

Distributed by Rep. Paul Seaton

Dr. Cannell on vitamin D for the treatment of depression

Posted on January 15, 2015 by John Cannell, MD

Sometimes we miss an important paper. This was the case with Professor Simon Spedding's 2014 meta-analysis of randomized controlled trials (RCT) that used vitamin D to treat depression; Professor Spedding is at the University of South Australia.

Depression is a terrible disease. To a person suffering from depression, sometimes it seems like life is not worth living. It is the leading cause of disability in the U.S. As a psychiatrist, I can tell you that many times conventional antidepressants do not work and patients are left hanging in "partial remission," which means their depression has improved but is still present.

There is a controversy raging within the academic field of psychiatry; some are claiming that certain RCTs used by pharmaceutical companies to get FDA approval of antidepressants were flawed and that antidepressants are no better than placebo when it comes to treating depression.

In his analysis of the effects of vitamin D supplementation on depression, Dr. Spedding excluded RCTs that had "biological flaws." Professor Robert Heaney first described the concept of biological flaws in studies of nutrients. In Dr. Spedding's review, biologically flawed scientific studies included RCTs with one of the following:

- Inappropriate interventions (interventions that did not include vitamin D).

- Interventions producing the opposite effect of that intended (interventions that included Vitamin D, but reduced the 25OHD level in the intervention group).

- Ineffective interventions that did not improve vitamin D status (did not significantly change the 25OHD level).

- Where the baseline 25OHD level was not measured in the majority of participants.

- Where the baseline 25OHD level indicated sufficiency (not deficiency) at baseline.

I'd like to add one more criterion which well-designed RCTs should uphold: the RCT must include subjects with the condition being studied. For example, researchers should not conduct a RCT of vitamin D in non-depressed subjects to see if vitamin D has a treatment effect on depression or overall mood.

Dr. Spedding found that 8 of the 15 extant RCTs had biological flaws. Of the 7 RCTs without flaws, 6 RCTs found that vitamin D significantly improved depression.

Dr. Spedding concluded:

"The effect size for Vitamin D in depression demonstrated in this meta-analysis is comparable with the effect of anti-depressant medication, an accepted treatment for depression. Should

these results be verified by future research, these findings may have important clinical and public health implications.”

I treat a lot of patients with major depression. When I begin treatment, I place them all on 50,000 IU/day of vitamin D3 for two weeks and then place them on a maintenance dose of 10,000 IU/day. I wish I could tell you that vitamin D is a panacea for depression; it is not. It certainly helps some patients but most patients require treatment with conventional medication as well, and even then, some of those do not achieve full remission of their depression.

Source

Spedding S. Vitamin D and depression: a systematic review and meta-analysis comparing studies with and without biological flaws. *Nutrients*. 2014 Apr 11;6(4):1501-18. doi: 10.3390/nu6041501. Review.