ALASKA LEGISLATURE COMMITTEE FILES 1981-1982 8672

1541 SHESS SB 747 (#1) - (#2)

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Methods

Our sources of data for the 1146 elective home deliveries and our methods of analysis have been described elsewhere (Mehl, et al.,1976). In summary these deliveries were collected from the medical charts of five San Francisco Bay Area services consisting of three physician-midwife groups: a rural-based family practice in Western Marin County, an urban-based family practice in Mill Valley, and an urban-based group consisting of one physician (trained in pediatrics/neonatology) and two midwives; and two midwife groups consisting of 10 lay midwives in Santa Cruz County and 1 lay midwife in Sonoma County. 59.2% of the deliveries were performed by physicians and 40.8% by lay midwives. The methods of operation of these services, their screening procedures, obstetrical philosophies and practices, and the sociodemographic characteristics of their population have all been described elsewhere (Mehl, et al.,1976).

The planned hospital comparison group was drawn from the records of the Point Reyes family practice and consisted of 180 deliveries. These women came from the same population pool as those women planning home deliveries and had many of the same attitudinal sets. They would have been attended at home had they chosen to deliver there. Women with complications of prenatal care obviating a home delivery were excluded from this sample. For the hospital comparison group 81.2% were followed at least six months. 110 of the infants and mothers were discharged at the end of two hours post-delivery. The hospital comparison group tended to be less from the counter-culture and were characterized by a more uniform middle-class socioeconomic backgroupd with usually one or both parents a college graduate.

DISCUSSION

Each group was a self-selected health group of women screened for complicating medical problems. Comparisons between the home birth group and the planned hospital group suggests that for women delivering in the home with the particular philosophies and practices of this particular group of practitioners, there was no significant increase in risk with a home delivery versus a hospital delivery.

Several points may be made -- that the perineal massage technique

(next page)

There was no association among either group between length of labor and length of second stage with the incidence of low Apgar scores at birth or with other complications. The mean length of first stage labor among the planned hospital group was 17.5 hours for primigravidae and 5.4 hours for multigravidae. For the home group it was 10.2 hours and 4.6 hours, respectively. This difference was significant at $p < 0.05$. The mean length of second stage labor for the planned hospital primigravidae was 106.8 min ± 31.0 min and for multigravidae was 50.1 min ± 28.3 min. For the home series the mean length of second stage was 118.2 min ± 40.5 min. for primigravidae and 44.6 min ± 23.7 min for multigravidae. The primigravidae differences were significant at $p < 0.05$.

There were 14 cases of prolonged rupture of membranes in the home birth series and 11 in the planned hospital series ($p < 0.01$). There were no infections in the infants except for one low birth weight infant whose mother developed signs of amnionitis prior to delivery and had had multiple vaginal exams. She was in the planned hospital series. Table 9 presents some additional data on the reasons for which home deliveries were transported to the hospital for the home birth series.

utilized by the midwives in preventing vaginal lacerations during delivery did indeed function and that as the physicians adopted this technique, their laceration rate decreased. The higher utilization of oxytocin after delivery by the physicians may have reflected its availability to them and their training to use it frequently. The equivalence of hemorrhage and blood loss results between the physician and midwife group suggests that it was not needed as frequently as used. The lay midwives took women to the hospital more frequently than the physicians, presumably reflecting their decreased capabilities to handle specific complications at home and their lower threshold level for going to the hospital possibly related to a lower level of knowledge. The reasons for transport which were most significantly different between the groups were for prolonged rupture of membranes, uterine inertia, decreasing fetal heart rate, manual removal of a retained placenta, and treatment of postpartum hemorrhage. The physicians were able to treat some of their cases of uterine inertia with buccal oxytocin at home, and removed several reta[illegible] placenta at home, as well as carrying oxytocin and methergine to treat third stage bleeding at home. The greater number of FHT problems brought to the hospital by the midwives may reflect their greater level of anxiety in dealing with and desire for transporting abnormal situations to the hospital early.

The planned hospital population, while having equivalent training for childbirth, used more analgesia during labor than the home birth series, and this may have contributed to their higher incidence of low one minute Apgar scores, second stage dystocia, and greater incidence of fetal heart rate drops. The much lower incidence of "excessive bleeding" in the planned hospital group may be indicative of the attendents lesser anxiety for equivalent blood loss in the hospital than in the home. The

incidence of postpartum hemorrhage was greater in the planned hospital group and may represent the greater tendency to pull on the umbilical cord to aid in the delivery of the placenta. At home, the umbilical cord was rarely pulled to aid placental delivery, but rather, the natural expulsive forces of the uterus were relied on. This is substantiated by the longer third stages seen in the home group.

The failure of prolonged second stage to be associated with infant problems in this series may relate to the slower descent with less intense pushing placing less of a stress on the infant, or may relate to other factors. This has been found to hold, as well, in the British Perinatal Study (1973) and by Friedman (1974). Clearly many of these findings may need to be substantiated by further study in such populations as these. It may be that much current obstetrical thinking is influenced by many of the studies having been completed on welfare populations, while different results may hold in different populations. More work needs to be done in this area.

The 0.3% incidence of neurologically abnormal infants at one year follow-up contrasts favorably with the 1.7% incidence of neurologically abnormal infants at 1 year of age found by the National Institute of Neurological Diseases and Stroke (1972). The Apgar scores in this series were scored by an attendent not involved in the actual delivery, and may be inflated here, as in the hospital, where often the physician delivering the infant assesses the Apgar score. They are useful however in assessing the accoucheur's perception of the infant's immediate difficulties, which in this series, seem minimal. The total percent of 1 minute Apgar scores less than 7 was 4.1% compared to a 21% incidence of such scores in a non-welfare population in the hospital found by Drage and Berendes (1966). The contribution of other factors such as lower stress in the home en-

in a study such as this. Incidences of meconium staining in this group was less than that of the general population (Klaus and Farnaroff, 1973). This was true as well for labor dystocia (Friedman, 1974) and (Eastman and Hellman, 1968), as well as for other complications (Eastman and Hellman, 1968).

Neonatal mortality rate for the home delivery population was 5.2 per 1000, and perinatal mortality was 9.5 per 1000. Intrapartum asphyxia deaths occurred at a rate of 0.95 per 1000. Unfortunately few studies are available for comparison. Behrman, et al[9] report a neonatal mortality rate of 5.0 per 1000 in 39,896 non-premature, white middle-class pregnancies receiving private prenatal care. The non-premature perinatal rate for this group was 7.6 per 1000, and the overall neonatal and perinatal mortality rates were 13.8 and 17.6 per 1000, respectively. Chan, et al[10] report an intrapartum stillbirth rate due to asphyxia of 1.7 per 1000 in 1162 patients receiving random assignment fetal monitoring at Loma Linda University Hospital, and Shenker, et al[11] report a 0.5 per 1000 intrapartum asphyxial death rate in fetal monitored patients. The prematurity rate of the Behrman, et al study was 4.8%; in the home delivery series it was 3.0%. The planned hospital population had a neonatal mortality rate of 5.5 per 1000 and a perinatal mortality rate 11.0 per 1000.

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This compares favorably to the work of Halverkamp (1976) showing superior results of nurse monitorring labors compared to fetal monitor machines. Table 10 is included to show the equivalence of physician midwife observations for the home delivery series. Since these same physicians were making observations in the hospital, this suggests that the quality of observations between the two populations was equivalent.

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portion and had more low forceps deliveries, significantly more because of a drop in fetal heart rate.

Table 4 presents the comparison complication figures for the home delivery population (4A) and the planned hospital group (4B). The planned hospital group showed significantly more second stage labor dystocia ($p < 0.025$), more drops of the fetal heart rate ($p < 0.005$), more postpartum hemorrhage ($p < 0.001$), more forceps deliveries ($p < 0.001$), episiotomies ($p < 0.001$), Cesarean sections ($p < 0.025$), analgesia ($p < 0.001$), and significantly less total unmedicated deliveries ($p < 0.001$).

Table 5 compares the perinatal outcome data. The neonatal and perinatal mortality results were not significantly different between the planned hospital group and the home delivery group, nor was the rate of low birthweight infants, or the mean length of infant follow-up. The hospital neonatal death rate was 5.5 per 1000 live births with 11.1 perinatal deaths per 1000 total births. Table 6 compares infant morbidity obtained and outcome, and Table 7 compares neonatal complications. The planned hospital group had significantly more fetal hypoxia ($p < 0.025$) and significantly more 1 minute Apgar scores less than 4 ($p < 0.025$). Among the home birth series, the midwives had more infants who received phototherapy for jaundice than did the physicians ($p < 0.025$). Causes of fetal deaths are compared in Table 8.

The prematurity rate for the population initially seeking assistance from one of the services studied was 3.0%. For the planned hospital group it was 2.8%. There was no significant difference between one minute Apgar scores ranging from 4-6 between the home birth group and the planned hospital group with 40 and 7 such ratings, respectively. Average Apgar scores for the planned hospital group were 8.6 at one minute and 9.7 at five minutes, and were not statistically significantly different from the home birth group.

Results

Table I compares the statistics on the selection of the planned hospital group with the elected home delivery group. There were more primigravidae in the hospital group and fewer secundipara. The other differences were not significant. The maternal age was not statistically different between groups. Virtually all the women in the planned hospital group were trained in childbirth classes (as were the home group) such as Bradley or LaMaze. A high incidence of breast feeding also characterized the planned hospital group. All women in the planned hospital group attempted breast feeding except one, and, for a variety of reasons, two of these were not successful.

Statistics on the presentations and deliveries are compared in Table 2. The planned hospital group contained more breech infants, had more Cesarean sections, had more analgesia, received more oxytocin during first stage, second stage, and after third stage labor, had more low and mid forceps deliveries, and more episiotomies. The breech infants did not contribute to these differences with the exception of one Cesarean section. It is important to note that the labor attendents for these planned hospital deliveries had the same philosophies as the home birth attendents so that these differences presumably come as a result of the effect of being in the hospital and may relate to a lower motivation for the women to carry through with an unmedicated delivery or to more readily available analgesia or an atmosphere more encouraging of analgesia, or to a feeling of pressure transmitted to the birth attendents to intervene sooner or more aggressively in the hospital than at home. These may be related to the subtle effects of atmosphere which are as yet difficult to measure. The indications given for forceps and Cesarean deliveries are compared in Table 3. The planned hospital group had more Cesarean sections, primarily related to cephalopelvic dispro-

Perinatal Outcome

	Home Number	Home Rate	California St. 1973	Sign.	Hospital Number	Hospital Rate
Total Births	1152*				180**	
Live Births	1147*				180**	
Fetal Deaths	5	4.3[1]	8.2[1,3]	NS	1	5.5[1]
Neonatal Deaths	6	5.2[2]	10.3[2]	NS	1	5.5[2]
Total Perinatal Deaths	11	9.5[1]	20.3[1]	NS	2	11.1[1]
Low Birthweight (2501g)	15	1.3[2]	5.3[2,3]	NS	3	1.7[2]
Mean Length of Infant Follow-Up	11.5 mos.			NS	11.6 mos.	
S.D. Length of Follow-Up	±10.3 mos.			NS	±10.4 mos.	
% Infants Followed to 6 mos.	83.4%			NS	81.2%	

*includes 6 sets of twins
** includes 2 sets of twins

1 per 1000 total births
2 per 1000 live births
3 for white, non-Spanish surname, age 20-29

Complications	Primigravidae N=729 M.D.'s N=464 Home	To Hosp	Midwives N=265 Home	To Hosp	SS[1]	Multigravidae N=417 M.D.'s N=221 Home	To Hosp	Midwives N=196 Home	To Hosp	SS[1]	Total M.D.'s N=685 Home	To Hosp
Jaundice reg. Rx	1	5	2	9	$p<0.025$	2	1	0	1	NS	3	6
Fetal hypoxia	2	0	0	0	NS	0	1	0	0	NS	2	1
Neurological Abnormalities[2,4]	2	1	0	1	NS	0	0	0	1	NS	2	1
Cerebral palsy	1	0	0	1	NS	0	0	0	0	NS	1	0
Neonatal FTT	1	1	0	1	NS	0	0	0	0	NS	1	1
Apgar (1 min.) score												
score less than 4	3	0	1	1	NS	0	1	0	1	NS	3	1
score 4 - 6	12	7	5	3	NS	2	4	2	5	NS	14	11

1 calculated on the basis of home & hospital
2 include cerebral palsied infants
4 development at 1 year follow-up

[illegible] Sections and Forceps Deliveries
in Women Beginning Labor at Home

	Home Number	Hospital Number
Low Forceps Delivery		
Protracted descent	6	0
Arrest of descent	2	3
Dysfunctional labor	1	0
Brow presentation with arrest of descent	1	0
Fetal heart drop	1	3
Bleeding during 2nd stage	0	1
	11	7
Mid Forceps Delivery		
Protracted descent	3	0
Arrest of descent	1	1
Dysfunctional labor	1	0
Fetal heart drop, occiput posterior presentation	1	0
Fetal heart rate drop, amnionitis, maternal hypertension	0	1
	6	2
C-Sections		
Cephalopelvic disproportion	16	7
Failure to descend, occiput posterior presentation, relative CPD	6	
Arrest of active phase dilation, fetal heart drop, cord 4x neck	1	
Prolapsed cord	1	(1)
Breech with amnionitis	1	
Psychotic reaction to labor	1	
Acutely dropping fetal heart tones	1	
Toxemia	1	
Breech with low breech score, poor labor progression	0	1
Transverse lie with one prolapsed cord	(1)	2
	28	10

	Home		Hospital		California	Stat.
	Number	Percent	Number	Percent	1973	Sign.
Mother's Age	1146	100.0	180	100.0	100.0	
< 20	60	5.2	12	6.7	17.3	NS
20-34	1068	93.2	160	89.9	77.6	NS
≥ 35	18	1.6	6	3.4	5.1	NS
Mean Age	24.9					
Range	16-44					
Variance	16.8					
S.D.	4.1					
Parity	1146	100.0	180	100.0	100.0	
para 0	729	63.6	133	73.9	43.3	$p < .005$
para 1	237	20.7	33	18.3	31.0	NS
para 2	128	11.2	9	5.0	13.3	$p < .025$
para 3	34	3.0	2	1.1	6.0	NS
para 4	18	1.6	1	0.6	6.3	NS
Prenatal Care Began	1146	100.0	180	100.0	100.0	
1st Trimester	707	61.7	114	64.0	72.8	NS
2nd Trimester	362	31.6	63	35.4	20.2	NS
3rd Trimester	74	6.5	1	0.6	4.5	**
None	3	0.3	0	–	2.4	NS

