**432**

**Systematic review of the effect of vitamin D on women’s mental health during the perinatal period**

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Introduction. The perinatal period is a vulnerable time for depressive disorders with 15-30% of mothers in that time experiencing mood disturbances. Symptoms can be associated with preeclampisia, low birth weight, substance use, risky behaviors and long term adverse effects on the mother and offspring. Investigating a preventive intervention that decreases the number of cases and/or severity of symptoms of mood disturbances is important. Considering that vitamin D deficiency is more prevalent in perinatal women with more than 40% being vitamin D deficient, and that receptors for vitamin D are present not only in bone but also in the brain, recent research has suggested that vitamin D plays a role in addressing these public health issues that affect the local and global population.

Aims. To review the literature to investigate the potential role of vitamin D deficiency on women’s mental health particularly in the perinatal period.

Methods. Peer-reviewed RCTs, cohort, case control and cross-sectional studies in English from 2005 onwards were accessed using the AMED, CINAHL, IPA, Maternal and infant care, EBM ALL, Embase, Global health, MEDLINE, PsycINFO and PubMed databases. A comprehensive search strategy was undertaken using variations of following keywords: vitamin D; mental disorders; perinatal depression and women. Studies were included if the sample consisted of at least 50% women; subjects were over 18 years old; serum 25(OH)D was measured; a tool was used to assess symptoms of mood and a quantitative analysis between vitamin D and depression scores was conducted. Authors met on multiple occasions to reach consensus on eligibility of potentially relevant articles found.

Results. The review identified 34 articles matching inclusion criteria; 3 controlled trails, 12 cohort studies, 7 case controls and 12 cross sectional studies. A negative correlation between serum vitamin D levels and depression score was seen in 24 studies with the remaining producing inconclusive results based on vitamin D status and gender.

Discussion. Given that our analysis showed a consensus among studies linking vitamin D deficiency and depression, and that those that failed to produce a result included a majority of males or vitamin D sufficient subjects, further research in the form of studies on vitamin D deficient perinatal women that seek to correct vitamin D levels through supplementation are needed to determine if this relationship is causal. This has the potential to help revise guidelines and change practice in terms of prevention and clinical management of perinatal depression.


**433**

**Community pharmacist practices, attitudes, recommendations, information and education needs for herbal and nutrient complementary medicines for weight loss**

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Introduction. Over half the Australian population use some form of alternative or complementary medicine, spending more than $2 billion dollars annually. Herbal/nutrient complementary medicines for weight loss (WLCM) are popular among consumers, with pharmacies being a major retail outlet for these products. To date, there are no Australian studies exploring community pharmacists’ attitudes and practices regarding WLCMs sold in pharmacies.

Aims. To investigate pharmacists’ WLCM practices in the context of other pharmacist weight-management support practices (provision of lifestyle advice, orlistat and meal-replacement treatments); and gain insight into community pharmacist attitudes, recommendations, information and education needs.

Methods. Pharmacists were randomly selected from a sample of 214 community pharmacies located within different socioeconomic areas in the Greater Brisbane region, Australia. Pharmacists completed a survey exploring their weight-management practices, with a specific focus on WLCM practices. Items within the questionnaire were adapted from previously published surveys or developed by the authors. Data collected from the sample group represented pharmacist practices within the Greater Brisbane metropolitan region.

Results. The response rate was 51%. During weight-management consultations, a relatively high proportion of consumers (37%) sought pharmacist advice relating to WLCM compared to other weight-management practices. Only 10% of pharmacists however recommended them. The resources that most pharmacists reported using provide insufficient WLCM information and may not be evidence-based. The majority of community pharmacists (85%) were interested in further education about WLCMs.

Discussion. Results from this study highlight the need for pharmacy professional bodies to develop education programmes for pharmacists that are evidence-based to assist consumers with popular and widely available WLCM products.