant health, psychological, relational, familial or social problems. Dependence is a complex phenomenon which may have genetic components. Psychological dependence refers to the psychological symptoms associated with craving and physical dependence to tolerance and the adaptation of the organism to chronic use. The American Psychiatric Association has proposed seven criteria (see chapter 7).

Dopamine

Neuromediator involved in the mechanisms of pleasure.

Drug

Generally used to refer to illicit rather than licit substances (such as nicotine, alcohol or medicines). In pharmacology, the term refers to any chemical agent that alters the biochemical or physiological processes of tissues or organisms. In this sense, the term drug refers better to any substance which is principally used for its psychoactive effects.

European Monitoring Centre on Drugs and Drug Addiction (EMCDDA)

The European Monitoring Centre was created in 1993 to provide member states objective, reliable and comparable information within the EU on drugs, drug addictions and their consequences. Statistical information, documents and techniques developed in the EMCDDA are designed to give a broad perspective on drug issues in Europe. The Centre only deals with information. It relies on national focal points in each of the Member States.

Fat soluble

Characteristic of a substance to irrigate quickly the tissues. THC is highly fat-soluble.

Gateway (theory)

Theory suggesting a sequential pattern in involvement in drug use from nicotine to alcohol, to cannabis and then "hard" drugs. The theory rests on a statistical association between the use of hard drugs and the fact that these users have generally used cannabis as their first illicit drug. This theory has not been validated by empirical research and is considered outdated.

Half-life

Time needed for the concentration of a particular drug in blood to decline to half its maximum level. The half-life of THC is 4.3 days on average but is faster in regular than in occasional users. Because it is highly fat soluble, THC is stored in fatty tissues, thus increasing its half life to as much as 7 to 12 days. Prolonged use of cannabis increases the period of time needed to eliminate it from the system. Even one week after use, THC metabolites may remain in the system. They are gradually metabolised in the urine (one third) and in feces (two thirds). Traces of inactive THC metabolites can be detected as many as 30 days after use.

Hashish

Resinous extract from the flowering tops of the cannabis plant and transformed into a paste.

International Conventions

Various international conventions have been adopted by the international community since 1912, first under the Society of Nations and then under the United Nations, to regulate the possession, use, production, distribution, sale, etc., of various psychotropic substances. Currently, the three main conventions are the 1961 Single Convention, the 1971 Convention on Psychotropic Substance and the 1988 Convention against Illicit Traffic. Canada is a signatory to all three conventions. Subject to countries' national constitutions, these conventions establish a system of regulation where only medical and scientific uses are permitted. This system is based on the prohibition of source plants (coca, opium and cannabis) and the regulation of synthetic chemicals produced by pharmaceutical companies.

International Narcotics Control Board (INCB)

The Board is an independent, quasi-judicial organisation responsible for monitoring the implementation of the UN conventions on drugs. It was created in 1968 as a follow up to the 1961 Single Convention, but had predecessors as early as the 1930s. The Board makes recommendations to the UN Commission on Narcotics with respect to additions or deletions in the appendices of the conventions.

Intoxication

Disturbance of the physiological and psychological systems resulting from a substance. Pharmacology generally distinguishes four levels: light, moderate, serious and fatal.

Joint

Cigarette of marijuana or hashish with or without tobacco. Because joints are never identical, scientific analyses of the effects of THC are more difficult, especially in trying to determine the therapeutic benefits of cannabis and to examine its effects on driving.

Legalisation

Regulatory system allowing the culture, production, marketing, sale and use of substances. Although none currently exist in relation to « street-drugs » (as opposed to alcohol or tobacco which are regulated products), a legalisation system could take two forms: without any state control (free markets) and with state controls (regulatory regime).

Marijuana

Mexican term originally referring to a cigarette of poor quality. Has now become equivalent for cannabis.

Narcotic

Substance which can induce stupor or artificial sleep. Usually restricted to designate opiates. Sometimes used incorrectly to refer to all drugs capable of inducing dependence.

Office of national drug control policy (ONDCP) USA

Created in 1984 under the Reagan presidency, the Office is under the direct authority of the White House. It coordinates US policy on drugs. Its budget is currently US \$18 billion.

Opiates

Substance derived from the opium poppy. The term opiate excludes synthetic opioids such as heroin and methadone.

Prohibition

Historically, the term designates the period of national interdiction of alcohol sales in the United States between 1919 and 1933. By analogy, the term is now used to describe UN and State policies aiming for a drug-free society. Prohibition is based on the interdiction to cultivate, produce, fabricate, sell, possess, use etc., some substances except for medical and scientific purposes.

Psychoactive substance

Substance which alters mental processes such as thinking or emotions. More neutral than the term "drug" because it does not refer to the legal status of the substance, it is the term we prefer to use.

Psychotropic substance (see also psychoactive)

Much the same as psychoactive substance. More specifically however, the term refers to drugs primarily used in the treatment of mental disorders, such as anxiolytic, sedatives, neuroleptics, etc. More specifically, refers to the substances covered in the 1971 Convention on Psychotropic Substances.

Regulation

Control system specifying the conditions under which the cultivation, production, marketing, prescription, sales, possession or use of a substance are allowed. Regulatory approaches may rest on interdiction (as for illegal drugs) or controlled access (as for medical drugs or alcohol). Our proposal of an exemption regime under the current legislation is a regulatory regime.

Society of Nations (SDN)

International organisation of States until 1938; now the United Nations.

Tetrahydrocannabinol (D9-THC)

Main active component of cannabis, Δ^9 -THC is very fat-soluble and has a lengthy half-life. Its psychoactive effects are modulated by other active components in cannabis. In its natural state, cannabis contains between 0.5% to 5% THC. Sophisticated cultivation methods and plant selection, especially female plants, leads to higher levels of THC concentration.

Tolerance

Reduced response of the organisms and increased capacity to support its effects after a more or less lengthy period of use. Tolerance levels are extremely variable between substances, and tolerance to cannabis is believed to be lower than for most other drugs, including tobacco and alcohol.

Toxicity

Characteristic of a substance which induces intoxication, i.e., "poisoning". Many substances, including some common foods, have some level of toxicity. Cannabis presents almost no toxicity and cannot lead to an overdose.

United Nations Drug Control Program (UNDCP)

Established in 1991, the Programme works to educate the world about the dangers of drug abuse. The Programme aims to strengthen international action against drug production, trafficking and drug-related crime through alternative development projects, crop monitoring and anti-money laundering programmes. UNDCP also provides accurate statistics through the Global Assessment Programme (GAP) and helps to draft legislation and train judicial officials as part of its Legal Assistance Programme. UNDCP is part of the UN Office for Drug Control and the Prevention of Crime.

World Health Organization (WHO)

The World Health Organization, the United Nations specialized agency for health, was established on 7 April 1948. WHO's objective, as set out in its Constitution, is the attainment by all peoples of the highest possible level of health. Health is defined in WHO's Constitution as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.

Part III

Policies and Practices in Canada

Chapter 11

A National Drug Strategy?

There is no arguing that both licit and illicit psychoactive substances affect Canadians in many ways, both positively and negatively, both directly and indirectly. In addition, no one would dispute the fact that psychoactive substance use (again, both licit and illicit) is a widespread phenomenon, not only on the part of adults but also among the youths of this country. Because of the potential problems for those who abuse psychoactive substances, dealing with this issue should be a matter of serious concern for any government, and for society as a whole.

Based on the importance of the subject, it would probably surprise many Canadians to learn that only from 1987 to 1993 did Canada have a fully funded national drug strategy. It is true that Canada has had legislation dealing with the use of psychoactive substances since the passage of the *Opium Act* in 1908. This Act was followed by several pieces of criminal legislation over the years that increased federal enforcement powers

over psychoactive substances and expanded the list of illicit substances.[1] These pieces of legislation have historically focused on the supply of psychoactive substances, adopting a prohibitionist approach to use. It is widely acknowledged, however, that a more balanced approach is required if one is to deal effectively with those who abuse psychoactive substances.

This chapter will recount the development and implementation of the 1987 National Drug Strategy, which had as an objective the promotion of a balanced approach to the problem of psychoactive substance abuse. This will be followed by a discussion of what became of the national strategy and whether its goals have been achieved.

Phase I - development and implementation

In May 1987, the federal government announced a \$210-million, five-year action plan to curb drug abuse. The government stated that the action plan was in response to mounting concerns regarding increasing rates of drug-related problems. Others have suggested that *"(t)his strong political action was undoubtedly influenced by the latest American 'War on Drugs.'"*[2]

The National Drug Strategy (NDS), *Action on Drug Abuse*, was launched by the then Minister of National Health and Welfare, who was the lead Minister in the federal effort to curb drug abuse.[3] Several other departments also participated in the first interdepartmental attempt to co-ordinate Canada's response to its drug abuse problem. It was believed that there was a need for a coordinated, strategic approach to the problem of drug abuse in Canada. The overall objective of the NDS was *"to reduce the harm to individuals, family and communities from the abuse of alcohol and other drugs through a balanced approach that is acceptable to Canadians."*[4] Other partners included provincial and municipal governments, business, law enforcement agencies, and professional and voluntary organizations.

The federal government recognized that, in the past, the emphasis of its involvement in this area had been largely restricted to supply control measures. Meanwhile, communities, provinces and territories, and many professional and volunteer groups, had focused their efforts on reducing the demand for drugs, through prevention and treatment programs. Given the division of constitutional powers in Canada, this separation of responsibilities is not altogether surprising. It does, however, impose limits on the establishment of a comprehensive national framework.

The division of powers between Canadian provinces and the federal government has made concerted, comprehensive action against drug and alcohol abuse very difficult to achieve. For example, most program strategies aimed at prevention are generally seen as part of the health or education systems; matters of provincial jurisdiction over which the federal government has little direct control. However, while enforcement activities are controlled at the local level, for the most part, the authority derives from federal powers, and the control largely remains with the federal government. [5]

In developing the NDS, the federal government noted that, within the provinces and territories, and at the community level, many innovative programs of drug counselling, therapy and rehabilitation had been initiated. It also recognized that much of the program expertise existed at the provincial level. What was lacking, however, was a strong mechanism for national collaboration. The government believed that the NDS provided such a comprehensive national framework and viewed it as "a co-operative program that combines the efforts and resources of the federal government with those of all provincial and territorial governments and addiction agencies across Canada."[6]

The government identified six core components of the NDS: education and prevention; enforcement and control; treatment; international cooperation; research and information; and national focus. Of the \$210 million in new federal funds allocated to enhance existing programs and to fund new initiatives, \$20 million was allocated for the first year, \$40 million for the second year, and \$50 million for the last three years of the strategy. A significant amount (70%) of the resources was committed to education and prevention (32%) and treatment and rehabilitation (38%); 20% was committed to enforcement and control; and the other 10% to information and research (6%), international co-operation (3%) and national focus (1%).^[7] The government noted that, while enforcement agencies were given more resources to combat supply, most of the money was allocated to address the demand for psychoactive substances, thus providing a better balance between reducing both the demand for drugs and reducing their supply.^[8] According to information received from Health Canada, the resources were generally spent as planned.

In order to illustrate the comprehensive nature of the NDS, the following sets out the goals and initiatives announced during the week of its launch:

Prevention, treatment, research, control components^[9]

❖ **To create improved public awareness and information:**

- A media campaign, developed in consultation with provinces;
- Federal endorsement of Drug Awareness Week;
- Telephone information lines.

❖ **To encourage involvement in prevention activities:**

- Support for a range of prevention initiatives developed within local communities;
- Support for the development of innovative and improved treatment services at the community level;
- Development and expansion of training and training materials;
- A National Action Conference on Drug Abuse.

❖ **To encourage prevention initiatives targeted to particular groups:**

- Efforts to encourage youth employment activities that improve life-skills development as well as employability;
- Support for demonstration projects by police to develop new prevention initiatives for youth in school, and for urban youth at risk and Aboriginal communities;
- A review of all current programming directed at drug abuse among Aboriginal people;

- New initiatives focussed particularly at Aboriginal youth;
 - Support for northern communities wishing to exchange experiences with other Arctic Rim communities on drug abuse issues.
- ❖ To encourage more effective treatment services tailored to specific needs:
- An examination of future federal cost-sharing of new or expanded drug and alcohol treatment and rehabilitation programs;
 - Measures to improve detection of drug abuse by health professionals and to support their rehabilitation;
 - Establishment of an advisory committee on methadone and measures to prevent diversion of methadone;
 - Development of training materials and information for health care professionals and others working in the addictions field;
 - A review of current efforts to address the problem of drugs in the workplace;
 - Continued efforts to eliminate the use of banned drugs in sport within Canada and internationally.
- ❖ To update and improve Canada's drug laws and regulations:
- New legislation to replace the outdated *Narcotics Control Act* and *Food and Drugs Act*;
 - Improved co-ordination among federal organizations and with provinces to improve regulatory control of drug use;
 - Increased federal capacity for drug identification, analysis and monitoring;
 - Co-ordinated policies concerning illegal supply of drugs in Canada.
- ❖ To improve the knowledge base in the drug abuse field:
- Support research on patterns and trends in the drug abuse field and on prevention and treatment;
 - A study and recommendations on priority data needs.
- ❖ To ensure a long-term commitment to the drug abuse field where long-term solutions are

needed:

- A Task Force to review different means of ensuring that provincial expertise and experience can be made available for the benefit of the country as a whole and to ensure national ongoing commitment to promoting the study and prevention of drug abuse.

Enforcement components[10]

- ❖ To provide strengthened and co-ordinated drug law enforcement:
 - Strengthening of the RCMP's drug intelligence capabilities and liaison with other forces;
 - A co-ordinated approach to improved coastal enforcement against drug smuggling;
 - Improved co-ordination of drug law enforcement at the federal level as well as between federal and provincial organizations.
- ❖ To help take the profit out of illegal drug trafficking:
 - Expansion of the RCMP's Anti-Drug Profiteering Program and improved public awareness of program activities and objectives;
 - Improved techniques for tracing illicit funds will be developed.
- ❖ To strengthen Canada's international efforts:
 - RCMP special training in drug enforcement for police officers of selected drug source or transit countries.
- ❖ To create improved public awareness and information about drug abuse:
 - An expansion in the RCMP's capacity across the country to promote drug awareness.
- ❖ To address the problems of drug abuse in federal correctional institutions:
 - A study will be undertaken on drug use among inmates and on the effectiveness of current treatment programs in correctional institutions;
 - Improved drug control in penitentiaries;
 - Development of programs for inmates with drug abuse problems to help them cope better after

their release;

- Improved prevention through training for staff and development of information programs for inmates.

Interdiction components[11]

❖ To strengthen Canada Customs' capacity to interdict illegal drugs entering Canada:

- Expansion of Canada Customs resources to strengthen capability in the critical areas of targeting and examination of high-risk cargo shipments and travellers in all modes of transportation, and of high-risk mail;
- Development and acquisition of X-ray equipment to increase drug detection capabilities during the examination of cargo, baggage and mail;
- Expansion of the Canada Customs Detector Dog Service to provide service in all Customs regions across Canada, and increase our present capabilities at high-volume points of entry;
- Enhanced training to Customs Inspectors in the identification of drug couriers and high-risk commercial shipments: this training will increase the awareness of Customs Inspectors relating to the identification of indicators (characteristics) that may be present during the examination of a person or commercial shipment;
- Expansion of Canada Customs involvement in the Crime Stoppers programs of municipal police forces across Canada;
- Co-operation with airlines and shipping companies engaged in the international transport of people and goods, with a view to Canada Customs obtaining assistance in the detection of illicit drugs destined for Canada;
- Co-operation with foreign Customs services in targeting in-transit drug couriers.

❖ To ensure appropriate immigration policies:

- Review of immigration policy on drug traffickers.

International components[12]

❖ To ensure that Canada plays an active role in international forums on drug abuse:

- Canada's active participation at the International Conference on Drug Abuse and Illicit

Trafficking to be held in Vienna, 17-26 June 1987;

- Accession to the 1971 United Nations Convention on Psychotropic Substances;
 - Increase in Canada's contribution to the United Nations Fund for Drug Abuse Control (UNFDAC) to a target level of \$1 million by 1991;
 - Inclusion of reduction of drug abuse as a factor in considering requests for assistance under Official Development Assistance;
 - Hosting of an international conference of experts on Recommended Methods for Testing Drugs of Abuse.
- ❖ To improve public awareness and information:
- Information for Canadians travelling abroad about the hazards of illicit drug possession in other countries.

Proceeds of crime components[13]

- ❖ To take the profit out of illicit drug trafficking:
- Proceeds of Crime legislation to reduce the profitability of drug trafficking.

Creation of the Canadian Centre on Substance Abuse

The Canadian Centre on Substance Abuse (CCSA) was created by an act of Parliament in 1988. It is a non-governmental organization with the aim to promote *"increased awareness on the part of Canadians of matters relating to alcohol and drug abuse and their increased participation in the reduction of harm associated with such abuse, and to promote the use and effectiveness of programs of excellence that are relevant to alcohol and drug abuse."*[14] This is to be done by:

- ❖ Promoting and supporting consultation and co-operation among governments, the business community and labour, professional and voluntary organizations in matters relating to alcohol and drug abuse;
- ❖ Contributing to the effective exchange of information on alcohol and drug abuse;
- ❖ Facilitating and contributing to the development and application of knowledge and expertise in the alcohol and drug abuse field;
- ❖ Promoting and assisting in the development of realistic and effective policies and programs aimed at reducing the harm associated with alcohol and drug abuse; and

- ❖ Promoting increased awareness among Canadians of the nature and extent of international efforts to reduce alcohol and drug abuse, and supporting Canada's participation in those efforts.[15]

Thus, the CCSA was created to provide a national focus and leadership in the area of reducing the harm associated with alcohol and other drug abuse. It works closely with federal and provincial partners, both governmental and non-governmental. As the NDS indicated, the government had recognized that a coordinated response including all partners was required if long-term solutions were to be found. Co-operation and coordination between all partners is a key function of the CCSA.

The CCSA works with the private sector, provincial addiction agencies, and many special interest groups to make it possible for all Canadians to benefit from the best prevention programs. One way of doing this is by keeping people working in the field in touch with what's happening across the country.[16]

The CCSA is primarily responsible for providing "credible, objective information and policies on addiction to the federal government, the not-for-profit and private sectors, and provincial/territorial and municipal governments." [17] It has set out the following seven goals:

- ❖ Policy Formulation

- Goal 1: To monitor significant research and policy developments, and to provide informed comment on issues of national significance.

- ❖ Information Development

- Goal 2: To maintain and continually improve national information on the nature, extent and consequences of substance abuse, and problem gambling in Canada.

- ❖ Best Practices Development

- Goal 3: To monitor significant programs and practices, and contribute to the identification and dissemination of best practices.

- ❖ Communications

- Goal 4: To develop a communications strategy that includes a series of focused activities and information products aimed at increasing the awareness of Canadians of addictions issues, and influencing and informing CCSA's key target audiences.

❖ Network Development

- Goal 5: To develop, co-ordinate and support networks that facilitate the sharing and application of information and expertise.

❖ Information and Reference Service

- Goal 6: To maintain an efficient and responsive information and reference service.

❖ Administration/Management

- Goal 7: To organize the policy, administrative and human resource functions in an effective and financially responsible manner.[18]

An important contribution of the CCSA is the establishment of a Clearinghouse on Substance Abuse, which links all major sources of information on alcohol and other drugs in a single computer network.

The CCSA, which is within the portfolio of the Minister of Health, is structured as a corporation, with a chair and a board of directors. It is funded by the NDS and through its own revenue-generating efforts. The CCSA was originally allocated an annual \$2 million of core funding but the cuts that occurred as a result of Program Review in 1997 reduced its core funding to \$500 000. This necessitated the release of almost all full-time staff. Michel Perron, the CCSA's chief executive officer, indicated that the budget cuts affected the CCSA's ability to carry out its mandate.

Since 1997, the CCSA has basically survived by working for a number of departments on contract. Those contracts ensured our survival, but significantly hindered our efforts to fulfill our legal mandate in a proactive way. [19]

In early 2002, the government increased the CCSA's core funding to \$1.5 million. We were told that, with this increase, the CCSA can stabilize its activities and Canada runs a lower risk of losing its only collective memory as well as the only drug addiction specialists working at the federal level.[20]

Creation of Canada's Drug Strategy Secretariat

In 1990, Canada's Drug Strategy Secretariat was given the mandate to coordinate activities within the federal government and with other governments (both nationally and internationally). The secretariat was given many responsibilities, including ensuring the visibility of the NDS, coordinating the evaluation of the NDS and examining the issue of substance abuse from a strategic standpoint. One of its key responsibilities was to act as a facilitator.

An important function of the Secretariat is to serve as an information source, a central point of entry to the federal government directing those with questions toward people with the answers. Members of the Secretariat also provide advice from outside groups to the federal partners. They attempt to bring groups together to facilitate issues of common concern. [21]

The Secretariat was disbanded in 1996 during Phase II of the strategy. In the evaluation of Phase II of the CDS, it was suggested that the function of overseeing the coordination should be given to a body that is not an integral part of one of the partner departments—otherwise, such a body would be in a potential or perceived conflict of interest.[22] In the past, some had regarded the Secretariat as representing primarily the interest of Health Canada rather than representing the drug strategy itself.

Today, the Office of Canada's Drug Strategy is the focal point within the federal government for the drug strategy. It describes itself as follows:

The Office of Canada's Drug Strategy of Health Canada is the focal point within the federal government for harm reduction, prevention, and treatment and rehabilitation initiatives concerning alcohol and other drugs issues. Our efforts aim to prevent the use of drugs by those not currently using them, reduce the harm for those who use them, and promote effective and innovative treatment and rehabilitation for those affected by substance abuse. The Office works collaboratively with other federal departments and provincial and territorial governments, and provides national leadership and co-ordination on substance abuse issues, conducts research into the risk factors and root causes of substance abuse, synthesizes and disseminates leading-edge information and best practices to key partners, and collaborates with multilateral organizations to address the global drug problem. [23]

The Auditor General, in her 2001 Report, indicated that there are limits on Health Canada's authority as coordinator and recommended that the government "*review the current mechanisms for leadership and co-ordination within the federal government as well as mechanisms for co-ordination with provincial/territorial and municipal governments in addressing the problem of illicit drugs.*"[24] *We agree with the Auditor General's assessment and recommend the creation of a position of National Drug Advisor, responsible for ensuring interdepartmental co-ordination at the federal level. In addition, the CCSA would be given a coordinating role with respect to the provinces and territories, cities and with research bodies and universities.*

Phase II - Renewal

In order to determine the future of the NDS, the federal government undertook a national consultation process in March and April 1991. The purpose of the consultations, held with local and provincial partners, was to prepare for the possible renewal of the NDS, obtain information on the strengths and weaknesses of the strategy and identify renewal priorities. During the consultations, alcohol abuse was

identified as the major problem in Canada, and the abuse and misuse of pharmaceuticals was the second most frequently mentioned concern. Tobacco use was also seen as a major substance abuse and health problem. Street drugs, while still a concern, were not a major worry of those consulted. It was noted that cannabis use continued to be widespread.

Many at the consultations advocated incorporating the Driving While Impaired (DWI) Strategy into the NDS, and there was also strong support for a comprehensive national alcohol policy. It was also suggested that use of steroids by athletes and youth be included in the NDS. Finally, others called for a comprehensive tobacco policy and for tobacco's inclusion within the NDS. A long-term commitment to the drug strategy was one of the issues stressed by the participants.

To address many problems in substance abuse, participants in the consultation process stressed the need for a long-term commitment to CDS. Substance abuse has been a problem since the dawn of time. To expect significant changes in the level and nature of substance abuse over a five, or even a ten, year period is not realistic. The impact of initiatives to counteract the problem of substance abuse may not be visible for generations. Therefore, CDS must become an ongoing program with political and government support and endorsement. Bringing about fundamental long-term societal changes in attitude and behaviour requires basic funding, without a sunset provision. [25]

In 1992, the NDS was renewed under the designation Canada's Drug Strategy (CDS). Funding was increased to \$270 million over the five-year period and the Strategy principally involved six federal departments.[26] As had been suggested, the DWI Strategy became a component of CDS, although the same could not be said for tobacco. Once again, CDS called for a balanced approach to reducing both the demand for drugs and their supply. The funding was to be allocated as follows: prevention (30%); treatment (30%); enforcement and control (28%); information and research (5%); national focus (5%); and international co-operation (1%). According to Health Canada, over the five-year period, about \$104.4 million was actually provided.[27] In fact, resources that were originally approved were almost immediately reduced, and this reduction continued over the course of CDS as a result of budget cuts.

In renewing CDS, the federal government acknowledged the concerns of stakeholders and stated that solutions to substance abuse require long-term commitment—that to expect significant changes over five or even ten years was not realistic. Thus, it was stated that CDS should become an ongoing program. In addition, it was thought that a balanced approach between demand and supply reduction was critical to the success of CDS. Finally, it was recognized that partnerships (both governmental and non-governmental) at all levels (locally, nationally and internationally) were needed.[28]

On the whole, it was concluded that the strategy was working well and that it was important to maintain the momentum created by Phase I. The primary and overall objective of Phase II was to make Canada's alcohol and other drug interventions more effective at reducing harm to individuals, families, and communities caused by the problem use of alcohol and other drugs. This would be accomplished through the following secondary objectives:

- ❖ Improved program targeting through a focus on high-risk populations (especially young children, street kids, dropouts, off-reserve Aboriginals, the unemployed, seniors and women);
- ❖ Improved coordination and collaboration across federal departments and with external partners (provincial and territorial governments, non-governmental organizations, etc.);

- ❖ *An improved information base on substance abuse-related issues, to assist policy-makers, program developers, researchers, professionals, and others concerned with substance abuse issues in addressing this problem; and*
- ❖ *Enhanced resources that would enable departments to continue certain ongoing activities and redirect attention to emerging issues or new activities.[29]*

The decision to renew CDS was accompanied by a requirement for its evaluation. In June 1997 a report evaluating Phase II of CDS was published by Health Canada. Its main findings were as follows:

- ❖ *Improved program targeting was implemented in all participating departments, with justifiable variation according to their respective mandates;*
- ❖ *Interdepartmental coordination at the working level and for task-specific initiatives was effective. However, interdepartmental co-ordination at the strategic planning level was identified as a concern over the course of Phase II and would not appear to have been resolved (clear coordination goals were not identified, nor was the role of the CDS Secretariat properly defined);*
- ❖ *CDS did not have national visibility at either political or public levels;*
- ❖ *The information available in Canada on the issue of substance abuse increased as a result of Phase II funding;*
- ❖ *Departmental resources were increased through Phase II. However, there were significant subsequent cuts to some departmental budgets that may have limited the potential achievements of Phase II; and*
- ❖ *Phase II resources were used in a manner consistent with a harm reduction approach, although a formal harm reduction policy was not in place during the course of the strategy.*

The report also identified effective leadership, coordination and strategic planning as essential to the strategy, and found weaknesses in these areas during Phase II. In addition, a common vision and a set of clear and measurable objectives were also found to be fundamental requisites. Lack of accountability for strategy-wide objectives was also identified as a problem. As will be discussed later, most of these issues were again raised as concerns in 2001 (five years later) by the Auditor General of Canada

To coordinate the strategy, two groups were established at the federal level, both chaired by Health Canada: the Assistant Deputy Ministers' Steering Committee on Substance Abuse, and the Interdepartmental Working Group on Substance Abuse. Their purpose has been described as follows:

The Steering Committee is mandated to meet at least twice a year to improve the overall effectiveness of the strategy and provide direction to the Working Group. Its aims are to co-ordinate federal activities, develop consensus on priorities, address emerging issues, and monitor implementation of the federal strategy. [30]

Phase III – Renewal without specified funding

In 1997, the *Controlled Drugs and Substances Act* (CDSA) was enacted. This legislation formed part of CDS; it was focused, according to the government, on modernizing and enhancing the drug abuse control policy underlying the previous legislation and on fulfilling Canada's international obligations. It should be noted that since the introduction of the CDSA, most changes to federal legislation dealing with illicit drugs have focused on supply reduction.

In 1998, CDS was renewed in principle but without any specified funding, despite warnings of possible negative consequences. An evaluation of Health Canada's contributions to CDS stated that:

We must conclude that short-term initiatives such as the CDS Phase II are useful in that they inspire a higher sense of priority for a certain issue; at the same time, they hold inherent disadvantages in addressing an issue such as substance abuse, that is widely recognized to require a longer-term intervention than time-limited initiative funding will allow. [31]

The following was also added:

The CDS Phase II Health Canada Component made a considerable investment in research and program development, and information monitoring systems. In many areas, Health Canada is now poised to reap benefits from the knowledge gained – however it is feared that this will not be the case due to non-renewal.

