The effectiveness of antenatal interventions to prevent postnatal depression in high-risk women

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CRD summary
The review concluded that antenatal interventions can be effective in preventing postnatal depression but interventions may be better conceptualised as treatment rather than prevention as they were delivered to women who were experiencing antenatal depression. The author’s conclusions reflect the evidence presented but potential for bias in the review makes the reliability of the conclusions uncertain.

Authors’ objectives
To evaluate the effectiveness of antenatal interventions designed to prevent postnatal depression in high-risk women.

Searching
MEDLINE, PsycINFO, Maternity and Infant Care, BNI, EBM Reviews and CINAHL were searched to October 2010 for articles in English. Search terms were reported. References of retrieved studies were scanned.

Study selection
Randomised controlled trials (RCTs) of interventions to reduce postnatal depression delivered to high-risk women during pregnancy were eligible for inclusion. Studies that focused on pharmaceutical interventions only were excluded.

Interventions in the included studies included psychoeducational or psychological sessions, psychotherapy, cognitive-behavioural therapy and interpersonal therapy. Most of the intervention formats were group based. Number and duration of sessions varied between studies (details reported). Most control groups used standard antenatal care as a comparison. One study used a matched group that received the same length contact time but on a different topic. Participants’ level of depression symptoms ranged from none or low to moderate to severe. Depression was measured the Edinburgh Postnatal Depression scale or Beck Depression Inventory (BDI). Some studies also conducted diagnostic interviews. Participants were recruited from antenatal clinics. There was large variation across the studies in the degree of depression symptoms women recruited to the study were experiencing; these ranged from no/low depression (mean BDI=9) to moderate to severe levels of depression (mean BDI=25). Mean age ranged from 19 to 31 years.

It appeared that only one reviewer selected studies for inclusion.

Assessment of study quality
The author did not state whether study quality was assessed.

Data extraction
Data on incidence of postnatal depression were extracted.

It appeared that only one reviewer extracted data.

Methods of synthesis
Data from individual studies were combined in a narrative synthesis.

Results of the review
Eleven RCTs (1,571 participants) were included in the review. Sample sizes ranged from 27 to 377. Final follow-up ranged from one to six months after delivery. Diagnostic interviews to confirm postnatal depression were conducted in seven studies. Only two studies reported that the interviewer was blind to the treatment group. Six studies reported use of intention-to-treat analysis but the methods and reporting were often inadequate and only three studies reported a sample size calculation.

Six trials reported on interventions that were significantly more effective in reducing the incidence and/or symptoms of
postnatal depression than a control group.

Greater effectiveness was reported for interventions delivered to women with moderate to severe depression (two studies) than interventions delivered to participants with no or low levels of depression (three trials).

Five out of seven trials reported that psychological treatments were effective. One out of four educational interventions were reported to be effective. Most of the effective interventions included a major component addressing interpersonal relationships.

Authors' conclusions
There was evidence to suggest that interventions delivered in pregnancy can be effective in preventing postnatal depression. However, these interventions may be better conceptualised as treatment than prevention as they were delivered to women who were experiencing antenatal depression.

CRD commentary
The review question and inclusion criteria were reported clearly. Several relevant sources were searched. The restriction of the review to studies in English risked language bias. No efforts were made to locate unpublished studies so there was potential for publication bias. Study quality was not formally assessed but some aspects of quality were discussed. It appeared that only one author selected studies and extracted data so there was potential for reviewer error and bias.

A narrative synthesis was appropriate given the small number and variable nature of the included studies. Results for individual studies were reported without supporting data or levels of statistical significance and this made it impossible to verify the findings reported in the review.

The author’s conclusions reflected the evidence presented but potential for bias in the review process means the reliability of the conclusions are uncertain.

Implications of the review for practice and research
Practice: The authors stated a need to identify pregnant women who were experiencing depression and deliver evidence-based psychological interventions. Not all women who developed postnatal depression would have experienced depression during the antenatal period so postnatal screening and treatment of depression was of paramount importance.

Research: The authors did not state any implications for research.

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Record Status
This is a critical abstract of a systematic review that meets the criteria for inclusion on DARE. Each critical abstract contains a brief summary of the review methods, results and conclusions followed by a detailed critical assessment on the reliability of the review and the conclusions drawn.