*includes prenatal care unknown

Condition	Number	Rate per 1000 LB	Delivery	Complications	Outcome
Congenital Defects	6	5.2			
PDA			Home	None	repaired surgically at 1 year
Coarctation of aorta			Home	None	repaired surgically at 2 years
Omphalocele			Home	None	repaired surgically at 15 hours
Myelomeningocele, thoracic			Home	None	mental & motor retardation at 18 month[illegible]
Multiple minor anomolies			Hosp	FHT↓, C-S	no mental or motor retardation at 1 ye[illegible]
Down's syndrome			Home	Meconium	mental retardation
Cerebral palsy	2	1.7	Home	FHT↓, precip. del.	motor retardation
			Home	None	mild spastic with slow verbal developm[illegible]
Surgical Conditions	2	1.7	Home	None	pyloric stenosis repaired at 5 and 8 da[illegible]
Low Birthweight	15	13.1	Hosp	2nd Tri Bleed	1332 grams, in hospital 1 month, severe
			Home	None	1729 grams, in hospital 2 weeks, mild [illegible]
			Home	Breech	2154 grams, in hospital 12 days, mild [illegible]
		Others:	Home	None	No problems
Low Birthweight	3	16.6	Hosp	FHT prior to del.	neonatal sepsis and amnionitis
			Hosp		2 cases mild RDS
Hyperviscosity syndrome	1	5.5	Hosp	None	resolved

Age at Death	Number	Delivery	Complications	Cause of Death
5 months est. gest. age	1	Home	None	Rh incompatabilit., insisted on home delivery
35 weeks est. gest. age	2	Home	None	Intrauterine death, unknown cause
During labor	1	Hosp	Amnionitis IUD in place	Overwhelming intrauterine sepsis
During labor	1	Home	None	Unknown cause
2 days	1	Home	None	Macrosomia, single umbilical artery, bilateral adr hemorrhage, numerous congenital anomalies
7 days	1	Home	None	Cystic fibrosis, meconium ilius, postoperative per tinitis and sepsis
7 days	1	Home	None	Coarctation of aorta
10 days	1	Home	None	Cor biloculare
2 weeks	1	Home	None	Sudden infant death syndrome
3 weeks	1	Home	None	Post surgery for tetralogy of Fallot
During labor	1	Hosp	Rapidly ↓ FHT	Meningoencephalitis, etiology unknown
8 days	1	Hosp	None	Aplastic left ventricle

Complication	Primigravidae (N=52/133=39.1%) Hospital	Percent	Stat. Sign.**[1]
Intrapartum			
Dystocia 1st Stage[2]	15	11.3	NS
Dystocia 2nd Stage	10	7.5	p 0.025
CPD	7	5.3	NS
Meconium stain only	4	3.0	NS
FHT↓ (c̄, s̄ meconium)	10	7.5	p 0.005
Hypertension	2	1.5	NS
Precipitous labor	2	1.5	NS
Other*	6	4.5	
TOTAL	56		
Postpartum			
Hemorrhage[3]	5	3.8	p 0.001
Excessive PP bleed[3]	2	1.5	p 0.001
Retained placenta	2	1.5	NS
Endometritis	3	2.3	NS
PP Depression	1	0.8	NS
TOTAL	13		

Complication	Multigravidae (N=10/45=22.2%) Hospital	Percent	Stat. Sign.**[1]
Intrapartum			
Dystocia 1st Stage	2	4.4	NS
Dystocia 2nd Stage	1	2.2	NS
CPD with breech	1	2.2	--
Precipitous labor	2	4.4	NS
FHT↓	1	2.2	NS
Hypertension	1	2.2	--
Transverse lie	1	2.2	--
TOTAL	9		
Postpartum			
Hemorrhage	0	--	NS
Excessive PP bleed	1	2.2	NS
Retained placenta	1	2.2	NS
Endometritis	1	2.2	NS
TOTAL	3		

*single cases of amnionitis, shoulder presentation, cord prolapse, cord knot, recurrent pyelonephritis, transverse lie.

**compared with Table 5A

[1]Percent complications per 133 primigravidae, 45 multigravidae.

[2]Dystocia as used in this table is defined as: prolonged or arrested first stage, failure to dilate; prolonged or arrested 2nd stage, failure to descend, according to Friedman and Greenhill (1974).

[3]Hemorrhage is defined as more than 650 ml; excessive bleeding as "more than normal", and includes late bleeding after the third postpartum day.

Neonatal Outcomes

[Pr]imigravidae N=729					Multigravidae N=417					Total N=1146					
[M.D.'s] [N=]464	Midwives N=265				M.D.'s N=221		Midwives N=196			M.D.'s N=685		Midwives N=461			Planne[d] N=17[8]
To Hosp	Home	To Hosp	SS[1]		Home	To Hosp	Home	To Hosp	SS[1]	Home	To Hosp	Home	To Hosp	SS[1]	
5	2	9	$p<0.025$		2	1	0	1	NS	3	6	2	10	$p<0.025$	3
0	0	0	NS		0	1	0	0	NS	2	1	0	0	NS	3
1	0	1	NS		0	0	0	1	NS	2	1	0	2	NS	0
0	0	1	NS		0	0	0	0	NS	1	0	0	1	NS	0
1	0	1	NS		0	0	0	0	NS	1	1	0	1	NS	1
0	1	1	NS		0	1	0	1	NS	3	1	1	2	NS	6
7	5	3	NS		2	4	2	5	NS	14	11	7	8	NS	7

home & hospital
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...Transportation to the Hospital and Therapy Applied

Complication	M.D.'s N=58	Midwives N=78	Stat. Sign.
1st Stage Complications			
No prenatal care			
Dehydration→IV Hydration	1	0	NS
severe toxemia→ Cesarean	0	1	NS
Prolonged rupture of membranes→induction	0	4	p 0.01
Dystocia 1st stage (excluding CPD)			
Uterine Inertia→Oxytocin	7	19	p 0.001
Labor Prolongation with↓ FHT→ internal monitor & oxytocin	1	0	NS
Arrest of Dilation			
Involving↓ FHT and uterine inertia→int. monitor & oxytocin	1	0	NS
Brow presentation→ oxytocin & low forceps	1	0	NS
Arrest & Uterine Inertia→oxytocin, low forceps	0	2	NS
Arrest→CPD, Cesarean	10	7	NS
Arrest→FHT nuchal cord x4 Cesarean	1	0	NS
Hypertension, Rx'ed with mag. sulfate	1	0	NS
untreated	5	0	NS
Bleeding during labor→no treatment	1	0	NS
Amnionitis→antibiotics	1	0	NS
Fear, desire for hospital	2	6	p 0.05
Desire for anesthesia			
Anesthesia given	3	0	NS
Analgesia only	1	0	NS
Hyperemesis→IV's and compazine	1	0	NS
Dropping FHT's			
No therapy, monitor applied	0	4	p 0.001
Cesarean section	0	1	NS
Cord prolapse→Cesarean	0	1	NS
with meconium→intubation	0	3	p 0.025
Psychotic Reaction to Labor Cesarean	0	1	NS

Neonatal Outcomes

[illegible]ravidae N=729		Midwives N=265			Multigravidae M.D.'s N=221		N=417 Midwives N=196			Total M.D.'s N=685		N=1146 Midwives N=461			Planned N=17[illegible]
[illegible]	To Hosp	Home	To Hosp	SS[1]	Home	To Hosp	Home	To Hosp	SS[1]	Home	To Hosp	Home	To Hosp	SS[1]	
	5	2	9	$p<0.025$	2	1	0	1	NS	3	6	2	10	$p<0.025$	3
	0	0	0	NS	0	1	0	0	NS	2	1	0	0	NS	3
	1	0	1	NS	0	0	0	1	NS	2	1	0	2	NS	0
	0	0	1	NS	0	0	0	0	NS	1	0	0	1	NS	0
	1	0	1	NS	0	0	0	0	NS	1	1	0	1	NS	1
												1	2	NS	6
	0	1	1	NS	0	1	0	1	NS	3	1	7	8	NS	7
	7	5	3	NS	2	4	2	5	NS	14	11				

home & hospital
fants
w-up

	...D.'s N=58	Midwives N=78	Stat. Sign.[b]
2nd Stage Complications			
Protracted descent			
Rx'ed with low forceps (1 FHT↓)	4	2	NS
Rx'ed with mid forceps with FHT↓	2	1	NS
Rx'ed with oxytocin	5	9	NS
Arrest			
CPD, Cesarean Section	4	2	NS
Abnormal Presentation, mid forceps	1	1	NS
Brow presentation, low forceps	0	1	NS
Dropping FHT's			
Low forceps	1	0	NS
With meconium→oxytocin, intubation	0	2	NS
mid forceps	1	0	NS
Bleeding→oxytocin	0	1	NS
3rd Stage Complications			
Retained placenta→manual removal	2	5	$p<0.05$
Hemorrhage→oxytocin, meth., blood	1	4	$p<0.025$
Cervical laceration→suturing	0	1	NS

a sums of complications
b based on total N's (685 and 461, respectively)

Complication	Primigravidae N=729				Multigravidae N=417				Totals N=1166			
	MD's N=464		Midwives N=265		MD's N=221		Midwives N=196		MD's N=685		Midwives N=461	
	Home[2]	Hosp[3]	Home	Hosp	Home	Hosp	Home	Hosp	Home	Hosp	Home	Hosp
Intrapartum												
Hypertension	1	6	2	0	0	0	0	0	1	6	2	0
Dystocia 1st stage	25	16	2	18	2	4	0	8	27	20	2	26
Dystocia 2nd stage[7]	9	8	1	6	4	3	0	6	13	11	1	12
3rd stage oxytocin	115	43a	1	7a[x]	38	35a	2	4a[x]	153	78a	3	11a[x]
Meconium staining totals	19	2	4	2a	7	0	4	1a	26	1	8	3a
Meconium c̄ ↑ BP	0	2a	0	0	0	0	0	0	0	2	0	0
Meconium stain with FHT irreg. or ↓	2a	3a	0	0	2	0	0	1	5	3	0	1
Precipitous labor	1	0	0	0	7	0	0	0[y]	8	0	0	0[y]
CPD	0	4	0	9	0	1	0	0	0	14	0	9
Poly/oligohydramnios	0	2	0	1	0	1	0	0	0	3	0	1
Brow presentation	1	1	0	1	0	0	0	0	1	1	0	1
Placenta previa	0	1	0	0	0	0	0	0	0	1	0	0
Partial abruption	0	1	0	0	0	0	0	0	0	1	0	0
Shoulder dystocia	1	0	0	1	0	0	1	0	1	0	1	1
FHT irreg/↓ s̄ mec.	2	5	1	6	1	1	0	2	3	5	1	3
Postpartum -												
Excessive PP bleed[4]	9	1a	2	1a	10	2a	4	2a	16	3a	6	3a
PP Hemorrhage[4]	1	0	0	3	3	0	0	2	3	1	0	1
Retained Placenta	8	2	2	2	4	2	0	2	12	2	2	2
PP Depression	0	2a	0	2a	0	1	0	0	0	0	0	2a
Endometritis	6	1a	3	1	2	1a	1	0	8	2a	4	1
Thrombophlebitis	0	0	0	1	0	0	0	0	0	0	0	1

[1] calculated on home + to hospital totals [2] complication managed at home [3] complication managed at hospital
[4] see Table 5A for definition [5] 24-48 hours after delivery [6] after third postpartum day [7] excluding abnormal presentation a already at hospital for another reason

STATISTICAL SIGNIFICANCE[1]: x = $p < 0.001$ y = $p < 0.025$ all others = not significant

ALASKA STATE LEGISLATURE
HOUSE OF REPRESENTATIVES
RESEARCH AGENCY

Pouch V, State Capitol
Juneau, Alaska 99811
(907) 465-3991

March 27, 1981

MEMORANDUM

TO: Representative Tony Vaska

FROM: Leslie Longenbaugh LL
Research Staff

RE: Lay Midwifery in Oregon
Research Request Number 81-89

You have asked that we investigate the history and consequences of the Oregon Attorney General's opinion of June 17, 1977 regarding lay midwifery. Specifically, you asked about 1) the legal rationale used by the Attorney General in his opinion; 2) how the legislators who oppose lay midwifery happened to forego the opportunity to legislate against the practice; 3) whether Oregon has been held liable for health problems or deaths resulting from lay midwifery; and 4) whether Oregon keeps a register or other list of lay midwives.

Linda Vaska asked that we relay the information to your office in installments, if necessary. This memorandum presents the preliminary results of our research.

We spoke with Marianne Remy, of the Oregon Department of Health[1], who was able to answer your questions as follows.

1. <u>What was the legal rationale used by the Attorney General's office in his opinion?</u>

Oregon law apparently provides that only those medical procedures defined as involving a "disease state" require the presence of a physician or registered nurse. Childbirth is not defined by the Attorney General as a "disease state," or as an intrusive and surgical procedure, and therefore is not a precedure that requires the attendance of a licensed medical practitioner. The Attorney General's opinion prohibits lay midwives from administering medication and from performing episiotomies.[2] In the case of an emergency during a delivery, a lay midwife either calls

[1]Marianne Remy, Oregon State Department of Health, Portland, Oregon; phone: (503) 229-5806.

[2]According to Ms. Remy, lay midwives rarely violate these prohibitions, in large part because of the "nonintrusive" philosophy that informs their work.

a local physician or transports the mother and child to the emergency room of a local hospital. The question of whether lay midwives may cut the cord of an infant has not been addressed, either in the opinion or in the enforcement of the opinion's prohibition against surgical procedures.

2. Why have Oregon legislators who oppose lay midwifery not attempted to pass legislation to restrict or limit the practice?

Ms. Remy reports that the members of the medical community and legisators who oppose lay midwifery and home childbirth were not aware of the extent of lay midwifery that was practiced in Oregon at the time of the Attorney General's opinion. Now that lay midwives have formed associations and have become quite visible in the state, such organizations as the Oregon Medical Association have begun to press for legislation to restrict attendance at a childbirth to licensed physicians and nurses. In fact, such a bill apparently has been introduced during the current session of the Oregon Legislature.