There are also concerns that the sunseting of the Health Canada component of the CDS will not only leave a void but see the balance in the federal harm reduction policy list too far in the direction of supply reduction, and that Canada's international credibility will also suffer. [32]

The signatories were limited to federal departments and agencies, with Health Canada again responsible for providing national leadership and coordination. CDS still states that it reflects a balance between reducing the supply of drugs and reducing the demand for drugs. The long-term goal of the strategy remains unchanged: it is to reduce the harm associated with alcohol and other drugs to individuals, families and communities. The goals of CDS are to:

- ❖ Reduce the demand for drugs;
- ❖ Reduce drug-related mortality and morbidity;

- ❖ Improve the effectiveness of and accessibility to substance abuse information and interventions;
- ❖ Restrict the supply of illicit drugs and reduce the profitability of illicit drug trafficking; and
- ❖ Reduce the costs of substance abuse to Canadian society.[33]

The strategy states that it is built on four pillars: prevention; enforcement and control; treatment and rehabilitation; and harm reduction. Within this general framework, seven separate components have been identified: research and knowledge development; knowledge dissemination; prevention programming; treatment and rehabilitation; legislation, enforcement and control; national coordination; and international co-operation.[34]

The Drug Strategy and Controlled Substances Program, within the Healthy Environments and Consumer Safety Branch of Health Canada, currently spends \$34 million annually on substance abuse.[35] The Office of Canada's Drug Strategy currently manages \$16.5 million of the \$34-million total budget. The Alcohol and Drug Treatment and Rehabilitation program, which was originally managed by HRDC, was transferred to Health Canada in October 1997. It is currently managed by the Office of Canada's Drug Strategy, which provides \$14 million to the provinces for treatment and rehabilitation programs. The other \$2.5 million is allocated to the CCSA (\$1.5 million) and for research and program management (\$1.0 million). The remaining \$17.5 million is allocated by the Healthy Environments and Consumer Safety Branch as follows: administration of regulations other than the Marijuana Medical Access Regulations (\$5.0 million); Medical Marijuana Program (\$5.0 million); drug analytical services (\$4.5 million); policy, research and international affairs (\$3.0 million).[36]

Health Canada does spend other resources on substance abuse through the department's varied activities. For example, the Population and Public Health Branch allocates resources to deal with HIV/AIDS and Hepatitis C, and to deal with FAS/FAE.

Canada's Drug Strategy – A Success?

This section does not claim to provide an in-depth analysis of CDS since its implementation and development – 1987. Certain key objectives, however, will be reviewed in order to determine whether or not the CDS can be deemed a success. It is important to note that, despite the considerable amounts of money spent at the federal level to control psychoactive substances, many would argue that Canada does not even have a funded national drug strategy.

In 1997 the government implemented "Program Review", and severe financial cuts were applied to all departments, including Health Canada. The drug strategy did not escape these cuts and it sunset in 1997. In fact, there has been very little new money from the federal government for the field of addictions since.

Canada currently has no national strategy. We therefore simply do not have research data to guide us. In

fact, no one knows the extent of drug consumption or prevalence in Canada because no national inquiry has been done since 1994. We therefore have to come up with hypotheses and resort to other tools to get a picture of the current situation in Canada. [37]

As mentioned, research, knowledge development and knowledge dissemination are severely lacking in Canada, despite the fact that these are intended to be key components of the CDS. A more complete analysis of these deficiencies in knowledge development and dissemination is set out in Chapter 6. To summarize, Canada has not given itself the means to conduct proper research and to acquire knowledge in this field. For example, only two general national drug surveys have been conducted - in 1989 and 1994. Much of the problem with respect to research and knowledge development can be attributed to the almost non-existent funding allocated to the CCSA. Considering the importance of the CCSA's role in knowledge development and the costs of substance abuse in Canada, it is clear that its funding has been totally inadequate over the years. The recent increase to its core funding may temporarily stop the bleeding but will not allow Canada to acquire the tools necessary to conduct vital and necessary research in this area.

The CDS has, since its implementation, stated that it reflects a balance between reducing the supply of drugs and reducing the demand for drugs. While such policy objectives are easy to pronounce, they have not been reflected in reality. The Auditor General has recently indicated that, of the approximately \$500 million spent annually by 11 departments or agencies at the federal level to address illicit drug use in Canada, roughly 95% is spent on supply reduction. Notwithstanding the division of constitutional powers in Canada, one would be hard pressed to argue that this allocation of funds represents a balanced approach.

Another of the key objectives of the CDS is to ensure coordination and collaboration across all federal departments and with the provinces and municipalities. The Auditor General has recently criticized the leadership provided at the federal level and recommended a drug strategy with sound co-ordination and with clear objectives and results.

Canada requires stronger leadership and more consistent co-ordination to set a strategy, common objectives, and collective performance expectations. It must be able to respond quickly to emerging concerns about illicit drug use or the illicit drug trade. The present structure for leadership and for co-ordination of federal efforts needs to be reviewed and improved. The mechanisms for co-ordination with the provinces and municipalities also need review since they cross three levels of government. [38]

One of the obvious weaknesses of the CDS is the failure to provide comprehensive evaluations of its objectives. For example, we are unaware of any evaluations of the prevention and treatment programs that have been funded by the federal government. This lack of evaluation is an overall concern.

Although the federal government provides leadership and co-ordination for dealing with the illicit drug problem, it has not produced any comprehensive reports that demonstrate how well Canada is managing the problem. It would be logical for Health Canada, as the lead department, to report government-wide results of Canada's efforts to reduce the demand for and the supply of illicit drugs. [39]

In summary, it would be difficult to declare the CDS a success when we do not even have the tools needed to determine whether or not the objectives of the strategy have been satisfied. The current strategy has, at

the very least, many fundamental weaknesses. As several critics have argued one must question whether we in fact even have a comprehensive drug strategy in Canada.

Conclusions

While we recognize that the federal government cannot act alone if it is to deal effectively with substance abuse problems, our conclusions with respect to a national strategy regarding psychoactive substances are generally limited to the role played at the federal level.

- Canada urgently needs a comprehensive and coordinated national drug strategy for which the federal government provides sound leadership.

➤ Any future national drug strategy should incorporate all psychoactive substances, including alcohol and tobacco.

➤ To be successful, a national drug strategy must involve a partnership with all levels of government and also with non-governmental organizations.

➤ Over the years, the intermittency of funding has diminished the ability to co-ordinate and implement the strategy; adequate resources and a long-term commitment to funding are needed if the strategy is to be successful.

➤ Clear objectives for the strategy must be set out, and comprehensive evaluations of these objectives and the results are required.

➤ At the developmental stage, there is a need to identify clear and shared criteria for "success".

➤ The core funding for the CCSA has been insufficient for it to carry out its mandate; adequate funding for the CCSA is essential.

➤ There is a need for an independent organization – the CCSA – to conduct national surveys at least every second year; there is also a need to achieve some level of consistency, comparability and similar time frames for provincially based school surveys.

➤ Coordination at the federal level should be given to a body that is not an integral part of one of the partner departments.

➤ Canada's Drug Strategy's should adopt a balanced approach – 90% of federal expenditures are currently allocated to supply reduction.

[1] A discussion of Canada's legislative history in regard to psychoactive substances can be found in Chapter 12.

[2] Giffen, P.J., Endicott, S. and S. Lambert, (1991) *Panic and Indifference: The Politics of Canada's Drug Laws*, Ottawa: Canadian Centre on Substance Abuse, page 587.

[3] Government of Canada, News Release, *Federal Government Launches Co-ordinated Action on Drug Abuse*, 25 May 1987.

[4] Government of Canada, *Action on Drug Abuse: Making a Difference*, 1988, page 5.

[5] Giffen, P.J., *op. cit.*, page 585.

[6] Government of Canada, *Action on Drug Abuse: Making a Difference*, 1988, page 7.

[7] *Ibid.*

[8] From 1987 to 1991, an additional \$19.5 million was provided for the Driving While Impaired (DWI) Strategy. The DWI strategy included national awareness programs, driver education curricula, national surveys and hundreds of local initiatives aimed at making drinking and driving socially unacceptable to

Canadians.

- [9] Government of Canada, *National Drug Strategy: Prevention, Treatment, Research, Control Components*, 25 May, 1987.
- [10] Government of Canada, *National Drug Strategy: Enforcement Components*, 26 May 1987.
- [11] Government of Canada, *National Drug Strategy: Interdiction Components*, 27 May 1987.
- [12] Government of Canada, *National Drug Strategy: International Components*, 28 May 1987.
- [13] Government of Canada, *National Drug Strategy: Proceeds of Crime Components*, 29 May 1987.
- [14] *Canadian Centre on Substance Abuse Act*, R.S., 1985, c. 49 (4th Supp.), s. 3.
- [15] *Ibid.*
- [16] Government of Canada, *Canada's Drug Strategy*, 1991, page 4.
- [17] *Report of the Auditor General of Canada to the House of Commons*, 2001, Chapter 11, "Illicit Drugs: The Federal Government's Role", page 6.
- [18] For more information on the CCSA, visit its website at <http://www.ccsa.ca> and see Government of Canada, *Canada's Drug Strategy - Phase II: A situation paper*, Canada, 1994, pages 38-40.
- [19] Michel Perron, Executive Director, Canadian Centre on Substance Abuse, Proceedings of the Special Committee on Illegal Drugs, Senate of Canada, first session of the thirty-seventh Parliament 2001-2002, 10 June 2002, Issue no. 22, page 69.
- [20] *Ibid.*,
- [21] Government of Canada, *Canada's Drug Strategy - Phase II: A situation paper*, Canada, 1994, pages 11-12.
- [22] Health Canada, *Evaluation of Canada's Drug Strategy: Final Report*, June 1997, page 22.
- [23] Information regarding the Office of Canada's Drug Strategy can be found on the Health Canada web site at <http://www.hc-sc.gc.ca/hppb/cds-sca/cds/about.html> (revised: 1 December 2000).
- [24] *Report of the Auditor General of Canada to the House of Commons*, 2001, Chapter 11, "Illicit Drugs: The Federal Government's Role", page 24.
- [25] Government of Canada, *Canada's Drug Strategy: Consultations 1991*, page 7. For more information on comments made regarding supply issues, demand issues and the role and impact of CDS, see pages 3-7.
- [26] Health and Welfare Canada, Solicitor General Canada, Revenue Canada (Customs and Excise), Labour Canada, External Affairs and International Trade Canada and Justice Canada.
- [27] Gillian Lynch, Director General, Drug Strategy and Controlled Substances Programme, Health Canada, Proceedings of the Special Committee on Illegal Drugs, Senate of Canada, first session of the thirty-seventh Parliament 2001-2002, 10 June 2002, Issue no. 22, page 27.
- [28] Government of Canada, *Canada's Drug Strategy - Phase II*, 1992, page 3.

- [29] Health Canada, *Evaluation of Canada's Drug Strategy: Final Report*, June 1997, p. iv.
- [30] *Report of the Auditor General of Canada to the House of Commons*, 2001, Chapter 11, "Illicit Drugs: The Federal Government's Role", page 6.
- [31] Health Canada, *Evaluation of Health Canada's Contributions to Canada's Drug Strategy: Final Report*, December 1996, pages 33-34.
- [32] *Ibid.*, pages 34-35.
- [33] Government of Canada, *Canada's Drug Strategy*, 1998, pages 4-5.
- [34] While CDS deals with both licit and illicit substances, a separate strategy has been developed to identify specific approaches to tobacco.
- [35] This does not include expenditures made by the First Nations and Inuit Health Branch, which total approximately \$70 million.
- [36] Health Canada, Presentation to the Special Committee on Illegal Drugs, 10 June 2002.
- [37] Michel Perron, *loc. cit.*, page 71.
- [38] *Report of the Auditor General of Canada to the House of Commons* 2001, Chapter 11 – Illicit Drugs: The Federal Government's Role, page 1.
- [39] *Ibid.*, page 22.

Chapter 12

The National Legislative Context

Drugs have been prohibited for fewer than one hundred years; cannabis for slightly more than 75. It is tempting to think that the decisions made over the years to use criminal law to fight the production and use of certain drugs are in keeping with social progress and the advancement of scientific knowledge about drugs. Pre-twentieth century societies were less "advanced" and did not have the sophisticated tools that medicine, molecular biology and biochemistry, psychology and the cognitive sciences have provided over the course of this century of technological revolution. The prohibition measures adopted by parliaments, and on a wider scale, by the international community were therefore a more or less accurate reflection of the knowledge gradually acquired by scientists. The gradual conquest of territory occupied not so long ago by the irrational and its gang of charlatans and other shamans continued, for the greater good of humanity. As proof, phenomenal technical advances in medicine and pharmacology over the course of this century have resulted in increased longevity and decreased infant mortality in Western countries.

But is this really the case? Is civilization one long march towards progress, towards greater, and increasingly invincible, rationality? If we consider the state of the planet and the alarms sounded by more than one scientist today, we may have our doubts. From a social standpoint, the twentieth century has not brought fewer wars, less destruction, or more equality between people than previous centuries. With respect to drugs, is the legislation a more or less faithful translation of scientific knowledge for the greater good of all? Can we discern a rational structure in the national laws and international conventions that govern certain drugs and other substances? Are they based on knowledge of the effects of drugs on the psyche and human behaviour? Do they reflect the desire to ensure the well-being of the public?

The history of legislation governing illegal drugs in Canada, like the analysis in Chapter 19 of the structure

of international conventions, suggests that this is highly doubtful. We do not deny that knowledge has advanced; the second part of our report testifies to this. But scientific knowledge itself is a structure that develops in a given historical context and responds to paradigms in the way problems are posed and research is conducted. The dominant scientific positivism is a temporary result in the long evolution of knowledge. It is not the "end of the story". Within the scientific process, a "selection" is made of pertinent questions and ways in which to ask them, such that any question is not necessarily a good question and certain ways of answering are more acceptable to the community of researchers.

Moreover, legislation adopted by parliaments is influenced at least as much by prejudices and preconceptions resulting from "*pop science*" as by partisan, personal and international considerations. In this sense, the parliamentarian is no different from any other citizen, as we pointed out in the report's general introduction.

We were told several times that we could not compare the effects of cannabis to those of alcohol or tobacco. And yet, even at the risk of being unreadable if not unacceptable to the community, public policy on "drugs" must propose some rationale of the type: "this is prohibited, because..., and this is not, because...". Most of the time the "reason" - or the justification? - is presented as risks or dangers on the one hand and as medical usefulness on the other. Thus, under the current control regime, because of the risks or dangers they are believed to present, some drugs must be regulated, that is, they are not sold over the counter. When they present a danger **and** they have no known medical application, the regulatory controls prohibit their manufacture, production, growth, use, possession, etc., entirely. That is the case with the legislation and conventions governing opium and its derivatives (heroin), the coca plant and its derivatives (cocaine, crack) and the cannabis plant and its derivatives (marijuana, hashish). When the drug presents a danger but is medically useful, it is subject to more or less severe regulatory controls. That is the case with benzodiazepines and other powerful medications, which are sold by pharmacists and cannot be obtained without a medical prescription. Other drugs present a "health risk": nicotine, alcohol, as well as several other over-the-counter drugs. The packaging must indicate the risks (except for alcohol - which is very telling) so as to "warn" the user.

To what extent is such reasoning really rational?

Three researchers at the University of Toronto (Lazarou, Pomeranz, Corey, 1998) have estimated that correctly prescribed legal medications kill, on average, 100,000 people a year in North America. Although for methodological reasons that figure was cut back by one half or two thirds, it nonetheless illustrates the enormous losses of human life that go undetected by any monitoring system, including the legal system. No one thinks that this danger should be avoided by prohibiting medical prescriptions - the risky decisions made by physicians - or denying the "right to use" medications. Why? Because we do not see how that solution could be preferable to the solution of taking risks responsibly. Knowing that this problem exists, we will try to find other solutions, such as better quality control for the products, etc. Nor (fortunately) do we consider assigning criminal responsibility to physicians for taking the risk of writing a correct prescription, knowing that even correctly prescribed medications can cause death. [1]

The 2001 report from the International Narcotics Control Board indicates a "worrisome" increase in the abuse of various prescription drugs in the United States and notes that several of these medications are found on the black market, in particular through the Internet.[2]

Tobacco use causes more than 400,000 deaths a year in the United States, and approximately 45,000 in Canada. As for alcohol, it is linked to physical aggression and violence, especially marital, and to road

accidents, and its abuse causes thousands of deaths each year.

It is a mistake to see illegal drugs in a separate category from the legal drugs insofar as the history of criminalization is concerned. We have compounded that difficulty today because we do not tend to see the legal drugs in the same limelight as the illegal drugs. To demonstrate that, we use the phrase "alcohol and drugs" as if alcohol were not a drug, as if police officers who go to domestic disputes do not know already that the major drug problem they will likely find at that dispute is alcohol abuse, as if we do not already know that more than 70 per cent of all homicides involve alcohol abuse as a critical factor. For us to pretend that the consumption of alcohol is on a morally different plane from the consumption of illegal drugs seems to be a kind of cultural folly that speaks volumes about the cultural blinders we wear as we go about our business in everyday life. [3]

Is the rationale of the system of controls acceptable in the eyes of civil society, users as well as abstainers? What criteria motivated the legislators' decisions? For that matter, were there any criteria? What motivated parliamentarians from Canada and elsewhere to prohibit certain substances, to control access to certain others, and to permit still others to be sold over the counter?

Knowing where you have been helps you to understand where you are going. That is the goal of this chapter, which retraces the evolution of Canadian drug laws from 1908 to the present day.[4] We have identified three legislative periods. The first, and longest, spans the years from 1908 to 1960. That is the period of hysteria. The second, which is much shorter, runs from 1961 to 1975 and is the period involving the search for lost reason. Lastly, the contemporary period, which really starts at the beginning of the 1980s, is the period of forging ahead regardless. As it would be too much to describe the different sections in the various bills adopted over the years, we have appended a table that explains and presents the clauses of the legislation adopted from 1908 to 1996 on the control of narcotics.

1908-1960: Hysteria

At the time of the Shanghai Conference on opium in 1909[5], European societies had known for hundreds of years about opium, coca leaves, and cannabis, having discovered them through contact with other societies. These "drugs" were used in medical practice, as well as by a certain worldly or artistic elite, and especially as a commercial tool by colonial powers. In the midst of advances in chemistry, the 19th century saw the arrival of a large number of new drugs—primarily opiate based—and their enthusiastic adoption by physicians, pharmacists, general store owners and traveling salesmen as miracle elixirs. What happened so that Canada in 1908, and the seven countries gathered in Shanghai in 1909, decided to prohibit this "drug"? At least four factors figured in the game of chance and necessity that led to prohibition.

First of all, geopolitical issues, commercial dealings with China in particular and the political stability of the Middle Kingdom in general, played a considerable role, as shown in Chapter 19. But from a domestic standpoint, these factors do not explain everything, especially since the concerns of the Dominion of Canada and its people about international politics were still relatively minor.

Initially, physicians noticed, sometimes from their own experience as a user, that use of opium derivatives resulted in a certain degree of dependence and health problems.[6] At first, these cases of drug addiction were limited to the leisured classes and to artists, who were rarely labeled as "delinquents". However, the increasing availability of these drugs[7] and the subsequent development of dependence problems within the

working classes had a profound effect on public opinion about these drugs. There was no longer talk of "the ill" but rather of "delinquents" who [translation] "could not face up to the demands of life as a good citizen and worker"[8]. A few doctors, worried about protecting their monopoly, did not hesitate to demand laws from the government to restrict the use of drugs produced by pharmaceutical companies and thus avoid the propagation of this "scourge" that threatened the foundation of North American society.

Even though the use of opium did not result in a social crisis before the beginning of the 1880s, whites who frequented Chinese opium dens were often seen as suspicious or dangerous. At the time, [translation] "Frequenting the Chinese quarter and its opium dens is seen by several moral groups as a preference for the foreign, as willingly straying from white Anglo-Saxon values. This judgment is even more severe where women are concerned," [9]

Associated with the problem of alcoholism in the working classes, the question of the use of drugs then became the metaphor par excellence for the decay of western Judeo-Christian civilization, and the favourite theme of temperance leagues in the United States as well as Canada. Born in the 19th century, these movements had a very strong religious basis, especially in the protestant ethic of responsibility for personal health through work and self control: [translation] "work and sobriety were valued as a means to avoid loss of production and to maintain the economic superiority of the white Anglo-Saxon race." [10] Waging "war" against alcohol that causes male violence and adultery, against drugs that kill young people, and also against prostitution, cigarettes and gambling suited these movements perfectly. [11] From community support groups designed to help those who wanted to break their bad habits, these leagues transformed themselves into powerful pressure groups demanding the complete prohibition of alcohol first, and then supporting the prohibition of opium and other drugs.

The third factor, closely related to the previous two, was population movement and especially Chinese immigration – it would be more accurate to talk about the importation of Chinese workers. The Chinese had immigrated to the United States in the middle of the 19th century to work in the mines and build the railroads in the American West. Once these large projects were completed, certain labour disputes broke out on the American West Coast, pitching the Chinese, who offered cheap labour to owners of agricultural enterprises, against powerful unions, largely composed of white workers. Following the appearance of the union-based anti-Chinese movement and legislation that prevented any further Chinese immigration, many Chinese had no choice but to develop the opium trade in the ghettos where they lived in large American cities. The temperance movement did not hesitate to adopt the racist feeling driving certain segments of American society in order to denounce the use of opium, seen as a scourge that promoted immorality, crime and the decline of the white Anglo-Saxon race. It was in this context of social unrest, although limited to the American West Coast, that the first American legislation governing the opium trade was adopted.

In Canada, in the middle of the 19th century, the Chinese became a major source of manpower for building the Canadian Pacific Railway. As the economy of British Columbia diversified, these immigrants found work in fish processing plants, coal mines and the forestry industry, although the jobs available to them remained limited. This worsened the competitiveness of the local labour market and increased their marginalization in society. [12] Beginning in the 1880s, the massive influx of Chinese juxtaposed with the economic slowdown brought on by the end of construction of the Canadian Pacific railway and the economic recession that marked the end of the 19th century and the early years of the 20th century caused several union and popular demonstrations demanding the end of Chinese immigration, the source of British Columbia's economic and moral problems.

According to Giffen, this fear was not justified since white immigration from other regions of Canada more than offset the increase in British Columbia's Chinese population. In fact, the proportion of Chinese in the province declined from 20% at the beginning of the 1880s to less than 6% in 1921 [13], just before a clause in the Opium and Narcotic Drug Act was adopted authorizing the deportation of an

immigrant found guilty of a drug-related offence.

But,

Tolerance for the habit of smoking opium lasted only as long as British Columbia's tolerance for the Chinese. In the early years of the twentieth century, both a labour surplus and anti-Asian resentment developed. The Asiatic Exclusion League was formed, supported by an amalgamation of the Vancouver Trades and Labour Council and federal Conservative politicians. Opposed to the Liberals' immigration policies (under Sir Wilfrid Laurier), the league demanded an end to immigration from Asia, claiming that the "yellow peril" was about to "swallow" a white British Columbia. [14]

In fact, well before the development of this "social crisis", the British Columbia government had tried to halt Asian immigration by adopting the *Chinese Immigration Act* in 1884, which imposed an annual tax of \$10 on the Chinese and other Asians living in British Columbia and prohibited them from buying land belonging to the province. The federal government disallowed this Act, but in 1885 it created a Royal Commission to investigate Chinese immigration and this commission recommended imposing a \$10 entry tax on every Asian immigrant. In 1885, as a result of public pressure, the federal government adopted the *Chinese Immigration Act*, which imposed a \$50 entry tax that was increased to \$500 in 1904, as many had criticized the fact that despite the imposed tariff, 20,000 Asians had immigrated to the country between 1889 and 1900.

A major incident in 1907 led the federal government to intervene in matters of Chinese immigration and labour disputes in British Columbia. During the year, a demonstration organized by the *Asiatic Exclusion League* and attended by more than 10,000 people, most of whom were union workers and members of the middle class, turned into a riot when the angry crowd headed into Vancouver's Chinese district, attacking people and causing serious property damage. After convincing Prime Minister Laurier of the wisdom of compensating the Chinese, William L. Mackenzie King, then Deputy Minister of Labour, returned to Vancouver in the Spring of 1908, where he wrote a report [15] that would lead to the adoption of the *Opium Act*. Based primarily on moral, ethical, political, diplomatic and ethnic considerations, Mackenzie King's report, rather than attacking labour disputes between white and Chinese workers, shifted the problem to opium use by Asian foreigners.

[...] the amount [of opium] consumed in Canada, if known, would probably appall the ordinary citizen who is inclined to believe that the habit is confined to the Chinese, and by them indulged in only to a limited extent. The Chinese with whom I conversed on the subject, assured me that almost as much opium was sold to white people as to Chinese, and that the habit of smoking opium was making headway, not only among white men and boys, but also among women and girls. [16]

As in the United States, Chinese immigrants brought with them not only their labour but also their practice of smoking opium. They preferred this practice to the widespread habit of white workers of using alcohol and opiate-based drugs to cure illnesses and to momentarily forget their social and working conditions. [17] Thus the first opium den opened its doors in Vancouver in 1870. Some Chinese even opened factories to produce opium for smoking; the opium was then used in opium dens in Vancouver's Chinese district or was simply sold to white clientele. As Professor Boyd mentioned during his testimony before the Committee:

Over time, equal amounts of smoking opium were sold to whites as to Chinese. If you look back through the issues of Vancouver Province or the Victoria Times Colonist, you find advertisements. You do not find any expression of concern or anger about those smoking opium establishments, but you find advertisements. [18]

In 1883, there were three factories producing smoking opium in Victoria and in 1891, there were more than 10 opium dens in the Chinese districts of large cities in the Canadian West.[19] The surge in this industry was beneficial to the British Columbia government since it imposed a customs tariff on crude opium of 10% to 25%.

If I could turn back the clock 100 years to Vancouver, Victoria and New Westminster, I could show you opium-smoking factories which were started in the late 1870s and persisted for 30 years without complaint. The labour surplus and the depression in the first decade of the 20th century led to concerns that led to the original legislation. It is noteworthy that the Opium and Narcotic Drug Act of 1908 was introduced by the Minister of Labour. When he introduced the act, he said, "We will get some good out of this riot yet," referring to the anti-Asiatic riot in Vancouver in September of 1907.

Imagine, today, the idea of illegal drug legislation coming forward from the Minister of Labour because he or she is seeking to get some good out of a labour crisis on Canada's West Coast. The situation in California was similar. [20]

Even though the Royal Commission of 1885 did not recommend specific measures governing the production or use of smoking opium, it did indicate that smoking such a substance was a pagan practice incompatible with the lifestyle of a Christian nation.[21] According to Line Beaudesne, the crusade against opium that followed this report gradually resulted in a decline in opium smoking.[22] The results of an investigation conducted by the *American Pharmaceutical Association* in 1903 into drug use claimed that drug consumption was widespread throughout American society, but involved two social groups more specifically: Chinese immigrants and Blacks. This study probably influenced some federal politicians and temperance movements that used similar arguments until the beginning of the 1930s to justify the prohibition of opium and other drugs.[23]

In short, while economic considerations were at the heart of anti-Asian feeling, temperance movements and religious groups took advantage of the situation to promote their views, not only in the immediate area of British Columbia but also across the rest of the country. These events drew the public's attention to the "dangers" of opium for Canadian society.

Opium Act, 1908

In the House of Commons on July 10, 1908, the Minister of Labour proposed the adoption of a motion prohibiting: "*the importation, manufacture and sale of opium for other than medicinal purposes.*"[24] The motion was adopted without debate. The Minister introduced Bill 205, *An Act to prohibit the importation, manufacture and sale of opium for other than the medicinal purpose.* (Opium Act, 1908).[25] The first section of the Act prohibited the importation of opium without authorization from the Minister of Customs. Additionally the drug could be used for medical purposes only. The manufacture, sale and

possession for the purpose of selling crude opium or opium prepared for use by smokers was also prohibited. Whoever violated these provisions could be found guilty of a criminal offence punishable by a maximum prison term of three years and/or a minimum fine of \$50 and not exceeding \$1,000. Even though it prohibited the use of opium, the legislation was aimed at opium dealers, most of whom were Chinese, and not users. The bill was given Royal Assent on July 20, 1908.

The Opium and Narcotic Drug Act, 1911

The enactment of the *Opium Act* led to the introduction of 8 new bills intended to make it both more restrictive and effective on January 26, 1911, Mackenzie King, who had just become the Minister of Labour, introduced Bill 97, an *Act to prohibit the improper use of Opium and other Drugs* (the *Opium and Narcotic Drug Act, 1911*).^[26] During the deliberations on second reading, Mackenzie King gave three reasons for introducing the bill: the Shanghai Commission, the panic in Montreal caused by cocaine use and the need to grant special powers to the police to ensure that the Act could be enforced effectively. The Shanghai Commission had adopted a number of non-binding resolutions, including: putting a gradual stop to the opium smoking habit, with due regard to the specific circumstances of each country; prohibiting the use of opium and its alkaloids and derivatives (morphine, heroin, etc.) and other drugs for non-medical purposes; and prohibiting the export of these substances to countries that prohibited their use.

No member raised any objections about the four drugs added to the Schedule to the Act, namely cocaine, opium, morphine or eucaïne. Section 14 of the Act also provided that the Governor in Council had the power to order any alkaloid, by-product or drug preparation added to the Schedule when its addition was deemed necessary in the public interest—a power which still exists today. The justification given for this was that if the use of a new drug were to become widespread in society, it would be possible to add it more quickly to the Schedule than by having to enact new legislation.^[27] Other provisions of the Act related to the use of opium, search powers granted to the police, orders for the confiscation or restitution of seized drugs and a reverse onus for cases of simple possession of drugs. The possibility of requesting that a higher Court issue a writ of *certiorari* with respect to prosecutions carried out under this Act was eliminated.

The post-war period led to a string of major amendments to the offences, penalties, police powers and criminal procedure provided in the *Opium and Narcotic Drug Act*. There are several factors to explain this legislative ferment: the concerns raised by Emily Murphy's writings about the extent of the "scourge" of drugs in Canada^[28]; the renewed conflicts between Whites and Asians in British Columbia; the mobilization of doctors' and pharmacists' associations to prevent the Act from infringing on their activities; the establishment in 1919 of the Department of Health and the powerful Narcotics Division (the predecessor of the current Office of Controlled Substances), which were responsible for enforcing international conventions on drugs in Canada; the establishment in 1919 of the Royal Canadian Mounted Police (RCMP), responsible for enforcing the *Opium and Narcotic Drug Act*; the enactment of the *Harrison Narcotic Act* in the United States in 1914; and the mobilization of the international community to enforce the *International Opium Convention* (The Hague - 1912) imposed on a number of countries by the 1919 Treaty of Versailles.

