Effective Public Health Practice Project Summary Statement

December 2005

This is a summary statement written to condense the work of the authors of a systematic review. The reference for the full review is below. The intent of this summary is to provide an overview of the findings and implications of the full review. For more information on individual studies included in the review, please see the review itself.

Reference for Review in APA: Dennis, C-L., & Creedy, D. (2004). **Psychosocial and psychological interventions for preventing postpartum depression.** The Cochrane Database of Systematic Reviews, Issue 4. Art. No.: CD001134.pub2. DOI:10.1002/14651858.CD001134.pub2.

Issue: Postpartum depression is non-psychotic depression beginning shortly after birth, usually within the first four weeks postpartum, although it can develop at any time during the first year. Symptoms are similar to those of general depression. Postpartum depression is formally diagnosed using DSM-IV criteria. Estimates of prevalence vary widely; a meta-analysis of community studies estimates the prevalence of postpartum depression to be 13% in the first 6 weeks after birth (O'Hara and Swain, 1996). The condition is serious not only because it is disabling to the affected women, but also because it can disrupt maternal-child interactions. Postpartum depression has been linked to long-term sequelae such as attachment disorder, delays in cognitive, language and social skills, and behavioural problems (Ross, Dennis, Blackmore and Stewart, 2005; RNAO, 2005).

Review Content Summary: This is a systematic review and meta-analysis of randomized controlled trials of non-pharmaceutical interventions (psychosocial or psychological interventions) in the prenatal or postnatal period to reduce the risk of postpartum depression. Interventions included psychoeducational strategies, cognitive behavioural therapy, interpersonal psychotherapy, non-directive counselling, psychological debriefing, various supportive interactions and tangible assistance, delivered by telephone, home or clinic visits, in individual or group sessions. Studies were included whether they targeted high risk women or women from the general population. Eligible studies had to consider postpartum depression as an outcome, although other maternal and infant outcomes were discussed if included in the studies. The review identified 15 trials, published between 1995 and 2003, that included 7697 women. Overall, no beneficial effect on the prevention of postpartum depression was found for the interventions studied.

Comments on this review's methodology: The search was comprehensive, and used the strategy defined for the Cochrane Pregnancy and Childbirth Group. Secondary references were scanned and experts in the field were contacted to identify unpublished trials. Two reviewers independently assessed the trials on seven eligibility criteria, assessed study quality and extracted data using a standard form. Appropriate meta-analytic techniques were used, and sensitivity analyses were performed by excluding studies most susceptible to bias. In addition to pooling results from the entire set of studies, six *a priori* subgroup analyses were performed. For the primary outcome, there was significant heterogeneity in the analysis of all studies, the high-quality subgroup and for many of the subgroup analyses based on outcome measure or intervention type.

Evidence points *ARE NOT* weighted or ranked according to strength.

What's the evidence?	Implications for practice and policy:
Meta-analysis of data from 15 randomized trials found no evidence of a significant overall effect of psychological and psychosocial interventions for preventing postpartum depression (p=0.08).	
The only intervention found to be effective in reducing the risk of postpartum depression was home visit by a health professional. Evidence was provided by 2 studies, one rated fair and one rated good in a separate review by the primary author (Dennis, 2004).	See below.
Interventions found to be effective were confined to the postpartum period. Ten trials contributed to this finding. Nine studies were rated in a separate review (Dennis, 2004), of which five were rated good, three fair and one poor.	See below.
Interventions targeting high risk women were found to be beneficial, while there was no evidence that the general population of new mothers benefits from intervention. The finding was based on seven trials, five of which were rated as fair and one as poor in a separate review (Dennis, 2004).	The identification of women "at risk" for postpartum depression remains problematic. At present, there are no screening tools with adequate sensitivity, specificity, predictive values or likelihood ratios. More research is needed to elucidate causes and develop good screening tools. In the meantime, there is some evidence that programs should

	target women who exhibit known risk factors, and should consist of home visiting by health professionals in the postpartum period.
Interventions successful at reducing the risk of postpartum depression may also improve infant immunization status and reduce the risk of injury. This finding is based on one study assessed as fair.	The need for intervention can be justified by improved maternal outcomes. Whether infant outcomes are improved requires further study.

General Implications: This review presents evidence that postpartum depression can best be addressed by providing home visits by health professionals to high risk women in the postpartum period. There is no evidence to suggest that approaches targeting the general population of women are effective, nor that interventions in the antenatal period provide any benefit. Individually based interventions (outside of home visits) and group-based interventions have not been found to be effective, and the duration of the intervention has not been shown to influence outcomes.

These findings can be contrasted with those of a similar review of randomized trials by Lumley, Austin and Mitchell (2004). The latter found that postnatal counselling of women with depression or probable depression by professionals with special training was successful in reducing symptoms. Studies targeting "at risk" women in the postnatal period had mixed results, but pooled results were not significant. Antenatal interventions and postnatal interventions targeting the general population were not found to be effective. This review included quasi-randomized as well as randomized trials, and was therefore subject to bias.

A good tool to screen for women at risk for postpartum depression is greatly needed to assist in the development of programs for prevention.

It is surprising that improved infant outcomes have not been demonstrated in trials with positive maternal outcomes, given that the infants of depressed mothers have been shown to be at risk for multiple adverse effects.

Cost Benefit or Cost-Effectiveness Information: Not included in review.

References Used to Outline Issue:

Dennis, C-L.E. (2004). Preventing postpartum depression part II: a critical review of nonbiologic interventions. *Can J Psychiatry, 49,* 526-538.

O'Hara, M.W. & Swain, A.M. (1996). Rates and risk of postpartum depression—a meta-analysis. *Int. Rev. Psychiatry 8,* 37-54.

Registered Nurses' Association of Ontario (RNAO) (2005). *Interventions for postpartum depression.* Toronto, Canada: Registered Nurses' Association of Ontario.

Ross, L.E., Dennis, C-L., Blackmore, E.R. & Stewart, D.E. (2005). *Postpartum Depression: a guide for front-line health and social service providers.* Centre for Addiction and Mental Health.

Other References on this Topic:

Lumley, J., Austin, M-P, & Mitchell, C. Intervening to reduce depression after birth: a systematic review of the randomized trials. *Int. J. of Technology Assessment in Health Care 2*, 128-144.

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