3. Has Oregon been held liable for illness or death attributable to the practice of lay midwifery?

Ms. Remy is not aware of any suits charging that the state is liable in cases of complications resulting from childbirth through lay midwifery. She indicated that this question could be better answered by the Attorney General's office.

4. Does Oregon keep a register of lay midwives?

There is no list of midwives compiled by the state.

The member of the Oregon Attorney General's staff who wrote the 1977 opinion will not be in the office until Monday, March 30; we will call him then, and send you additional information based on this conversation. Ms. Remy is sending us a copy of the Attorney General's opinion.

The Oregon Public Health Association has recently formed a resource committee to study the issue of alternative childbirth; Ms. Remy is a member of this new committee. The committee plans to study the outcomes of several types of childbirth, among them lay midwifery.

[3] David Spence, Director, Family Health Section, Division of Public Health, Department of Health and Social Services; phone: 465-3100.

In Alaska, David Spence is the Director of the Family Health Section of the Division of Public Health in the Department of Health and Social Services.[3] He might be able to give more information on lay midwifery, not only in Alaska and Oregon but for other states as well.

If you would like us to analyse the opinion in light of Oregon and Alaska law, please call on us.

LL/dp

ALASKA STATE LEGISLATURE
HOUSE OF REPRESENTATIVES
RESEARCH AGENCY

Pouch Y, State Capitol
Juneau, Alaska 99811
(907) 465-3991

March 31, 1981

MEMORANDUM

TO: Representative Tony Vaska

FROM: Leslie Longenbaugh
Research Staff

RE: Lay Midwifery in Oregon, Additional Information
Research Request Number 81-89

In our memorandum to you of March 27, we mentioned that we would be contacting the author of the Oregon Attorney General's opinion on lay midwifery. We spoke this morning with Arnie Silver[1] of the Oregon Attorney General's office, who offered a somewhat different perspective on lay midwifery in that state.

Mr. Silver described his legal approach in writing the opinion as one which employed not only the "disease state" criterion alluded to by Ms. Remy (see our March 27 memorandum), but also an old Oregon statute that allows a midwife to sign a birth certificate. He interpreted this law to mean that the Oregon Legislature had intended to allow lay midwives to deliver babies.[2]

Mr. Silver is of the opinion that strong opposition to lay midwifery does not exist in Oregon, except among members of the medical community. He feels that, owing to Oregon's strong "naturalistic" movement, many people support the notion of "natural" childbirth performed at home under the guidance of a lay midwife.

In answer to your question concerning the state's legal liability, Mr. Silver believes that his state has no legal responsibility whatsoever in the practices of lay midwives, as Oregon does not participate in any licensing or training.

The copy of the Oregon opinion sent to us by Ms. Remy has not yet arrived; as soon as it does, we will forward a copy to your office.

If we can be of further assistance, please call on us.

---

[1]Arnie Silver, Assistant Attorney General, Portland Division; phone: (503) 229-5725.

[2]Mr. Silver mentioned that the opinion was requested by the Oregon Board of Nursing, which wanted to know whether lay midwives were practicing nursing, and therefore would come withing the purview of Oregon laws governing nursing.

Ables

Gollogly - restrict to those who are low-risk -
 all licensed. - bd (lay, MD, nurse midw) scope too broad
Wilbur - doesn't favor home birth. wants licensure, bd needs MD,
 20 births inadequate, cont ed ditto, history inadequate.
Gleason - need requirement for back-up. Bd of N - not support
McKenzie - need reg midw. New Mexico better framework. Main
 problem is scope.
Montano - don't license - say "caveat emptor"
Gettinger - bill step in right direction

Sitka

Spencer - drs won't cooperate
Frank - define midwife, midwifery
Pearce - no easy answer

Anch

Witt - no mechanism for improvement. No back-up system
Korn - experience (20 births) no criterion. Who sponsor? Support
 birthing centers

Soldotna -

KENAI | MAT-SU

Debbie Millington — midwives Assn of AK

3/5 % home in Kenai

Judy Harvey — 5 kids (2 home) 3 home) midwife

Diane Thorn — study I

*

MAT-SU

1 Bridgette J. Preston — 2 children (home) - favor
*2 Thomas R. Preston — arrogance of dr - c-sections — fav
3 Karen Saal Boyer — fav. expecting
4 Yvonne Hall — 20 births adequate 4 children home
5. Kathy DUNBAR — nurse - 400 attend at home birth

Bridgette will read husband's written testimony. He was unable to attend *

6. Jennie Schrage RN - against

SITKA

~~[illegible]~~

~~SUSAN Carlson~~

homer

Dillingham — 4 people

Carmila Martinez - med anthropologist, apprentice midwife

? Robert Clark - area health corp - need options

Fbks

Kay Kent - against - not against midwifery - bill really describes nurse-midwife -

Homer —

Mary Lou Kelsey - against - is nurse-midwife. Malpractice + 3d party pac inhibits home birth.

Kathleen Styer — home born child, favors 747. Key is knowledge, not how obtained

Claudia Child — freedom of choice!

* William Bell — MD — against. Oregon experience — bill does not provide nec tng - 25/30 cases - several crises -

Paul Eneboe MD — doing few home births every year 18 yrs 1975 - 17 home births - 1 dead —

John Child — 9 children (2 home) hosp birth problem.

Kathy - 2 way capability

Barrow
Anch
FBKS
Bethel — Linda Vaska
Nome
Katz.
Kodiak
(2 way)

Ketch
Sitka
(1 way)

2-3 wks.
Mar. 25th

thurs. afternoon 3-5

- well planned - so much time allotted per place -

- even if the video includes - all sites can hear.

Rushing 279-0181

Nancy Pearson
PO Box 3055
Palmer 99645

~~Annie Weatherford~~
~~Delta Jct, ak~~

Lois DeRaadt
Po Box 2686
FBKS, 99707

Vicki Penwell
Po Box 81242
College, ak 99708

Glenn Johnston
7937 Cranberry
Anch, ak 99502

Al Rushing (Anne)
1403 E. 27th
Anch 99504

Patrick Durkin
SRA 8705 Indian
Anch. 99540

David Burke
SR 1705
Eagle River 99577

Annie Weatherford
Box 1117

Kathie Oettinger
1028 Market St.
FBKS 99701

Kathy Reimherr
Box 60887
F. 747

KAREN
Boyer
General Delivery
Wasilla, AK
99687

E/e
22
Anch, ak

Cathleen Harwitz
3601 Rona Lane
Anch 99503

Kathy Oettinger
1028 Market ST
FBKS 99701

Theresa Ravin
8141 Country Woods
Anch 99502

Julie Gorham
SR 1552 Eagle R. Rd.
Eagle River, ak 99577

Barbara & Harold Parker
PO Box 605 A
Chugiak, 99567

Thomas & Karen Malone

Rhoda Anderson
3525 W. 73RD Ave
Anch, ak 99502

Lisa Sundvik
SR B Box 7480
Palmer 99645

~~Julie Gorham~~
~~Box 1037~~
~~Bethel, 99559~~

Linda, Michael Barer
PO Box 3-858 ECB
Anch. 99501

Jean Simich
2831 Concord
Anch, AK 99502

Bryan
~~Bryan~~ Clarke
4840 Loretta Lane
Anch. 99507

Gina Katkin
1402 Primrose St.
Anch. 99504

Joseph Brove
1911 Sunrise Dr.
Anch. 99504

Barbara Anderson

Binnie Smith
834 E 73RD #4
Anch 99507

David Hansen
530 E 46th Pl. apt. B
Anch 99503

Marie Anderson
1301 ~~E~~ W. 43RD
Anch 99503

Nereida Talley
8121 Resurrection Dr
Anch., Ak 99504

Kathleen Harrington
340 G. St., Suite 201
Anch 99501

Mrs. Phil Luse
710 Dogwood
Anch. 99501

Mary Balin
3323 Robin ST
Anch., Ak 99504

Carol E. Edwards
SRA Box 1765-H
Anch. 99507

Lizette E. Burns

Valerie Talbot
1240 E. 11th Ave
Anch 99501

Paula Frey
3430 Korchak Circle
Anch. 99502

Mona Claire Ravin, R.N. M.S.N.
2401 Captain Cook Dr
Anch 99503

Patricia Smith
Box 118
Talkeetna, 99676

Charles Morel
801 W. Fireweed Lane, Suite 101
Anch., 99503

Eileen Harrington R.N.
220 S Eureka #25
Anch 99503

Christine Lorance
316 Eklutna
Anch 99504

Eugene Venie
Box 6513
Anch 99502

Judie Hodge

Cheri Dunlap
4131 W. 72 Ave
Anch, AK 99502

Ben Atkinson
1003 W. 34th
Anch 99503

Julie/Greg AREHART
SRA 372 N.
Anch. 99507

Charlene Collett-Paule
372 Shaw Circle
Anch 99504

Pay Alascom for satellite time
- no production capability in Juno
- L.A.A. - thinks because Ronnie was legislative equipment there should be no charges. Charity thought she had made an arrangement with Ronnie production.

HB 316

Washington State

1. 21 yrs of age
2. certificate or diploma (from accredited [illegible]) midwifery program or foreign Equivalent.
3. minimum 3 yrs. training. May get 1 yr credit for nursing or Experience.
4. lists minimum ed. requirements.
5. observing 50 women in intrapartum period.
6. training emphasis on distinguishing high risk women.

pg. 1 line 28-29 Delete (6)

pg 8 line 14 insert

(4) ensure that each infant is screened in accordance with AS 18.15.200

pg 9 line 7

(3) "Sponsor" ~~means a physician licensed to practice in this State~~ licensed means a physician or midwife licensed to practice.

pg 2 line 9 ~~AS 08~~

three members shall be licensed under this Chapter or Eligible to receive licensure under AS 08.69.050 (1)-(3) one of which will be a certified nurse midwife.

pg. 2

—— Delete line 10-13 "one member... AS 08 69.050 (1)-(3)

—— Delete pg 2 line 15-16 "... or an occupation ... childbirth.

pg 2 line 21 Change "his" to their.

Mon. 1:00 Beltz Rm. SB 710

Page 2, Line 13 - one of the two members appointed by the Governor shall be a medical doctor.

Page 2, Line 22 - prepare and administer a comprehensive examination that tests competence in all aspects of midwifery;

Page 3, Line 10 - Furnishes proof of having received a high school degree or its equivalent and ~~training and education~~ at least 2 years of nursing training or its equivalent;

Page 8, Add section (3) under 08.69.150.
"shall try to establish and maintain a collaborative relationship with a physician under conditions set forth by the board;"

Page 8, Line 29 - practice in this state, and authorized for sponsorship by the board."

SB 141 file

OB GYN

26 in Private Pract.
4 PHS
6 Military

Jerry Orren	Anch
David Erkvall	Anch
William Compton	Anch.
Richard Curtis	Anch
Lydia Eastburn	Anch
John Erkmann	Anch
Leonard Ferucci	Anch
Sam Gibson	Anch
Ray Gills	Anch
Kedric Hanson	Anch
Bill Ivey	Anch
Burritt Newton	Anch
Richard Nist	Anch
Jay Rank	Anch
Claire Renn	Anch
George Stransky	Anch

James Bertelson	FBKS
Barbara Clutter	FBKS
Clarice Dukeminier	FBKS
Lawrence Dunlap	FBKS
Doris Heilman	FBKS
Richard Hess	FBKS.
Ralph Wells	FBKS
Joseph Worrall	FBKS

Richard Babcock Ketch.

Caralyn Brown Palmer

ANMC Anch

John Knight
Alan Wayman
Dennis Zilary
Kaaren Zvonik

Eielson

Bernard Winer

Elmendorf

Rita Biesen
Karl Metz

Kodiak

Mil Cheung-Ki Kim

Bassett

Richard Sedwick
Nigel Wappett

SB
747
2/3

3924 E. 8th Ave #2
Anchorage, Alaska 99504
March 7, 1982

Senate and House Health, Education, and Social Services Committee
Pouch V
Juneau, Alaska 99811

Dear Sir:

I would like you to vote in favor of Senate bill #747, regarding the legelization of midwives and the establishment of a midwifery board. Homebirths and having midwives present at births is a part of our heritage. Although this practice had diminished in the recent past, it is on the rise again. I feel it is a beautiful way to bring a child into this world as opposed to being plugged into a machine and being injected with drugs at birth in a hospital.

The federal government recognizes midwives and uses them in Alaska at Elmendorf AFB, the Alaska Native Hospital, and throughout the State. With proper management midwifery can be a useful and rewarding program for our state, as it is for the federal government.

I realize that persons in the medical profession will lobby against this bill but their's are selfish -monetary- interests. Please vote as the common people in Alaska would have you represent them, in favor of midwifery in Alaska.

Sincerely,

Thomas Malone

Thomas Malone

Karen Malone

Karen Malone

cc: Charles Parr
Terry Stimson
Mike Coletta
Vic Fisher
Tim Kelly

3-16-82
M.B.

Alaska State Legislature

House of Representatives

Representative Ken Fanning

Official Business

JUNE—DECEMBER
Box 80929
College, AK 99708
Ph. 907-479-4234

WHILE IN SESSION:
Pouch V
State Capitol
Juneau, Alaska 99811
Ph. 907-465-4833

M E M O R A N D U M

TO: Senator Charlie Parr
Chairman, Senate HESS Committee

FROM: Representative Ken Fanning

DATE: April 9, 1982

RE: SB 747

Attached is a copy of a letter I received from Al Rushing, the President of B.A.B.E. (Better Alaskan Birth Experiences). In the letter, he expressed dissatisfaction with both the House and Senate HESS committees as he had specifically requested notification of hearings on this legislation, and he has not been so informed.

I would simply like to request on his behalf that he receive adequate notice of any additional hearings your committee may hold on this bill.

Thank you for your cooperation.