The establishment of the narcotics division

The enactment of the *Harrison Narcotic Act* in the United States and the mobilization of the international community to enforce The Hague Convention quickly brought to light three major shortcomings of the *Opium and Narcotic Drug Act, 1911*.^[29]

The first problem appeared when the time came to control drug imports and exports. The Act had only vague instructions concerning trading in drugs for medical or scientific purposes. That being the case,

customs officials were reluctant to seize cargo containing opium or other drugs.

The second problem stemmed from the enactment in the United States of the *Harrison Narcotic Act*, which was similar to the Act passed in Canada in 1911. However, it imposed a system of licences issued to businesses by the federal government authorizing them to import or export drugs. This led to a significant demand for illegal drugs in the United States. As the supply of these substances in Canada exceeded consumer demand, traffickers quickly took advantage of this business opportunity and exported their surpluses to the United States. This had become so profitable that in 1918, a committee of the US Senate filed an official complaint with the Canadian government concerning drug trafficking.

The third and final problem stemmed from the fact that traffickers quickly found ways to avoid the provisions of the 1911 Act because its enforcement was not centralized within a single government agency. On the one hand, Customs was attempting as best it could to control legal trade in drugs whereas on the other hand, municipal police departments handled illegal trafficking, which was becoming increasingly sophisticated every year, requiring that new powers be granted to the police.[30]

The many amendments to the Act to deal with these problems were orchestrated in part by F. W. Cowan the first Chief of the new Narcotics Division (1919-1927) of the Department of Health, and in particular by Colonel C. H. L. Sharman, the former RCMP officer who succeeded him (1927-1946). Cowan quickly understood after becoming Chief of the new division that he would have to centralize control over both legal and illegal trade in drugs to ensure that the Act could be enforced effectively, thereby assuring the long-term survival of his organization. During his tenure, an impressive communications network was created, and by the end of the 20s, it included the other divisions of the Department of Health, the Department of Justice and the lawyers hired to prosecute drug offences, the RCMP, the media, municipal police departments, associations representing doctors and pharmacists, governments and agencies responsible for enforcing the laws of other countries, including the United States, and international narcotics control agencies established by the League of Nations.

Under Sharman's impetus, the administration of information from all of these participants was eventually conducted solely by the Division, and no longer by the Department of Justice or the RCMP. This made it possible for the director to have an overall picture of the narcotics situation, thereby making him an "expert" in the field. A former official of the Division described Colonel Sharman as "a Czar running an empire of his own." [31] *His influence grew when the Division was placed under the authority of the Deputy Minister of Health. The reorganization fostered a closer and more direct relationship with the Minister and Members of Parliament, making it possible for him to short-circuit proposals from other divisions within the Department. And when the time came to add further offences, penalties, criminal procedures or new police powers in the 20s, the Division never hesitated to take advantage of the "panic" generated by the media in Vancouver, or Emily Murphy's writings, to justify such amendments.* [32]

From the standpoint of enforcing the Act, this structure was very useful. For example, up until the 50s, from the moment a police officer or a lawyer, anywhere in Canada, informed the Chief of the Division of a weakness in the Act, he would draft proposed amendments, pass them on to his network for rapid consultation, and if necessary, he would encourage the Minister of Health to introduce a bill to correct the problem situation. The federal drug bureaucracy as we know it today was born!

In such a context, the establishment of a network like this had a significant impact on the direction that would be taken by Canadian narcotics legislation:

In short, the establishment of an administrative organization to enforce narcotic law had the unintended consequence of creating a centralized pressure group which had the motivation and influence to play a major role in shaping the future course of the legislation. This centralization of power and expertise together with the fact that the resources were directed mainly at a socially powerless group helps to

explain the virtual absence of an effective criticism and alternative proposals for control from 1920 to 1950. [33]

Amendments to the Opium and Narcotic Drug Act (1920-1938)

Many amendments were made to the 1911 Act prior to an in-depth overhaul of the Act in 1938. It was during this period that cannabis was added to the schedule of the Act.

Amendments to list of substances in schedule: Addition of cannabis

From 1911 to 1938, many drugs were added to the schedule of the Opium and Narcotic Drug Act. The 1911 Act was introduced to control only four drugs. In 1938, when the Act to amend the Opium and Narcotic Drug Act [34] was enacted, the schedule listed more than 15 drugs, including derivatives or salts, one of which was cannabis, added in 1923.

During a sitting of the Committee of the Whole in connection with a review of the 1923 Act, Minister of Health Henri-Séverin Bédard simply said about the substance that, "There is a new drug in the schedule." [35] That is how cannabis ended up in the schedule to the Act. According to Giffen, the circumstances leading to the decision remain obscure because, until 1932, the issue of the effects of cannabis on people's physical, psychological or mental health had never been raised in Parliament. Giffen described the criminalization of the drug as a solution without a problem.

*In the United States, beginning in 1890, some American doctors were worried that the potency of cannabis appeared to be variable and that individual reactions when cannabis was taken orally appeared to be unpredictable. Thus despite the continued use of much more dangerous drugs like barbiturates and opiates, cannabis was abandoned by doctors. At the beginning of the century, the discovery of the hallucinogenic nature of cannabis contributed considerably to its reputation as a dangerous drug. However, the people who wrote the *Harrison Narcotic Act* had not deemed it appropriate to subject it to the controls provided in the Act. [36] But in 1915, California became the first American state to prohibit the use of marijuana, and in the early 20s, marijuana had "become a major 'underground drug' traced to an influx of Mexican workers into Southern United States in the 1910s and 1920s." [37] As with opium, labour disputes, the economic interests of big business and morality served as catalysts to create a popular movement in favour of the prohibition of cannabis in the United States, which led to the passage of the *Marijuana Tax Act* in 1937, prohibiting the use and production of cannabis.*

Unlike in the United States, there were no reliable accounts of the non-medical use of cannabis in Canada before the 1930s. [38] And unlike California, Canada was not faced with an influx of Mexican workers. Why then was cannabis added to the Opium Act schedule?

*In 1922, Emily Murphy referred to the harmful effects of cannabis on human behaviour in her book *The Black Candle*, in which she worked over most of the articles she had published in *MacLean's* magazine. In the chapter entitled "*Marihuana - A New Menace*" she reported comments made by the Chief of the Los Angeles Police Department, who described the terrible effects of cannabis.*

*But Giffen's research in the archives of the Department of Health indicates that these scare tactics, which were steeped in morality, were not behind the placing of cannabis in the *Opium and Narcotic Drug Act* schedule, particularly given that at the time, it was virtually unknown in Canada and its use was not a problem. [39] This is confirmed in section 7 of the 1932 Act, which amended a provision of the 1920 Act by allowing the manufacture, sale or distribution, without a permit, of medicines if they contained only small quantities of certain drugs listed in the schedule. In 1932, the measure would henceforth apply to cannabis. During parliamentary debate on the introduction of this statute, the discovery of the existence of this drug appeared to elicit the interest of certain parliamentarians. During Committee of the Whole, MP*

Ernest Lapointe asked the Minister of Health, "What is *cannabis sativa*?", and the Minister replied "Hitherto this was a drug which was not included in the list which might be used. It is one form of the drug used in India which, I believe, goes under the popular name of hashish. There is no objection to the use of it"[40]

In short, it is remarkable that, over seventy-five years later, we should still not know why cannabis was placed on the list of prohibited drugs. On the other hand, no shortage of "reasons" were found in the years that followed.

Under the influence of American media campaigns, which were taken up by Canadian newspapers, and of horrifying accounts by police officers about young Canadians who were physically and mentally destroyed after using cannabis, the attitude of federal parliamentarians towards the drug would become less and less tolerant. The 1938 Act, enacted one year after the passage of the Marijuana Tax Act in the United States, was the end result of this "new panic". Section 3 of the Act prohibited anyone from growing cannabis or opium poppy without first having obtained a permit from the Department of Health. The penalties for this new offence were the same as those provided for trafficking in, and simple possession of, cannabis. This measure was unusual because Canada, for the first time, had climate conditions conducive to the growing and production of a drug, which it did not for the other drugs in the schedule. An analysis of parliamentary debates shows that the Department of Agriculture conducted scientific experiments on industrial hemp by growing cannabis at the Experimental Farm in Ottawa and at another research centre near Montreal. A number of entrepreneurs in Ontario were still growing hemp. The 1938 Act put an end to the practice.

Following the introduction of the Bill, Minister of Health Charles Power said in connection with section 3: "The proposed amendments deal to a considerable extent with the attempt which is being made by the department to control what, though it cannot be called a new drug, is a new menace to the youth of the country".[41] Later, he said that it was very dangerous to smoke marijuana cigarettes. To demonstrate his comment, he cited a report prepared by Harry J. Anslinger, the first commissioner of the *Federal Bureau of Narcotics*, in which the drug was described as, "the assassin of youth ... one of the greatest menaces which has ever struck that country".[42] The Minister of Health nevertheless said that the situation in Canada was not as serious as in the United States. The statements by the Minister of Health about the harmfulness of cannabis were not disputed by any members, even though no research was put forward in defence of the statements made.

The most important amendments to the schedule were made in 1932, following the enactment of the Act to amend the Opium and Narcotic Drug Act, 1932.[43] In the amendments, over 10 psychoactive substances were added to the schedule, both natural drugs (like coca leaf) and synthetic drugs. The inclusion of these substances coincided with the adoption in 1931 of the Geneva Convention for Limiting the Manufacture and Regulating the Distribution of Narcotic Drugs, with Colonel Sharman making a major contribution to the negotiations leading to the signing of the convention. It was also at this time that Canada had begun to play an active role internationally with respect to drugs in support of the efforts of the United States and Harry J. Anslinger to better control international drug trafficking, particularly in the producing countries.[44]

During the debates on the enactment of the 1932 Act, which would implement the provisions of the 1931 Convention into Canadian law, no questions were asked of the Minister of Health, Murray McLaren, concerning the reasons leading the Minister to include the above-mentioned drugs in the schedule

Amendment of penalties

The penalties for trafficking or illegal possession of narcotic drugs were amended several times during this period. Furthermore, other offences were created as trafficking techniques to get around the law became

increasingly sophisticated. According to Giffen, there were several reasons why the authorities responsible for enforcing the Act wanted more flexibility:

"Latitude in regard to penalties helped to overcome the reluctance of the courts to convict in cases of lesser culpability and respectable social status; such cases were inevitable in the early years when the addict population was still relatively heterogeneous. Moreover, popular support for the law was more likely to be maintained if sentences that were regarded as unjust by local people could be avoided." [45]

This flexibility gave more options to the police and Crown attorneys allowing them to negotiate guilty pleas more easily, to decide on the type of proceeding or to make use of people who had been charged as informers or undercover agents by promising them a reduced sentence or the withdrawal of the charges. In some instances, it also allowed for minimum sentence thereby reducing the Court's discretion during sentencing. The increase in the severity of penalties also sent a clear message to judges about the severity and level of social reprobation for drug offences. The possibility of proceeding by summary conviction also reduced the time period between the arrest and the sentencing. This made it possible to significantly increase the number of convictions. This was particularly important, because the higher the number of convictions, the more the people would be able to see the extent of the problem and the effectiveness of the act.[46]

The 1911 Act provided for a maximum sentence of imprisonment of one year and/or a maximum fine of \$500. In 1920, after the *Act to amend the Opium and Narcotic Drug Act, 1920*, was passed[47], a minimum fine of \$200 was assessed with the maximum increased to \$1,000. In 1921, the *Act to amend the Opium and Narcotic Drug Act, 1921*,[48] significantly amended the penalty for this type of offence. Hybrid offences were created (summary conviction and indictment) for these two illegal activities. For an indictment, a maximum term of imprisonment of seven years could be imposed. For a proceeding by summary conviction, the maximum prison sentence was increased to 18 months, with the possibility of an additional 12 months for default of payment of any fine assessed by the Court. In 1922, the *Act to amend the Opium and Narcotic Drug Act, 1922*,[49] amended the sentence of imprisonment for a summary conviction by providing for the imposition of a minimum prison sentence of six months. In 1925, Parliament passed an amendment providing for the imposition, at the judge's discretion, of a sentence of forced labour for a summary conviction, for simple possession of a drug.

In 1921, an offence was created for the sale, gift or distribution of drugs by a trafficker to a minor. In such cases, one could only proceed by way of indictment and anyone convicted could receive a maximum prison sentence of seven years. Following a highly emotional debate, the sentence of whipping, which had been suggested by a Member, was withdrawn. However, the next year, while reviewing the 1922 Act in the Committee of the Whole, the same member once again suggested the imposition of a sentence of whipping for traffickers selling drugs to minors. At the end of the debate, the Minister of Health agreed to add the penalty of whipping to the Act. In 1929, federal parliamentarians stated their opinions about extending the punishment of whipping to trafficking and simple possession of drugs, as provided for in the *Act to amend and consolidate the Opium and Narcotic Drug Act, 1929*,[50]

Another important penalty was introduced in the 1922 Act: the deportation of immigrants. Section 5 of this statute provided that, except as may otherwise be provided in the Immigration Act, any immigrant convicted of trafficking, simple possession or selling drugs to a minor could be deported from Canada. From 1922 to 1944, when the last immigrants were deported for drug offences, over 1,082 Chinese (82%) were deported, compared to 163 Americans (13%) and 68 other persons of various ethnic origins (5%), for a total of 1,313 deportations. In 1930, the "panic" in British Columbia was a thing of the past, but during the previous eight years, over 638 Chinese had been deported by the Canadian authorities.[51]

There were other offences as well in the legislation, for example possession of pipes, lamps or any other

equipment for the preparation or use of opium; drug trafficking by mail; and obtaining drugs by consulting two doctors. Between 1922 and 1930, 7,096 persons were convicted for an offence under the *Opium and Narcotic Drug Act*. Of these, over 4,900 were Chinese, or 69%.^[52]

Police powers

From 1920 to 1930, various amendments to the *Opium and Narcotic Drug Act* led to the police being granted new powers. These amendments specifically had to do with powers of search. Section 7 of the 1911 Act provided for the issuance of a search warrant authorizing police officers who had reasonable grounds to search the following kinds of premises: a dwelling-house, shop, boutique, warehouse, garden or ship, and to seize drugs found there as well as any containers in which the drugs had been found. Section 3 of the 1922 Act provided for the possibility of conducting a search for drugs without a warrant, either during the day or at night, in the above-mentioned premises. However, police officers were required to have a warrant to search a dwelling-house.

Section 8 of the 1911 Act provided that any drugs seized and the containers in which the drugs were found could be confiscated and delivered to the Court, and be destroyed after the accused's conviction. However, section 9 imposed a number of conditions on the procedure provided under section 8. Indeed, if the person charged was acquitted, there was a three-month period during which the Court could be asked to issue an order to give back the seized drugs. If they were not claimed during this period, they were to be destroyed. The 1921 Act slightly amended these two provisions by specifying that henceforth, drugs and the containers in which they were found were to be confiscated and turned over to the Department of Health, which would dispose of them as it saw fit. This amendment was deemed necessary by the Narcotics Division because several judges, rather than order the destruction of the goods, sent them to hospitals. The Division was afraid that the drugs so returned might fall into the hands of traffickers.

In 1923, the powers to search and the orders of forfeiture were extended to vehicles in which drugs were found. In 1929, this procedure was extended to all traffickers' vehicles, whether or not any such substances were found in them. The purpose of this was to impede the activities of traffickers and to prevent their vehicles from being used by other criminals after they were convicted. The procedure was later extended to aircraft. In 1925, Parliament, by enacting the *Act to amend the Opium and Narcotic Drug Act, 1925*,^[53] authorized police officers to search any person found on the premises searched, with or without a warrant.

The 1929 Act granted special search powers to police officers. Section 22 of this statute allowed a writ of assistance to be issued to a police officer. This was a general power, without any restrictions of time or place, to remain valid throughout the career of the peace officer. Such a writ authorized its recipient to enter a dwelling-house at any time of the day or night accompanied by whatever persons were deemed necessary to conduct searches and seize drugs. The writ of assistance thus made it possible to get around the prohibition on searches and seizures of drugs in a dwelling-house without a warrant. At the same time, the Act was amended to authorize police officers, during searches or seizures, with or without a warrant, to use force if required to conduct a search and to be assisted by persons other than peace officers.

Criminal procedure

In the 1920s, another major amendment was introduced to facilitate convictions in drug cases, a reverse onus provision. The onus was now on the accused, not on Crown prosecutors, to prove that he had not committed the crime with which he was charged. Under British criminal law, the task of proving an accused's guilt traditionally falls on the Crown, hence the expression "presumed innocent until proven guilty".

Section 10 of the Act of 1911 provided that, in a prosecution for drug possession or trafficking (with the exception of importing and exporting), in order to be acquitted, the accused had to prove that he had a legitimate excuse or that he had used such substances for therapeutic or scientific purposes. When Parliament amended the Opium and Narcotic Drug Act in 1920 to provide a better framework for dealing with importing and exporting, the manufacture, sale and prescription by physicians of scheduled drugs by means of a permit, the procedure established in 1911 was amended to specify that, in order to be acquitted, the accused had to prove that he had had a permit duly issued by the Department of Health.

Section 1 of the Act of 1921 expanded the application of the reverse onus to include any person who possessed or occupied a place (dwelling, store, boutique, warehouse, garden or ship) where drugs had been found. According to the wording of the section, that person was deemed to possess such a substance if he was unable to prove that it had been in that place without his consent or that he did not know that the drug was there.

The article also provided that this procedure would apply when a person was charged with trafficking in raw or prepared opium for smoking purposes without having first obtained a permit issued by federal authorities. In 1923, the *Act to Prohibit the Improper Use of Opium and Other Drugs* (Act of 1923)[54] extended application of the reverse onus to offences involving the import or export of drugs without a permit. In cases involving the prescription or administration of a scheduled substance for non-therapeutic purposes, a physician or pharmacist had to prove that that substance had been used solely for medical purposes.

The Act of 1923 also cancelled another fundamental legal guarantee, the right of appeal. Section 25 eliminated the right of appeal in summary conviction cases involving possession, drug trafficking without a permit or for the sale, gift or distribution of a drug to a minor, the latter being an indictable offence. Section 26 of the Act of 1929 expanded this procedure to include possession of or trafficking in a substance similar to a drug. This new procedure rendered moot the provision enacted in 1911 prohibiting any application for a writ of *certiorari*, and the Narcotics Division sought its removal from the act, which was actually done in 1929.[55]

Two other important amendments were made to the *Opium and Narcotic Act* between 1920 and 1930 to provide for the admissibility of the certificate of a federal analyst and the application of the *Identification of Criminals Act* to summary conviction offences. Section 1 of the Act of 1921 had amended the legal procedure applicable in drug prosecutions by making the certificate of a federal analyst admissible in evidence with respect to one or more drugs seized by police officers. However, the courts were reluctant to accept the certificate because they could not authenticate the analyst's signature[56] or confirm his appointment. In 1929, an amendment was made to the *Opium and Narcotic Drug Act* (section 18) providing that the certificate would henceforth constitute *prima facie* evidence of the status of the person who gave or issued it. In this context, proof of that person's appointment or authentication of his signature was no longer necessary.

In 1923, the *Opium and Narcotic Drug Act* was amended to apply the provisions of the *Identification of Criminals Act* to persons convicted of an offence by way of summary conviction. Section 2 of that act permitted police officers to fingerprint, photograph and measure the accused solely in cases where they were indicted. That information constituted the accused's official "criminal record", which was kept in the national police records, with all the consequences that entailed for social, professional or family stigmatization. However, from the standpoint of the Narcotics Division, this amendment would prove beneficial since it would henceforth make it possible to establish files and more effectively monitor drug addicts convicted by way of summary conviction.

Control measures

The *Act to Amend the Opium and Narcotic Drug Act* (Act of 1920)[57] established a control system for the legal trade in narcotics through a system of permits issued to businesses, pharmacists and physicians by the Department of Health in order to regulate Canada's supply of drugs for medical or scientific purposes. The Act provided for: a prohibition against importing or exporting drugs at a port not designated for that purpose by federal authorities; the issue of permits for the import, export, manufacture, sale and distribution of drugs; the imposition of criteria regarding packaging and labelling of packages containing such substances; an obligation for businesses to keep a record of their drug importing, exporting, manufacturing, sale and distribution activities duly authorized by federal authorities; an obligation for physicians to provide the information requested by federal authorities concerning the purchase, manufacture or prescription of medications containing drugs; an obligation for pharmacists to keep a record of their purchases and sales of drugs, the preparation of their own medications containing such substances and renewals of prescriptions signed by a physician;[58] and the authorization to sell medications (such as ointments and liniments) containing very small quantities of scheduled drugs without a permit, provided they were not administered to children under two years of age and met certain labelling criteria.

Amendments to the Act to Amend the Opium and Narcotic Drug Act in 1954

In 1954, Parliament passed the *Act to Amend the Opium and Narcotic Drug Act* (Act of 1954).[59] repealing offences relating to opium use and the possession of equipment intended for that purpose, the sale of drugs to a minor and drug trafficking through the mail. It also made two other significant amendments to the act.

Under the impetus of R.E. Curran, Deputy Minister of Health, it now included a definition of the offence of drug trafficking in order to make the act more comprehensible and increased the maximum prison term for that offence from seven to 14 years. The minimum prison term of six months and the fine were repealed. Henceforth, this offence could only be prosecuted by way of indictment. However, a person convicted of the offence was still liable to whipping and deportation.[60]

Subsection 4(3) of the Act of 1954 created the offence of possession for the purpose of trafficking, for which the new penalties provided for drug trafficking applied. This new offence would mean that those possessing large quantities of narcotic drugs would no longer be convicted for simple possession. As we have seen, a reverse onus was part of Canada's drug legislation from 1911 to 1929. In 1954, subsection 4(4) added a new criminal procedure to facilitate convictions for possession of drugs for the purpose of trafficking.

Thus, in every criminal prosecution for this offence, Crown prosecutors first had to prove that the accused was illegally in possession of the drug. The defendant then had to prove that he had not possessed the substance for the purpose of trafficking. If he succeeded, he was found guilty of possession; otherwise he was convicted of trafficking. In this specific case, Canadian courts established a distinction between the so-called secondary burden, which is to prove a specific fact (in this case the intention to traffic) and the primary burden (illegal possession), which consists in proving that fact where all the evidence is adduced. Thus the Crown prosecutor had the primary burden of establishing that an offence was indeed committed. In this particular case, however, the Crown did not have to prove that the accused intended to engage in trafficking. Proof of illegal possession was sufficient for the court to conclude that there was an intention to traffic.

This amendment was enacted in response to the recommendation by the RCMP and the Narcotics Office (former Narcotics Division) since, failing an admission by the accused, it was very difficult to prove the intention to traffic. However, this new procedure considerably undermined the rights of the accused, particularly since the act did not specify the quantity of drugs necessary to determine whether the accused had actually possessed it for the purpose of trafficking. The accused was thus guilty of trafficking in the absence

of evidence to the contrary.[61]

Senate report of 1955

On February 24, 1955, the Senate passed a motion creating a Special Committee of the Senate on the Traffic in Narcotic Drugs in Canada following the motion made a few weeks earlier by Senator Thomas Reid. At that time, Senator Reid had asked the Senate government leader, W. Ross MacDonald, whether the federal government intended to create such a committee since, based on his information, the traffic in opium and other narcotics in the City of Vancouver was beyond the control of police authorities. In debate on the motion, Senator MacDonald accurately summed up the task before the members of the Senate Special Committee as follows:

The work of the committee will largely be to consider the causes of this unfortunate problem with which this country is faced, to hear expert witnesses and to determine in what way the Government can make its most valuable contribution in resolving this unfortunate condition. The reports of this committee, based upon an objective, cautious and factual assessment of the problem, may well become a document of the utmost importance and have far-reaching consequences in helping to found policy upon which the successful solution of this problem can rest. [62]

Upon adoption of the motion, Senator Reid was appointed chairman of the Committee. From March 25 to June 17, 1955, the committee organized public hearings in Ottawa and was the first to travel outside the capital, holding meetings in Montreal, Toronto and Vancouver. In addition to specialists, public servants and police officers, the senators also met a group of 150 people suffering from a drug dependency at Oakalla Prison in Vancouver to gain a better understanding of the reasons leading them to use drugs. The Committee heard 52 witnesses: 13 from law enforcement agencies, 10 from the various federal departments concerned by the fight against drug trafficking and 12 addiction treatment specialists. On June 23, 1955, Senator Reid tabled the Committee's report containing a series of recommendations for the treatment of people suffering from a drug dependency and the fight against the traffic in narcotic drugs.

According to the report, the figures provided by the Department of Health revealed that there were 515 "medical addicts" in Canada, that is to say individuals who had become dependent on a drug as a result of treatment for a disease, 333 "professional addicts" (doctors, pharmacists and so on) and 2,364 "criminal addicts", for a total of 3,212. Of the persons belonging to the last category, 1,101 were located in Vancouver.[63] Only 26 of the 2,364 "criminal addicts" were under 20 years of age.

To establish a relationship between crime and drug dependency and to explain the difficulties in establishing treatment programs, the Committee cited a study conducted by the RCMP noting that, of 2,009 "criminal addicts", 341 had first been convicted of an offence under the Opium and Narcotic Drug Act, 1,220 had first been convicted for other crimes and 478 had already had a criminal record. Thus, 1,668 of the total 2,009 "drug addicts" were criminals, which was sufficient in the Committee's view to confirm the thesis of the "criminal" or "contaminating" user.[64] It was therefore clear that drug addiction was not a disease. In the Committee's view, most "addicts" came from disadvantaged backgrounds in which crime and family problems were omnipresent.

The evidence of medical authorities was to the effect that drug addiction is not a disease in itself. It is a symptom or manifestation of character weaknesses or personality defects in the individual. The addict is

usually an emotionally insecure and unstable person who derives support from narcotic drugs. The Committee was gravely concerned to learn that relatively few cases could be authenticated where drug addicts, while out of custody, had been successful in abstaining from the use of drugs for any lengthy period of time. The complications and difficulties in the successful treatment of drug addiction, having regard to the pattern of development of the addict and his almost invariable criminal tendencies, cannot be too heavily stressed. [65]

In the circumstances, the Committee unanimously rejected the idea of creating government clinics which, on certain conditions, would provide "criminal addicts" with ambulatory treatment. The Committee moreover emphasized that a resolution adopted at the time of the tenth annual session of the United Nations Narcotic Drug Commission, stated that this form of treatment was not advisable. [66] It also rejected the United Kingdom's model after confirming, with the aid of British specialists, that doctors should not encourage drug addicts to persist in their addiction if they could not, even after lengthy treatment involving gradual reduction of the prescribed doses abstain from drugs. On this point, the report states: "[...] *dangerous (narcotic) drugs in the United Kingdom are subject to a wide degree of control of the exacting standards demanded by the international agreements to which the United Kingdom, in common with Canada, is a party.*" [67]

Considering that "addicts" were "basically criminals who daily violate the *Opium and Narcotic Drug Act*", the Committee argued that municipal and police authorities, more particularly those of Vancouver, should more effectively invoke the provisions of the *Criminal Code* dealing with theft, vagrancy and prostitution. Citing the testimony of Harry J. Anslinger before a U.S. Congress committee, the Committee stated that such an initiative would solve much of the problem caused by drug addiction. Second, it noted that "*the evidence of many witnesses recommended the compulsory segregation and isolation of all addicts for long periods of time for the purpose of treatment and possible rehabilitation.*" [68]

Thus, to prevent this "scourge" from spreading in the penitentiaries and to cure "criminal addicts" convicted of crimes, the Committee suggested that "*the penitentiary authorities might give further consideration to the particular problems presented by criminal addicts in terms of segregation, treatment including specialized training and rehabilitation and other measures necessary in view of the special problems which addiction superimposes.*" [69] In fact, as Minister of Health, Paul Martin had done a year earlier, the Committee instead emphasized the limits of federal jurisdiction and the efforts the provinces should devote to the treatment of "drug addicts" who had not been convicted of a crime. Still advocating the segregation of these individuals, the Committee indicated that the federal government wanted to make available to British Columbia the federal William Head quarantine station on Vancouver Island so that it could transform it into a treatment centre similar to that in Lexington, Kentucky. It further proposed the creation of a national health program to provide financial support for provincial drug addiction initiatives.

The Committee also encouraged the creation of groups similar to Alcoholics Anonymous, but rejected the idea of national education campaigns for the general public and teenagers on the ground that "*such programs should not be used where they would arouse undue curiosity on the part of impressionable persons or those of tender years.*" [70] The Committee supported the position of the UN Narcotic Drug Commission, recommending instead that a "mental health" program be established to detect behaviour in the schools that might lead to drug addiction.

Since treatment programs could not cure all "drug addicts", the Committee also proposed that certain measures be adopted to fight illegal trafficking in narcotics. It thus recommended:

- that a separate offence be created for the illegal importing/exporting of narcotic drugs in order to put an end to drug smuggling;

- that a maximum prison term be imposed of up to 25 years (life) for that new offence;
- that the maximum prison term be increased from 14 to 25 years for trafficking offences; and
- that it be possible to establish proof of a conspiracy in order to facilitate the conviction of the leaders of criminal organizations not directly involved in the sale of narcotics but which benefit therefrom.

In the Committee's view, the severity of these penalties would "act as an effective deterrent to an individual in smuggling drugs into Canada for the profit of a 'higher up.'"[71] Rather than waste police and court resources in trying to convict organized crime leaders who were the cause of the problem, an attempt had to be made to eliminate the "trafficker-distributors" in the neighbourhoods of the large cities and the problem would be solved.

Although the Committee's proposals were much more conservative than those advanced in the debates preceding its establishment, contrary to a number of other reports by parliamentary committees or royal commissions of inquiry, most of its recommendations would be followed by federal authorities. First, it contributed to a number of research projects in British Columbia and Ontario in 1956. And second, the Senate Committee's report was at the origin of most of the new provisions of the Narcotic Control Act, which was passed in 1961 to replace the *Opium and Narcotic Drug Act*.

From 1960 to the Le Dain Commission: the search for reasons

The period following World War II witnessed new attitudes toward narcotic drug control that would call into question the approach adopted by Canada since 1908 in fighting the abuse of and trafficking in narcotic drugs. The international human rights movement, the creation of organizations dedicated to the defence of civil liberties, the gradual democratization of access to universities, the appearance and development of new disciplines in the social sciences such as criminology, psychology, sociology, political science and the sociology of law, scientific progress and research into drug addiction were factors in the creation of new pressure groups consisting of more articulate individuals who disputed the use of criminal law as a "miracle" solution in responding to drug problems. However, it was not until the explosive increase in drug use in the 1960s, the hippie protest movement and the work of the Le Dain Commission that these demands materialized.

Narcotic Control Act (1961)

Passage of the *Narcotic Control Act* (Act of 1961)[72] coincided with the coming into force of the *Single Convention on Narcotic Drugs* of 1953, which played an important role in the creation of the modern international narcotic drug control system, an extension and expansion of the international legal infrastructure developed between 1909 and 1953. Work to group together the nine multilateral treaties signed during that period into a single international enactment began in 1948, and Canada played a significant role in the negotiations and drafting that led to its adoption.

While the Act retains most of the criminal procedures and offences established over the previous years, two amendments formed the subject of major parliamentary debate: the creation of an offence for illegal importing or exporting of narcotics and the increase in penalties for the offence of trafficking, and the

treatment of drug addicts?. The minimum prison term of six months for simple possession was repealed, as was the procedure that provided that the *Identification of Criminals Act* would apply in the case of a summary conviction and the provision eliminating the right of appeal for certain offences.

The Act of 1961 was divided into two parts: the first, entitled "Offences and Enforcement", was placed under the authority of the Minister of Health, and the second, "Preventive Detention and Detention for Treatment", was to be administered by the Minister of Justice.

As the Senate Committee had recommended, section 5 of the Act of 1961 created the offence of importing and exporting narcotic drugs. Whoever was convicted of that offence (solely by way of indictment) was liable to a minimum prison term of seven years to a maximum of 25 years. That provision was designed to combat drug smuggling between the United States and Canada and to comply with the international undertakings Canada had made in ratifying the Single Convention.[73]

In accordance with another recommendation from the Senate Committee report, section 4 of the Act of 1961 raised the maximum prison term for trafficking in narcotic drugs from 14 to 25 years. The provision for whipping was also repealed. These amendments also applied to the penalty provided for possession for the purposes of trafficking.

Part II of the Act, which comprised sections 15 to 19, defined the new federal policy regarding preventive detention and detention for treatment. First, the courts henceforth had the power to order that an individual convicted of trafficking, possession for the purpose of trafficking or importing/exporting drugs, and only if the accused had previously been convicted of similar offences, be placed in preventive detention for an indeterminate period of time. This measure replaced any other sentence which might have been imposed. Second, when a person was charged with simple possession, possession for the purpose of trafficking, trafficking or import/export, the court, at the request of Crown counsel or the accused, could order the accused detained for examination purposes to determine whether he was eligible for a drug addiction treatment program. If that was the case, the accused had to be sentenced to detention for treatment at a specialized federal institution for an indeterminate period of time in lieu of any other sentence provided for under the act. For a first offence, preventive detention could not exceed 10 years. The individual had a right of appeal, was subject to the *Parole Act* and could be referred to preventive detention at any time if he used drugs during his probation period.

Lastly, the Act of 1961 provided that, if a province adopted a preventive detention policy combined with a drug addiction treatment program (in cases not involving an offence under the act), the federal government could enter into an agreement with the competent authorities of that province to transfer drug addicts to the specialized federal institutions. These new provisions in fact enacted the Senate Committee's proposals.

Despite the intervention of two ministers, this treatment policy, based on a penal approach and, to a certain degree, oriented toward repression of the "contaminating user" or "criminal user", failed to stir up interest among parliamentarians. The measures were passed without opposition but, for reasons that remain unclear, were never proclaimed. The Le Dain Commission moreover questioned this decision by the federal government: "*Whether this is because of doubts about the constitutional validity of these provisions or the failure to develop suitable treatment methods and facilities or later reservations by the government as to the advisability of compulsory treatment in principle, or some combination of these, it's not clear.*"[74]

Another provision of the Act of 1961, but not the least, was passed by Parliament without debate: the schedule. The Single Convention of 1961 contained a series of schedules prepared by the World Health Organization containing the list of drugs subject to rigorous control for the purpose of preventing them from being used for other than medical or scientific purposes. Most were on the schedule to the Act of 1961, which now comprised more than 92 drugs and their derivatives, spread over 14 major classes (opium, cannabis, coca, phenypipedridine, and so on). No member of Parliament questioned the Minister of Health to determine the criteria or reasons advanced by his department for subjecting such a large number of substances to the restrictive provisions of the act.

An Act respecting Food and Drugs and Barbiturates (1961)

In the early 1960s, the use of drugs not included in the schedule to the *Opium and Narcotic Drug Act*, or, later, in the *Narcotic Control Act*, began to concern medical and government authorities. These drugs were barbituric acids or "goof balls", amphetamines, methamphetamines and the salts and derivatives of those three substances. These so-called psychotropic drugs could be used to reduce stress, eliminate insomnia, stimulate muscle and brain activity and eliminate appetite.

When physicians and other health professionals began to notice the number of barbiturate dependence cases and the serious secondary effects of those drugs in the 1950s, they asked the government to regulate their distribution and use more effectively. In addition, in 1957, following a Health Department survey of 2,500 pharmacies, more than 300 pharmacists were convicted for failing to comply with regulations respecting the prescription of barbiturates and amphetamines. This time, it should be pointed out, the position of health professionals had more influence on government authorities than the positions of police officers or the Narcotic Control Office. These substances were included in the *Food and Drugs Act* as "controlled drugs" and not in the *Narcotic Control Act*, for two reasons. First, certain harsh provisions of the Act of 1961 were coming under increasing criticism. Second, the use of those substances in a number of prescription medications meant that their use was widespread among the general public, particularly among persons holding good jobs, which ultimately was quite different from the unflattering picture hitherto painted of "drug addicts". In the circumstances, having recourse to the provisions of the Act of 1961 was out of the question.[75]

In 1961, Parliament thus passed the *Act to Amend the Food and Drugs Act* (Food and Drugs Act of 1961)[76] to better regulate the trade in barbiturates and amphetamines. The new act created Part III concerning the "controlled drugs" listed in Schedule G. It also created the offence of trafficking or possession for the purpose of trafficking, for which an accused was liable to a maximum prison term of 10 years, if convicted by way of indictment, or 18 months by summary conviction. However, simple possession of the substances was not illegal. Furthermore, unlike the *Narcotic Control Act*, the definition of trafficking excluded the distribution or giving of a controlled drug, but included the offences of importing and exporting.

In the case of criminal procedures applicable in a trial, a number of aspects were retained from the Act of 1961, such as the procedure concerning the reverse onus in a prosecution for possession for the purpose of trafficking, the use of a certificate from a federal analyst to confirm the nature of the drug, search and seizure writs of assistance, and the forfeiture and restitution of seized substances.

Lastly, Schedule G of the Act included three drugs: amphetamines, barbituric acids and methamphetamines, as well as the salts and derivatives of those drugs. During the debates, one member asked why other similar substances were not included in the schedule. The Minister of Health answered that, based on scientific research, only those three drugs were considered dangerous to human health.[77] Furthermore, as had been the case with the *Opium and Narcotic Drug Act* and the new *Narcotic Control Act*, the Governor in Council could make regulations upon recommendation by the Minister of Health, and where the public interest warranted it, to amend the schedule.[78]

Food and Drugs Act and hallucinogenics (1969)

In 1969, Parliament extended the application of legislative and bureaucratic controls to hallucinogenic drugs by passing the *Act to Amend the Food and Drugs Act* (Food and Drugs Act of 1969).[79] That enactment

created Part IV, which was to govern the use of and trade in "restricted drugs" enumerated in the new Schedule J. Those drugs were lysergic acid diethylamide (LSD), N-Diethyltryptamine (DET) and Methyl-2,5-dimethoxyamphetamine (STP).

To better control the use of and trade in hallucinogenic drugs, the act provided for the same offences and procedures as those applying to barbiturates. It also created an offence of possession in order to deter anyone from using such drugs. In that instance, an accused was liable, on summary conviction, to a maximum prison term of three years and a fine of \$5,000.[80] If found guilty of a first offence, on summary conviction, an accused was liable to a prison term of up to six months or a maximum fine of \$1,000. For subsequent convictions, the act provided for a maximum prison term of one year or a fine of \$2,000.

Narcotic Control Act and the offence of possession of cannabis

In the parliamentary debates on the Food and Drugs Act of 1969, the Minister of Health moved a very important amendment to the *Narcotic Control Act*. From 1921 until the *Narcotic Control Act* was passed, Canadian legislation had provided for a hybrid offence in the case of simple possession of a drug. Since 1961, however, that offence was solely an indictable offence punishable by a prison term of up to seven years. The amendment proposed in 1969 maintained the offence, but again offered the option of proceeding by way of summary conviction, thus recreating a hybrid offence. In the case of a first offence in which an accused was found guilty on summary conviction, the Act provided for a maximum prison term of six months or a fine of up to \$1,000, and a term of up to one year and a fine of \$2,000 for subsequent offences. The amendment was considered necessary by the Minister of Health since the number of prosecutions for cannabis possession had increased from 493 in 1966 to 1,727 in 1969.[81] In his view

[...] in spite of the enormous variety of individual situations involved in that number of cases, the relevant section of that act provides very little scope for flexibility, either on the part of the Crown prosecutors or presiding judges or magistrates. There is no provision for the Crown to choose to proceed summarily. [...] This rigidity has been the subject of increasing criticism from a wide variety of sources such as the addiction research agencies of several provinces. [82]

Lastly, the Food and Drugs Act of 1969 amended the procedure adopted in 1929 providing for the admissibility of a certificate from a federal analyst at trial for an offence involving a scheduled drug under the *Narcotic Control Act* or a Schedule G or J drug under the *Food and Drugs Act*. Crown prosecutors would henceforth be permitted to prove orally, under oath, by affidavit or solemn declaration, the status of the signatory of the certificate, who thus no longer had to appear in court. However, a judge could require the analyst to appear before him for examination or cross-examination to better assess the information contained in the affidavit or solemn declaration. The amendment was designed to ensure greater respect for the fundamental rights of the accused.

The Le Dain Commission (1969-1973)

When parliamentarians were examining the provisions of the *Food and Drugs Act* in 1969, they asked that a special committee be struck to look into the issue of drug use in Canada, particularly the use of cannabis. On May 29, 1969, the Liberal government headed by Pierre Elliott Trudeau passed Order-in-Council P.C. 1969-1112, establishing the Commission of Inquiry into the Non-Medical Use of Drugs, more commonly

known as the Le Dain Commission. One of the reasons put forward to justify its creation was:

That notwithstanding these measures and the competent enforcement thereof by the R.C.M. Police and other enforcement bodies, the incidence of possession and use of these substances for non-medical purposes has increased and the need for an investigation as to the cause of such increasing use has become imperative. [83]

The Commission's activities and reports

The Commission carried out its activities from mid-October 1969 until December 14, 1973, when its final report was tabled. During this period, it heard from 639 groups and individuals; 295 organizations presented briefs and 43 appeared before the members of the Commission; 212 individuals made submissions and 89 gave oral presentations. In total, the Commission held public hearings in 27 cities, including Ottawa and the ten provincial capitals, travelling some 50,000 miles around the country. During its term, the Commission published four reports: an interim report (1970), a special report on cannabis (1972), a report on treatment (1972) and a final report (1973). In addition to its Chairman, Gerald Le Dain, the Commission comprised four members: Ian L. Campbell, Heinz Lehman, Peter Stein and Marie-Andrée Bertrand.

Before reviewing the Commission's recommendations in relation to cannabis, it is worthwhile to look into four aspects of the Commission's work that Dr. Marie-Andrée Bertrand brought up at a hearing of our Committee.

The first relates to the Commission's mandate, which was "extremely generous and broad." She presented it thus:

(a) to marshal from available sources, both in Canada and abroad, data and information comprising the present fund of knowledge concerning the non-medical use of sedative, stimulant, tranquillizing, hallucinogenic and other psychotropic drugs and substances;

(b) to report on the current state of medical knowledge respecting the effect of the drugs...

(c) to inquire into and report on the motivation underlying the non-medical use referred to in (a);

(d) to inquire into and report on the social, economic, educational and philosophical factors relating to the use for non-medical purposes... in particular, on the extent of the phenomenon, the social factors that have led to it, the age groups involved, and problems of communications; and

(e) to inquire into and recommend with respect to the ways or means by which the Federal Government can act, alone or in its relation with Government at other levels, in the reduction of the dimensions of the problems involved in such use

Because the mandate was so broad, commissioners and the Commission's personnel got involved in a vast project which, in my opinion, had a great deal of impact on Canadian society. I am convinced that even though it had no influence at all on criminal legislation, the Le Dain Commission brought about a considerable change in the mentalities of Canadians, as it raised, for instance, awareness about the effects of traditional drugs. [84]

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Second, the method used by the Commission to seek the opinions of Canadians. After mentioning the Commission's travel, she recalled that the public hearings gave the public an opportunity to ask questions and to confront the experts.

Thus, we raised a wide national debate on the factors whereby Canadian society ... can, frequently resort to psychotropic substances to alleviate some of its suffering. In my opinion, the generosity of the mandate, the method of consultation, the style and attitude of the commissioners - and more specifically those of the Commission's chairman - brought about an effervescence of ideas about democracy, about how the State functions, and about the feeling of alienation that many Canadians felt and still feel vis-à-vis their national, provincial or municipal government. [85]

Third, the Commission's research mandate. Dr. Bertrand stated that the Le Dain Commission, at the height of its mandate, employed 100 persons, 30 of whom were full-time researchers. These researchers basically worked on four targets: (1) the effects of the drugs - and especially of cannabis, (2) drug use, (3) treatment problems, and (4) the influence of the media on the phenomenon.

Fourth, the Commission's impact. Dr. Bertrand believes that the democratic debate kicked off by the Commission had significant impact on knowledge about drugs. Many people came to understand that stereotypes of drug users as criminals were just that - stereotypes. The Commission also kicked off a deep debate about the factors pushing people to take drugs and increased awareness of these issues. What became apparent very quickly after the Commission started its work was Canadians' feeling of alienation from Canadian politicians and lawmakers, and the frustration that ordinary people are not listened to in this country.

The special report on cannabis

Before presenting their recommendations in connection with a new public policy on cannabis, the Commissioners made a number of observations about Canadian cannabis legislation.

- ❖ The decision to criminalize cannabis was made "*without any apparent scientific basis nor even any real sense of social urgency [...]*". [86]
- ❖ The reversal of the evidentiary burden of proof for an offence of possession for the purpose of trafficking places a very heavy burden on the accused - significantly weakening the principle of the presumption of innocence - since he must prove that he did not intend to traffic by a preponderance of evidence, not just by raising a reasonable doubt in the mind of the judge or jury.
- ❖ Law enforcement is made very difficult by the very nature of the offences that take place secretly and often on a consensual basis, and extraordinary methods of law enforcement must be used. However, "*the combined effect of their use in connection with [drug] laws has been one of the chief causes of concern about the impact of the criminal law in this field.*" [87]
- ❖ RCMP officers and officers in the provincial or municipal police services do not have the necessary

financial, human or technical resources to curb narcotics trafficking as well as dealing with simple possession offences. All too often, possession cases are discovered accidentally in the course of other police investigations or surveillance activities over several months, resulting in a discriminatory application of the law.

- ❖ The decision as to whether to proceed by indictment or summary conviction varies considerably from one area to another of the country, and is influenced by the number of ongoing cases involving narcotics and the significant discretion exerted by crown attorneys. This inequitable application of the law can have extremely serious consequences on a defendant's future, particularly if a criminal record is the outcome.[88]

- ❖ Sentencing practices in drug cases are characterized by a wide disparity across Canada because of individual judges' perceptions about drug addiction, and their relative experience in criminal law and with cases involving simple possession or drug trafficking. According to the Commission's research, judges with greater experience in these types of cases handed down more lenient sentences. For example, sentences for simple possession involved fines or probation when a defendant did not have a criminal record, and, in trafficking cases, imprisonment of less than two years.[89] and

- ❖ From 1968 to 1971, the proportion of fines imposed for simple possession of cannabis increased from 1 % of all dispositions to more than 77 %.[90]

While the Commissioners agreed with these observations, their conclusions and recommendations were not unanimous.

The majority opinion – the recommendations of Gerald Le Dain, Heinz Lehman and Peter Stein

In order to explain the underlying reasons for their recommendations, the majority based their conclusions on the concept of harm, considering this the most useful criterion for laying down a new social policy for cannabis. This principle is associated both with the harm caused to an individual who uses a harmful substance, particularly his physical or mental health, and with the harm the individual causes to society, i.e. the impact on his family and colleagues. The concept of harm was of significance to the majority, since it made it possible to assess whether society should be concerned about the adverse effects of cannabis on human health and on society and, if such were the case, to what extent should criminal law apply in order to reduce those adverse effects. Should one criminalize simple possession of cannabis or only trafficking? Should measures such as decriminalisation or legalization be considered?

Initially, the majority wanted to eliminate some of the myths about the danger of cannabis:

The evidence of the potential for harm of cannabis is far from complete and far from conclusive. It is possible to find some fault with the methodology or the chain of reasoning in virtually all of the evidence. [...] On the whole, the physical and mental effects of cannabis, at the levels of use presently attained in North America, would appear to be much less serious than those which may result from excessive use of alcohol. However, there has not been sufficient experience with long-term, excessive use of cannabis under North American conditions to justify firm and final conclusions. [91]

Regarding the amotivational syndrome, the Commission said it did not have conclusive data about personality change.

Some observers have spoken of apathy and a loss of goals, an absorption in the present with little or no thought for the future. All of these symptoms might be equally associated with a profound change of values and outlook which many might regard as salutary.[92] In our opinion, these concerns justify a social policy designed to discourage the use of cannabis as much as possible, particularly among adolescents. [93]

The Commission did not have specific and conclusive scientific data to identify the harmful or beneficial effects of cannabis. On the other hand, while it believed that the dangers of cannabis (particularly those involving operation of a motor vehicle, poly-drug use, long-term mental deterioration and disorder, and criminality) were exaggerated, the Commission recognized that cannabis, like all other drugs, can have particularly harmful effects when it is used along with other drugs and that its use by adolescents could have a harmful effect on their maturation. The majority of members explained that, even if the use of cannabis is not a threat to the foundations of Canadian society or to our system of values based, for example, on a productive life, this element could not be excluded from the formulation of a new policy on cannabis.

Secondly, since, in addition to health problems, cannabis use entails significant costs to the family, to society and to the economy, the majority justified the use of the criminal law, stating:

In our opinion, the state has a responsibility to restrict the availability of harmful substances and in particular to prevent the exposure of the young to them and that such restriction is a proper object of the criminal law [...] where, in its opinion, the potential for harm appears to call for such a policy. [94]

For this reason, the majority rejected a public policy model based on legalization of the use and distribution. Even if legalization would have had the benefit of better controlling supply and quality, without a considerable increase in the number of long-term users, it could have led to some users moving on to hashish, with its higher concentration of THC, or encouraged users to smoke more marijuana or other cannabis products in order to obtain the desired psychoactive effect, and this would have cancelled out the effectiveness of control measures and increased the likelihood of abuse. [95]

Therefore, the majority recommended maintaining the offences of cannabis trafficking, of possession of cannabis for the purpose of trafficking, and importing and exporting cannabis. However, it adopted a much more liberal position with regard to controlling the demand:

The criminal law should not be used for the enforcement of morality without regard to potential for harm. [...] If we admit the right of society to use the criminal law to restrict the availability of harmful substances in order to protect individuals (particularly young people) and society from resultant harm, it does not necessarily follow that the criminal law should be applied against the user as well as the distributor of such substances. [96]

In this context, the majority felt it was necessary to amend the Narcotic Control Act, because "we do not believe that a change in the law need have an adverse effect on a proper appreciation of the caution with which we believe cannabis should be treated." [97] It was necessary to restore Canadians' confidence in and respect for the cannabis policy by reclassifying the drugs listed in the appendix to the Act, particularly

cannabis. The majority opinion was based on the fact that:

While the Single Convention groups cannabis with the opiate narcotics it does not insist that it be given identical treatment in the law of the member states. The Single Convention has certainly been responsible for reinforcing the erroneous impression that cannabis is to be assimilated to the opiate narcotics but it does not prevent domestic legislation from correcting this impression. Because the present classification and legislative treatment of cannabis is so generally recognized to be erroneous and indefensible, any change in it which corresponded more closely to the facts could be expected to command much more respect and careful attention [to the law]. [98]

Restoring Canadians' confidence in the *Narcotic Control Act* also involved a comprehensive review of criminal penalties relating to cannabis. To justify this view, the majority pointed out that the harm caused by the criminal law, particularly on mere users, was more serious than the harm to their health and their environment caused by using the drug. In its analysis, the majority focussed on the consequences of sentences on young people, since over 85% of those convicted for cannabis possession or trafficking in 1970 and 1971 were under the age of 25.

A criminal record could have serious consequences for the future of young people, limiting the right to travel, and because of the family, social or professional stigma it caused. The majority were of the view that the possibility of obtaining a pardon is not sufficient to resolve this situation, since: "*the knowledge which a lot of people invariably possess of a conviction and the knowledge which can be obtained by interested parties through careful investigation cannot be eliminated.*" [99] In fact, the *Criminal Records Act* provides only for removing information about the criminal record stored in national police files following a pardon, but not information in police investigation reports, or in legal documents stored in the law courts about the trial and the sentence, let alone newspaper articles.

Moreover, the majority of members deplored the extreme severity of sentences for cannabis use, stating, "*they are out of all proportion to the harm which could possibly be caused by cannabis. Moreover, they are excessive by comparison with those of most other nations.*" [100] It disapproved of the maximum penalty of seven years' imprisonment for cannabis cultivation for one's own use, the mandatory minimum penalty of seven years' imprisonment for cannabis importing or exporting, as well as the possibility of life imprisonment for cannabis trafficking. The majority's criticism also covered the definition of trafficking, which included giving or offering, so that people who are merely passing a joint among friends in an evening could be charged with trafficking. The majority also mentioned that these sentences were made even more severe because:

- ❖ in the cases relating to possession of cannabis for the purpose of trafficking, the Crown could only proceed by way of indictment, with the consequence of more severe sentences; and
- ❖ the enforcement of the *Narcotic Control Act* was discriminatory (police investigations, the Crown Attorneys' discretion in deciding how to proceed, reversal of the burden of proof to the detriment of the accused, and judges' past experience).

The criminalization of cannabis had another negative effect: the illegal nature of simple possession and cultivation was conducive to the development of an illicit market, where some people must engage in crime or at least deal with criminals in order to obtain a supply. In some cases, people were exposed to other, more dangerous drugs. According to the majority:

Making cannabis legally available would not isolate people from contact with the illicit market in other drugs. From the point of view of influence, the important contacts are between drug users rather than between users and traffickers. Most users are initiated into new forms of drugs by other users. Interest in other drugs would not cease if cannabis were made legally available. [101]

Finally, the use of extraordinary police powers, such as writs of assistance, often against users, only discredited the law further and adversely affected the morale of law enforcement authorities. [102]

For all these reasons, the majority recommended:

- ❖ that importing and exporting should be included in the definition of trafficking (as they are under the Food and Drugs Act), and they should not be subject to a mandatory minimum term of imprisonment;*
- ❖ that it be possible to proceed by indictment or summary conviction in the case of trafficking and possession for the purpose of trafficking, and, on indictment, the penalty for this offence should be five years, and on summary conviction, eighteen months. It should be possible in either case to impose fine in lieu of imprisonment;*
- ❖ that the prohibition against the simple possession of cannabis be repealed;*
- ❖ that trafficking should not include the giving, without exchange of value, of a quantity of cannabis which could reasonably be consumed on a single occasion;*
- ❖ that the prohibition against cultivating cannabis for personal use be repealed; and*
- ❖ that the burden of proof on a person charged with possession for the purposes of trafficking be lightened, by stipulating in the Act that it is sufficient for the accused to raise a reasonable doubt as to his intention to traffic.*

Minority Opinion—the recommendations of Marie-Andrée Bertrand

According to Marie-Andrée Bertrand, Canada's cannabis policy required an in-depth reform that went far beyond merely amending the Narcotic Control Act. Dr. Bertrand took a much more liberal approach than the majority, and particularly Ian L. Campbell, as we will see below. Dr. Bertrand wrote that the Commission's research findings "establish that a large number of people have used cannabis—more than a million in Canada. Very few of them have ever required medical or psychological treatment as a consequence. Smoking marijuana or hashish generally produces no serious personal problems, nor does it result in criminality." [103] Cases of habitual and excessive use were exceptional, as most users used cannabis recreationally. Any new public policy aiming at controlling cannabis use effectively without causing harm both to users and to society should consider these determinants. The use of the criminal law was out of the question. According to the Commissioner, there were several arguments in support of this conclusion.

Like the majority, she rejected a number of prejudices concerning harm caused by cannabis to human

health, in particular its effects on brain activity and the ability to drive a vehicle, but recognized nevertheless that in large amounts cannabis could cause psychoses. While Marie-Andrée Bertrand commented that cannabis might have an effect on adolescent maturation, she said that very few facts supported the hypothesis put forward by the majority.[104] She also concluded that there was no relationship between cannabis use and criminality, aggression or the infamous amotivational syndrome.[105] Moreover, she rejected claims that cannabis use leads to poly-drug use in most users:

[...] a certain proportion of cannabis users take other drugs [...]. We are not dealing with a phenomenon that is limited to cannabis, LSD and the amphetamines (which are used in combination by only a few) but with an almost indiscriminate use of mood-changing substances in our society. When we include alcohol, it can be said that Canadians consume great quantities of a variety of psychoactive drugs, even if cannabis is excluded.[106]

Second, users could not be sure of the quality of cannabis they bought, with all the concomitant repercussions, given the illicit and clandestine nature of production and distribution activities. Dr. Bertrand responded to the argument made by the majority that quality control of cannabis in a legal market would encourage a number of users to move to hashish by saying that no evidence points to such a possibility.[107]

Third, the prohibition of cannabis trade and illicit use was expensive and ineffective. Attempts to curb trafficking, despite all the efforts made by RCMP officers and municipal police forces, along with severe penal sanctions, were ineffective. The sentences provided for simple possession no longer had any dissuasive effect, since a million Canadians were using or had used cannabis.

Fourth, in its current form, the law had no educational or dissuasive impact, since Canadians' perception of the harm caused by cannabis was no longer the same as the government's. In this connection, Marie-Andrée Bertrand wrote:

A more important factor underlying problems in the application of the law is the gradual change in opinion taking place among Canadians regarding the harmfulness of this substance. The evidence has been taken into account - cannabis is not an opiate, its use does not induce physical dependence. The earlier opinions of society have been challenged and modified. [...] However, the continued prohibition of cannabis has precipitated, among many users, a generalized disrespect for the law. [108]

For all these reasons, Marie-Andrée Bertrand recommended a "controlled legalization" policy for cannabis. She concluded that the federal government should remove cannabis from the Narcotic Control Act and initiate discussions with the provinces to have the sale and use of cannabis placed under controls similar to those governing the sale and use of alcohol. Such a system would entail regulations prohibiting the sale or distribution of cannabis to minors, and governing the distribution of a quality product at a price that would make smuggling impractical. To guarantee the success of the new approach, the federal and provincial governments were to work together in developing all stages of the production and distribution of cannabis, while undertaking multidisciplinary epidemiological research to evaluate the repercussions of a controlled legalization policy on health and human behaviour and to monitor patterns of use.[109]

Lastly, Marie-Andrée Bertrand considered that this policy would prove beneficial, not only for users, but also for the federal and provincial governments because of the considerable revenue they might well derive

from the sales taxes on such a popular product.[110]

Minority Opinion—the recommendations of Ian Campbell

In comparison with the very liberal recommendations made by Marie-Andrée Bertrand, the recommendations by Ian Campbell were much more conservative in tone. Although he was in almost full agreement with the conclusions of the majority, he firmly believed that decriminalizing simple possession of cannabis would be misinterpreted by the media and by Canadians. If cannabis were legalized, the signal that would be sent out to society, particularly to young people, would be that cannabis is harmless, and might eventually lead to the accepted use of other, much more dangerous drugs. In this regard, he stated that, in both cases:

I think there is also a risk that the repeal of the prohibition on the possession of cannabis, even by the young, would be misunderstood as indicating a willingness by the society to condone and accept the use of the drug. There is little evidence to suggest that such a willingness exists. [...] The risk of such progression is probably not as great among those who have been deterred from use by the present law as among those who have already used cannabis. But the risk of progression is nonetheless real for some considerable number.[111]

He also felt that maintaining the prohibition had a positive benefit—that of protecting young people from the harm caused by cannabis:

The potential for harm from adult use of cannabis is probably very much less than from use by the young. But, I find sufficient reasons to recommend the continuation of the general prohibition. Not the least of these reasons is the practical impossibility, at this time, of using the law to convey a perception of the dangers of cannabis without maintaining the prohibition for all, whether young or old. [112]

Against this backdrop, the law was in the interest of prevention and morality, protecting as it did both individuals and society. Continuing in this vein, Mr. Campbell spoke about cannabis and young people's lack of maturity, saying:

We have properly been concerned about the damage done by placing too many duties and responsibilities on the individual too early. But it seems to me that recently we have been far too little concerned with the consequences of placing too many rights and freedoms on the shoulders of the young. [113]

Despite it all, like other members of the Commission, Mr. Campbell recognized that some penal sanctions provided by the law could cause harm that was disproportionate in comparison with the real harm caused by cannabis on human health and society. He therefore recommended that the prohibition on the possession of cannabis be maintained, with possession of cannabis being punishable, upon summary conviction, by a fine of \$25.00 for the first offence and a fine of \$100.00 for any subsequent offence. Maintaining the prohibition would benefit not only users, but also police officers, since it:

Is entirely reasonable to assume that a high proportion of those currently arrested for possession as a result of systematic police investigation are in fact guilty of trafficking. [114]

The work of the Le Dain Commission ended on December 14, 1973 when its final report was tabled. On July 31, 1972, John Munro, Minister of Health, revealed the policy that the federal government wanted to pursue following the tabling of the Commission's special report on cannabis. Even though he refused to legalize the use of cannabis, the Minister stated his intention to remove cannabis from the *Narcotics Control Act* and place it under the *Food and Drugs Act*. This measure would be accompanied by lighter sentences for certain cannabis-related offences, research and education programs about its non-medical use, and less severe legal consequences for users. This measure would have covered hashish since the government "wanted to make a clear distinction between this drug [cannabis] and dangerous narcotics like heroin." [115] Two years later, on November 26, 1974, the federal government met its commitments by tabling *Bill S-19* in the Senate.