Paid for By Private Funds

BETTER ALASKAN BIRTH EXPERIENCES
P.O. Box 4-381, Anchorage, Alaska 99509
(907) 279-9117

look at current draft of bill — fill me in

March 26, 1982

MAR 31 1982

Reps Ken Fanning & Dick Randolph
Alaska State Legislature
Pouch V, Juneau 99811

Dear Reps Fanning & Randolph

I received today, your letter giving me opinion of SB 747 (and SSHB 11). — Carney →

I hope that you are continuing to keep abreast of the tremendous quantity of input supporting this legislation from families and individuals of Alaska. They are sincerely concerned about the protection of their right to choose freely what pregnancy care they utilize, as well as birth setting and birth attendant. From your letter and what I understand and know of your legislative philosophy, as well as Rep. Dick Randolph's I believe you and he each have mutual support for this basic human freedom.

I hope that you will however maintain an open and objective attitude and look into the current situation confronting us in Alaska. Here in the Anchorage area (and in other areas) couples choosing the home as a birth setting are being any access to routine lab work

there is absolutely NO reasonable explanation for this practice! Families choosing home birth have been unable to find any avenue for obtaining this very basic procedure. Lab work, is NOT medical care, irregardless of what individuals of the medical system may believe! Why is it that the current licensed medical/surgical hospital monopoly finds it necessary to maintain this non-competitive system? Why is it that SB 237 (introduced last session) had portions which would have made it illegal for anyone to have utilized the services of anyone, other than physicians at childbirth?

I believe that it is easy to see that

1) physicians are opposed to attending home births and most will not attend such births, therefore
2) by outlawing assistance of others at birth
   a) birth becomes less safe and/or
   b) people will be forced to go to hospitals for care

SB 237, the parts relating to childbirth, were effectively eliminated when the public found out of the bill. This speaks loudly of peoples interest and concern in regarding free choice of birth alternatives.

Hospitals as well as physicians currently have a virtual ~~stamp~~ "stamp of approval" from our State and yet react by attacking people seeking birth alternatives.

We have no protections currently - People are being harassed, intimidated, threatened and denied

access to basic lab work as well as open access to other services that we would all assume are and should be available to all desiring them.

Instead what we have is a powerful private interest group - physicians - denying this access. These are the same individuals that profess to have as their only interest the health and welfare of ~~other~~ our mothers and infants! Is this reasonable? How does this unethical treatment (possibly illegal) benefit mothers and infants?

When we've sought legal opinions we've been told that lay midwives and home birth couples are in effect "non-persons" - that without legislation to "legitamize" their choices and midwifery, that these people will not obtain justice in our State's legal system!

Please look into this more fully. I am rather knowledgeable on this entire issue and would welcome the opportunity to discuss this with anyone sincerely concerned.

I was also rather displeased to say the least to find out late Tuesday night that the House HESS Committee was having their hearing on SSHB 11. To add to this Friday afternoon I was informed that the Senate HESS Committee's hearing was being held that day! I have provided input on this bill and the problems we are encountering for quite some while now and have continued to request to be informed of

any and all hearings regarding this legislation. As he stated I was informed of neither. I would have done my best to have come down to Juneau for direct testimony, questioning and input but was not notified. As is I have expended a lot of personal time and expense to correct a very unjust and unnecessary set of circumstances.

I am disgusted presently - I have been working within the system I do not feel the system has been working fairly.

If I can be of assistance regarding this subject please contact me.

Sincerely,
Al Rushing
President B.A.B.E.

P.S. BABE is composed of individuals supporting open access to alternatives in birthing, and providing childbirth education. We have approximately 500 or more individuals which support BABE's goals through their memberships.

I also have direct contact with childbirth educators of other groups, as well as the majority of all lay midwives practicing in Alaska.

PSS Short of a complete and total revamping of the current physician - hospital medical system I feel this legislation is perhaps the only effective means of protecting these peoples' freedoms.

Letter to Rushing
DRAFT
[illegible]

April 16, 1982

Al Rushing
P.O. Box 4-381
Anchorage, AK 99509

Dear Al:

Today we received a letter from Ken Fanning with a copy of your letter of March 26, 1982. I have to say that I am very distressed at your implications that the Senate HESS Committee has excluded you from testifying on SB 747. Ginger Baim and myself have worked for months on this project, have spoken to you at length on several occasions, have provided your written information and research to our legislators, have searched for legal opinions on midwifery, have lobbied the medical community and state departments on behalf of the midwives and have carefully rewritten this bill again and again to insure its passage.

I'm sure you must remember the video teleconference we had in March in which you were a participant. You must also be aware that Committee meeting schedules are developed a minimum of 5 days in advance, are published in the newspaper, and are available at all Legislative Information Offices. In addition, I know you have had weekly contact with Ginger and I feel you have little reason to suggest to other legislators that we have undermined your rights as a citizen to have input in the legislative process.

Sincerely,

Nancy Deitrick
Senate Aide

ND:sr

ALASKA STATE LEGISLATURE
HOUSE OF REPRESENTATIVES
RESEARCH AGENCY

Pouch Y, State Capitol
Juneau, Alaska 99811
(907) 465-3991

May 18, 1981

MEMORANDUM

TO: Representative Terry Martin

FROM: Betty Barton BB
Research Staff

RE: Funding Alternatives to Abortion
Research Request No. 81-116 (Additional Information)

As a component of your request on alternatives for women encountering problem pregnancies, you asked for information on the amount of State expenditures for abortion-related services costs. In a previous memorandum, we indicated that information regarding abortion-related expenditures under the State's public assistance program had been compiled for processing and analysis. We recently learned from Jeff Hubbard, who is responsible for the project at the Department of Health and Social Services, that the information will not be available until mid-June.

Consequently, we are only able to provide you with data concerning expenditures reimbursed to physicians for abortion-related costs under the Medicaid and General Relief Medical programs. From July 1979 to October 1980, there were 268 abortions reported with $81,434 reimbursed to physicians. According to Jeff Hubbard, between 14 and 20 public assistance clients per month received abortions with physician costs averaging $300 per case. This does not take into account hospital costs or pharmacy expenditures.

We are sorry that we were unable to obtain additional information for you at this time. When the Department of Health and Social Services has completed its analysis, we will forward a copy to your office.

BB/bf

ALASKA STATE LEGISLATURE
HOUSE OF REPRESENTATIVES
RESEARCH AGENCY

Pouch Y, State Capitol
Juneau, Alaska 99811
(907) 465-3991

April 24, 1981

MEMORANDUM

TO: Representative Terry Martin

FROM: Betty Barton BB
Research Staff

RE: Funding Alternatives to Abortion - Research Design
Research Request No. 81-116

The purpose of this memorandum is to present a suggested design for your research request regarding funding alternatives to abortion. You have asked that we address the level of service available to unmarried or economically disadvantaged women with pregnancies they wish to carry to term, and that we determine how the State can better meet the needs of these women. To fulfill your request, we have determined that our assistance might best be provided in a 5 to 7 page memorandum presented in two parts: 1) An identification of current gaps in services available to pregnant women; and 2) A discussion of innovative programs to assist unmarried or disadvantaged pregnant women.

Gaps in Service Coverage to Pregnant Women

In submitting this research request on your behalf, Bill Moffat has commented that current State programs may be providing a disproportionate level of assistance to women seeking abortions compared to the services available to those women who wish to carry their pregnancies to term. He has asked that we research this subject to determine the amount of State dollars that are spent both directly and indirectly on abortion-related costs. Our preliminary research has indicated that much of this data is unavailable. Although data on some of the direct assistance is available, such as medicaid funding for abortions, many costs cannot be isolated within a specific problem category.[1] Costs borne by the State for counselling services, for example, may be attributable to a variety of counselling needs ranging from family conflicts

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[1] The Department of Health and Social Services' Division of Public Assistance, is in the process of compiling data for physician, hospital and pharmacy expenditures attributed to abortion-related costs in the Medicaid and General Relief Medical programs. According to Bob Ogden, a deadline of May 15 has been established for the data compilation.

to economic difficulties. Counselling administered to the client for a problem pregnancy may be a service that overlaps with a number of other counselling services.

Taking this into consideration, we have revised this component of your request in an effort to establish a subject feasible for research which will accommodate your needs. We suggest a review of the Public Assistance program to determine what services are currently extended to eligible clients in need of pregnancy-related services. To the extent that cost data is available, we will be happy to provide it.

Program Innovations in Assistance to Pregnant Women

This section will introduce several concepts in the areas of social services, medical assistance, and education/information services for the disadvantaged or unmarried pregnant woman, which could be considered for program development in Alaska. To research this subject, we will first contact other states to review innovative programs that may have been implemented elsewhere in the U.S. Additionally, we will review selected programs in Alaska to determine whether the needs of pregnant women could be accommodated through the expansion of existing programs. We have tentatively identified the following concepts for study:

Maternity Homes/Birth Centers. Some unmarried pregnant women may choose not to bear a child due to the stigma of illegitimacy which they fear they will encounter during pregnancy. Traditionally, the response to this problem has been the establishment of unwed mothers' homes where women could live until their childbirth. For the most part, these homes for unwed mothers have been developed in an institutional setting. We will explore this area to determine what innovations are being considered to establish more humanistic settings for unmarried pregnant women. This might include, for example, any efforts that are being made to allow young women to continue their education during pregnancy.

Public Information Program. Some pregnant women may be unaware of the services currently available to them, e.g., adoption programs or pre and postnatal care programs. This segment of our research will explore potential solutions to increasing women's awareness of the availability of services.

Grants and Loans Programs to Individuals and Agencies. Economic considerations may cause some women to abort rather than bear a child. A grants and loans program could be extended to eligible women who have no other funding assistance for their pregnancy needs. These grants could be established in recognition of the special needs of pregnant women and could be extended to cover such costs as maternity clothing.

In turn, a grants and loans program could be established for eligible not-for-profit organizations to augment services provided to pregnant clients.

We hope this research design will meet your needs. We anticipate completing the second part of this research for you by May 1. The first segment, concerning existing service coverage to pregnant women, should be finished no later than May 8.

BB/bf

ALASKA STATE LEGISLATURE
HOUSE OF REPRESENTATIVES
RESEARCH AGENCY

Pouch Y, State Capitol
Juneau, Alaska 99811
(907) 465-3991

May 12, 1981

MEMORANDUM

TO: Representative Terry Martin

FROM: Betty Barton
Research Staff

RE: Funding Alternatives to Abortions
Research Request 81-116

You have asked for information concerning funding alternatives to abortion. This memorandum explores possible options for expanding the State's role in assistance to pregnant women. For the purposes of this memorandum, we are limiting our focus to those women who may be contemplating abortion because of the socio-economic problems associated with carrying their pregnancies to term. Consequently, we will address the service needs of the client who is experiencing a so called "problem pregnancy." You have also asked for information concerning the level of State expenditures for abortion-related costs; we will respond to this part of your request in a separate memorandum.

Our research is based upon telephone interviews with service providers located both in-state and out-of-state. To gain an understanding of the current service needs and problems for pregnant women in Alaska, we have contacted agency representatives of several Anchorage-based programs: Ms. Pat Petit and Ms. Jo Brosamer, co-directors of Birthright in Anchorage; Lt. Gene Ragan, director of Booth Memorial Home; and Ms. Norma Jean Elgas, an information and referral worker for the Anchorage Women's Resource Center. We have also contacted Mr. John Pugh, Mr. Dwayne Peeples and Mr. Gordon Landis of the State Department of Health and Social Services. To attain a perspective on programs outside of Alaska, we contacted Mrs. Lore Maier, executive director and cofounder of Alternatives to Abortion International; Ms. Maxine Cunningham, program analyst for the U.S. Department of Health and Human Services' Office of Adolescent Pregnancy Programs; Ms. Winnie Schoefer, director of Concern for Health Options; Ms. Ann Grey, editor of the Maternal and Child Health Legislative Alert Newsletter; and Ms. Susan Harding, co-director of the Addison County Parent/Child Center in Middlebury, Vermont.

STATEMENT OF PROBLEM

In the U.S., approximately 249,000 single women and girls under the age of 20 gave birth to children in 1978. This figure represents a significant increase above the figure of 199,000 in 1970, and is nearly three times greater than in 1960 when 91,700 births were recorded. According to an article in Today's Education, approximately 1 out of 18 girls will experience childbirth before she reaches the age of eighteen. Many of these girls will encounter problems during their pregnancies as a result of their young ages, economic status, or other socio-economic factors.

In Alaska, 12 per cent of the births are to women between 15 and 19 years, 37 per cent of whom are unmarried. The reported average age of a client at Booth Memorial Home, the only residential care facility for pregnant women in the Anchorage area, is 16.5 years although the range in ages is between 13 and 18 years. However, many of the women in Alaska who encounter problems are married and are older, according to staff at Birthright. Typically, these women may be experiencing financial problems or family difficulties concerning their unborn children. Generally, however, pregnancy clients are adolescents, financially needy, and lacking in employment skills. At Booth Memorial Home, between 30 and 50 per cent of the residents have become pregnant as a result of incest.

To illustrate, the complexities of the service needs of many clients, Pat Petit of Birthright described a recent case involving a pregnant 16 year old girl. The girl had no knowledge of childbirth from even a conceptual standpoint and did not speak or understand English.

SERVICE NEEDS FOR PROBLEM PREGNANCY CLIENTS IN ALASKA

Resource persons we contacted identified four problem areas regarding the current level of care available to women with problem pregnancies in the state:

- Shortage of emergency housing and foster home facilities;
- Inaccessibility of medical care;
- Inadequate public assistance programs;
- Deficient postnatal care services.

Emergency Housing and Foster Home Facilities

In the Anchorage area, a woman with a problem pregnancy has few available options for housing: She may stay in one of the 3 bedrooms at Birthright; she may stay within a foster home if one can be located for her; she may stay at the Booth Memorial Home if she is in the custody of the State (or if she has the financial resources to pay for her care); or, if she has been physically abused, she may seek emergency housing at McKinnell Emergency Lodge for Women (for a period not to exceed 30 days). If her family conditions allow it, she can remain within her own home, receiving necessary intervention services on an outpatient basis. For many of the women, however, remaining at home is not a feasible option.

More commonly, according to Booth and Birthright staff, women are placed on waiting lists until housing arrangements can be made available. Currently Booth Memorial Home is maintaining a waiting list of about 15 names and will be unable to provide space for another 6 months. Birthright, which is serving about 50 clients monthly, is able to house only 3 clients and is maintaining a list of 5 women in need of shelter. To the extent possible, Birthright staff arrange for temporary housing in private homes but as Pat Petit noted, "It is generally difficult to find someone who is willing to house a girl who may have been recently released from Ridgeview [Correctional Center] for theft and prostitution."