Bill S-19 and cannabis

Bill S-19 created Part V of the *Food and Drugs Act* entitled "Cannabis". Thus, as recommended in the majority opinion expressed in the Le Dain Commission's special report, cannabis and cannabis users were no longer subject to the harsh provisions of the *Narcotic Control Act*.

Clause 7 of *Bill S-19* defined "cannabis" as hashish, marijuana, cannabidiol and THC. It continued the offence of possession, which, however, could only be prosecuted summarily. Anyone convicted of a first offence would be liable to a maximum fine of \$5000 or, failing payment, to a maximum prison term of six months. For repeat offences, the fine would be fixed at an amount not exceeding \$1,000 or, failing payment, a prison term not exceeding six months could be imposed. As may be seen, fines were favoured over imprisonment for simple possession.

The Bill also maintained the offences of trafficking, possession for the purposes of trafficking and cultivation of cannabis without a permit provided for by the *Narcotic Control Act*, punishable on summary conviction by a maximum fine of \$1,000 or a prison term of up to 18 months or, if prosecuted by way of indictment, by a prison term of up to 10 years. The penalties provided were thus less severe than those provided for by the Act of 1961, except for the cultivation of cannabis. Although *Bill S-19* created a dual-procedure offence for this crime, the maximum prison term was more severe (10 years rather than seven if prosecuted by way of indictment).

Lastly, a person convicted of importing or exporting cannabis was liable, on summary conviction, to a maximum prison term of two years or, if prosecuted by way of indictment, to a prison term of three to 14 years. Parliament thus wanted to show that cannabis trafficking and smuggling were crimes which it still considered very serious.

Apart from these offences, *Bill S-19* also contained the criminal procedures included in Parts III and IV of the *Food and Drugs Act* (evidence of possession for the purpose of trafficking, certificate of the analyst, police powers and so on). Lastly, the provisions respecting regulations that the governor in council may make concerning the issuing of cultivation permits and possession of cannabis were now contained in the new Part V.

The Bill was considered by the Senate Standing Committee on Legal and Constitutional Affairs, which, in its report, recommended three amendments. The first added a provision for an exception to the *Criminal Records Act* so that any person receiving an absolute or conditional discharge would be automatically pardoned. The purpose of this measure was to eliminate the possibility that a criminal record might remain

with the Canadian Police Information Centre (CPIC) following discharge. The second amendment increased the maximum prison term for trafficking in a narcotic from 10 to 14 years less a day. The third repealed the minimum term of three years for smuggling.

Bill S-19 was passed on third reading on June 15, 1975 and referred to the House of Commons, where it never passed second reading. In the fall of 1976, Mitchell Sharp stated in an interview that the bill would not be reintroduced since more important legislation was under consideration.

After Le Dain: forging ahead regardless

Throughout the 1970s, a number of federal politicians promised major reforms to lessen, even eliminate, the criminal penalties imposed on cannabis users. In 1972, the Liberal Party of Canada stated in its election platform that it intended to amend Canada's policy on marijuana,[116] which likely gave birth to Bill S-19. In 1978, Joe Clark, Leader of the Progressive Conservative Party, declared that a government formed by his political party would decriminalize possession of that drug.[117] However, promises of reform ceased in the early 1980s.

In the mid-1980s, Canadians witnessed a significant change in the federal government's position on drugs. This new situation was perhaps not unrelated to the U.S. policy of "war on drugs" adopted in the early 1980s by President Ronald Reagan. The United States once again became very active within international drug control agencies to encourage the international community to take energetic measures to put an end to drug trafficking, which "threatened American youth".

In 1987, Canada became actively involved in the work of the International Conference on Drug Abuse and Illicit Trafficking.[118] Two important events occurred at that meeting organized under the aegis of the United Nations. First, delegates passed a full multidisciplinary plan for future activities to combat drug abuse encouraging the states to comply with their obligations under existing treaties. That initiative targeted four important areas: prevention and reduction of demand for illicit drugs, control of supply, suppression of illicit trafficking and treatment and rehabilitation. For the first time, international legal instruments made express provision for the reduction of supply. Second, delegates put the final touches on the treaty to suppress drug trafficking on a global scale. That treaty was passed in Vienna on December 20, 1988 as the *Convention on Illicit Traffic in Narcotic Drugs and Psychotropic Substances* (Convention of 1988).

In addition to taking part in the work leading to the adoption of that convention, starting in the mid-1980s, Canada stepped up its international efforts with regard to drugs. In June 1987, it ratified the Convention on Psychotropic Substances of 1971[119] and promised to increase its financial participation in the United Nations Fund for Drug Abuse Control to \$1 million by 1991. The Canadian government justified its participation in the international drug effort as follows:

"The Government is acting to stem the flow of drugs in and out of Canada, not only because Canadians are among the victims of drug abuse, but also because we have a role to play as responsible citizens of the world." [120]

Canada was influenced by this international effort when, on September 13, 1988, before it had even signed or ratified the Convention of 1988 – which was not done until 1990 – Parliament passed Bill C-61, designed to combat laundering of the proceeds of crime (money laundering, enterprise crime, etc.). The Bill was aimed at organized crime and the financing of its operations through drug trafficking. The *Criminal Code* and the *Narcotic Control Act* were thus amended to create two new offences: laundering of proceeds of crime and possession of property obtained through drug trafficking. These new provisions also applied to the illegal activities of drug cultivation, trafficking and importing and exporting in or outside Canada if they were committed by Canadian citizens. Parliament did not need to legislate to criminalize the other activities prohibited by the Convention of 1988 since, as noted above, many had already been covered since 1961.

Controlled Drugs and Substances Act

In accordance with the commitment the federal government made in 1987, Minister of Health Perrin Beatty tabled Bill C-85, *An Act respecting psychotropic substances*, on June 11, 1992. It merged Parts III and IV of the *Food and Drugs Act* as well as the *Narcotic Control Act* into a single piece of legislation. Bill C-85 never passed report stage and died on the Order Paper in September 1993, when the 34th Parliament was dissolved.

On February 2, 1994, the new Minister of Health, Diane Marleau, retabled the legislation proposed by the former government under a different name, the *Controlled Drugs and Substances Act* (CDSA), which was passed by the House of Commons on October 30, 1995. After the first session of the 35th Parliament was prorogued, the bill was reintroduced in the Senate on March 6, 1996, and renumbered Bill C-8. The legislation went into effect on June 20, 1996.

This was the first major reform of Canada's drug legislation since the 1960s. Apart from the amendments made in 1988 under Bill C-61, the *Narcotic Control Act* had been amended in 1985 to abolish the writ of assistance and the procedure for establishing proof of possession of narcotics for the purpose of trafficking. In 1987, in *R. v. Smith*, the Supreme Court of Canada ruled that the minimum prison term of seven years for importing or exporting was unconstitutional under section 12 of the *Canadian Charter of Rights and Freedoms* (cruel or unusual punishment), as a result of which it was repealed.

One of the objects of the bill was to meet Canada's international obligations under the *Single Convention on Narcotic Drugs* (1961), the *Convention on Psychotropic Substances* (1971), and the *United Nations Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances* (Vienna Convention, 1988). It was further designed to introduce a legislative framework for regulating the import, production, export, distribution and use of scheduled substances under previous acts. The following sections describe the main provisions of this legislation.

Substances

The merger of the schedule of the *Narcotic Control Act* with those of the *Food and Drugs Acts* of 1961 and 1969, combined with the addition of new substances such as benzodiazepines and the precursors of this long list of substances, considerably increased the number of drugs subject to the restrictive provisions and procedures of the CDSA.

The expression "controlled substance" means a substance included in Schedule I, II, III, IV or V. In addition, the Act defines the term "analogue" as any substance that, in relation to a controlled substance, has a substantially similar chemical structure. Furthermore, anything that contains or has on it a controlled

substance and that is used or intended or designed for use in producing or introducing the substance into the human body will be treated in the same way as that illegal substance.

- ❖ **Schedule I:** narcotic drugs such as opium, morphine and cocaine.
- ❖ **Schedule II:** cannabis, hashish, cannabinol, etc.
- ❖ **Schedule III:** stimulants such as amphetamines, hallucinogenics, such as mescaline, LSD and DET, and sedatives such as methaqualone, commonly called quaalude.
- ❖ **Schedule IV:** among others, anabolic steroids, hypnotics such as barbiturates and benzodiazepines (better known by their trademarks Seconal, Luminal, Valium and Librium).
- ❖ **Schedule V:** enumerates other substances that may be abused.
- ❖ **Schedule VI:** precursors, which produce no effects on the mind but can be converted or used to produce designer drugs, "simili-drugs" or substances contained in the schedules under Canada's international obligations under the *Single Convention on Narcotic Drugs* (1961) and the *Vienna Convention* of 1988.
- ❖ **Schedules VII and VIII:** concerning application of penalties for cannabis

offences.

A total of more than 150 drugs, psychotropic substances and precursors now appear in the schedules of the act. It should be noted that section 60 of the CDSA continues the provision adopted in 1911 that the Governor in Council may, by order, amend any one of the schedules of the act by adding or deleting one or more substances where the Governor in Council deems the amendment to be necessary in the public interest.

Part I: Offences and Punishment

Participation in the aforementioned activities would not necessarily result in criminal penalties. As will be seen below, the act provides for regulations authorizing the possession, import and export and production for medical, scientific, industrial purposes or for the purposes of the act. Part I of the CDSA enumerates a number of types of offences:

(1) Possession of a Schedule I, II or III substance (subsection 4(1)); obtaining or seeking to obtain a Schedule I, II, III or IV substance, or the order necessary to obtain it from a practitioner (subsection 4(2)). The following table shows the maximum penalties for the offence of possession:[121]

Possession of a Schedule I Substance

Indictable offence

Summary conviction

Reoffence

Seven years' imprisonment

Fine of \$1,000 or 6 months' imprisonment or both

Fine of \$2,000 or one year's imprisonment or both

Possession of a Schedule II Substance (cannabis in all its forms):

Indictable offence

Summary conviction

Reoffence

Five years' imprisonment less a day

Fine of \$1,000 or 6 months' imprisonment or both

Fine of \$2,000 or one year's imprisonment or both

Possession of a Schedule VIII Offence

(less than 1 g of cannabis resin (hashish) or less than 30 g of marijuana)

Summary conviction only

Fine of \$1,000 or 6 months' imprisonment or both

Possession of a Schedule III Substance

Indictable offence

Summary conviction

Reoffence

3 years' imprisonment

Fine of \$1,000 or 6 months' imprisonment or both

Fine of \$2,000 or one year's imprisonment or both

The penalties imposed for the offence under subsection 4(2) are similar but slightly different from those provided for possession.

(2) Trafficking in a Schedule I, II, III or IV substance or any substance represented to be such a substance. Trafficking is defined as any transaction to sell, administer, give, transfer, transport, send or deliver a schedule substance, or to offer to do any one of those things. To "sell" means offering for sale, exposing for sale, having in one's possession for sale and distributing a substance, whether or not the distribution is made for consideration (subsection 5(1)); possessing any Schedule I, II, III or IV substance for the purpose of trafficking (subsection 5(2)). The following table shows the maximum penalties for these offences:

Trafficking in a Schedule I or Schedule II Substance

(except in cases involving less than 3 kg of cannabis)

Indictable offence

No summary conviction offence

Life imprisonment

Trafficking in a Schedule III Substance

Indictable offence

Summary conviction

10 years' imprisonment

18 months' imprisonment

Trafficking in a Schedule IV Substance

Indictable offence

Summary conviction

Fine of \$1,000 or 6 months' imprisonment or both

One year's imprisonment

Trafficking in cannabis is not always punishable by the maximum penalty of life imprisonment. In cases of trafficking involving less than 3 kg of cannabis, a person is guilty of an indictable offence and subject to a maximum term of five years' imprisonment less a day.

(3) Importing or exporting any Schedule I to VI substance (subsection 6(1)); having in one's possession

any Schedule I to VI substance for the purpose of exporting it (subsection 6(2)). The following table shows the maximum penalties for these offences:

Importing or Exporting a Schedule I or II Substance

Indictable offence

No summary conviction

Life imprisonment

Importing or Exporting a Schedule III or IV Substance

Indictable offence

Summary conviction

10 years' imprisonment

18 months' imprisonment

Importing or Exporting a Schedule IV Substance

Indictable offence

Summary conviction

3 years' imprisonment

One year's imprisonment

(4) Producing a Schedule I, II, III or IV substance. The expression "produce" is defined as meaning to obtain a substance by any method or process including manufacturing, synthesizing or using any means of altering the chemical or physical properties of the substance, or cultivating, propagating or harvesting the substance or any living thing from which the substance may be extracted or otherwise obtained. The following table shows the maximum penalties for this offence:

Producing a Schedule I or II Substance

(other than cannabis/marijuana)

Indictable offence

No summary conviction

Life imprisonment

Producing cannabis (marijuana)

(less than 1 g of cannabis resin (hashish) or less than 30 g of marijuana)

Indictable offence

No summary conviction

7 years' imprisonment

Producing a Schedule III Substance

Indictable offence

Summary conviction

10 years' imprisonment

18 months' imprisonment

Producing a Schedule IV Substance

Indictable offence

Summary conviction

3 years' imprisonment

One year's imprisonment

(5) Possession of property obtained by crime (section 8) and offences relating to the laundering of proceeds of crime (section 9).

The penalties are obviously closely related to the schedule in which the substance in question appears. Furthermore, the penalties determined for cannabis offences also vary considerably depending on the quantity

involved, a subject discussed in greater detail below.

Section 10 of the Act states the purpose of sentencing, which is to contribute to the respect for the law and the maintenance of a just, peaceful and safe society while encouraging rehabilitation, and treatment in appropriate circumstances, of offenders and acknowledging the harm done to victims and to the community. This section also provides a list of circumstances which the court is required to consider as "aggravating" factors in determining the sentence that shall be imposed on a person convicted of a designated substance offence. Those factors are: the use of a weapon or use of or threat to use violence, trafficking in a substance on or near school grounds or in or near any public place frequented by minors or by persons under the age of 18 years, and previous convictions of a designated substance offence. In addition, the use of the services of a minor in the commission of a designated substance offence is an aggravating factor. Any judge deciding not to sentence a person to imprisonment despite the presence of one or more aggravating factors is required to give reasons for that decision.

Part II: Enforcement

Sections 11 and 12 of the act concern search and seizure activities, which are discussed in greater detail in Chapter 14.

Section 13 incorporates certain *Criminal Code* provisions establishing a detailed plan for the return, reporting and detention of seized property. In the case of offence-related property, the *Criminal Code* provisions apply subject to sections 16 to 22 of the Act. Furthermore, a separate procedure is established under sections 24 to 29 to determine the disposal of controlled substances. It should be noted that section 14 provides for the issuing of a restraint order in respect of offence-related property.

Sections 16 and 17 concern the forfeiture of offence-related property. Offence-related property is defined as any property, within or outside Canada, by means of or in respect of which a designated substance offence is committed, that is used in any manner in connection with the commission of a designated substance offence, or that is intended for use for the purpose of committing a designated substance offence, but does not include a controlled substance or real property, other than real property built or significantly modified for the purpose of facilitating the commission of a designated substance offence. A court which convicts a person of a designated offence shall order the forfeiture of offence-related property where it is satisfied, on a balance of probabilities, that the property is offence-related property. Where the offence-related property cannot be related to the offence with which the person is charged, the court may nevertheless order its forfeiture. The court may make such order where it is satisfied, beyond a reasonable doubt, that it is offence-related property. Furthermore, offence-related property may be forfeited even if legal proceedings were never instituted. The court shall render an order of forfeiture of property if it is satisfied (1) beyond a reasonable doubt that any property is offence-related property, and (2) that proceedings in respect of a designated substance offence in relation to the property were commenced, and (3) that the accused charged with the offence has died or absconded.

Sections 18 to 22 are essentially a restatement of sections 462.4 to 462.45 of the *Criminal Code*. The purpose of these provisions is to protect the interests of innocent third parties and good-faith buyers. As a general rule, if the court is satisfied that the claim is lawful, it may order the return of the property (or payment of its value if restitution is impossible) to the person who is its legitimate owner or who is entitled to own it.

Section 23 merely incorporates the *Criminal Code* provisions on forfeiture of proceeds of crime. The same terms and conditions are thus established in the case of the forfeiture of the proceeds of designated offences.

Part III – Disposal of Controlled Substances

Under subsection 13(4) of the Act, where a controlled substance has been seized, a report identifying the place searched, the substance seized and the location where it is being detained shall be filed with the justice of the peace of the territorial division concerned. Sections 24 to 29 of the Act govern the disposal of controlled substances.

Section 24 establishes the pre-trial procedure for the return of controlled substances. For example, any person may, within 60 days after the date of the seizure, finding or acquisition by a peace officer or inspector, apply to a justice of the peace for a restitution order. If the justice is satisfied that the application is valid, he shall order that the substance be returned to the applicant. In the opposite case, the justice orders forfeiture to the Crown. The substance is then disposed of in accordance with the applicable regulations or as the Minister directs. Where no application for return is made, the substance is delivered to the Minister and disposed of in accordance with the applicable regulations or, failing such regulations, in such manner as the Minister directs.

It should be noted that section 26 enables the Minister to ask the justice of the peace to order that a controlled substance be forfeited, at any time, if he has reasonable grounds to believe that it constitutes a potential security, public health or safety hazard. The application is essentially made *ex parte*. If the justice of the peace finds that the Minister has reasonable grounds to believe that the substance constitutes a potential security, public health or safety hazard, he orders its forfeiture. The substance is then disposed of in accordance with the applicable regulations or, if there are no applicable regulations, in such a manner as the Minister directs.

Section 27 regulates the post-trial procedure for returning controlled substances seized—the persons whose substances were seized is entitled to have them returned where the court rules his activities legitimate. Otherwise, the substance is returned to the true legitimate owner, provided that that person can be identified. If neither is possible, the substance is forfeited to the Crown, which disposes of it in accordance with the applicable regulations or, if there are no applicable regulations, in such manner as the Minister directs.

Section 28 enables the Minister to dispose of a controlled substance with the owner's consent.

Lastly, under section 29, the Minister may destroy any plants from which a Schedule I, II, III or IV substance may be extracted and that is being produced without a regulatory licence or in violation thereof.

Part IV – Administration and Compliance

This part concerns the powers assigned to inspectors to ensure that holders of a regulatory authorization or licence to deal in controlled substances or precursors are complying with the regulations.

The inspector may, at any reasonable time, enter any place he believes on reasonable grounds is used for the purpose of conducting that person's business or professional practice. The Act authorizes inspectors to conduct a series of inspection acts, including seizing and holding any controlled substance or precursor which he deems on reasonable grounds must be seized or held. The Act makes provision for the return of seized property. It should be noted that, in the case of dwelling-places, the inspector must first obtain the occupant's consent or hold a warrant.

Part V – Administrative Orders for Contraventions of Designated Regulations

This part makes provision for the administrative procedure that is to be followed where a regulation designated by the Governor in Council has been contravened. Under section 33 of the CSDA, the Governor in Council may proclaim certain regulations made under section 55 as "special regulations". Non-compliance with those regulations may result in administrative orders providing for severe penalties, including revocation of the permit or licence issued by the Minister of Health (subsection 40(4)).

Part VI – General

Sections 44 to 60 are general provisions. For example, sections 44, 45 and 51 concern the designation of analysts, the scope of their duties and the admissibility of their reports at trial.

Section 46 creates a general penalty applying to anyone who contravenes a provision of the Act for which no penalty is specifically provided or contravenes a regulation. An indictable offence is punishable by a maximum fine of \$5,000 and/or three years' imprisonment. An offence punishable on summary conviction results in a \$1,000 fine and/or six months' imprisonment.

Under section 47, summary convictions for certain offences under the act and regulations must be commenced within one year of the commission of the offence. All other summary procedures must be commenced within six months of the offence.

Other sections concern the following matters: that the prosecutor is not required, except by way of rebuttal, to prove that a certificate, licence, permit or other qualification does not operate in favour of the accused (section 48); that a copy of any document filed with a department is admissible in evidence without proof of the signature of the authority (section 49); that a certificate issued to a police officer exempting him from the act or its regulations is admissible in evidence at trial and, in the absence of evidence to the contrary, is proof that the certificate or other document was validly issued, without proof of the signature or official character of the person purporting to have certified it, although the defence may, with leave of the court, cross-examine the person who issued the certificate (section 50); that the giving of any document may be proved by oral evidence, affidavit or solemn declaration, even though the court may require the signatory to appear (section 52); that the continuity of possession of any exhibit tendered as evidence in a proceeding may be proved by the testimony, affidavit or solemn declaration of the person claiming to have had it in his possession (section 53); and that certified copies of records, books, electronic data or other documents seized may be presented as admissible evidence by the Minister's officer, the copied versions having the same probative force as the originals, unless the accused submits evidence to the contrary (section 54).

Subsection 55(1) establishes the power of the Governor in Council to make regulations. One of the objectives of Canada's drug policy was to monitor the legal trade in scheduled drugs for medical or scientific purposes. The CSDA significantly enhanced the Governor in Council's power to make regulations with respect to designated substances and precursors. The regulations made under the CSDA apply in particular to businesses, physicians and pharmacists. The Governor in Council may thus make regulations, with respect to the designated substances or precursors:

- ❖ Governing, controlling, limiting, authorizing the importation and exportation, production, packaging, sending, transportation, delivery, sale, administration, possession or obtaining of those substances or precursors;
- ❖ Issuing permits to businesses or persons permitting the aforementioned activities, defining the terms and conditions of payment and their revocation, and determining the qualifications required of permit holders;

- ❖ Controlling the methods of production, storing, packaging and restricting the advertising, if necessary, for the sale of those substances;
- ❖ Governing the books, records, electronic data or other documents that must be established by the businesses, physicians or pharmacists or any other permit holder engaged in the activities enumerated in the first point;
- ❖ Authorizing, if necessary, the communication of information obtained through investigations conducted by the inspectors of the Department of Health to provincial authorities in respect of a serious contravention of the regulations concerning the activities defined in the first point so that they may take disciplinary measures;
- ❖ Exempting, on conditions set out in the regulations, any person or class of persons from the application of section 55.

Under subsection 55(2), the Governor in Council, on the recommendation of the Solicitor General of Canada, may make regulations that pertain to investigations and other law enforcement activities. This includes regulations exempting police officers, in certain circumstances, from the application of Part I of the Act (Offences and Penalties).

Under section 56, the Minister may, on such terms and conditions as the Minister deems necessary, exempt any person or class of persons or any controlled substance or precursor or any class thereof from the application of all or any of the provisions of the act or the regulations if, in the opinion of the Minister, the exemption is necessary for a medical or scientific purpose or is otherwise in the public interest. Section 57 concerns the delegation of the powers of the Minister and the Solicitor General.

Section 58 provides that the provisions of the act and the regulations made under it prevail over any incompatible provisions of the *Food and Drugs Act* or its regulations.

Section 59 makes it an offence to make or assent to the making of a false or misleading statement in any book, record, return or other document that must be made under the act or regulations.

As mentioned, under section 60, the Governor in Council may amend any schedule to add or delete a controlled substance.

The specific case of cannabis

In the first version of the CSDA, cannabis was cited in the schedule containing the most dangerous drugs to which the most severe criminal penalties described above applied. To allay criticism, the government agreed to withdraw cannabis from Schedule I and created Schedules II, VII and VIII, which concern that drug exclusively. Schedule II defines cannabis as marijuana, cannabis resin (hashish) cannabinol, and so on. Schedule VII established at three kilograms of cannabis or hashish the maximum quantity for the imposition of a less severe penalty for trafficking or possession for the purpose of trafficking in that substance. Lastly, Schedule VI¹ provided that a person who had less than one gram of hashish or less than 30 grams of cannabis in his possession for his own personal use was liable to less severe criminal penalties than those provided for in Schedule II.

As a result, if a person is convicted of possession, possession for the purpose of trafficking or possession

of a quantity greater than that defined in Schedules VII and VIII, the more severe penalties provided for in Part I for Schedule I or II substances apply. Otherwise, the CSDA defines new criminal penalties. As regards Schedule VIII, section 4 of the CSDA provides that a person charged with simple possession of cannabis may be prosecuted summarily and provides for a maximum term of six months' imprisonment, a maximum fine of \$1,000 or both. Contrary to the majority recommendation made in the 1972 special report of the Le Dain Commission respecting the reduction of the penalty imposed for importing and exporting cannabis, life imprisonment still applies. Lastly, the maximum prison term of seven years provided for by the *Narcotic Control Act* for the offence of cultivation (production) of that drug remains unchanged under the CSDA.

Conclusions

- Early drug legislation was largely based largely on a moral panic, racist sentiment and a notorious absence of debate.
- Drug legislation often contained particularly severe provisions, such as reverse onus and cruel and unusual sentences.
- The work of the Le Dain Commission laid the foundation for a more rational approach to illegal drug policy by attempting to rely on research data.
- The Le Dain Commission's work had no legislative outcome, except in 1996, in certain provisions of the Controlled Drugs and Substances Act, particularly with regard to cannabis.
- No action was taken on the reform proposals introduced in the 1970s, particularly for the decriminalization of cannabis.
- Thirty years after the Le Dain Commission, the legislation and its application had no notable effect on the supply and demand of cannabis.
- The present act takes no account of data from research on the comparative effects of various substances, particularly the effects of cannabis.

[1] Pires, A.P., (2002) *op. cit.*, page 43.

[2] INCB (2002) pages 58-60 in particular.

[3] Testimony by Neil Boyd, Professor of Criminology, Simon Fraser University, before the Special Senate Committee on Illegal Drugs, Canadian Senate, Second Session of the Thirty-Sixth Parliament, October 16, 2000, Issue 1, page 49.

[4] This chapter is based largely on the excellent report prepared at the Committee's request by François Dubois, research assistant to Senator Pierre Claude Nolin: *Le Parlement fédéral et l'évolution de la législation canadienne sur les drogues illicites*, Ottawa: Special Senate Committee on Illegal Drugs, June 2002. This report is available on line at www.parl.gc.ca/illegal-drugs.asp

[5] See Chapter 19 for more details.