Inaccessibility of Medical Care

There is no available source for low-cost prenatal care in the Anchorage area. Several years ago, staff at the Neighborhood Health Center in Anchorage attempted to provide prenatal care at a cost determined by the client's ability to pay. However, the Center's staff were unsuccessful in finding the resources to provide a physician licensed to practice obstetrics. In an effort to work around the problem, the Center at one point adopted an operational policy where clients received prenatal care at the Center and were advised to go to hospital emergency rooms for their deliveries as hospital admittance staff will not refuse treatment of the financially needy.[1] The Center's policy was unfavorably received by the medical community and, consequently, was gradually discontinued. Prenatal care is no longer provided at the Center.

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[1] Pat Petit, co-director of Birthright, emphasized that emergency room deliveries may not be a wise alternative for a high-risk pregnancy. Research suggests that there is an added risk in terms of increased maternal-child morbidity and mortality rates in emergency room deliveries.

According to the staff at Birthright, prenatal care and delivery costs currently range between $800 and $1,000 for physician's fees and between $1,500 and $2,000 for hospital costs. Obstetricians in the Anchorage area require payment in advance for prenatal care; the cost for the first visit ranges from $100 to $200 with subsequent visits carrying a lesser fee. Agency representatives have noted that the payment provisions of the medical community preclude many pregnant women from seeking prenatal treatment. Staff at Birthright noted that there are a large number of women, who while unable to qualify for Medicaid and General Relief Medical programs, cannot afford the costs of obstetrical care.

Medicaid and General Relief Medical assistance present an added difficulty for many pregnant women. According to Duane Peebles of the State Department of Health and Social Services, some members of the medical community are unwilling to accept public assistance patients because of delays in reimbursement for services and insufficient compensation for the true costs of providing treatments. According to Jo Brosamer, only one obstetrician in the Anchorage area routinely accepts Medicaid or Medical patients; two obstetricians occasionally admit public assistance clients; the remaining members of the obstetrical community rarely accept such patients, and when so doing, some physicians often treat their assistance as donated services rather than seek reimbursement from public assistance programs.

Postnatal Service Needs

Our research indicates that several postnatal service needs are currently unmet. Ms. Norma Jean Elgas of the Anchorage Women's Resource Center has noted that although pregnant women and their families have a number of alternatives for counseling and support services before childbirth, there are no regularly available resources for these women's postnatal needs. As an example, Ms. Elgas cited the absence of counselling services in parenting skills. Adolescent-aged parents often lack the maturity and experience to understand the responsibilities inherent in childbirth. To illustrate, Susan Harding, co-director of the Addison County Parent/Child Center in Vermont, spoke of a young couple in her program who left their five-month old baby in his highchair all day. The couple considered themselves to be exemplary parents, not recognizing that by depriving him of the opportunity to lie on his back and stomach, they were creating the potential for permanent developmental disabilities. Ms. Harding has found that parenting problems in general do not begin to surface until the newness and excitement of a new baby have subsided. As a result, Ms. Harding's program offers classes and support groups in parenting to couples and single parents until their children are 3 years of age. She believes that the front-end costs of this service will result in a proportionately larger cost-savings in the

long term by diminishing the need for educational programs and social services at a later time.

An additional area of postnatal services which appears to be lacking is in employment placement and vocational training. According to Birthright staff, the majority of their clients lack the vocational skills and job histories which would make them employable. Professionals regard employment training to be an important area so that women without financial resources may become economically capable of caring for themselves and their children without requiring further public assistance.

Inadequate Public Assistance

Under current law, socially and economically deprived pregnant women are entitled to medical assistance when they meet eligibility criteria established under the State's Aid to Families with Dependent Children and General Relief programs. Eligibility is determined, in part, by assessing the amount of income and financial resources available to a woman in her home. Consequently, if a woman is living with a non-needy parent or relative, she may be denied eligibility because of the parent's or relative's perceived abilities to pay for her care. Some professionals noted to us that pregnancy-related costs are often regarded as a special category of expenditure frequently not included in a family's personal budget or health insurance plan. Some individuals believe that this occasionally results in women moving out of their family homes in order to gain eligibility for State-provided medical care. This aspect of the public assistance program is viewed by some professionals as a disincentive for family solidarity that can create additional stress for the pregnant woman.

AFDC once provided cash assistance to eligible pregnant women, but this was discontinued several years ago. Under current law, some pregnant women are entitled to financial assistance under the State's General Relief program's regular guidelines. However, some individuals we contacted regard this source of financial assistance to be insufficient, noting that pregnant women generally encounter significant increases in their cost-of-living due to added needs precipitated by their condition. An article in a December 18, 1980 issue of the New York Times addressed the "rising costs of having a baby" and cited examples of special needs affected by inflationary costs, including: maternity clothing, transportation services and fuel, infant accessories, and food to satisfy the increased nutritional needs of a woman and her child. According to Anchorage agency representatives, women experiencing problem pregnancies would be greatly assisted by the expanded availability of financial assistance programs.

POTENTIAL OPTIONS FOR THE STATE IN PROVIDING SERVICES

Our research has indicated that pregnancy programs outside Alaska traditionally have been offered primarily by federal and private non-profit organizations. In turn, funds for these programs generally appear to come from private donations and from federal, rather than state, sources. Dr. Sharon Alexander of the National Association of State Boards of Education has noted the absence of State policy regarding the service needs of women with problem pregnancies, attributing it in part to the inherent problems that limit a state's effectiveness in providing a comprehensive program of services. As examples of these deficiencies, she cited the absence of systematic data collection regarding this target population, impairing a state's abilities to identify service needs and to develop policy. Dr. Alexander also noted that categorical funding aimed directly at problem pregnancy services is rare. An article in Children Today elaborates:

> Frequently, state agencies have not developed policies in this area because the target population has been subsumed in other programs which already have policies in place. Often, too, the staff members responsible for this issue are far removed from the agency's policymaking level which diminishes the potential for change in agency policies.[2]

In the course of our research, we learned of no states that have assumed an active role in the development and implementation of comprehensive services for categorically designated problem pregnancy clients. As a result, if policymakers are to consider various means for the State of Alaska to expand its service capabilities in this area, it appears that they cannot look to other states for direction. Nonetheless, as a result of our conversations with agency representatives located both inside and outside the state, we were able to identify some program concepts that could be developed within Alaska in order to fill current gaps in service.

Prematernal Home/Birth Center

As a response to the combined problems of insufficient emergency housing and inaccessibility of medical care, the State could explore the feasibility of establishing a prematernal home and birth center

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[2] Carlos Salguero, "Adolescent Pregnancy: A Report on ACYF-Funded Research and Demonstration Projects," Children Today, November-December 1980, p. 35.

facility. This type of structure could be established for the purpose of providing low-cost housing and medical care to eligible women. However, the facility could also be made available to other women on a fee basis if it was determined that a larger population group could benefit from the availability of a center.

Such a facility could be free-standing, unaffiliated with an existing hospital or social services organization; or it could be appended to an existing program. According to Lt. Ragan of Booth Home in Anchorage, several prematernal homes and birth centers have been effectively established by other Booth Memorial Homes in the United States (for example in Portland, Oregon).

Beyond its essential provision of shelter, the prematernal home is an effective means of offering a built-in support group for pregnant women who often share common problems. Additionally, a prematernal home is a useful means of providing educational programs in nutrition, parenting skills, and other prenatal instruction.

The design of the facility would depend on the functions and the population it was serving. It might serve a statewide, regional or local population.

Parent/Child Program

A State-supported comprehensive program in parenting could also be developed. Although each child is born with his own potential for physical, social, and cognitive development, research suggests that a child's chances for reaching his maximum potential may be strongly linked to his early childhood environment and the parent-child relationship that he experiences during childhood.

Family Focus, Inc., a private non-profit organization in Chicago, was established in 1976 to demonstrate the effectiveness of providing community-based support services to expectant parents and to parents of young children. The organization has established a number of parent/child centers within Illinois, each of which is designed to fill a gap in services for families. Programs maintain a low operational budget by relying heavily on existing community services and the use of trained volunteers for program staffing. Additionally, Family Focus programs utilize parents who are participating in the program for assistance in fund-raising, program planning, and special projects. This also provides opportunities for the parents to develop and exercise leadership skills.

One Family Focus program, called "Our Place," is geared toward teenage parents and pregnant adolescents. Located in Evanston, Illinois, Our Place is a drop-in center that provides comprehensive social,

medical, educational, and vocational services to the community's adolescent population. The center offers a childcare program as well as recreation, fellowship, and education in responsible parenting.

Grants and Loans Program to Private Non-Profit Organizations

In 1978, the federal Office of Adolescent Pregnancy Programs was established under the Health Services and Centers Amendments of 1978 (P.L.95-626). Title VI of the legislation provided for funds to be granted to public and private non-profit agencies to assist in establishing networks of community-based services for "adolescents at risk of unintended pregnancies, pregnancies, pregnant teenagers and adolescent parents." Under the provisions of the legislation, grantees were required to provide certain basic services, including: pregnancy testing, maternity counseling, prenatal and postnatal health care, pediatric care, family planning services, referral to appropriate educational or vocational training programs, and adoption counseling and referral services. Federal staff anticipate that if the Office is refunded it will include additional program emphasis in family support services and alternatives to abortion.

Conceivably, if State policymakers determined the concept to be feasible, the State of Alaska could develop a similar program within the Executive Branch. This type of program could make financial resources available to private, nonprofit organizations within the state that are currently providing services to clients.[3]

Expanded Maternal/Child Health Programs

Under Title V of the Social Security Act, the State of Alaska receives two Maternal and Child Health grants through the federal Health Services Administration: The Improved Pregnancy Outcome Program and the Maternal and Infant Care Program. The Improved Pregnancy Outcome Program includes a statewide program for the development of early prenatal educational curricula and, on a local basis, a pilot program in Fairbanks for social educational, and medical assistance for pregnant women. Through the Fairbanks-based program, women may receive:

- counseling and care referral services;
- prenatal education; and
- medical care assistance.

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[3] Legal research may be required to determine if there are any State limitations on providing financial assistance to nonprofit organizations having a religious affiliation.

Medical assistance is provided to clients based on a sliding scale determined by family size and income. Coverage is extended as a payment of last-resort after all other sources of third-party coverage have been exhausted. Duane Peebles of the State Department of Health and Social Services commented that the program generally seems to pick up those women whose incomes are slightly above the Medicaid eligibility requirements.

The second Maternal and Child Health grant program in the State is located in Juneau. The Maternal and Infant Care Project is similar to the Fairbanks-based program with one notable exception. The Juneau program provides medical assistance for women for labor and delivery costs while the Fairbanks program, due to federal regulatory restrictions, is unable to offer compensation for inpatient services.

Although services under these programs may be extended to all pregnant clients, the program is primarily designed for women with medical/social risks. Consequently, while any woman may receive screening services, financial assistance is based upon factors such as age and income.

State policymakers might consider assuming financial responsibility for these programs and expanding their service outreach capabilities to communities other than Fairbanks and Juneau. According to Duane Peebles, funding for the Improved Pregnancy Outcome Project is scheduled to lapse September 30, 1982. In light of the Reagan administration's budget proposals and block grant approach, the prospects for continued funding of the project's $400,000 annual budget are somewhat uncertain.

Paternity Outreach Programs

In single parent settings, the responsibilities of child rearing can become very demanding. Pressures often are compounded when the parent is an adolescent, unwed mother. In an effort to alleviate the responsibilities borne by a single parent and to create a more natural setting for the child, some State and local governments are emphasizing program development to promote the participation of the other parent financially and socially.

An example of such a program is the Memphis Paternity Outreach Project in Tennessee. The purpose of the program is to enable the children of unmarried mothers to be legitimized and thereby eligible for support benefits. Through the program, a representative of the juvenile court visits every hospitalized, unmarried mother after the birth of her child, at which time the representative explains the process required to establish a legal relationship between the father and the child. A mother who decides to accept the paternity service signs an application and the process is handled in the same manner as other paternity cases.

Since the program's inception in August 1979, program representatives estimate that about 75 percent of the paternity cases where the father can be located, result in an agreement without reluctance on the part of the father to establish a parental relationship with his child. As a result of the program, it is possible for support to begin in some instances shortly after the mother and child are released from the hoospital.

Expanded Educational and Vocational Training Programs

Many couples and single parents are apprehensive about carrying a pregnancy to term because of the economic hardships which may be experienced after the child is born. Generally, this apprehension exists because of the deficient educational and vocational background of the parent which seriously limits the prospects for employability and self-sufficiency. Because of this, many professionals believe that state pregnancy assistance programs must include educational and vocational training programs for couples encountering problem pregnancies.

The Addison County Parent/Child Center in Vermont places extensive emphasis on the long-range vocational needs of its clients. Over 65 percent of the Center's participants return to school or seek educational or vocational training after the delivery of their children. According to Susan Harding, co-director of the Center, the program attributes part of its effectiveness to the individualized nature of the services established for the women as well as the program's tight coordination and utilization of existing services. Much emphasis is also placed on preliminary skills development; e.g., if poor reading skills are inhibiting a client's ability to develop office skills, volunteers are assigned to the woman to tutor her in her reading. Additionally, staff at the Addison County Center try to tailor job development to new parenting roles.

An example of an educational program designed for pregnant adolescents is the Family Learning Center, which was established in New Brunswick, New Jersey in 1969 to counter a significant pregnancy-related drop-out rate in the public schools. The program is provided in a separate building from the public school and is offered to any pregnant adolescent woman.[4] The program offers a comprehensive educational and health program that stresses nutrition, weekly physical check-ups, frequent consultation with guidance counselors, teachers, as well as the attending physician and clincial staff, and on-going counseling

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[4] Women have the option of attending the Family Learning Center of remaining in the regular public school programs.

and participation in support groups. Beyond the regular academic schedule, each student receives instruction in family life education, maternal and child health, and physical education.

CONCLUSION

The information presented in this memorandum is intended to represent only a sampling of program ideas and concepts which could be explored at the State level to ease the social and economic problems that may accompany pregnancy. A number of related services such as expanded adoption services and additional education programs, have not been addressed in our research but could, of course, alleviate some of the problems associated with unwanted pregnancies.