- [6] We note in passing that in fact these were synthetic opium derivatives such as morphine. It was not discovered until much later that smoking heroin was much less harmful to the user than injecting it or using its synthetic derivatives. We can also draw a parallel with synthetic derivatives of cannabis, which cause more problems than smoking cannabis, as we saw in Chapter 9.
- [7] Line Beauchesne talks about large pharmaceutical companies that flooded the market by manufacturing these products en masse and then trying to dispose of them in any way possible. Beauchesne, L., (1991) *La légalisation des drogues... Pour mieux en prévenir les abus*. Montreal: Méridien, pages 95-96.
- [8] Beauchesne, L. *op. cit.*, page 98.
- [9] *Ibid.*, page 126
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- [11] Ati-Dion, G., (1999) *The Structure of Drug Prohibition in International Law and in Canadian Law (Doctoral Paper)*, Montreal, Université de Montréal, École de criminologie, page 24.
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- [13] *Ibid.*, page 53
- [14] Boyd, N. (1991) *High society. Illegal and Legal Drugs in Canada*, Toronto, Key Porter Books, page 27
- [15] William L. Mackenzie King, *The Need for the Suppression of Opium Traffic in Canada*, Ottawa, Parliamentary Document 36b, 1908, 18 pages
- [17] Beauchesne, L., (1991) *op. cit.*, page 125
- [18] *Ibid.*
- [19] Giffen, P.J. et al., (1991) *op. cit.*, page 125
- [20] Testimony by Neil Boyd, Professor of Criminology, Simon Fraser University, before the Special Senate Committee on Illegal Drugs, Canadian Senate, Second Session of the Thirty-Sixth Parliament, October 16, 2000, Issue 1, page 49.
- [21] Beauchesne, L., *op. cit.*, page 128
- [22] *Ibid.*, page 128
- [23] Ati-Dion, G., (1999) *op. cit.*, page 25
- [24] Hansard, House of Commons, July 10, 1908, page 12550
- [25] Statutes of Canada 1908, c. 50
- [26] Statutes of Canada 1911, c. 17

- [27] Hansard, House of Commons, January 26, 1911, page 2549.
- [28] This was discussed in Chapter 10.
- [29] Giffen, P.J., et al., *op. cit.*, page 105.
- [30] *Ibid.*, pages 105-121.
- [31] *Ibid.*, page 144.
- [32] *Ibid.*, pages 138-146.
- 33 *Ibid.*, page 127.
- [34] Statutes of Canada, 1938, c. 9.
- [35] Hansard, House of Commons, April 23, 1923, page 2117.
- [36] Beauchesne, L., (1991) *op. cit.*, page 117.
- [37] Spicer, Leah, (2000) *Historical and Cultural Uses of Cannabis and the Canadian "Marijuana Clash"*, Ottawa: Law and Government Division, Library of Parliament, Report prepared for the Senate Special Committee on Illegal Drugs, p. 20, available online at www.parl.gc.ca/illegal-drugs.asp
- [38] *Ibid.*, page 21.
- [39] Giffen, P.J. et al., *op. cit.* page 179.
- [40] Hansard, House of Commons, 1932, page 1792.
- [41] Hansard, House of Commons, February 24, 1938, page 772.
- [42] Hansard, House of Commons, February 24, 1938, page 773.
- [43] Statutes of Canada, 1932, c. 20
- [44] Sinha, Jay (2001) *The History and Development of the Leading International Drug Control Conventions*, Ottawa: Library of Parliament, Law and Government Division, report prepared for the Senate Special Committee on Illegal Drugs, page 15. Available at www.parl.gc.ca/illegal-drugs.asp
- [45] *Ibid.*, page 199.
- [46] *Ibid.*, pages 199-200
- [47] Statutes of Canada, 1920, c. 31
- [48] Statutes of Canada, 1921, c. 42
- [49] Statutes of Canada, 1922, c. 22
- [50] Statutes of Canada, c. 49.
- [51] Giffen, P.J. et al., *op. cit.*, page 596.

- [52] *Ibid.*, page 594.
- [53] *Statutes of Canada*, 1925, c. 20
- [54] *Statutes of Canada*, c. 22.
- [55] P.J. Giffen *et al.*, *op. cit.*, page 261.
- [56] *Ibid.*, pp. 278-279.
- [57] *Statutes of Canada*, 1920, c. 31.
- [58] This provision was added to the Act of 1911. In the years that followed, the criteria for renewing prescriptions issued by physicians were restricted so that the legal trade in narcotics could be monitored and drug addicts prevented from obtaining prescriptions and using the drugs thus obtained for trafficking purposes. For example, the Act of 1921 provided that a pharmacist could not fill or refill a prescription unless it had been signed by a physician. The Act of 1923 went further by prohibiting multiple refills of prescriptions of a drug based on the original prescription. The patient thus had to consult a doctor each time he wanted to renew.
- [59] *Statutes of Canada*, 1954, c. 38.
- [60] The provisions respecting the deportation of immigrants were transferred to the Immigration Act in 1952 but still applied to drug offences.
- [61] Giffen, P.J. *et al.*, *op. cit.*, pages 448-450.
- [62] *Hansard*, Senate, February 24, 1955, page 239.
- [63] *Hansard*, Senate, June 23, 1955, page 739.
- [64] *Hansard*, Senate, June 23, 1955, p. 739.
- [65] *Hansard*, Senate, June 23, 1955, p. 742.
- [66] *Hansard*, Senate, June 23, 1955, p. 740.
- [67] *Hansard*, Senate, June 23, 1955, p. 740.
- [68] *Hansard*, Senate, June 23, 1955, p. 744.
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- [73] *Hansard*, House of Commons, June 7, 1961, page 6794.
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- [86] Le Dain, G. *et al.*, (1972) *Cannabis: A Report of the Commission of Inquiry into the Non-Medical Use of Drugs*, Ottawa : Government of Canada, page 230.
- [87] *Ibid.*, page 239.
- [88] *Ibid.*, page 245.
- [89] *Ibid.*, pages 248-249.
- [90] *Ibid.*, page 249.
- [91] *Ibid.*, pages 266-267.
- [92] *Ibid.*, page 270.
- [93] *Ibid.*, page 274.
- [94] *Ibid.*, page 281.
- [95] *Ibid.*, pages 283-286.
- [96] *Ibid.*, page 282.
- [97] *Ibid.*, page 291.
- [98] *Ibid.*, page 292.
- [99] *Ibid.*, page 293.

- [100] *Ibid.*, page 293.
- [101] *Ibid.*, page 296.
- [102] *Ibid.*, pages 295-299.
- [103] *Ibid.*, page 303.
- [104] *Ibid.*, page 308.
- [105] *Ibid.*, pages 307-309.
- [106] *Ibid.*, page 308.
- [107] *Ibid.*, page 309.
- [108] *Ibid.*, p. 304
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- [110] *Ibid.*, p. 304
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CANNABIS : OUR POSITION FOR A CANADIAN PUBLIC POLICY

REPORT OF THE SENATE SPECIAL COMMITTEE ON ILLEGAL DRUGS

VOLUME III : PART IV and CONCLUSIONS

Chairman: Pierre Claude Nolin

Deputy Chairman: Colin Kenny

SEPTEMBER 2002

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Glossary of key terms

Abuse

Vague term with a variety of meanings depending on the social, medical and legal contexts. Some equate any use of illicit drugs to abuse: for example, the international conventions consider that any use of drugs other than for medical or scientific purposes is abuse. The Diagnosis and Statistical Manual of the American Psychiatric Association defines abuse as a maladaptive pattern of substance use leading to clinically significant impairment or distress as defined by one or more of four criteria (see chapter 7). In the report, we prefer the term excessive use (or harmful use).

Acute effects

Refers to effects resulting from the administration of any drug and specifically to its short term effects. These effects are distinguished between central (cerebral functions) and peripheral (nervous system). Effects are dose-related.

Addiction

General term referring to the concepts of tolerance and dependency. According to WHO addiction is the repeated use of a psychoactive substance to the extent that the user is periodically or chronically intoxicated, shows a compulsion to take the preferred substance, has great difficulty in voluntarily ceasing or modifying substance use, and exhibits determination to obtain the substance by almost any means. Some authors prefer the term addiction to dependence, because the former also refers to the evolutive process preceding dependence.

Agonist

A substance that acts on receptor sites to produce certain responses.

Anandamide

Agonist neurotransmitter of the endogenous cannabinoid system. Although not yet fully understood in research, these neurotransmitters seem to act as modulators, THC increasing the liberation of dopamine in nucleus accumbens and cerebral cortex.

At-risk use

Use behaviour which makes users at-risk of developing dependence to the substance.

Cannabinoids

Endogenous receptors of the active cannabis molecules, particularly 9-THC. Two endogenous receptors have been identified: CB1 densely concentrated in the hippocampus, basal ganglia, cerebellum and cerebral cortex, and CB2, particularly abundant in the immune system. The central effects of cannabis appear to be related only to CB1.

Cannabis

Three varieties of the cannabis plant exist: *cannabis sativa*, *cannabis indica*, and *cannabis ruderalis*. *Cannabis sativa* is the most commonly found, growing in almost any soil condition. The cannabis plant has been known in China for about 6000 years. The flowering tops and leaves are used to produce the smoked cannabis. Common terms used to refer to cannabis are pot, marihuana, dope, ganja, hemp. Hashish is produced from the extracted resin. Classified as a psychotropic drug, cannabis is a modulator of the central nervous system. It contains over 460 known chemicals, of which 60 are cannabinoids. Delta-9-tetrahydrocannabinol, referred to as THC, is the principal active ingredient of cannabis. Other components such as delta-8-tetrahydrocannabinol, cannabitol and cannabidiol are present in smaller quantities and have no significant impacts on behaviour or perception. However, they may modulate the overall effects of the substance.

Chronic effects

Refers to effects which are delayed or develop after repeated use. In the report we prefer to use the term consequences of repeated use rather than chronic effects.

Commission on narcotic drugs (CND)

The Commission on Narcotic Drugs (CND) was established in 1946 by the Economic and Social Council of the United Nations. It is the central policy-making body within the UN system for dealing with all drug-related matters. The Commission analyses the world drug abuse situation and develops proposals to strengthen international drug control.

Decriminalization

Removal of a behaviour or activity from the scope of the criminal justice system. A distinction is usually made between *de jure decriminalization*, which entails an amendment to criminal legislation, and *de facto decriminalization*, which involves an administrative decision not to prosecute acts that nonetheless remain against the law. Decriminalization concerns only criminal legislation, and does not mean that the legal system has no further jurisdiction of any kind in this regard: other, non-criminal, laws may regulate the behaviour or activity that has been decriminalized (civil or regulatory offences, etc.).

Diversion

The use of measures other than prosecution or a criminal conviction for an act that nonetheless remains against the law. Diversion can take place before a charge is formally laid, for example if the accused person agrees to undergo treatment. It can also occur at the time of sentencing, when community service or

treatment may be imposed rather than incarceration.

Depenalisation

Modification of the sentences provided in criminal legislation for a particular behaviour. In the case of cannabis, it generally refers to the removal of custodial sentences.

Dependence

State where the user continues its use of the substance despite significant health, psychological, relational, familial or social problems. Dependence is a complex phenomenon which may have genetic components. Psychological dependence refers to the psychological symptoms associated with craving and physical dependence to tolerance and the adaptation of the organism to chronic use. The American Psychiatric Association has proposed seven criteria (see chapter 7).

Dopamine

Neuromediator involved in the mechanisms of pleasure.

Drug

Generally used to refer to illicit rather than licit substances (such as nicotine, alcohol or medicines). In pharmacology, the term refers to any chemical agent that alters the biochemical or physiological processes of tissues or organisms. In this sense, the term drug refers better to any substance which is principally used for its psychoactive effects.

European Monitoring Centre on Drugs and Drug Addiction (EMCDDA)

The European Monitoring Centre was created in 1993 to provide member states objective, reliable and comparable information within the EU on drugs, drug addictions and their consequences. Statistical information, documents and techniques developed in the EMCDDA are designed to give a broad perspective on drug issues in Europe. The Centre only deals with information. It relies on national focal points in each of the Member States.

Fat soluble

Characteristic of a substance to irrigate quickly the tissues. THC is highly fat-soluble.

Gateway (theory)

Theory suggesting a sequential pattern in involvement in drug use from nicotine to alcohol, to cannabis and then "hard" drugs. The theory rests on a statistical association between the use of hard drugs and the fact that

these users have generally used cannabis as their first illicit drug. This theory has not been validated by empirical research and is considered outdated.

Half-life

Time needed for the concentration of a particular drug in blood to decline to half its maximum level. The half-life of THC is 4.3 days on average but is faster in regular than in occasional users. Because it is highly fat soluble, THC is stored in fatty tissues, thus increasing its half life to as much as 7 to 12 days. Prolonged use of cannabis increases the period of time needed to eliminate it from the system. Even one week after use, THC metabolites may remain in the system. They are gradually metabolised in the urine (one third) and in feces (two thirds). Traces of inactive THC metabolites can be detected as many as 30 days after use.

Hashish

Resinous extract from the flowering tops of the cannabis plant and transformed into a paste.

International Conventions

Various international conventions have been adopted by the international community since 1912, first under the Society of Nations and then under the United Nations, to regulate the possession, use, production, distribution, sale, etc., of various psychotropic substances. Currently, the three main conventions are the 1961 Single Convention, the 1971 Convention on Psychotropic Substances and the 1988 Convention against Illicit Traffic. Canada is a signatory to all three conventions. Subject to countries' national constitutions, these conventions establish a system of regulation where only medical and scientific uses are permitted. This system is based on the prohibition of source plants (coca, opium and cannabis) and the regulation of synthetic chemicals produced by pharmaceutical companies.

International Narcotics Control Board (INCB)

The Board is an independent, quasi-judicial organisation responsible for monitoring the implementation of the UN conventions on drugs. It was created in 1968 as a follow up to the 1961 Single Convention, but had predecessors as early as the 1930s. The Board makes recommendations to the UN Commission on Narcotics with respect to additions or deletions in the appendices of the conventions.

Intoxication

Disturbance of the physiological and psychological systems resulting from a substance. Pharmacology generally distinguishes four levels: light, moderate, serious and fatal.

Joint

Cigarette of marijuana or hashish with or without tobacco. Because joints are never identical, scientific analyses of the effects of THC are more difficult, especially in trying to determine the therapeutic benefits of cannabis and to examine its effects on driving.

Legalisation

Regulatory system allowing the culture, production, marketing, sale and use of substances. Although none currently exist in relation to « street-drugs » (as opposed to alcohol or tobacco which are regulated products), a legalisation system could take two forms: without any state control (free markets) and with state controls (regulatory regime).

Marijuana

Mexican term originally referring to a cigarette of poor quality. Has now become equivalent for cannabis.

Narcotic

Substance which can induce stupor or artificial sleep. Usually restricted to designate opiates. Sometimes used incorrectly to refer to all drugs capable of inducing dependence.

Office of national drug control policy (ONDCP) USA

Created in 1984 under the Reagan presidency, the Office is under the direct authority of the White House. It coordinates US policy on drugs. Its budget is currently US \$18 billion.

Opiates

Substance derived from the opium poppy. The term opiate excludes synthetic opioids such as heroin and methadone.

Prohibition

Historically, the term designates the period of national interdiction of alcohol sales in the United States between 1919 and 1933. By analogy, the term is now used to describe UN and State policies aiming for a drug-free society. Prohibition is based on the interdiction to cultivate, produce, fabricate, sell, possess, use, etc., some substances except for medical and scientific purposes.

Psychoactive substance

Substance which alters mental processes such as thinking or emotions. More neutral than the term "drug" because it does not refer to the legal status of the substance, it is the term we prefer to use.

Psychotropic substance (see also psychoactive)

Much the same as psychoactive substance. More specifically however, the term refers to drugs primarily used in the treatment of mental disorders, such as anxiolytic, sedatives, neuroleptics, etc. More specifically, refers to the substances covered in the 1971 Convention on Psychotropic Substances.

Regulation

Control system specifying the conditions under which the cultivation, production, marketing, prescription, sales, possession or use of a substance are allowed. Regulatory approaches may rest on interdiction (as for illegal drugs) or controlled access (as for medical drugs or alcohol). Our proposal of an exemption regime under the current legislation is a regulatory regime.

Society of Nations (SDN)

International organisation of States until 1938; now the United Nations.

Tetrahydrocannabinol (D9-THC)

Main active component of cannabis, Δ^9 -THC is very fat-soluble and has a lengthy half-life. Its psychoactive effects are modulated by other active components in cannabis. In its natural state, cannabis contains between 0.5% to 5% THC. Sophisticated cultivation methods and plant selection, especially female plants, leads to higher levels of THC concentration.

Tolerance

Reduced response of the organisms and increased capacity to support its effects after a more or less lengthy period of use. Tolerance levels are extremely variable between substances, and tolerance to cannabis is believed to be lower than for most other drugs, including tobacco and alcohol.

Toxicity

Characteristic of a substance which induces intoxication, i.e., "poisoning". Many substances, including some common foods, have some level of toxicity. Cannabis presents almost no toxicity and cannot lead to an overdose.

United Nations Drug Control Program (UNDCP)

Established in 1991, the Programme works to educate the world about the dangers of drug abuse. The Programme aims to strengthen international action against drug production, trafficking and drug-related crime through alternative development projects, crop monitoring and anti-money laundering programmes. UNDCP also provides accurate statistics through the Global Assessment Programme (GAP) and helps to draft legislation and train judicial officials as part of its Legal Assistance Programme. UNDCP is part of the UN Office for Drug Control and the Prevention of Crime.

World Health Organization (WHO)

The World Health Organization, the United Nations specialized agency for health, was established on 7 April 1948. WHO's objective, as set out in its Constitution, is the attainment by all peoples of the highest possible level of health. Health is defined in WHO's Constitution as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.

Part IV

Public Policy Options

Chapter 19

The International Legal Environment

This chapter could begin and end with the same words: The international drug control conventions are, with respect to cannabis at least, an utterly irrational restraint that has nothing to do with scientific or public health considerations.

Very useful restraint, to be sure, if one favours prohibition, for when the advocates of such policy run out of scientific and public health arguments, they can simply fall back on the conventions that Canada has signed. More than signed, in fact: owing to the efforts of certain men, police officers and federal public servants, Canada was a leading proponent of those conventions.

Currently, three conventions govern the entire life cycle of drugs, from cultivation of the plants to their consumption: the *Single Convention on Narcotic Drugs, 1961* (Single Convention),^[1] the 1971 *Convention on Psychotropic Substances* (Psychotropics Convention)^[2] and the 1988 *Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances* (Trafficking Convention).^[3] They create not only international law concerning drugs but also control mechanisms and bodies, both political and bureaucratic.

Yet these agreements have a history that began well before the Single Convention, a history that sheds light on the issues that led to their development and on their contemporary significance. That is the subject of the first section. The conventions create obligations, as shown in the second section, detailed obligations that are morally rather than legally binding. And they are a patchwork of compromises that leave states with some leeway, as we shall see in the third section.

A genealogy

The genealogy of the international conventions governing drug production and trade is fascinating and unique. The story begins in the mid-19th century, when Britain and China fought two opium wars, both quickly won by the British. In this era, the roles were reversed: the British owned the lucrative opium monopoly of the East India Company and refused to relinquish it, while the Chinese had been trying for decades to stamp out opium use, not so much for health reasons as for economic ones, since this trade was exacting a heavy toll.

China had long exercised the upper hand in its economic relations with the Occident. Silks, teas, fine pottery, and other items flowed west. Yet the Middle Kingdom desired little from the outside. (...)

Encouraging the China opium trade therefore solved several related problems for colonial governments. Opium production provided a living for numerous peasants, merchants, bankers, and governments officials. Exports to China earned hard currency, thereby reducing specie outflow. [4]

While Britain balked at introducing control mechanisms that would deprive it of hard currency, the United States realized at the turn of the century that this was a perfect opportunity to assert itself on the international scene.

The drug story's geopolitical ingredients blended with well-known domestic political interests, racist attitudes and economic interests in a complex cocktail. In Chapters 11 and 12, we touched on certain aspects of the anti-Chinese racism that marked the turn of the century in Canada. The same phenomenon existed in the U.S.

[Translation] The United States had a number of reasons for acting on this proposal. The official reason was a moral one: at a time when the temperance leagues and the churches were demanding Prohibition, puritan America decided to take the lead in civilization's world crusade. It claimed to be protecting uncivilized races from the ravages of opium and alcohol. But it also had some less virtuous reasons. Under pressure from the trade unions, which feared competition from Chinese labour, it passed the Exclusion Laws, openly xenophobic legislation whose purpose was to control the yellow peril. It therefore spread the myth of the 'unsavoury Chinese opium addict,' devoted to his habit and ready to contaminate American youth. [5]

Naturally, the Chinese government vigorously protested against the Exclusion Laws, but the Middle Kingdom, a victim of its conflicts and its internal disorganization, lacked the resources to make an impact on the international scene. While continuing to combat opium use within its own territory, China set about promoting poppy cultivation at the local level.

The pharmaceutical industry, which had been booming since the mid-19th century, was able to produce more and more low-priced medicines, many of which contained extracts of coca or opium.

The mid-1880s euphoric reaction of cocaine set off a chain reaction. Pharmaceutical companies rushed to fill orders, but fresh coca leaf was unavailable in sufficient quantity. Consequently, the price skyrocketed. To meet demand and share in the profit, several imperial powers stepped up efforts to develop commercially saleable coca. (...) Within a few years, coca production increased dramatically, coca paste processing became commonplace, coca leaves became a commodity traded on the international market and pharmaceutical manufacturers competed for business on the basis of price, availability, and quality of product. Hardly available in 1885, cocaine became quickly emblematic of the modern, technological, international, political economy. (...) By the early twentieth century, cocaine ranked 4th in terms of dollar value among drugs. The popularity of the two drugs superseding cocaine, morphine and quinine, resulted from the same constellation of factors – a burgeoning pharmaco-industrial complex. [6]

The third factor was the growing professionalism and social power of the medical community. The latter was essentially working against a form of popular medicine, ostensibly because it was a source of abuse and charlatanism, but mostly because it was practised outside the medical establishment and thus was less tightly controlled by scholarly medical "authority". Certain of its science, the powerful medical lobby would quickly swing into action and demand the regulation of drugs and sole authority to diagnose and

prescribe.

Last but not least, there were moral considerations. The temperance movements fighting the moral and social "vices" of alcohol and drugs were growing rapidly and carried substantial political clout, which the prohibitionists wielded brilliantly.

The last piece of the puzzle was the 1906 decision by Britain's new Liberal government to oppose the forced opium trade between India and China, which made it possible for the Chinese government to launch an extensive campaign against opium consumption and production. In 1907, the British agreed to reduce exports of Indian opium to China by 10 per cent a year, provided that China would permit independent verification of its own production cuts. The accord proved more effective than the two countries expected, until the Manchu (Ch'ing) dynasty fell in 1911. After that, the Chinese warlords began encouraging opium production on a large scale to finance their military spending. Nevertheless, future prohibition advocates would view the 1907 "ten-year agreement" as the first successful opium "treaty"; for the next 60 years. This agreement was to set the tone for international drug control negotiations.[7] The stage was now set for the first in a long series of international conferences, treaties and conventions, as shown in the table below.[8]

Multilateral Agreements on Narcotics and Psychotropic Substances[9]

Date and place signed

Title of agreement

Date of entry into force

26 February 1909

Shanghai, China

Final Resolutions of the International Opium Commission I

Not applicable

23 January 1912

The Hague, Netherlands

International Opium Convention

11 February 1915 /

28 June 1919 2

11 February 1925

Geneva, Switzerland

Agreement concerning the Manufacture of, Internal Trade in, and Use of Prepared Opium

28 July 1926

19 February 1925

Geneva, Switzerland

International Opium Convention

25 September 1928

13 July 1931

Geneva, Switzerland

Convention for Limiting the Manufacture and Regulating the Distribution of Narcotic Drugs 3

9 July 1933

27 November 1931

Bangkok, Thailand

Agreement for the Control of Opium Smoking in the Far East

22 April 1937

26 June 1936

Geneva, Switzerland

Convention for the Suppression of the Illicit Traffic in Dangerous Drugs

26 October 1939

11 December 1946

Lake Success, New York, USA

Protocol amending the Agreements, Conventions and Protocols on Narcotic Drugs concluded at The Hague on 23 January 1912, at Geneva on 11 February 1925 and 19 February 1925 and 13 July 1931, at Bangkok on 27 November 1931, and at Geneva on 26 June 1936

11 December 1946

19 November 1948

Paris, France

Protocol Bringing under International Control Drugs outside the Scope of the Convention of 13 July 1931, for Limiting the Manufacture and Regulating the Distribution of Narcotic Drugs, as amended by the Protocol signed at Lake Success, New York, on 11 December 1946

1 December 1949

23 June 1953

New York, USA

Protocol for Limiting and Regulating the Cultivation of the Poppy Plant, the Production of, International and Wholesale Trade in, and Use of, Opium

8 March 1963

30 March 1961

New York, USA.

Single Convention on Narcotic Drugs, 1961

13 December 1964

21 February 1971

Vienna, Austria

Convention on Psychotropic Substances

16 August 1976

25 March 1972

Geneva, Switzerland

Protocol amending the Single Convention on Narcotic Drugs, 1961

8 August 1975

20 December 1988

Vienna, Austria

United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances

11 November 1990

1 This is the only document in the table that is not an enforceable multilateral treaty. It is included because it marks the beginning of substantial international cooperation on drug control.

2 China, the Netherlands, and the U.S. implemented the Convention in 1915 (Honduras and Norway followed suit later that year). It did not come into force globally until it was incorporated into the Treaty of Versailles in 1919.

3 As amended by the Protocol signed at Lake Success, New York, on 11 December 1946.

The 1909 Shanghai Conference

U.S. interest in international drug control grew substantially following the Spanish-American War, which led to its acquisition of the Philippines in 1898.[10] The acquisition brought with it what the American administration perceived as a serious problem: a government-run opium supply monopoly. Under the guidance of the new Episcopal Bishop of the Philippines, Charles Henry Brent, the monopoly was shut down. Yet smuggling continued, and Brent, who regarded the opium issue as a moral question and use of the drug as "*a social vice ... a crime*," persuaded President Theodore Roosevelt to support holding an international meeting in Shanghai to remedy what was clearly a regional problem.[11]

In February 1909, the International Opium Commission[12] met in Shanghai, with Brent as its president.

However, because the participants did not have the necessary plenipotentiary powers to conclude a treaty, the result was simply a collection of facts and a set of non-binding recommendations. In the discussions on the Commission's terms of reference, one question that arose was whether drug-related medical issues, such as addiction and its treatment, should be considered; the proposal was defeated (by a majority of one) because it was felt that there was insufficient medical expertise present at the meeting.[13] This set a telling precedent: most subsequent drug meetings would be attended predominantly by diplomats and civil servants, with little significant input from medical experts.

The negotiations during the Commission's meetings laid the groundwork for future conferences. The U.S., aggressively represented by Hamilton Wright, tried to persuade the colonial powers to support a narrow definition of "legitimate use" of opium, under which any non-medical or non-scientific use—by Western medical and scientific standards—would be considered illicit. The colonial powers advocated a softer approach, which would permit "quasi-medical use". In the final wording of Resolution 3, the Commission concluded "that the use of opium in any form otherwise than for medical purposes is *held by almost every* participating country to be a matter for prohibition *or for careful regulation*; and that each country in the administration of its system or regulation purports to be aiming, as opportunity offers, at progressively increasing stringency" (emphasis as in original).

The Commission was, in fact, far from "international". The focus was on China's opium problems—five of the nine resolutions mentioned China by name—and the U.S. and Britain dominated the discussions. The U.S. was pushing for prohibition and felt that China needed assistance with its domestic opium problems. Britain worked to protect its lucrative Indian opium trade, arguing that curbing such trade would be useless until China brought its domestic production under control.[14]

Underlying the U.S. delegation's hard-line stance at the Shanghai meeting were key domestic political and economic goals that would also colour later negotiations. It was assumed that if other countries controlled their own opium production and exports, the U.S. would not be burdened with the task, because the poppy and the coca leaf had never been grown in appreciable quantities in North America. Furthermore, international agreements calling on countries to take drastic internal measures provided ammunition for Brent and Wright, who were pressuring the U.S. government to develop stringent domestic drug control laws.[15]

The 1912 Hague International Opium Convention

At the Shanghai meeting, the Americans had proposed a future conference to draft an international drug control treaty that would include the Shanghai resolutions in an expanded and more stringent form. This proposal was contested by the other countries and went nowhere. In the years that followed, however, the U.S. lobbied continually and forcefully around the world for a new conference. Addressing the opium problem directly, publicly and internationally was a way for the U.S. to achieve its domestic control objectives, to put an end to the profitable drug trade dominated by the colonial powers, and to curry favour with the Chinese and thereby improve Sino-American economic relations.[16]

Twelve countries agreed to meet at The Hague on 1 December 1911 to draft a treaty.[17] Once again, the meeting was chaired by Brent, and Wright led the U.S. delegation. Most states had demanded amendments to the U.S. draft agenda, which focused on stringent control of opium production, manufacture and distribution in Asia. For example, Britain insisted that manufactured drugs such as morphine, heroin, and cocaine be considered. This was an attempt to dilute the opium agenda and deflect attention from Indian opium production. Britain also hoped that a fair treaty would create a level playing field for British pharmaceutical companies to compete with the dominant German synthetic drug industry.[18]

Chapters I and II of the 1912 *International Opium Convention*[19] (1912 *Hague Convention*) dealt with raw and prepared opium. For example, Article 1 required parties to "enact effective laws or regulations for the control of the production and distribution of raw opium" unless such laws were already in place. The Convention also recognized the U.S.-initiated principle of restricting opium use to medical and

scientific purposes. Chapter IV was aimed at reducing drug trafficking in China.

Chapter III focused on licensing, manufacturing and distribution controls on synthetic drugs, but Germany ensured that the provisions were weak and vague. Article 10 allowed countries to simply make their "best endeavours" to implement these controls. Furthermore, Germany refused to sign the treaty until it was agreed that all countries would have to ratify[20] the Convention before it came into force. This was an effective tactic for delaying control measures as it took almost a decade for all countries to ratify the agreement. Germany did so only because ratification was a condition of the Treaty of Versailles that ended the First World War in 1919.[21]

Wright used the 1912 Hague Convention in his campaign for U.S. domestic legislation, arguing that a federal law was necessary for the U.S. to fulfil its obligations under the Convention. In 1916, the U.S. Supreme Court ruled that this was not so, but by then the *Harrison Narcotics Act of 1914* had become the first federal drug control law in the U.S.; it would remain a pillar of U.S. drug policy for the next few decades.[22]

The establishment of the League of Nations in 1919 following the First World War provided the international community with a centralized body for the administration of drug control. In 1920, the League created the Advisory Committee on the Traffic in Opium and other Dangerous Drugs, commonly known as the Opium Advisory Committee (OAC), the precursor to the United Nations (UN) Commission on Narcotic Drugs. The League Health Committee, forerunner of the UN World Health Organization, was also formed. Administration of the 1912 Hague Convention had originally been the responsibility of the Netherlands, but was transferred to the Opium Control Board (OCB) created by the OAC. Enforcement of the Convention was sporadic as the countries on the OCB were the ones profiting most from the drug trade.[23]

The League began to consider demand-side socio-medical issues such as why individuals use drugs, what constitutes drug abuse, and what social factors affect abuse. However, prohibition and supply-side issues soon regained the ascendancy as preparations began and talks were held, again at the instance of the U.S., for a new treaty in the mid-1920s. In general, the international regime has tended to separate the study of drug-related medical and social problems, including etiological questions, from that of drug control problems.[24]

The 1925 Geneva Opium Conventions

Even though the U.S. had chosen not to join the League of Nations, its influence in international drug control matters remained strong. Worried by the 1912 Hague Convention's limited effect on the smuggling of opium and, increasingly, drugs manufactured in East Asia, the U.S. pressured the League to convene a new conference. The League feared that if it did not comply, the U.S. might act independently.[25]

Between November 1924 and February 1925, two back-to-back conferences were held, and two separate treaties were concluded. The first Geneva Convention[26] focused on opium-producing nations; signatories were permitted to sell opium only through government-run monopolies and were required to end the trade completely within 15 years.

The second Geneva Convention, the *International Opium Convention*[27] (1925 Geneva Convention), was intended to impose global controls over a wider range of drugs, including, *for the first time, cannabis*, which was referred to as "Indian hemp" (marijuana) in Article 11 of the Convention. Articles 21 to 23 required Parties to provide annual statistics on drug stocks and consumption; the production of raw opium and coca; and the manufacture and distribution of heroin, morphine and cocaine. Chapter VI replaced the OCB with an eight-member Permanent Central Opium Board (PCOB).[28] Chapter V of the second Convention set up a PCOB-monitored import certification system to control the international drug trade by limiting the amount that each country could legally import.

While the 1912 Hague Convention had focused on domestic controls, the Geneva Conventions were an attempt to improve transnational control. The U.S. had proposed strict adherence to the principle that drugs should be used only for medical and scientific purposes and that there should be stringent controls on drug production at the source. When these proposals were flatly rejected at the second conference, the U.S. delegation walked out of the conference and never signed the treaties. The Chinese delegation withdrew as well, because no agreement could be reached on the suppression of opium smoking.[29] Instead, the two countries concentrated on enforcing the 1912 Hague Convention.

The 1931 Geneva Narcotics Manufacturing and Distribution Limitation Convention / 1931 Bangkok Opium Smoking Agreement

The import control system put in place following the 1925 Geneva Convention was only partially effective, as drugs were simply transhipped through non-signatory countries. In 1931, the League of Nations convened a further conference in Geneva to place limits on the manufacture of cocaine, heroin and morphine, and to control their distribution. The result of the conference was the *Convention for Limiting the Manufacture and Regulating the Distribution of Narcotic Drugs*[30] (1931 Limitation Convention).

In 1931, Canada abandoned its policy of simply reacting to international drug control efforts and began playing an active role in supporting U.S. efforts to expand control at the source. Colonel Charles Henry Ludovic Sharman, Chief of the Narcotics Division in the Department of Pensions and National Health, was the principal architect of Canada's domestic and international drug policy until the 1960s. Canada, through Sharman, was heavily involved in the negotiations leading up to the 1931 Limitation Convention.[31]

A new player also emerged from within the U.S. delegation: Harry J. Anslinger, first Commissioner of the newly created Federal Bureau of Narcotics, a position he would hold for 33 years. A firm believer in prohibition and the control of drug supplies at the source, Anslinger is widely recognized as a prime mover in the development of U.S. drug policy and, by extension, international drug control into the early 1970s.[32]

The centrepiece of the 1931 Limitation Convention was the manufacturing limitation system set out in Chapters II and III. Parties were required to provide the PCOB with estimates of their national drug requirements for medical and scientific purposes, and on the basis of those estimates, the PCOB would calculate manufacturing limits for each signatory. A Drug Supervisory Body (DSB) was created to administer the system. The Convention's effectiveness was seriously undermined by Article 26, which absolved states of any responsibilities under the Convention for their colonies. Article 15 required states to set up a "special administration" for national drug control, modelled to some extent on the U.S. domestic control apparatus.[33]

The Convention came into force quickly because various countries and the League of Nations thought it might provide a useful model for arms control negotiations. The League even prepared a report explaining how the principles set out in the 1925 Geneva Convention and the Limitation Convention could be applied to disarmament issues.[34]

In late 1931, another conference was held in Bangkok to address opium smoking in the Far East. The treaty[35] it produced was weak, primarily because the U.S. attended only as an observer and the European colonial powers were unwilling to implement effective controls on opium use while there was significant opium overproduction and smuggling. The fact that the U.S. strategy of absolute prohibition had made little impact on opium trafficking and use in the Philippines did not strengthen the U.S.'s hand in pushing for the elimination of poppy cultivation. The key result of the Bangkok conference was that it convinced the U.S. that a firmer approach was needed to combat raw material production and illicit drug trafficking.[36]

The 1936 Geneva Convention for the Suppression of the Illicit Traffic in Dangerous Drugs

Based on initiatives of the International Police Commission, forerunner of the International Criminal Police Organization (INTERPOL), negotiations had begun in 1930 to develop a treaty to stem illicit drug trafficking and punish traffickers severely through criminal sanctions.[37]

In 1936, the Convention for the Suppression of the Illicit Traffic in Dangerous Drugs[38] (1936 Trafficking Convention) was concluded in Geneva. The U.S., led by Anslinger, had attempted to include provisions that would criminalize all activities—cultivation, production, manufacture and distribution—related to the use of opium, coca (and its derivatives) and cannabis for non-medical and non-scientific purposes. Many countries objected to this proposal, and the focus remained on illicit trafficking.[39] Article 2 of the Convention called on signatory countries to use their national criminal law systems to "severely" punish, "particularly by imprisonment or other penalties of deprivation of liberty," acts directly related to drug trafficking.

The U.S. refused to sign the final version because it considered the Convention too weak, especially in relation to extradition, extraterritoriality and the confiscation of trafficking revenues. The U.S. was also worried that if it signed, it might have to weaken its domestic criminal control system to comply with the Convention. In fact, the Convention never gained widespread acceptance, as most countries interested in targeting traffickers concluded their own bilateral treaties.

Despite its minimal overall effect, the 1936 Trafficking Convention marked a turning point. All the previous treaties had dealt with the regulation of "legitimate" drug activities, whereas the 1936 Trafficking Convention now made such activities an international crime subject to penal sanctions.

The Second World War

In the late 1930s, the Opium Advisory Committee (OAC) of the League of Nations began to question the international drug control regime's emphasis on prohibition and law enforcement. Some countries proposed combating abuse through public health approaches, including psychological treatment, dispensary clinics and educational programs. Asserting the U.S. belief that addicts could only be cured through institutionalization, Anslinger, supported by Sharman, was able to block all OAC efforts to consider social and etiological approaches to drug problems. Instead, at Anslinger's insistence, the focus remained on developing a new treaty to impose prohibition and supply control worldwide.[40]

Ironically, in anticipation of war, many countries (in particular the U.S.) built up stockpiles of opium and opium products intended for medical purposes.[41] The Second World War put further development of the international drug control apparatus on hold.

The 1946 Lake Success Protocol

Following the war, the drug control bodies and functions of the League of Nations were folded into the newly formed United Nations.[42] The UN Economic and Social Council (ECOSOC) took over primary responsibility through its Commission on Narcotic Drugs (CND), which replaced the OAC. Under the CND, the Division of Narcotic Drugs (DND) was charged with the preparatory work for conferences. The PCOB and the DSB continued under the CND in their respective roles of compiling statistics for national estimates and administering previous treaties. Canada's Sharman became the first Chair of the CND and also held a seat on the DSB.

All these changes in responsibility and organization meant that the existing international drug control treaties had to be amended. The amendments were made in a Protocol[43] signed at Lake Success, New

York, on 110 December 1946.

The 1948 Paris Protocol

Anslinger and Sharman campaigned hard to ensure that the CND would report directly to ECOSOC as an independent organization. They were afraid that if the main drug control apparatus was a larger health or social issues organization, such as the World Health Organization (WHO) or the United Nations Educational, Scientific and Cultural Organization (UNESCO), etiology and treatment issues might take precedence over the prohibition focus. In particular, they wanted to ensure that governments would be represented by law enforcement officials rather than physicians or others with sociology or public health backgrounds. Furthermore, the USSR showed interest in considering the social factors underlying drug abuse. For the Western powers to have agreed with the Soviet Union would have undermined their hard-line stance against Moscow and communism in the looming Cold War.

Although control remained principally with ECOSOC, the World Health Organization (WHO), in particular its Drug Dependence Expert Committee, became responsible for deciding what substances should be regulated.[44] This authority was given to the WHO in an international Protocol[45] signed in Paris in 1948. Article 1 stated that if the WHO found a drug to be "capable of producing addiction or of conversion into a product capable of producing addiction," it would decide how to classify the drug within the international drug control structure. The Protocol also brought under international control specific synthetic opiates not covered by previous treaties.

The 1953 New York Opium Protocol

By the late 1940s, it became clear that the large number of international drug treaties, with their differing types and levels of control, had become confusing and unwieldy. Anslinger, Sharman and their allies had the CND recommend to ECOSOC the idea of consolidating all existing treaties into one document. It would also be an opportunity to bring in more stringent prohibition-based controls.[46] This plan was sidelined for a decade when the Director of the DND, Leon Steinig, proposed the creation of an "International Opium Monopoly" in an attempt to end the illicit trade and guarantee wholesale licit opium supply.

Throughout the 1950s, Cold War tensions pushed Anslinger to rebuild the U.S. stockpile of opium and opium derivatives, often by making large purchases from Iran through U.S. pharmaceutical companies. Many European countries were also stockpiling. The multinational pharmaceutical companies in Europe and the U.S. feared that a monopoly like the one proposed by Steinig would lead to restrictions and higher prices. Anslinger and Sharman along with the British, Dutch and French killed the monopoly discussions in the CND. The French representative on the CND, Charles Vaille, suggested a new opium protocol as an interim solution until the treaties could be consolidated. ECOSOC approved a plenipotentiary conference, and Anslinger seized the new protocol initiative as an opportunity to impose strict global controls on opium production.[47]

The Protocol[48] (1953 Opium Protocol), finalized in New York in 1953, Article 2 stated bluntly that Parties were required to "limit the use of opium exclusively to medical and scientific needs." Various provisions were included to control the cultivation of the poppy and the production and distribution of opium. Article 6 restricted opium production to seven states, and Parties could only import or export opium produced in one of those countries.[49] The Protocol comprised the most stringent international drug control provisions yet, but it never gained the support Anslinger had hoped for. It did not receive sufficient ratifications to bring it into force until 1963, and by then it had been superseded by the 1961 Single Convention.

The three current conventions

The Single Convention on Narcotic Drugs, 1961

The Single Convention has played a central role in the creation of the modern prohibitionist system of international drug control. It is a continuation and expansion of the legal infrastructure developed between 1909 and 1953.

The work of consolidating the existing international drug control treaties into one instrument began in 1948, but it was 1961 before an acceptable third draft was ready to be presented for discussion at a plenipotentiary conference.^[50] The conference began in New York on 24 January 1961, and was attended by 73 countries, each "with an agenda based on its own domestic priorities."^[51]

William B. McAllister has divided the participating states into five distinct categories based on their drug control stance and objectives.

- **Organic states group:** As producers of the organic raw materials for most of the global drug supply, these countries had been the traditional focus of international drug control efforts. They were open to socio-cultural drug use, having lived with it for centuries. While India, Turkey, Pakistan and Burma took the lead, the group also included the coca-producing states of Indonesia and the Andean region of South America, the opium- and cannabis-producing countries of South and Southeast Asia, and the cannabis-producing states in the Horn of Africa. They favoured weak controls because existing restrictions on production and export had directly affected large segments of their domestic population and industry. They supported national control efforts based on local conditions and were wary of strong international control bodies under the UN. Although essentially powerless to fight the prohibition philosophy directly, they effectively forced a compromise by working together to dilute the treaty language with exceptions, loopholes and deferrals. They also sought development aid to compensate for losses caused by strict controls.
- **Manufacturing states group:** This group included primarily Western industrialized nations, the key players being the U.S., Britain, Canada, Switzerland, the Netherlands, West Germany and Japan. Having no cultural affinity for organic drug use and being faced with the effects that drug abuse was having on their citizens, they advocated very stringent controls on the production of organic raw materials and on illicit trafficking. As the principal manufacturers of synthetic psychotropics, and backed by a determined industry lobby, they forcefully opposed undue restrictions on medical research or the production and distribution of manufactured drugs. They favoured strong supranational control bodies as long as they continued to exercise de facto control over such bodies. Their strategy was essentially to "shift as much of the regulatory burden as possible to the raw-material-producing states while retaining as much of their own freedom as possible."
- **Strict control group:** These were essentially non-producing and non-manufacturing states with no direct economic stake in the drug trade. The key members were France, Sweden, Brazil and Nationalist China. Most of the states in this group were culturally opposed to drug use and suffered from abuse problems. They favoured restricting drug use to medical and scientific purposes and were willing to sacrifice a degree of national sovereignty to ensure the effectiveness of supranational control bodies. They were forced to moderate their demands in order to secure the widest possible agreement.

- **Weak control group:** This group was led by the Soviet Union and often included its allies in Europe, Asia and Africa. They considered drug control a purely internal issue and adamantly opposed any intrusion on national sovereignty, such as independent inspections. With little interest in the drug trade and minimal domestic abuse problems, they refused to give any supranational body excessive power, especially over internal decision-making.

- **Neutral group:** This was a diverse group including most of the African countries, Central America, sub-Andean South America, Luxembourg and the Vatican. They had no strong interest in the issue apart from ensuring their own access to sufficient drug supplies. Some voted with political blocs, others were willing to trade votes, and others were truly neutral and could go either way on the control issue depending on the persuasive power of the arguments presented. In general, they supported compromise with a view to obtaining the broadest possible agreement.

The result of all these competing interests was a document that epitomized compromise. The Single Convention clearly upheld and expanded existing controls and in its breadth was the most prohibitionist document yet concluded, though it was not as stringent as it might have been. It was free of the costly features of the 1953 Opium Protocol, such as the provision restricting opium production to the seven specified countries. Sharman no longer negotiated for Canada, and Anslinger had played a minor role in the conference owing to conflicts with the U.S. State Department. The latter was content with the Convention because U.S. influence was assured within the UN supervisory bodies and the prohibitive framework had been expanded to include tight controls over coca and cannabis. Since the U.S. originated the idea of the Single Convention, walking out of the conference would have meant losing face in the UN and given the impression of weakness vis-à-vis the Soviet Union during a tense Cold War period.[52]

The principal foundations of the previous treaties remained in place in the Single Convention.[53] Parties were still required to submit estimates of their drug requirements and statistical returns on the production, manufacture, use, consumption, import, export, and stockpiling of drugs.[54] The import certification system created by the 1925 Geneva Convention was maintained. Parties were required to license all manufacturers, traders and distributors, and all transactions involving drugs had to be documented.[55] The Single Convention built on the trend of requiring Parties to develop increasingly punitive criminal legislation. Subject to their constitutional limitations, Parties were to adopt distinct criminal offences, punishable preferably by imprisonment, for each of the following drug-related activities in contravention of the Convention: cultivation, production, manufacture, extraction, preparation, possession, offering, offering for sale, distribution, purchase, sale, delivery on any terms whatsoever, brokerage, dispatch, dispatch in transit, transport, importation and exportation.[56] Furthermore, the granting of extradition was described as "desirable." [57]

The Convention assigned substances to one of four schedules based on level of control. Schedules I and IV were the most stringent and covered primarily raw organic materials (opium, coca, cannabis) and their derivatives, such as heroin and cocaine. Schedules II and III were less strict and contained primarily codeine-based synthetic drugs. At the U.S.'s insistence, cannabis was placed under the heaviest control regime in the Convention, Schedule IV. This regime included drugs such as heroin (the WHO considered any medical use of heroin to be "obsolete"). The argument for placing cannabis in this category was that it was widely abused. The WHO later found that cannabis could have medical applications after all, but the structure was already in place and no international action has since been taken to correct this anomaly.

The U.S. was pleased with the Single Convention as it broadened control over cultivation of the opium poppy, coca bush and cannabis plant, though the measures were not as stringent as the ones Anslinger had negotiated in the 1953 Opium Protocol.[58] Articles 23 and 24 of the Convention set up national opium monopolies and put very strict limitations on international trade in opium.

Article 49 of the Convention required Parties to completely eliminate all quasi-medical use of opium,[59] opium smoking, coca leaf chewing, and non-medical cannabis use within 25 years of the coming into force of the Convention. All production or manufacture of these drugs was also to be eradicated within the same period. Only Parties for which such uses were "traditional" could take advantage of delayed implementation; for others, prohibition was immediate. Since the implementation period ended in 1989, these practices are today fully prohibited, and the drugs may be used only for regulated medical and scientific purposes.

Apart from consolidating the previous treaties and expanding control provisions, the Single Convention also streamlined the UN's drug-related supervisory bodies. The PCOB and the DSB were merged in a new body, the International Narcotics Control Board (INCB), responsible for monitoring application of the Convention and administering the system of estimates and statistical returns submitted annually by Parties.[60] The INCB was to have eleven members, three nominated by the WHO and eight by Parties to the Convention and UN members. The manufacturing lobby's effectiveness in the negotiations was evident in the knowledge requirement for WHO nominees: "*medical, pharmacological or pharmaceutical experience.*"[61] *The INCB was given a limited power of embargo: it could recommend that Parties stop international drug trade with any Party that failed to comply with the provisions of the Convention.*[62]

The Convention's emphasis on prohibition was reflected in the minimal attention paid to drug abuse problems. Only Article 38 touched on the social (demand) side of the drug problem by requiring Parties to "give special attention to the provision of facilities for the medical treatment, care and rehabilitation of drug addicts." Furthermore, it was considered "desirable" that Parties "establish adequate facilities for the effective treatment of drug addicts," but only if the country had "*a serious problem of drug addiction and its economic resources [would] permit.*" The inadequate recognition of demand/harm reduction approaches, such as prevention through education, has been one of the key criticisms of both the Single Convention and international drug control treaties in general.[63]

The Single Convention effectively consolidated several decades' worth of assorted drug control machinery into one key document administered by one principal body, the United Nations.

Convention on Psychotropic Substances

In the 1960s, following the signing of the Single Convention, drug use and abuse exploded around the world, especially in developed Western nations.[64] The increase was particularly evident in the pervasive use and availability of synthetic psychotropic substances developed since the Second World War, such as amphetamines, barbiturates and LSD. Most of these drugs were not subject to international control, and because national systems of regulation differed widely, trafficking and smuggling flourished.[65]

Throughout the 1960s, the CND and the WHO debated the issue of control of psychotropic drugs at regular meetings and made various recommendations to member states concerning the national control of particular substances, including stimulants, sedatives and LSD. In January 1970, the CND discussed a draft treaty prepared by the UN Division of Narcotic Drugs on the international control of psychotropic drugs. Following some modifications by the CND, this document became the basis for negotiations at a plenipotentiary conference convened in Vienna on 11 July 1971; this conference produced the Psychotropics Convention.[66]

The 1961 Single Convention had been used as a template for the draft Psychotropics Convention, and many of the former's features are found in the latter: CND/INCB administrative authority, schedules establishing different levels of control for different drugs, mandatory transaction documentation and licensing, an import/export control system, illicit trafficking provisions and criminal sanctions. Though superficially quite similar, the two Conventions are in fact extremely different. The Psychotropics Convention imposes much weaker controls. The reason for this becomes apparent when the positions of the negotiating stakeholders are examined and selected parts of the two treaties are carefully compared.[67] The overwhelming influence of the multinational pharmaceutical industry on the Psychotropics Convention was particularly obvious.[68]

In contrast to the five negotiating groups identified by McAllister for the Single Convention, there were only two distinct blocs with conflicting positions at the Vienna conference. One group included mostly developed nations with powerful pharmaceutical industries and active psychotropics markets; this was essentially the "manufacturing group." The other group consisted of developing states, supported by the socialist countries, with few psychotropic manufacturing facilities; this was to a large extent the "organic group." At the 1971 negotiations, however, the positions of the two groups were *completely reversed*. The manufacturing group adopted the traditional arguments of the organic group: weak controls, national as opposed to international controls, and national sovereignty taking precedence over any supranational UN body. The rationale for these positions was that strict controls would be difficult to enforce and would cause financial loss. The organic group, on the other hand, pushed hard for strict controls similar to those it had been forced to accept in the Single Convention.[69]

A comparison of the Preambles of the two Conventions is revealing. Although the Preamble is not legally binding, it encapsulates the spirit of the instrument. In the Single Convention, addiction is described as *"a serious evil for the individual ... fraught with social and economic danger to mankind."* It is recognized, however, that *"the medical use of narcotic drugs continues to be indispensable for the relief of pain and suffering and that adequate provision must be made to ensure the availability of narcotic drugs for such purposes."* By contrast, the Psychotropics Convention makes no mention of the "serious evil" of "addiction," but rather notes *"with concern the public health and social problems resulting from the abuse of certain psychotropic substances."* As well, it is recognized that *"the use of psychotropic substances for medical and scientific purposes is indispensable and that their availability for such purposes should not be unduly restricted."* The overall tone of the Psychotropics Convention Preamble is less harsh, and it implies that *"abuse of certain," not all, psychotropics, is not as serious a problem as "addiction to narcotic drugs"* in general.

The approach to categorizing drugs by means of schedules with varying levels of control also differed between the two Conventions. In the 1961 Single Convention negotiations, when the placement of a drug in a particular schedule was disputed, the drug almost always ended up in a schedule not favoured by the organic group – for example, the placement of cannabis in Schedule IV. The manufacturing group's insistence on this classification method was based on the idea that narcotic drugs should be considered hazardous until proven otherwise. This reasoning did not apply, however, when U.S. economic interests were at stake. In 1971, the U.S. delegation argued forcefully and often successfully that organic raw materials should be assigned to the strictest schedules, while their manufactured derivatives should be placed in the weaker schedules.

The Psychotropics Convention also contains four schedules of control, but they are substantially different in nature and organization from those of the Single Convention. For example, the most stringent schedule in the Single Convention is Schedule IV,[70] which is equivalent to Schedule I[71] in the Psychotropics Convention. In both cases, the drugs included may be used only by authorized persons in government-operated medical or scientific institutions, and their manufacture, import and export are strictly controlled. The weakest schedule in the Psychotropics Convention is Schedule IV, which contains tranquilizers. Some manufacturing states tried to eliminate Schedule IV by arguing that such drugs were sufficiently regulated by national controls and that international control was therefore unnecessary. In the end, Schedule IV was retained, albeit with a much shorter list of drugs. However, the principle on which drugs were classified was completely reversed, in particular by the U.S.: *"unless there was substantial proof that a substance was harmful, it should remain uncontrolled."*[72]

Another key difference between the two Conventions is revealed by a close comparison of the schedules. Previous treaties, including the Single Convention, not only covered the base substances but also extended control to include their salts, esters, ethers and isomers, i.e., their derivatives. In contrast, derivatives were completely absent from the schedules of the Psychotropics Convention. As a result, every substance to be covered under the treaty regime must be specified by name. In practical terms, that is impossible because new derivatives are constantly being produced, and they comprise 95 per cent of the substances developed by pharmaceutical firms. If a general reference to derivatives had been included, new substances would have been covered automatically. This omission was apparently the result of a deal made between

political representatives when the technical experts were not present; the derivatives had to be sacrificed in order to get the manufacturing states to sign the treaty.[73]

The system of estimates set out in Article 19 of the Single Convention requires Parties to report annually to the INCB how much of each controlled substance they will need for the next year. This system is one of the pillars of the international drug control regime and dates back to the second Geneva conference, which led to the 1925 International Opium Convention. It was *completely excluded* from the Psychotropics Convention. As McAllister has pointed out, "[t]his omission was clearly in the interests of the manufacturing states, because without estimates of need it is impossible to calculate whether more of a substance than can legitimately be put to use is being fabricated." [74] This allowed multinationals to manufacture unlimited quantities of psychotropic substances without being constrained by annual production limits based on licit need.

These omissions—derivatives and estimates—were largely corrected during the 1970s and 1980s through quiet recourse to customary international law by the DND and the INCB. The latter asked Parties to submit psychotropics information and statistics not required by the Convention. The initial positive responses from various organic group states were then used to persuade others to follow suit. Similarly, the CND and the WHO simply announced that derivatives would be included in the schedules. Some governments complied and others were eventually forced by international pressure to do likewise.

Article 3 of the Single Convention gives the WHO the key role in determining whether, on the basis of a medical or scientific analysis, a new drug should be added to a schedule and thus placed under international control. The WHO's recommendation is submitted to the CND, which makes the final decision. However, any Party may appeal the CND's decision to ECOSOC within 90 days. ECOSOC's decision is final. While a decision is being appealed, the CND may still require Parties to place control measures on the substance in question.

Under the Psychotropics Convention, the WHO continues to make recommendations based on medical and scientific criteria. However, Article 2(5) explicitly directs the CND to bear in mind "the economic, social, legal, administrative and other factors it may consider relevant" in coming to its decision. Furthermore, Article 17(2) states that the CND's decision is subject to approval by a two-thirds majority of CND members.[75] The CND's decision may still be appealed to ECOSOC, and Parties have up to 180 days to do so. In addition, ECOSOC's decision is not necessarily final; there is the possibility of continual appeals. Lastly, while a decision is being appealed, Article 2(7) allows a Party to take "exceptional action" and exempt itself from certain control measures ordered by the CND pending the outcome of the appeal. The cumulative effect of all of these additions to the Psychotropics Convention is that it can be much harder for the WHO to bring a new psychotropic drug within the control system than to add a new narcotic drug to the Single Convention.

The criteria for placing a new drug under control also differ between the two Conventions. According to Article 3 of the Single Convention, a narcotic drug will come within the control regime if it is "liable to similar abuse and productive of similar ill effects as the drugs" in the relevant schedule. The prerequisites under Article 2(4) of the Psychotropics Convention are significantly more stringent. The WHO must find:

(a) that the substance has the capacity to produce

(i) (1) a state of dependence, and

(2) central nervous system stimulation or depression, resulting in hallucinations or disturbances in motor function or thinking or behaviour or perception or mood, or

(ii) similar abuse and similar ill effects as a substance in Schedule I, II, III or IV, and

that there is sufficient evidence that the substance is being or is likely to be abused so as to constitute a

public health and social problem warranting the placing of the substance under international control.

Taking the lead for the manufacturing group on this point, the U.S. and Britain were the most adamant about including such highly restrictive criteria.[76]

The Psychotropics Convention is far ahead of the Single Convention's superficial attempt to address the demand side of drug problems (Article 38 described above). Article 20 of the 1971 treaty is a milestone in that it introduced the concepts of public education and abuse prevention into the legal infrastructure of international drug control. In particular, it enjoins Parties to *"take all practical measures for the prevention of abuse of psychotropic substances and for the early identification, treatment, education, after-care, rehabilitation and social reintegration of the persons involved, and [to] coordinate their efforts to these ends."* Parties are also required to promote "as far as possible" the training of personnel to carry out these tasks and encouraged to further the study and public awareness of etiological issues related to abuse. Although these provisions leave plenty of room for countries to avoid taking measures, they are a definite improvement over the Single Convention.

The penal provisions in Article 22 of the Psychotropics Convention allow states to use treatment, education, after-care, rehabilitation and social reintegration instead of just conviction or punishment in dealing with abusers who commit offences under the Convention. While the acknowledgement of treatment and rehabilitation is an improvement over previous strictly penal provisions, such measures are intended as a supplement to imprisonment rather than as an alternative.[77]

On the whole, the 1971 negotiations resulted in a treaty that was significantly weaker than the Single Convention. Furthermore, any possibility of revisiting the provisions of the Psychotropics Convention was not realistic in the early 1970s, as a new chapter in the U.S. "war on drugs" was beginning.[78]

Protocol amending the Single Convention on Narcotic Drugs, 1961

In the early 1970s, U.S. President Richard Nixon officially declared "war on drugs" in response to the massive drug abuse in the U.S. and the social damage it was causing. This announcement had global repercussions.[79]

In 1971, as part of the Nixon administration's international anti-narcotics campaign, U.S. officials suggested creating a government-funded, UN-administered fund to combat drug abuse.[80] The United Nations Fund for Drug Abuse Control (UNFDAC) was launched in 1971 with an initial \$2 million donation from the U.S. Other governments were reluctant to contribute because of the motives behind the Fund. This reluctance was well founded as UNFDAC essentially became a U.S. tool. The emphasis was on law enforcement and crop substitution rather than abuse and demand-oriented strategies. Money went primarily to projects that involved U.S. allies and focused on countries where the U.S. had been unable to stop opium production.[81]

The Fund was also sharply criticized for succumbing to the inefficiency of the UN's bureaucratic machinery: *"A large proportion of the money allocated to the Fund's various programs is in fact spent on supporting an ever-expanding bureaucracy to administer the programs. Indeed many of the Programs appear to serve no purpose other than to provide occupation for the enlarged secretariats."*[82] It was also argued that the UNFDAC should be transferred from the drug control bodies under ECOSOC to the United Nations Development Program, which was better able to assess the development and aid needs of recipient countries.[83]

Another key initiative of the Nixon administration was to strengthen the Single Convention. As a result of heavy U.S. lobbying, a UN plenipotentiary conference was convened in March 1972 to amend the Convention.[84] What came out of the conference was the Single Convention Protocol. The main goal of

the amendments was to expand the INCB's role in controlling licit and illicit opium production and illicit drug trafficking, in general. The U.S. wanted to revive certain aspects of the 1953 Opium Protocol by attempting to reduce licit opium production. However, in 1972, licit production was just meeting licit demand, and few countries were willing to risk a global shortage of opium for medical use.[85] Consequently, the U.S. proposals were significantly diluted.