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We hope this information has assisted you. Please let us know if we can provide you with additional research on this subject. We will be transmitting a second memorandum to you shortly on State expenditures for abortion-related services.

BB/bf

MEMORANDUM State of Alaska

TO: Pete Jeans
Deputy Commissioner
Department of Commerce &
Economic Development

Thur: Harry Treager, Director
Occupational Licensing

From: WILSON L. CONDON
ATTORNEY GENERAL

By:

Sarah T. Kavasharov
Assistant Attorney General

DATE: February 6, 1981

FILE NO: J-66-298-81

TELEPHONE NO: 465-3690

SUBJECT: Medical Board Inquiries Re Lay Midwives

You have asked for clarification of conflicting opinions from this office on the question whether or not assisting at child birth constitutes the practice of medicine. The answer is, that while we might attempt to stretch the definition of the practice of medicine in the current law to cover assistance at child birth, it would be better to seek a revision of the statute.

The proposed amendment of AS 08.64.170 and AS 08.64.380(2) along with the new section 369 in the medical bill being introduced this session will cover actual assistance at child birth. Prenatal counselling already comes within the definition of the practice of registered nursing in AS 08.68.410(8) of the nursing bill which is also being introduced this session. We believe that passing these amendments is the best solution to the problem of regulation of prenatal care or assistance at child birth and should cover at least the major problems. If you have further questions on the issue, please contact our office again. We believe, also, that any further regulation of this area should be discussed jointly with the Board of Nursing.

STK:wjp

02-001A(Rev.10/79)

CSSB 747

page 1. lines 28-29

Delete: (b)

page 2, line 9

three members shall be licensed under this chapter or eligible to receive licensure under AS 08.69.050 (1) - (3), one of which will be a certified nurse midwife.

delete following sentence to line 13

line 14: One person shall be a person with no financial interest in a health care facility. delete the rest of the sentence.

page 2, line 21: change his to their (SEXUAL PRONOUNS)

page 8, line 14

Insert: (4) ensure that each infant is screened in accordance with AS 18.15.200

page 8, line 13:

We need a clause in (3) which states that the consulting physician is not liable for the treatment of the midwife.

page 9, line 7

(3) "sponsor" means a physician licensed to practice in the state or exempted from licensure under AS \ , or a midwife licensed to practice in the state and authorized to act as sponsor by the board.

AS 08.64.370 (1)

soldotna — 4 ✓

dillingham 4 ✓

fairbanks 1 ✓

homer 6 ✓

mat-su 6.

Saal Boyer - bill should provide access to lab tests

Hall - need back-up. Midwife spends more time w/ mother than drs. Enough trained midwives to teach? More infections in hosp.

Schrage - scope is scope of nurse-midwife. Take more time to train lay under bill than for nurse to get trained as midwife.

THE FOLLOWING DOCUMENT(S) MAY NOT FILM LEGIBLY BECAUSE OF POOR QUALITY OF THE ORIGINAL.

Outcomes of Elective Home Births: A Series of 1,146 Cases*

Lewis E. Mehl, M.D., Gail H. Peterson, M.S.S.W., Michael Whitt, M.D., and Warren E. Hawes, M.D.

Institute for Childbirth and Family Research
Berkeley California
and the Infant Health Unit, Maternal Child Health
California State Dept of Health, Berkeley, California

Medical records of 1,146 elective home births from five home delivery services in northern California were reviewed. Three of the services consisted of family physicians and nurses, whereas two consisted of lay midwives without immediate physician supervision. Rates of medical complications in both groups were low. Perinatal morbidity and mortality were lower than California averages. Fifteen premature infants (1.3%) were delivered successfully. Apgar scores were high. Four infants (0.3%) were neurologically abnormal at follow-up. The perinatal mortality rate was 9.5 per 1,000 total births. There were no maternal deaths.

These figures demonstrate that in a self-selected, medically screened, low-risk population, home delivery with medical facility back-up can be a reasonable alternative to hospital delievery. Possible reasons for the good results obtained are cited.

Key words: Home birth, midwife, family physicians, perinatal mortality, infant morbidity.

Introduction

A steady increase has been noted in recent years in the incidence of home delivery in certain California counties and presumably in other areas of the country as well. For the past five years, registered out-of-hospital births in California have increased steadily, at the rate of 0.1% a year.[11] This rise has been decried by some members of the medical community while supported by others. Many highly emotional statements have been made by both sides without data to support either position. This study is an attempt to provide such data on 1,146 planned home deliveries conducted by five home delivery services in northern California. One similar study has been published to date—that of Hazell,[6] which was a sociodemographic study and did not emphasize medical outcomes.

Methods

Sources of Data

Medical charts from five home delivery services in northern California were reviewed. The five services included three physician groups: (1) a rural-based family practice in western Marin County (Point Reyes Station) composed of three family physicians and three registered nurses, performing both home and hospital deliveries since 1970 as part of a comprehensive family practice; (2) an urban-based (Mill Valley) family practice of two physicians and two registered nurses—one a maternity nurse practitioner—in practice since 1973; and (3) an urban-based (Berkeley) group consisting of one physician (whose training had been in pediatrics/neonatology) and two registered nurses, affiliated with a woman's health cooperative in Berkeley. This last group did not have hospital privileges and performed only home deliveries, referring women requiring hospital care to local obstetricians; they had been functioning since early 1974. The lay midwife groups consisted of (1) 10 lay midwives from Santa Cruz County, functioning in both urban and rural settings without immediate medical supervision and with limited medical backup, performing births since 1971, and (2) a rural lay midwife from Sonoma County, California, with good physician back-up, performing

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births since 1970. (In the latter service, records had been kept only for the last 171 of her estimated 500 deliveries during a five-year time span.)

All records until April 1975 were reviewed by one of us (L.E.M.). They were adequately detailed regarding prenatal care, intrapartum and postpartum events and infant and maternal follow-up. The groups represented the following percentages of the total sample: (1) the Point Reyes physician group, 40.4%; (2) the Mill Valley physician group, 11.2%; (3) the Berkeley physician group, 7.6%; (4) the Santa Cruz County midwives group, 30.8%; (5) the Sonoma County midwife, 10.0%.

The lay midwife from Sonoma County began her midwifery activities accidentally, while visiting a friend in labor. Others learned she had attended a birth and asked her to be at their deliveries until she eventually developed a reputation as a midwife. Her training was self acquired through reading and experience. The Santa Cruz midwives began functioning in much the same fashion, becoming midwives to meet an experienced need in the community and educating themselves through discussion groups, experience and reading. Their average fee per birth was $35.00, so their motivation was clearly not monetary. Typically, they were women who had had an unattended home delivery and had decided to help other women avoid this predicament.

The Sonoma County midwife had good medical back-up through physicians (mainly family practice residents) at the Community Hospital of Santa Rosa, who, although unwilling to attend home deliveries, were willing to discuss problems over the telephone and handle complicated deliveries in the hospital. The Santa Cruz group had poor medical back-up and was not able to obtain telephone consultation. They were often criticized heavily and condemned when bringing women who needed hospital care to the hospital and few supportive physicians to whom they could refer women with complications. Laboring women in the Sonoma area were occasionally as far as one hour from a hospital, although the usual distance was approximately 15 minutes. Laboring women in the Santa Cruz area were occasionally as far as 45 minutes from a hospital but usually ranged from 5 to 15 minutes.

Transport facilities for both lay midwife groups consisted of the midwife's car without any specialized support equipment. Equipment present at deliveries with the lay midwives was also minimal and typically consisted of a bulb syringe, sterile guaze, sterile gloves, a fetoscope, blood pressure cuff, urine dipsticks for testing for acetones, glucose and protein, a portable scale and little else. Their mode of operation has been described by Lang.[9]

The physician services brought a home delivery kit with them to births. Typically the nurse would attend the labor from its inception, and the physician would arrive during the second stage for primigravidae and first stage for multigravidae. The physician kit included IV equipment, oxytocin and methergine for use after delivery, other emergency drugs and forceps to use if necessary as well as suture supplies. (However, there was no intravenous oxytocin or forceps used at home in this series.) The only equipment or drugs not present in their kit and usually present in the hospital was whole blood. (A complete list of supplies is available on request.) The transport vehicle for the physician groups was also the car belonging to the birth attendant. For the Point Reyes group, the closest hospital was 20 miles. For the Berkeley and Mill Valley groups, the distance from a hospital was usually 5 to 10 minutes.

Prenatal care was essentially the same for all groups and did not deviate from the standards recommended by the American College of Obstetricians and Gynecologists with regard to frequency of visits, laboratory tests and clinical assessment. The lay midwife groups required a minimum of two visits to a physician, at which times clinical pelvimetry, Rh status, blood type, rubella titer, hemoglobin, hematocrit, VDRL and gonorrhea culture were determined. Nutrition, the avoidance of prenatal medication and the psychosocial aspects of pregnancy were stressed more than is typically done in prenatal care, and visits usually lasted 20 to 30 minutes for the physician groups, involving discussions with the nurse and then the doctor. For the lay midwife group, the visits were typically 30 to 60 minutes. Three women had no prenatal care and first presented themselves in labor.

There was no limiting of weight gain. It was felt that every woman should gain at least 20 to 30 pounds during pregnancy, and the average weight gain was in the 30- to 35-pound range. Women with chronic medical disease were encouraged to seek a hospital birth, as were women who remained anemic. The threat of a hospital birth usually increased patients' willingness to use iron-containing preparations, and, as a result, the number of women with hemoglobins

of less than 11.0 gm% giving birth at home was minimal (less than 1%).

Intrapartum care was essentially similar among the groups. The lay midwife groups did not perform breech or twin deliveries at home. The physician groups did so on occasion, but only after explaining the problems inherent in such deliveries. After 1973, the usual policy was to recommend cesarean section to women with low breech scores (Zatuchni-Andros breech score) and to attend women with breech scores indicating safe vaginal delivery at home if the women so desired and requested. (Since the completion of this study, the lay midwives have begun attending some breech deliveries at home because of parents' dissatisfaction with the rising incidence of cesarean sections in breech presentation.)

Labor prolongation, of itself, was not treated as a complication requiring hospitalization. Uterine inertia was often treated initially with buccal oxytocin by the physician group at home, and if results were not forthcoming, the woman was transported to the hospital for IV oxytocin. Prolongation of the second stage of labor also was not treated as a complication; indeed, most of the practitioners felt that a slower second stage with little pushing by the mother (often extending two to three hours) was preferable to a shorter second stage (less than two hours) characterized by an intense pushing effort by the mother. Patients with second stage *arrest*, however, if not responsive to buccal ocytocin over a one- to two-hour period, were transported to the hospital for forceps delivery. The midwives were unable to administer oxytocin and consequently sent more of their patients to the hospital for dystocia.

Both groups monitored the fetal heart rate closely throughout the first and second stage, using a fetal stethoscope or Doppler ultrasound fetoscope, and felt that any significant drop in heart rate requiring intervention would be noticed. Blood pressures were checked approximately every one to two hours during labor. Fetal heart tones were checked as often as after every contraction during second stage if some variability had been noted or if the mother was pushing particularly hard but usually were checked every 15 minutes during second stage and every 25 to 40 minutes during first stage, depending on the character of the labor and the fetal heart rate pattern. The fetal heart was occasionally listened to through a contraction and for some time afterwards to determine the presence of any abnormal patterns.

Meconium staining without fetal heart rate irregularities was not treated. (Meconium staining *with* fetal heart rate irregularities was cause for hospitalization, and the infants, with one exception, were treated with intubation and lavage.) Prolonged rupture of membranes in a term-sized infant was followed but not treated unless necessary. It was felt that if the mother did not show signs of amnionitis and had a good socioeconomic and nutritional background, intervention was not necessary within 24 hours. If labor had not begun by 24 hours, induction was usually undertaken in the hospital.

The midwives practiced perineal massage to prevent tearing, but the physicians typically did not. This was optimally done by the mother and father for the month prior to delivery and was done by the midwife during the last half of the second stage. It was not done consistenly by all parents and midwives, but the midwives felt it helped prevent lacerations during delivery.

Forceps deliveries were not conducted at home, and no analgesia or anesthesia was administered at home. If the latter was desired, hospital transport was necessary for the woman to receive it.

The room in which the delivery occured was kept warm, and the baby was given to the mother immediately after delivery to hold and nurse, with blankets placed around the infant to prevent heat loss. The umbilical cord was not clamped until it ceased pulsating except in Rh negative mothers, in whom it was clamped immediately after delivery. RhoGam was given to the Rh negative mothers within 48 hours. Silver nitrate was not applied routinely to the infants' eyes unless there had been a history of gonorrhea or one or both parents were unsure about the other. Most of the infants were fed only by the breast, without glucose or formula supplementation, and were fed ad lib.

Home visits were usually made each day for the first three postpartum days, and telephone contact was maintained with the couple. The infants were seen by the physicians at one week in their offices and again at four weeks. After that point, the recommendations for well child care of the American Academy of Pediatrics were observed. Midwives referred infants for newborn care to pediatricians or family physicians after the first week and continued to follow the infants themselves for various periods of time. All mothers had an examination from four to six weeks postpartum by a physician; results of

the examination were entered in the lay midwives' records.

Study Population

Hazell[6,7] has described the demographic characteristics of the home birth population in the San Francisco Bay Area in a study of 300 home deliveries from the socioanthropological standpoint. Her subjects overlapped to some extent with our sample and were derived from the same subject pool—San Francisco Bay Area couples planning home delivery. According to her study, 90% lived in typical American fashion, with the father gainfully employed and in a single family dwelling with one or two cars; they were not members of an ethnic minority, not on welfare and had no household servants. A general characteristic of the group was described as self-awareness, shown in a concern for nutrition, health food, ecology, humanistic psychology and a strong feeling for a natural birth process. Typically, the mother and father had both attended college, but neither had graduated. The fathers' occupations were noted to vary through the range of occupations present in the Bay Area—from auto mechanic to physician to homesteader. Only one-tenth were classified as "hip," in rebellion to "normal American values" and living in a variety of alternative styles.

In our study, patients of the lay midwives tended to belong more to the counter culture than did Hazell's population. In the physician groups, more professional couples were included. A detailed socioeconomic study on one of the lay midwife groups (the Sonoma County sample) is currently being coordinated by one of us (W.E.H.), and a psychological/developmental outcome study on a subsample of the Santa Cruz group is being analyzed by two of us (L.E.M. and G.H.P.).

Table I presents statistics on the selection of the study population. Only 4% of those women who requested a home delivery were screened out for medical reasons (including premature labor, [on some services] toxemia and underlying systemic disease). This low percentage would seem to indicate that women seeking home deliveries are a self-selected healthy group, probably knowledgeable about childbirth and the importance of nutrition in pregnancy. Nine women with previous fetal deaths were included in the home birth sample. Previous obstetric complications (with the exception of cesarean section) were not used as screening criteria because it was felt that they were iatrogenic to some extent.

TABLE I

HOME DELIVERY STUDY POPULATION

	Number	Percent
Contacted home delivery service	1,348	100.0
Screened out, medical dx	55	4.1
Decided against	147	10.9
Attempted home delivery	1,146	85.0
Taken to hospital	136	10.1
Completed home delivery	1,010	74.9
Attemped home delivery	1,146	100.0
Physicians	685	59.8
Midwives	461	40.2
Taken to hospital	136	11.9
Physicians	58*	5.1
Midwives	78*	6.8

*Patients hospitalized represented 8.5% of physicians' cases, 16.9% of midwives' cases.

Eleven percent of the women who considered home delivery decided against it for nonmedical reasons. This number was highest in the lay midwife groups and may have been related to a hesitation about giving birth without physician back-up. In the physician-directed services, a common reason cited for switching to a hospital birth was that Medicaid would cover only hospital deliveries.

TABLE II

CHARACTERISTICS OF MOTHERS

	Number	Percent	California 1973
Mother's age	1,146	100.0	100.0
<20	60	5.2	17.3
20-34	1,068	93.2	77.6
≥35	18	1.6	5.1
Parity	1,146	100.0	100.0
0	729	63.6	43.3
1	237	20.7	31.0
2	128	11.2	13.3
3	34	3.0	6.0
≥4	18	1.6	6.3
Prenatal care began	1,146	100.0	100.0
1st trimester	707	61.7	72.8
2nd trimester	362	31.6	20.2
3rd trimester	74	6.5	4.5
None	3	0.3	2.4*

*Includes prenatal care unknown.

TABLE III

Characteristics of Presentation and Delivery

	Number	Percent
Presentation	1,146	100.0
Vertex	1,125	98.2
Brow	[illegible]	(0.3)
Shoulder	(3)	(0.3)
Breech	21	1.8
Delivery	1,146	100.0
Cesarean	28	2.4
Vaginal	1,118	97.6
Analgesia, only	(14)	(1.2)
Anesthesia, only	(3)	(0.3)
Both	(6)	(0.5)
None	(1,095)	(95.5)
Oxytocin		
1st and 2nd stage labor	85	7.4
3rd stage labor	235	20.5
Low forceps	11	1.0
Mid forceps	6	0.5
Lacerations requiring repair	148	12.9
Episiotomies	89	7.8

Of the 1,146 women beginning labor at home with the intention of delivering there, 136 (11.9%) were sent to the hospital to complete their delivery for treatment of intrapartum (11%) or postpartum (0.9%) problems. Eighty-eight percent of the deliveries begun at home were completed there. Thus, of the initial set of women contacting the home delivery services, 75% successfully gave birth at home.

Four surviving infants required hospitalization for other than phototherapy within three days of delivery; a fifth was born very prematurely in the hospit[illegible] and remained there for one month.

Table II presents characteristics of the mothers and compares them to California statistics for 1973.[11] Over 90% were in the optimal childbearing age of 20 to 23 years, and the average was 24.9 years. There was a high number ([illegible]%) of primigravidae in this series and an incidence of grand multiparity of less than 1%. Virtually all the women were trained in childbirth classes such as Bradley or Lamaze. All women except one attempted breast feeding; for a variety of reasons, eight women were not successful.

Results

Delivery: Home Sample

Statistics on the presentations and deliveries are given in Table III. Most of the deliveries were normal vertex presentations. Of the 21 women with breech presentations, 10 were delivered successfully by choice at home, and 11 were taken to the hospital. The last were all unexpected and with lay midwives.

One percent of the women studied had low forceps deliveries, 0.5% had midforceps deliveries and 2.4% were delivered by primary cesarean section. (The California cesarean section rate was 9.9% in 1973.[11] If, as the Mayo Clinic[1] found, half of the cesarean sections are repeats, then California's primary section rate would approximate 5%, or double the rate in this study.) The indications given for forceps and cesarean deliveries are listed in Table IV.

TABLE IV

Indications for C-Sections and Forceps Deliveries in Women Beginning Labor at Home

	Number
Low forceps delivery	
Protracted descent	6
Arrest of descent	2
Dysfunctional labor	1
Brow presentation with arrest of descent	1
Fetal heart drop	1
	11
Mid forceps delivery	
Protracted descent	3
Arrest of descent	1
Dysfunctional labor	1
Fetal heart drop, occiput posterior presentation	1
C-sections	
Cephalopelvic disproportion	16
Failure to descend, occiput posterior presentation, relative CPD	6
Arrest of active phase dilation, fetal heart drop, cord 4× neck	1
Prolapsed cord	1
Breech with amnionitis	1
Psychotic reaction to labor	1
Acutely dropping fetal heart tones	1
Toxemia	1
	28

Lacerations requiring repair were lowest (4.4% and 5.7%) in the lay midwife groups and highest (40.2%) in the physician group with the shortest experience in performing home deliveries without episiotomies. Similarly, episiotomies were lower for the lay midwife groups than for the physician groups.

Analgesia and or anesthesia were used in only 2% of the vaginal deliveries. During the first and second stages of labor, 38 women (3.3%) received buccal oxytocin at home, whereas 47 women (4.1%) received IV oxytocin in the hospital. During the third stage of labor, 146 mothers had oxytocin at home and 89 in the hospital. Mean length of first stage was 10.2 hours for primigravidae and 4.6 hours for multigravidae; second stage means were 118 and 45 minutes, respectively.

Complications of labor and delivery of the home birth group are shown in Table V (individual women may be listed under more than one complication). Interestingly, the total percentages of complications were comparable for primigravidae and multigravidae (18%). The majority of the intrapartum problems involved first stage dystocia. However, the total incidence of protracted labor in this series is noticeably low when compared to that in the literature,[9] as are meconium staining and fetal heart irregularities.[3,8] There was no maternal hypotension prior to or during delivery.

The lay midwives took significantly more of their patients (16.9%) to the hospital than did the physician groups (8.5%). The former took more women to the hospital for induction for prolonged rupture of membranes, uterine inertia during the first stage of

TABLE V

COMPLICATIONS OF LABOR AND DELIVERY

(Individual women may be listed under more than one complication)

Primigravidae (N = 136/729 = 18.6%)				
Complication	Home	Hospital	Total	Percent*
Intrapartum				
Dystocia† 1st stage	27	34	61	8.4
Dystocia 2nd stage	10	14	24	3.3
CPD	0	23	23	3.2
Meconium stain, only	24	3	27	3.7
FHT ↓ (c, s meconium)	6	13	19	2.6
Hypertension	3	6	9	1.2
Hypertension	3	6	9	1.2
Brow presentation	1	2	3	0.4
Shoulder dystocia	1	1	2	0.3
Polyhydramnios	0	2	2	0.3
Other*	1	10	11	1.5
Total	73	108	181	
Postpartum				
Hemorrhage‡	1	3	4	0.5
Excessive PP bleed‡	11	7	18	2.5
Retained placenta	10	4	14	1.9
Endometritis	9	2	11	1.5
PP depression	0	4	4	0.5
Total	31	20	51	

*Single cases of oligohydramnios, amnionitis, toxemia, prolapsed cord, thrombophlebitis, placenta previa, abruptio placentae, dehydration, urinary tract infection, 2nd trimester bleed, precipitous labor.

Multigravidae (N = 78/417 = 18.7%)				
Complication	Home	Hospital	Total	Percent*
Intrapartum				
Dystocia 1st stage	2	12	14	3.4
Dystocia 2nd stage	4	9	13	3.1
Meconium stain, only	11	1	12	2.9
FHT ↓ (c, s meconium)	3	4	7	1.7
Precipitous labor	7	0	7	1.7
Other*	1	2	3	0.7
Total	28	28	56	
Postpartum				
Hemorrhage	4	1	5	1.2
Excessive PP bleed	9	4	13	3.1
Retained placenta	4	4	8	1.9
Endometritis	3	1	4	1.0
PP depression	0	1	1	0.2
Total	20	11	31	

*Single cases of CPD, shoulder dystocia, oligohydramnios.

*Percent complications per 729 primigravidae, 417 multigravidae.

†Dystocia as used in this table is defined as: prolonged or arrested 1st stage, failure to dilate; prolonged or arrested 2nd stage, failure to descend (as per Greenhill and Friedman[9]).

‡Hemorrhage is defined as more than 650 ml; excessive bleeding as "more than normal," including third-day postpartum bleeding.

TABLE VI

COMPLICATIONS OF LABOR AND DELIVERY

(Individual women may be listed under more than one complication)

Physicians (N = 134/685 = 19.6%)			Midwives (N = 80/461 = 17.4%)		
Complication	Number	Percent*	Complication	Number	Percent*
Intrapartum			Intrapartum		
Dystocia† 1st stage	47	6.9	Dystocia 1st stage	28	6.1
Dystocia 2nd stage	24	3.5	Dystocia 2nd stage	13	2.8
DPD	14	2.0	CPD	10	2.2
Meconium stain, only	28	4.1	Meconium stain, only	11	2.4
FHT ↓ (c, s meconium)	16	2.3	FHT ↓ (c, s meconium)	10	2.2
Hypertension	7	1.0	Hypertension	2	0.4
Brow presentation	2	0.3	Brow presentation	1	0.2
Shoulder dystocia	1	0.1	Shoulder dystocia	2	0.4
Polyhydramnios	1	0.1	Polyhydramnios	1	0.2
Oligohydramnios	1	0.1	Oligohydramnios	1	0.2
Precipitous labor	8	1.2	Precipitous labor	0	0.2
Other*	6	0.9	Other*	0	—
Total	155		Total	82	
Postpartum			Postpartum		
Hemorrhage†	5	0.7	Hemorrhage	4	0.9
Excessive bleeding†	19	2.8	Excessive bleeding	12	2.6
Retained placenta	15	2.2	Retained placenta	7	1.5
Endometritis	10	1.5	Endometritis	5	1.1
Depression	3	0.4	Depression	2	0.4
Total	52		Total	30	

*Single cases of amnionitis, placenta previa, abrupto placenta, dehydration, urinary tract infection, 2nd trimester bleeding.

†Percent complication for 685 MDs' patients, 465 midwives' patients. See Table V.

*Single cases of toxemia, prolapsed cord, thrombophlebitis.

labor, fear of completing the delivery at home, falling fetal heart rate, manual removal of placenta and treatment of postpartum hemorrhage. The physician groups used significantly more oxytocin after delivery of the placenta than did the midwives and reported more precipitous deliveries. Complications by midwives' and physicians' groups are shown in Table VI.

There were no maternal deaths.

Perinatal Outcome

Six sets of twins were delivered successfully at home, bringing the total number of births to 1,152.

Fifteen infants, including two sets of twins, weighed less than 2,501 grams at birth (1.3%). Most of them (11) were 2,250 grams and over. Fourteen of the low birthweight infants were born at home. One (1,332 grams) was born in the hospital after second trimester bleeding and remained there for a month. Two of the smaller babies (1,729 and 2,154 grams) were admitted to the hospital with mild respiratory distress syndrome.

As noted earlier, some mothers were medically screened out of the home delivery group because of premature labor. There were 20 such patients. If they are included, the total premature rate becomes 3.0%. (California's premature rate in 1973 for white women 20 to 29 was 5.3%.) All the low birthweight babies survived without other postnatal complications other than those mentioned above.

The average Apgar scores were high—8.9 and 9.7 at one and five minutes—and were usually assessed by a nurse or lay midwife who did not deliver the infant. Though the scores may be in-

TABLE VII

INFANT MORBIDITY

Condition	Number	Rate per 1,000 lb	Delivery	Complications	Outcome
Congenital defects	6	5.2			
PDA			Home	None	Repaired surgically at one year
Coarctation of aorta			Home	None	Repaired surgically at two years
Omphalocele			Home	None	Repaired surgically at 15 hours
Myelomeningocele, thoracic			Home	None	Mental and motor retardation at 18 months
Multiple minor anomalies			Hospital	HHT ↓, c-s	No mental or motor retardation at one year
Down's syndrome			Home	Meconium	Mental retardation
Cerebral palsy	2	1.7	Home	Meconium + + + FHT ↓	Motor retardation
			Home	None	Mild spastic with slow verbal development
Surgical conditions	2	1.7	Home	None	Pyloric stenosis repaired at five and eight days
Low birthweight	15	13.1	Hospital	2nd Tri Bleed	1,332 g, in hospital one month, no problem
			Home	None	1,729 g, in hospital two weeks, mild RDS
			Home	Breech	2,154 g, in hospital 12 days, mild RDS
		Others:	Home	None	No problems

flated, they probably are no more so than in the hospital, where the physician delivering the infant assesses the Apgar. Forty infants (3.5%) born both at home and in the hospital had one-minute Apgar scores of 4 to 6, and seven infants (0.6%) had one-minute Apgars of 3 or less and required resuscitation. (Drage and Berendes[2] found a 21% incidence of one-minute Apgar scores below 7.) Lack of drugs, both prenatally and intrapartum, may be associated with these relatively high scores.

Two other surviving infants were admitted to the hospital during the first three days—one for repair of an omphalocele and one who was the result of an unattended (the only one) delivery with gross meconium staining and fetal distress and who was taken to the hospital within 10 minutes after delivery, where intubation and lavage were *not* performed. This delivery was part of the lay midwife sample. Table VII describes the cases of infant morbidity and their outcome.

Four infants (0.3%) were neurologically abnormal at follow-up: two had cerebral palsy and two were mentally retarded. This finding compares favorably with the 1.7% incidence of neurologically abnormal infants at one year found by the National Institute of Neurological Diseases and Stroke.[10] A fifth was slow, albeit consistent, in developing and did not walk until 18 months.