The backbone of the Single Convention Protocol consists of provisions that enhance the INCB's powers, especially in relation to illicit trafficking. In Article 2 of the Single Convention, the definition of the INCB's functions now includes an explicit reference to the prevention of "illicit cultivation, production and manufacture of, and illicit trafficking in and use of, drugs." Article 35 encourages Parties to supply the INCB and the CND with information on the illicit drug activity in their territory; as well, the INCB is empowered to advise Parties on their efforts to reduce illicit drug trafficking. When Parties conclude extradition treaties with one another, such agreements are now deemed to automatically include the drug-related offences set out in the Single Convention, including trafficking.[86] Article 22(2) of the Psychotropics Convention says only that it is "desirable" that such offences be made extraditable.

The Protocol amended the Single Convention's abuse prevention provisions to bring them into line with Article 20 of the Psychotropics Convention.[87] The amended Single Convention also echoes the Psychotropics Convention by now allowing countries to use "treatment, education, after-care, rehabilitation and social reintegration" either as an alternative to or in addition to conviction or punishment.[88]

Although not as stringent as originally intended by the U.S., the Single Convention Protocol continued the prohibitive tradition of the international drug control regime, especially against opium, and stepped up the war on illicit trafficking.

Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances

Numerous national and regional drug control initiatives were launched in the 1970s and 1980s.[89] In Europe, the Co-operation Group to Combat Drug Abuse and Illicit Trafficking in Drugs, also known as the "Pompidou Group," was created to facilitate discussions between countries. In addition, the Heads of National Law Enforcement Agencies (HONLEA) met regionally - in Asia and the Pacific in the 1970s, and in Africa, Latin America and Europe in the 1980s - to improve police and customs drug enforcement cooperation. INTERPOL expanded its operations and became "an important clearinghouse for information and a sponsor of local, regional, and global drug enforcement meetings." [90]

Meanwhile, concerns arose within the UN and among its main control-oriented members that the anti-trafficking efforts of the international drug control system were being compromised by the fact that certain nations were not Parties to the Conventions or did not have domestic law enforcement systems capable of properly combating illicit trafficking.[91] In 1984, the UN General Assembly adopted resolution 39/141, which called on ECOSOC to instruct the CND to prepare "as a matter of priority" a draft convention considering "the various aspects of the problem [of illicit drug trafficking] as a whole and, in particular, those not envisaged in existing international instruments." Thus, the goal was to add an additional, trafficking-specific layer to the drug control system to complement the two existing Conventions.

The draft treaty was finalized at the 1987 UN Conference on Drug Abuse and Illicit Trafficking. Also at this Conference, a Comprehensive Multidisciplinary Outline of Future Activities in Drug Abuse Control [92] (CMO) was adopted to encourage states to fulfil their existing treaty obligations. The CMO focused on four areas: (1) prevention and reduction of illicit demand; (2) control of supply; (3) suppression of illicit trafficking; and (4) treatment and rehabilitation. Many of the objectives described in the CMO were reflected in the draft treaty. Between 25 November and 20 December 1988, representatives of 106 states met in Vienna to negotiate a final text. The result was the Trafficking Convention.

The Trafficking Convention is essentially an instrument of international criminal law. Its aim is to

harmonize criminal legislation and enforcement activities worldwide with a view to curbing illicit drug trafficking through criminalization and punishment. Under the Convention, Parties are required to enact and implement very specific criminal laws aimed at suppressing illicit trafficking. These laws relate to such aspects of the problem as money laundering, confiscation of assets, extradition, mutual legal assistance, illicit cultivation, and trade in chemicals, materials and equipment used in the manufacture of controlled substances. As with the other two Conventions, the CND and the INCB are charged with administration of the Convention. Furthermore, for minor offences, the Trafficking Convention allows demand-side measures to be used as an alternative to conviction or punishment.[93]

The Preamble describes illicit trafficking as "*an international criminal activity*" and points out the "*links between illicit traffic and other related organized criminal activities which undermine the legitimate economies and threaten the stability, security and sovereignty of States.*" It also stresses "*the importance of strengthening and enhancing effective legal means for international co-operation in criminal matters for suppressing the international criminal activities of illicit traffic.*" Even the single reference in the Preamble to demand-side issues is couched in terms specific to criminal law: "*Desiring to eliminate the root causes of the problem of abuse of narcotic drugs and psychotropic substances, including the illicit demand for such drugs and substances and the enormous profits derived from illicit traffic*" (emphasis added). The implication is that drug users also are to be considered criminals. The Preamble clearly reflects its prohibitionist roots, even explicitly reaffirming "*the guiding principles of existing treaties in the field of narcotic drugs and psychotropic substances and the system of control which they embody.*"

Accordingly, the cornerstone of the Trafficking Convention is Article 3: "Offences and Sanctions." Here the treaty breaks new ground by *requiring* that Parties "legislate as necessary to establish a modern code of criminal offences relating to the various aspects of illicit trafficking and to ensure that such illicit activities are dealt with as serious offences by each State's judiciary and prosecutorial authorities." [94] The mandatory offences, set out in Article 3(1), include the following:

- The production, manufacture, distribution or sale of any narcotic drug or psychotropic substance in violation of the provisions of the Single Convention or the Psychotropics Convention;
- The cultivation of the opium poppy, coca bush or cannabis plant in violation of the above Conventions;
- The possession or purchase of any narcotic drug or psychotropic substance for the purpose of illicit trafficking;
- The manufacture, transport or distribution of materials, equipment and substances for the purpose of illicit cultivation, production or manufacture of narcotic drugs or psychotropic substances;
- The organization, management or financing of any of the above offences.[95]

Furthermore, Article 3(2) of the Trafficking Convention requires each Party, subject to its constitutional principles and the fundamental principles of its legal system, to establish criminal offences for the possession, purchase or cultivation of drugs for personal consumption.

Some leeway?

Three points bear making concerning the substance of the current conventions.

The first has to do with the absence of definitions. The terms drugs, narcotics and psychotropics are not defined in any way except as lists of products included in schedules. It follows that any natural or synthetic substance on the list of narcotics is, for the purposes of international law, a narcotic, and that a psychotropic is defined in international law by its inclusion in the list of psychotropics.[96] The only thing that the 1961 Convention tells us about the substances to which it applies is that they can be abused. The 1971 Psychotropics Convention, which, as noted earlier, reversed the roles in that the synthetic drug producing countries wanted narrower criteria, indicates that the substances concerned may cause dependence or central nervous system stimulation or depression and may give rise to such abuse as to "constitute a public health problem or a social problem that warrants international control."

The second point, following from the first, relates to the arbitrary nature of the classifications. While cannabis is included, along with heroin and cocaine, in Schedules I and IV of the 1961 Convention, which carry the most stringent controls, it is not even mentioned in the 1971 Convention, though THC is listed as a Schedule I psychotropic along with mescaline, LSD and so on. The only apparent criterion is medical and scientific use, which explains why barbiturates are in Schedule III of the 1971 Convention and therefore subject to less stringent controls than natural hallucinogens. These classifications are not just arbitrary, but also inconsistent with the substances' pharmacological classifications and their danger to society.

Third, if there was so much concern about public health based on how dangerous "drugs" are, one has to wonder why tobacco and alcohol are not on the list of controlled substances.

We conclude from these observations that the international regime for the control of psychoactive substances, beyond any moral or even racist roots it may initially have had, is **first and foremost a system that reflects the geopolitics of North-South relations in the 20th century**. Indeed, the strictest controls were placed on organic substances - the coca bush, the poppy and the cannabis plant - which are often part of the ancestral traditions of the countries where these plants originate, whereas the North's cultural products, tobacco and alcohol, were ignored and the synthetic substances produced by the North's pharmaceutical industry were subject to regulation rather than prohibition. It is in this context that the demand made by Mexico, on behalf of a group of Latin American countries, during the negotiations leading up to the 1988 Convention, that their use be banned must be understood. It was a demand that restored the balance to a degree, as the countries of the South had been forced to bear the full brunt of the controls and their effects on **their own** people since the inception of drug prohibition. The result may be unfortunate, since it reinforces a prohibitionist regime that history has shown to be a failure, but it may have been the only way, given the mood of the major Western powers, to demonstrate the irrationality of the entire system in the longer term. In any case, it is a short step from there to questioning the legitimacy of instruments that help to maintain the North-South disparity yet fail miserably to reduce drug supply and demand.

Putting aside such questions of substance, we will now examine how much leeway countries have within the current conventions to adopt less prohibitionist policies.

Several states have adjusted their criminal enforcement systems to allow *de facto* possession of small amounts of certain soft drugs, such as cannabis and its derivatives, for personal consumption while remaining within the legal bounds of the Conventions.[97] Although the Conventions do not permit legalization or even decriminalization of possession, those countries have circumvented the limitations by criminalizing possession, as required by the treaties, but not strictly enforcing the legislation, or they have effectively "depenalized" the offences by exempting them from punishment.[98]

According to some observers, such approaches clearly violate the spirit of the Conventions, especially the Trafficking Convention, which seems to use the term "trafficking" very broadly to include demand-side activities within a supply-oriented control regime. Yet there is a legal basis for these "softer" approaches because the treaties do not explicitly forbid them.

The hard-nosed criminal law approach adopted by the international drug control system has drawn criticism from human rights activists. Some maintain that the imprisonment penalties are excessive for soft-drug

offences such as possession of a small amount of cannabis for personal consumption.[99] It is argued that imprisonment in such circumstances is disproportionate to the offence and therefore violates the inherent dignity of persons, the right to be free from cruel and degrading punishment, and the right to liberty, as set out in such instruments as the *Universal Declaration of Human Rights*, the *International Covenant on Civil and Political Rights*, and the *Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment*. [100] It has also been argued that drug use is a human right and should be recognized as such in the *Universal Declaration of Human Rights*. [101]

The Trafficking Convention is the only one of the three Conventions that mentions human rights. Article 14(2) of the Trafficking Convention explicitly requires Parties "to respect fundamental human rights" when they take measures to prevent and eradicate the illicit cultivation of plants containing narcotic or psychotropic substances, such as opium, cannabis and coca. The same provision also requires states to take into account traditional licit uses, where there is historical evidence of such use, and protection of the environment.

There are three factors that provide states, including Canada, with some leeway. The first is the fact that the conventions recognize the primacy of national legal systems. Indeed, the international drug agreements have no direct application in national law. To make them enforceable within its territory, the state must enact a law; in Canada, that law is the *Controlled Drugs and Substances Act*. Specifically, the conventions variously state that the proposed penalties are to be imposed "subject to [the Parties'] constitutional provisions" or "having due regard to their constitutional, legal and administrative systems." In Canada, the provisions of the *Canadian Charter of Rights and Freedoms* and the interpretations given to them by the Supreme Court are the framework for interpreting the international conventions on drugs.

The second, slightly more technical point suggests that sanctions for possession apply only to possession for the purposes of trafficking, especially in view of this provision's position between two articles on trafficking and of its earlier wording. [102] Failing to punish people for possession for personal use would not be, strictly speaking, prohibited. That is the legal opinion of an expert asked by Switzerland's Federal Office of Public Health to comment on its draft legislation to legalize cannabis: [Translation] "*The statute's general depenalization of the consumption and small-scale cultivation of cannabis would be compatible with the conventions.*" [103] With regard to cannabis trade and supply, the author writes: [Translation] "*Even though regulating cannabis trade with a licensing system does not appear to be out of the question, some practical problems remain, partly because of the control mechanisms required by the 1961 Convention, and partly because the international community interprets the 1988 Convention as an obligation to punish the buying and selling of cannabis.*" [104]

The third factor is that the conventions impose moral obligations on states and not legal obligations, much less penalties or sanctions for violating them, and that they also include review or amendment mechanisms.

CONCLUSIONS

As we have seen in Chapters 5, 6 and 7, cannabis is widely used in every part of the world, does not have the harmful effects ascribed to it, and poses little risk to public health. Consequently, it in no way deserves to be included in the convention schedules that list what are supposed to be the most dangerous drugs. Cannabis even has therapeutic uses recognized by Canadian courts. For the above reasons, we recommend that Canada notify the international community of its intent to seek the declassification of cannabis as part of a public health approach that would include stringent monitoring and

evaluation.

Conclusions of Chapter 19

- *The series of international agreements concluded since 1912 have failed to achieve their ostensible aim of reducing the supply of drugs.*
- *The international conventions constitute a two-tier system that regulates the synthetic substances produced by the North and prohibits the organic substances produced by the South, while ignoring the real danger which those substances represent to public health.*
- *When cannabis was included in the international conventions in 1925, there was no knowledge of its effects.*
- *The international classifications of drugs are arbitrary and do not reflect the level of danger those substances represent to health or to society.*
- *Canada should inform the international community of the conclusions of our report and officially request the declassification of cannabis and its derivatives.*

[1] *Single Convention on Narcotic Drugs, 1961 (RTC 1964/30), amended by the Protocol amending the Single Convention on Narcotic Drugs, 1961 (RTC 1976/48). The Single Convention came into force in Canada in 1964 and the Protocol in 1976.*

[2] *Convention on Psychotropic Substances, RTC 1988/35. It came into force in Canada in 1988.*

[3] *Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances, RTC 1990/42, which came into force in Canada in 1990.*

[4] *McAllister, W.B., (1999) Drug Diplomacy in the Twentieth Century. An international history, pages 10-11.*

[5] *Caballero, F., and Y. Bisiou (2000) Droit de la drogue. Paris: Dalloz, 2nd edition, page 36.*

[6] *McAllister, op. cit., pages 15-16.*

[7] *McAllister, op. cit., pages 24-27.*

[8] *This table and the text of this section are taken from the excellent report prepared by the Library of Parliament at the Committee's request: Sinha, J. (2001) The History and Development of the Leading International Drug Control Conventions. Ottawa: Library of Parliament, Parliamentary Research Branch, available on the Committee's Web site at www.parl.gc.ca/illegal-drugs.asp.*

- [9] Sources: Canadian Treaty Series; Kettil Bruun, Lynn Pan and Ingemar Rexed, (1975) *The Gentlemen's Club: International Control of Drugs and Alcohol*, Chicago: University of Chicago Press; United States, (1972) *International Narcotics Control: A Source Book of Conventions, Protocols, and Multilateral Agreements, 1909-1971*, Washington, D.C.: Bureau of Narcotics & Dangerous Drugs.
- [10] Lowes, P.D. (1966) *The Genesis of International Narcotics Control*. Geneva: Droz, page 102.
- [11] Bewley-Taylor, D.R. (1999) *The United States and International Drug Control*, page 19.
- [12] The Commission included all the colonial powers in the region – Britain, France, Germany, Japan, the Netherlands, Portugal and Russia – and China, Siam [now Thailand], Persia [now Iran], Italy and Austria-Hungary. (McAllister (2000), page 28)
- [13] Bruun *et al.* (1975), page 11; Lowes (1966), page 187-188.
- [14] Walker III, William O., (1991) *Opium and Foreign Policy: The Anglo-American Search for Order in Asia, 1912-1954*, Chapel Hill, N.C.: University of North Carolina Press, page 16-17; Lowes (1966), page 152-153.
- [15] Musto (1999), page 36-37.
- [16] William B. McAllister, (1992) "Conflicts of Interest in the International Drug Control System," in William O. Walker III, ed., *Drug Control Policy: Essays in Historical and Comparative Perspective*, University Park, Pennsylvania: Pennsylvania State University Press, page 145.
- [17] Germany, China, the United States, France, Britain, the Netherlands, Italy, Japan, Persia [now Iran], Portugal, Russia and Siam [now Thailand].
- [18] McAllister (2000), page 32-33; Bruun *et al.* (1975), page 11-12.
- [19] Done 23 January 1912; in force 28 June 1919.
- [20] Ratification is the process by which each country enacts national implementing legislation – unless the new international obligations are already met by domestic legislation – and thereby consents to the treaty's application within its territory.
- [21] McAllister (2000), page 36-37; Bruun *et al.* (1975), page 12; Lowes (1966), page 182-186.
- [22] Musto (1999), page 59-63. Since the U.S. Constitution did not allow a direct federal role in criminalizing drug use, Wright designed the *Harrison Act* as a tax statute; physicians, pharmacists, wholesalers and retailers had to obtain a tax stamp to distribute drugs. The Treasury Department was responsible for enforcing the statute. Thus, the use of drugs was limited through access restrictions. (McAllister (2000), page 35)
- [23] McAllister (1992), page 145-146.
- [24] McAllister (2000), page 46-50; Lowes (1966), page 188.
- [25] McAllister (2000), page 50-51.
- [26] *Agreement concerning the Manufacture of, Internal Trade in, and Use of Prepared Opium*, done 11 February 1925, in force 28 July 1926.
- [27] Done 19 February 1925; in force 25 September 1928.
- [28] The PCOB was intended to be impartial and politically disinterested, but its operations remain

extremely political to this day (it still exists). Since its inception, its membership has always included a representative from Britain, the U.S. and France. (McAllister (2000), page 83)

[29] Bruun *et al.* (1975), page 14.

[30] Done 13 July 1931; in force 9 July 1933.

[31] Giffen *et al.* (2000), page 483.

[32] See, for example, McAllister (2000), page 89-90; Bewley-Taylor (1999), page 102-164; Bruun *et al.* (1975), page 137-141; Inglis (1975), page 181-190. See also Harry J. Anslinger and Will Oursler, "The War against the Murderers," in William O. Walker III, ed., *Drugs in the Western Hemisphere: An Odyssey of Cultures in Conflict*, Wilmington, Delaware: Scholarly Resources Inc., 1996.

[33] Anslinger would use this provision continually in the future as a way of protecting his position and the Federal Bureau of Narcotics from being altered through reorganization. (McAllister (2000), page 98, 108-109)

[34] *Ibid.*, page 110-111.

[35] *Agreement for the Control of Opium Smoking in the Far East*, done 27 November 1931, in force 22 April 1937.

[36] Taylor (1969), page 275-279; McAllister (2000), page 106.

[37] Taylor (1969), page 288-298.

[38] Do 26 June 1936; in force 26 October 1939.

[39] Taylor (1969), page 293-295.

[40] McAllister (2000), page 126-127.

[41] The possibility of war accentuated the hypocrisy and opportunistic nature of the U.S. prohibitionist position. In 1939, Anslinger "was simultaneously pursuing a League-sponsored treaty to curtail agricultural production in far-off lands, a regional agreement that would allow him to commence poppy cultivation at home, and a global acquisition program that amassed the world's largest cache of licit opium yet assembled." (McAllister (2000), page 133)

[42] See Bewley-Taylor (1999), page 54-59; Bruun *et al.* (1975), page 54-65.

[43] *Protocol amending the Agreements, Conventions and Protocols on Narcotic Drugs concluded at The Hague on 23 January 1912, at Geneva on 11 February 1925 and 19 February 1925 and 13 July 1931, at Bangkok on 27 November 1931, and at Geneva on 26 June 1936*, done 11 December 1946, in force 11 December 1946.

[44] Bruun *et al.* (1975), page 70.

[45] *Protocol Bringing under International Control Drugs outside the Scope of the Convention of 13 July 1931, for Limiting the Manufacture and Regulating the Distribution of Narcotic Drugs, as amended by the Protocol signed at Lake Success, New York, on 11 December 1946*, done 19 November 1948, in force 1 December 1949.

[46] ECOSOC approved the recommendation in two resolutions: 159 II D (VII) of 3 August 1948, and 246 D (IX) of 6 July 1949. See also McAllister (2000), page 172; Bewley-Taylor (1999), page 137.

[47] McAllister (2000), page 172-179.

[48] *Protocol for Limiting and Regulating the Cultivation of the Poppy Plant, the Production of, International and Wholesale Trade in, and Use of, Opium*, done 23 June 1953, in force 8 March 1963.

[49] The seven producing countries were Bulgaria, Greece, India, Iran, Turkey, the USSR and Yugoslavia.

[50] One of the Canadian delegates to the CND, National Health and Welfare official Robert Curran, played the leading role in drafting a document that would be acceptable to all countries as a starting point for negotiations (McAllister (2000), page 205). For an analysis of this third draft, see Leland M. Goodrich, "New Trends in Narcotics Control", *International Conciliation*, No. 530, November 1960.

[51] McAllister (1992), page 148.

[52] Anslinger was extremely disappointed with the Single Convention because he believed that the opium control provisions were not stringent enough (e.g., Article 25 still allowed any country to produce up to five tons of opium annually, albeit subject to strict controls). He attempted to derail the Convention by lobbying countries to ratify the 1953 Opium Protocol in hopes of obtaining the number of ratifications needed to bring it into force. He failed, and his influence waned after that. (Bewley-Taylor (1999), page 136-161)

[53] Only the 1936 Trafficking Convention was not included in the Single Convention and remained in force separately, because agreement could not be reached on which of its provisions should be included in the Single Convention (McAllister (2000), page 207-208). Article 35 of the Single Convention simply encouraged cooperation between countries to combat illicit trafficking.

[54] Single Convention, Articles 19 and 20.

[55] *Ibid.*, Articles 21 and 29-32.

[56] *Ibid.*, Article 36.

[57] *Ibid.*, Article 36(2).

[58] Single Convention, Articles 22-28.

[59] The limit was 15 years for the quasi-medical use of opium.

[60] Single Convention, Articles 5 and 9-16.

[61] *Ibid.*, Article 9(1)(a).

[62] *Ibid.*, Article 14(2).

[63] See, for example, *Report of the International Working Group on the Single Convention on Narcotic Drugs, 1961*, Toronto, Addiction Research Foundation, 1983, page 10-11; recommendations 4, 5, 15, 19 and 20.

[64] See, for example, Vladimir Kušević, (1977) "Drug Abuse Control and International Treaties", *Journal of Drug Issues*, Vol. 7, No. 1, page 35-53. See also McAllister (2000), page 218-220; Musto (1999), ch. 11; McAllister (1992), page 153-162; Bruun *et al.* (1975), ch. 16; Inglis (1975), ch. 13.

[65] The U.S. attempted to regulate psychotropic substances through the Bureau of Drug Abuse Control, established under the *Drug Abuse Control Act of 1965*. This statute also shifted the constitutional basis for drug control from the taxing power to interstate and commerce powers, a change that led to the demise of Anslinger's Federal Bureau of Narcotics and the birth of the Bureau of Narcotics and Dangerous Drugs

(BNDD) under the federal Department of Justice. (Musto (1999), page 239-240)

[66] Kušević (1975), page 38.

[67] McAllister (1992), page 154-162; Kušević (1975), page 38-41. McAllister's comparison is highly detailed, and well worth reading; Kušević provides useful background and commentary. See also S.K. Chatterjee (1988) *A Guide to the International Drugs Conventions*, London: Commonwealth Secretariat, page 15-33, for a more technical, lower-level comparison of the two Conventions.

[68] The lead author of the preliminary draft, Arthur Lande, had ended his career at the UN shortly before the Vienna conference. He attended the conference as representative of the U.S. Pharmaceutical Manufacturer's Association, one of many industry observers. Another example of the industry's blatant influence involved a group of six small Latin American countries. They uncharacteristically supported weakening the treaty and were all represented by a Swiss national who was not fluent in Spanish and was not a government official, a diplomat or a narcotics expert. He worked for the European pharmaceutical giant Hoffmann-LaRoche. (McAllister (2000), page 232; Kušević (1975), page 39)

[69] McAllister (1992), page 154; Kušević (1975), page 39.

[70] Which includes cannabis and heroin, for example.

[71] Which includes hallucinogens, such as LSD.

[72] McAllister (1992), page 158.

[73] McAllister (2000), page 233.

[74] McAllister (1992), page 157.

[75] The U.S. tried to increase it to a three-quarters majority. (McAllister, 2000, page 161)

[76] *Ibid.*, page 159.

[77] United Nations, *Commentary on the United Nations Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances, Done at Vienna on 20 December 1988*, New York: United Nations, 1976, page 353-354.

[78] The U.S. war on drugs is considered to have begun with the enactment of a federal drug control law known as the *Harrison Narcotics Act of 1914*, and has continued ever since at varying levels of intensity. The most recent supporters of the war on drugs include President Nixon in the late 1960s and early 1970s, President Ronald Reagan in the 1980s, President George Bush in the late 1980s and early 1990s, President Bill Clinton in the 1990s and now President George W. Bush. A great deal has been written about the war on drugs. See, for example, Steven R. Belenko, ed., *Drugs and Drug Policy in America: A Documentary History*, Westport, Connecticut: Greenwood Press, 2000; H. Richard Friman, *NarcoDiplomacy: Exporting the U.S. War on Drugs*, Ithaca, New York: Cornell University Press, 1996; James A. Inciardi, *The War on Drugs: Heroin, Cocaine, Crime, and Public Policy*, Palo Alto, California: Mayfield Publishing Company, 1986; Kenneth J. Meier, *The Politics of Sin: Drugs, Alcohol and Public Policy*, Armonk, New York: M.E. Sharpe, 1994; Musto (1999); William O. Walker III, *Drug Control in the Americas*, revised edition, Albuquerque New Mexico: University of New Mexico Press, 1989; Steven Wisotsky, *Beyond the War on Drugs: Overcoming a Failed Public Policy*, Buffalo, New York: Prometheus Books, 1990.

[79] Musto (1999), page 248-259; Bruun *et al.* (1975), ch. 10.

[80] The U.S. campaign included massive international funding for crop substitution, technical assistance to improve the administration and law enforcement, initiatives to combat smuggling, and coordination of educational programs. However, many developing countries were wary of U.S. money with strings

attached. The Americans saw the Fund as a way to get around that reluctance. (McAllister (2000), page 236-237)

[81] *Ibid.*, page 238.

[82] Bruun *et al.* (1975), page 281.

[83] *Ibid.*, page 282; Kušević (1975), page 51.

[84] U.S. ambassadors were selected specifically for the purpose of visiting signatory countries to persuade their leaders to support the amendments proposed by the U.S. It is widely believed that the conference was largely an instrument that Nixon planned to use in the approaching presidential election. (Kušević (1975), page 47)

[85] Kušević (1975), page 48. According to Kušević, it would have been better to try to reduce the diversion of licit demand into the illicit market.

[86] Single Convention, Article 36, as amended by the Single Convention Protocol, Article 14.

[87] *Ibid.*, Article 38, as amended by the Single Convention Protocol, Article 15.

[88] *Ibid.*, Article 36, as amended by the Single Convention Protocol, Article 14.

[89] In the U.S., the war on drugs lost some momentum in the 1970s during the administrations of Presidents Gerald Ford and Jimmy Carter. Eleven U.S. states decriminalized certain aspects of marijuana regulation and were supported by well-known organizations such as the American Medical Association, the American Bar Association, the American Public Health Association and the National Council of Churches. President Ronald Reagan reversed this trend in the early 1980s. (Wisotsky (1990), page xviii)

[90] McAllister (2000), page 242-243.

[91] Bewley-Taylor (1999), page 167; David P. Stewart, "Internationalizing the War on Drugs: The UN Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances," *Denver Journal of International Law and Policy*, Vol. 18, No. 3, Spring 1990, page 387-404.

[92] *Declaration of the Conference on Drug Abuse and Illicit Trafficking, and Comprehensive Multidisciplinary Outline of Future Activities in Drug Abuse Control*, UN document ST/NAR/14, 1988.

[93] For a detailed description of the provisions of the Trafficking Convention, see William Gilmore, *Combating International Drugs Trafficking: The 1988 United Nations Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances*, London: Commonwealth Secretariat, 1991; Stewart (1990). Since Stewart was a member of the U.S. delegation that took part in the negotiations, his article presents the U.S. perspective on the treaty.

[94] United Nations, *Commentary on the United Nations Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances, Done at Vienna on 20 December 1988*, New York: United Nations, 1976, page 48.

[95] See Stewart (1990), page 392; Gilmore (1991), page 5.

[96] Caballero and Bisiou, *op. cit.*, page 26.

[97] For example, Belgium, Denmark, Germany, the Netherlands, Poland and some Australian states. Switzerland is currently considering a bill to legalize cannabis. The next chapter provides more detail on the Australian, Dutch and Swiss approaches in particular.

[98] See Krzysztof Krajewski, "How flexible are the United Nations drug conventions?" *International Journal of Drug Policy*, No. 10, 1999, page 329-338. Krajewski provides an excellent overview of the conventions' legal limits in the area of legalization and prohibition. He concludes that legalization or decriminalization would probably require amendment of Article 3(2) of the Trafficking Convention. See also the discussion on legalization in Dupras (1998), page 24-33; and Alfons Noll, "Drug abuse and penal provisions of the international drug control treaties," *Bulletin on Narcotics*, Vol. XXIX, No. 4, October/December 1977, page 41-57.

[99] See, for example, the following pages on the Web site of Human Rights Watch, a human rights non-governmental organization: <http://www.hrw.org/campaigns/drugs/> and

<http://www.hrw.org/worldreport99/special/drugs.html>.

[100] The full text of these international instruments is available on the Web site of the Office of the UN High Commissioner for Human Rights:

<http://www.unhcr.ch/html/intinst.htm>.

[101] See Erik Van Ree, "Drugs as a Human Right," *International Journal of Drug Policy*, Vol. 10, 1999, page 89-98. Van Ree proposes the addition of a new Article 31 to the *Universal Declaration of Human Rights*: Everyone has the right to use psychotropic substances of one's own choice.

[102] See Daniel Dupras (1998) *Canada's International Obligations under the Leading International Conventions on the Control of Narcotic Drugs*. Ottawa: Library of Parliament, available on the Committee's Web site at www.parl.gc.ca/illegal-drugs.asp.

[103] Peith, M., (2001) "Compatibilité de différents modèles de dépenalisation partielle du cannabis avec les conventions internationales sur les stupéfiants" [Compatibility of various models of partial depenalization of cannabis with international narcotics conventions]. Legal opinion requested by the Federal Office of Public Health of the Swiss Confederation, page 14.

[104] *Ibid.*, page 15.