In addition to those listed in Table VII, there were 21 cases (1.8%) of jaundice requiring phototherapy. Only a few not already in the hospital were admitted, for parents were able to rig up flourescent lights over bassinets at home. Three babies with failure to thrive were switched from breast to bottle feeding, with successful results. The average length of infant follow-up was 11.5 months. Some children are still being followed now at three to five years of age. Over 80% were followed at least six months.

The nine women with previous fetal deaths had no complications.

TABLE VIII

PERINATAL OUTCOME

	Number	Study rate	California rate — 1973
Total births*	1,152		
Live births*	1,147		
Fetal deaths	5	4.3	10.2
Neonatal deaths	6	5.2	10.3
Total perinatal deaths	11	9.5	20.3
Low birthweight (<2,501 g)	15	1.3%	6.4%

*Includes six sets of twins.

Fetal and perinatal death rates are based on 1,000 total births; neonatal death rates, on 1,000 live births.

TABLE IX

CAUSES OF PERINATAL DEATH

Age at death	Number	Delivery	Complications	Cause of death
5 months est. gest. age	1	Home	None	Rh incompatability, insisted on home delivery
35 weeks est. gest. age	2	Home	None	Intrauterine death, unknown cause
During labor	1	Hospital	Amnionitis, IUD in place	Overwhelming intrauterine sepsis
During labor	1	Home	None	Unknown cause
2 days	1	Hospital	None	Macrosomia, single umbilical artery, bilateral adrenal hemorrhage, numerous congenital anomalies
7 days	1	Home	None	Cystic fibrosis, meconium ilius, postoperative perotinitis and sepsis
7 days	1	Home	None	Coarctation of aorta
10 days	1	Home	None	Cor biloculare
2 weeks	1	Home	None	Sudden infant death syndrome
3 weeks	1	Home	None	After surgery for tetralogy of Fallot

Perinatal outcome rates and the causes of fetal and infant deaths are given in Tables VIII and IX. The perinatal mortality rate in this study is significantly lower (95% confidence interval) than the 20.3% rate for the state of California in 1973. The state's fetal death rate in that year for white women 20 to 29 was 8.2 per 1,000 total births as compared to 4.3 in the home birth series. Unfortunately, there is no comparable neonatal death rate available for this specific group.

There was no association in this series between length of first or second stage labor and the incidence of low Apgar scores at birth or other complications. Arrest of descent was weakly associated with somewhat lower Apgar scores, but this was also strongly associated with the use of forceps, and the total number of cases was too small to draw meaningful conclusions. There were 14 cases of prolonged rupture of membranes but no resultant infections in the infants.

The average cost of home deliveries in the physician-directed service was $325 for mother and baby; for the entire study population, $277. This was an all-inclusive rate, covering prenatal care, home visits postpartum and all necessary supplies. The average cost for total care with hospital delivery and three days' hospitalization was $1,450. This latter figure is low, for it does not include the additional fee for cesarean section. (Estimated figures for a normal vertex delivery in California hospitals in 1975 were $1,150 to 1,550.)

DISCUSSION

This is a self-selected healthy group of women, screened for obvious problems and complications occurring during pregnancy, so the data presented here are not directly comparable to state statistics. Still, their outcomes are better than average and the complication rates lower than expected.

Generally, the response of physicians to home delivery has been negative. Many view home birth as an irresponsible risk to mother and child. They do not encourage or attend home deliveries, and many have refused to give prenatal care, advice or instruction to couples planning home birth.

There is a dichotomy in obstetric thinking today. There is the technological trend represented by high-risk obstetric units with fetal monitoring and readily available medical and surgical intervention, and there is the family-centered, natural childbirth trend represented in its extreme by couples planning home delivery without any medical support. Reducing the antagonism between these divergent poles would enhance care for women choosing hospital deliveries as well as for those choosing home deliveries.

More studies of this kind are needed before any conclusions can be drawn. However, evidence from this study population strongly suggests that home delivery is a safe alternative for medically screened, healthy women; they deserve adequate care for the delivery of their choice. This care would include prenatal care by a physician, child birth education and only necessary intervention by attendants. Hospitals should be encouraged to adopt those techniques of home birth that improve pregnancy outcome. These techniques would include perineal massage and gentle head delivery to avoid episiotomies and lacerations, choice of the use of analgesia and anesthesia and provision of a supportive, friendly and comfortable environment for labor and delivery.

Acknowledgment

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Address reprint requests to: Lewis E. Mehl, M.D., Director of Research, Institute for Childbirth and Family Research, 2522 Dana St., Suite 201, Berkeley, California 94704.

3924 E. 8th Ave #2
Anchorage, Alaska 99504
March 7, 1982

Senate and House Health, Education, and Social Services Committee
Pouch V
Juneau, Alaska 99811

Dear Sir:

I would like you to vote in favor of Senate bill #747, regarding the legelization of midwives and the establishment of a midwifery board. Homebirths and having midwives present at births is a part of our heritage. Although this practice had diminished in the recent past, it is on the rise again. I feel it is a beautiful way to bring a child into this world as opposed to being plugged into a machine and being injected with drugs at birth in a hospital.

The federal government recognizes midwives and uses them in Alaska at Elmendorf AFB, the Alaska Native Hospital, and throughout the State. With proper management midwifery can be a useful and rewarding program for our state, as it is for the federal government.

I realize that persons in the medical profession will lobby against this bill but their's are selfish -monetary- interests. Please vote as the common people in Alaska would have you represent them, in favor of midwifery in Alaska.

Sincerely,

Thomas Malone
Thomas Malone

Karen Malone
Karen Malone

cc: Charles Parr
Terry Stimson
Mike Coletta
Vic Fisher
Tim Kelly

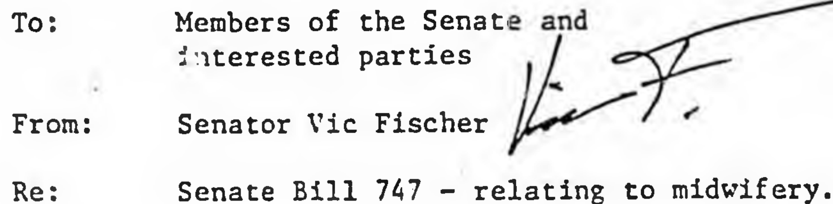
3-16-82
N.O.

Alaska State Legislature

Senator Vic Fischer · Pouch V · Juneau, Alaska 99811 · (907) 465-4954

February 16, 1982

To: Members of the Senate and interested parties



From: Senator Vic Fischer

Re: Senate Bill 747 - relating to midwifery.

SB 747 creates a mechanism for voluntary licensing of "lay midwives through a board of midwifery under the Department of Commerce and Economic Development, Division of Occupational Licensing.

Introduced by request of individual midwives, childbirth educators, and health care providers, this bill is primarily concerned with providing a degree of consumer protection and information not available under current practice.

The traditional and cultural use of midwives and the demand for midwifery service, particularly for out of hospital births, is increasing in Alaska without adequate regulation and licensing. This bill provides a method of regulating midwifery in the public interest to assure that users of midwifery services are aware of the competency levels of their health care providers.

A key element in this bill is the concept of voluntary licensing. Regulatory boards are often accused of creating a "limited entry" in their field by refusing to grant licenses. This legislation creates a board of midwifery to test, regulate and license qualified midwives and makes it unlawful for a person to represent oneself as a licensed midwife or use any designation that implies that a person is licensed or certified by the state to act as a midwife. The bill does not, however, prohibit the practice of midwifery in the state without a license.

The concept is simple: the state has a legitimate interest in assuring that consumers of midwife services have the information available to make an informed choice of health care providers but should not hinder, prevent or interfere with consumers exercise of free choice in childbirth services.

SB 747 establishes experience and education levels for licensing, permits use of certain procedures and drugs by licensed midwives, requires ongoing education and experience, provides for apprenticeship training, and it requires midwives to keep statistical records available to the public. The bill establishes standards of practice and professional conduct and subjects licensed midwives to criminal penalties or suspension for violations of the provisions for licensure.

THE FOLLOWING DOCUMENT(S) MAY NOT FILM LEGIBLY BECAUSE OF POOR QUALITY OF THE ORIGINAL.

American College of Surgeons

FOUNDED BY SURGEONS OF THE UNITED STATES AND CANADA, 1913

COMMITTEE ON TRAUMA

GEORGE H. LONGENBAUGH, M.D., F.A.C.S.
Chairman, Alaska State Committee
Box 377
Sitka, Alaska 99835

March 25, 1982

The Honorable Charles Parr, Chairman
Health, Education and Social Services Committee
State Capitol
Pouch V
Juneau, Ak. 99811

Dear Senator Parr,

I would like to address the Committee regarding Senate Bill 474, an act relating to midwifery.

First of all, I am a graduate of the University of Colorado School of Medicine, with surgical residency in Baltimore. I came to Alaska in 1962 and was Chief of Surgery at Public Health Service Hospital, Mt. Edgecumbe, Alaska. I have been in private practice in Sitka since 1967, as well as consultant Chief of Surgery at the Mt. Edgecumbe Public Health Service Hospital since 1971. I am currently Chief of Staff at the Sitka Community Hospital and Chief of Surgery at Sitka Community Hospital.

During my years in Alaska, although I have not practiced obstetrics, I have, as surgeon in this small community, served as consultant and as the primary physician for most Caesarean sections performed during these years. I have also been active in Emergency Medical Services and served as medical advisor for the Southeast Regional Medical [illegible] during the last several years and currently director of American College of Surgeons, Committee on Trauma, for the State of Alaska.

I believe that Senate Bill #747 is seriously flawed and its basic concept, that of licensing midwives who have not had medical training, encourages a pattern of obstetrical care which is certainly not in the best interest of survival for mother or infant. Delivery of children is certainly a natural process, and we realize that in the vast majority of deliveries is readily accomplished without a great deal of medical intervention. However, there is a significant percentage of mothers-to-be who at some point in their pregnancy have problems either immediately with their delivery or earlier. It is to this group of obstetrical patients that the encouragement of untrained attendants would do the greatest disservice. It seems to me that there are two factors involved in the management of the obstetrical patient that are often critical to the outcome of both mother and child.

1. The experience and training of the attendant.
2. The equipment and facility available to that attendant in the event there may be an unforeseen event.

In my role as consultant to various people practicing obstetrics over the years, it has certainly been apparent to me that the degree of training and experience is directly related to the complications encountered in the course of the delivery. I cannot believe that the attendance by an essentially untrained and minimally experienced person would have a significant influence on the presence of complications.

We here in the Sitka community have had some experience with home delivery, as at one time there was a physician here who promoted home delivery; however, the only neonatal death of a full term infant to occur in this community over the span of many years happened in association with a home delivery performed by a physician.

Again, I think that there is no question that the experience of the operator, including the facility and equipment available to him are factors in preventing various complications and death in the obstetrical practice. I believe that the licensing of minimally or untrained individuals to do deliveries would be a distinct disservice to the patients, as well as the society as a whole.

I appreciate this opportunity to submit this testimony for the consideration of your committee.

Sincerely,

George H. Tongenbaugh, MD

George H. Tongenbaugh, M.D., F.A.C.S.

GHT:ph

My name is Beth Cox and have lived in Sitka for 15 years. I am also President of our Local NAPSAC organization and a member of ICEA.

I urge the passage of SB 747 for one main reason. I believe childbirth is a natural physiological event and should be treated as such. This not always available in todays highly technological medical society.

I believe people should be allowed to have and chose safe alternatives in childbirth.

Midwifery is here to stay. You can outlaw midwifery but, you can't make it disappear.

The homebirth parents don't care if a midwife is a nurse or not. They don't care if she is trained formally or informally. They just want her to be appropriately skilled, experienced and available by whatever means accomplished.

Pass this bill so that quality care will be available no matter where you choose to give birth.

From:
Beth Cox
Box 875
Sitka, AK.
(Page 1 of 1)

Senator Charlie Parr

Hess Committee

Pouch V

Juneau, Alaska 99811

Senator Charlie Parr and all other legislators

Sir:

I am a mother, a mother-to-be and a childbirth educator in the Sitka area. I am in support of SB 747 "An Act Related to Midwifery". I know people in this area would like an alternative to the hospital births available. Many are forced to labor in crowded labor rooms, transfered to the one delivery room and on occasion returned to a room with a mother still in labor. How can one hope to have a good birthing and bonding experience under these conditions?

The medical community should be here to help everyone. When they refuse their services because a couple wants a home birth, they are not fulfilling their obligations.

Right now in Alaska, there is no way for the consumer to judge a midwifes ability. This bill would help do this and the way it does seems fair. Attending 20 births in Sitka would be very hard and considering most of alaska has a population less than this area. it is very limiting. However, if a person meets the standards excepted by the liscencing committee, then I would feel they are able to handle births.

A college education does not improve your value as a midwife. It is the experience and knowledge gained through actual birthing that makes a good midwife. Some people are born with a natural ability and desire to attend births. They may

spend their lives gaining knowledge and skill in this area alone. They would be able to meet the needs of the birthing community along with nurses, CNM and doctors.

I urge you to support SB 747.

Sincerely,

PAGE 1 oF 1

Senator Charlie Parr
H&SS Committee
Pouch V
Juneau, Alaska
99811

Senator Charlie Parr and all other Legislators

Sir:

I am in support of [illegible] 747 "An Act Related to Midwifery".
I feel that pregnancy and childbirth is a natural physiological process and, in as much, a state of wellness rather than disease. For that reason, I feel that safe birthing alternatives such as midwifery within birthing center and home deliveries be offered as options as well as the hospital settings.

I urge you and other legislators to support passage of this bill, so families might exercise their freedom of choice in matters relating to safe, healthy childbirth.

Sincerely,

[signature]

From:
Bill Stokes
Box 1141
Sitka, AK.

For Senate HESS
PAGE 1 of 1

[illegible] 25, 1992

[illegible] Legislative Information Office
[illegible] Street
[illegible], AK 99835

[illegible] Senate Bill 747

[illegible] Sir;

I [illegible] for Senate Bill 747 and would like to see it go through. [illegible] safe alternatives in child birth and the licensing of [illegible] would [illegible] this because the people coming into Alaska [illegible] have a way of judging the performance of our midwives.

Sincerely,

[illegible]
Drusilla Kennedy Palmer
Box 1990
Sitka, AK 99835