



# Cochrane Review Summary: psychosocial and psychological interventions for preventing *postpartum* depression

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## Review question

1. To assess the effectiveness of specific psychosocial and psychological interventions in reducing the risk of *postpartum* depression in mothers and their families.
2. To examine the influence of variations in intervention types, providers, modes, duration, onset and high risk women

## Relevance to primary care and nursing

Primary care teams, including nurses, midwives, health visitors and general practitioners are involved in identifying and managing depression during antenatal and *postpartum* care. The National Institute for Health and Care Excellence (NICE) has issued a guidance report for health care professionals on routine postnatal care, which includes depression (NICE, 2006). It is important to identify effective intervention for *postpartum* care.

## Characteristics of the evidence

This Cochrane review contained 28 randomised controlled trials, which included 16 912 pregnant women and new mothers (less than six weeks *postpartum*) at no known risk or at risk of developing *postpartum* depression (Dennis and

Dowswell, 2013). They were conducted in Australia (12), United Kingdom (seven), United States (four), China (two), and Canada, Germany and India (three), respectively. Interventions needed to be non-pharmacological, aiming to reduce the risk of developing *postpartum* depression, compared with any form of standard or usual care. They included psycho-educational strategies, cognitive behavioural therapy (CBT), interpersonal psychotherapy, non-directive counselling, psychological debriefing and various supportive interactions. They were delivered by professionals (eg nurse, physician, psychiatrist, psychologist) or trained volunteers via telephone sessions, home or clinic visits, or individual or group sessions given antenatally and/or up to four weeks *postpartum*. The type, intensity and duration of interventions varied considerably.

## Summary of key evidence

Most trials were of good quality (low risk of bias). Outcomes were defined in various ways and were analysed at final assessment and at four time points across the *postpartum* period: immediate (zero to eight weeks); short term (9 to 16 weeks); intermediate (17 to 24 weeks); long term (more than 24 weeks).

Primary outcomes were depressive symptomology, clinical diagnosis of depression (dichotomous) and mean depression scores. Secondary outcomes included various maternal, infant and family outcomes. Data were combined in a meta-analysis.

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### Psychosocial and psychological interventions

There was a significant beneficial effect (22%) on depressive symptomatology (20 trials,  $n = 14\ 727$ ) that was sustained in the immediate, short-term and long-term period. There was a significant overall preventative effect (50%; five trials,  $n = 939$ ) and a short-term effect on clinical diagnosis of depression, with a small effect on mean scores. There was no evidence of benefit on mortality, maternal–infant measure, Parental Stress Index, maternal perceptions of support or social support, although mean anxiety scores reduced significantly (four trials,  $n = 815$ ). Stress levels improved (one trial,  $n = 103$ ) but not in the long term. Satisfaction with care improved significantly (four trials,  $n = 3014$ ), although the mean effect was not significant. There was no evidence of long-term effect on infants not fully immunised, infant development or child abuse, although the latter reported a beneficial effect in the immediate *postpartum* period (one trial,  $n = 176$ ). There was no significant effect on marital discord scores.

### Psychosocial interventions

There was an overall beneficial effect (17%) on depressive symptomatology (12 trials,  $n = 11\ 322$ ), which remained from short term to longer term (40%; three trials,  $n = 1385$ ), a significant effect on clinical depression (48%; three trials,  $n = 867$ ) and no significant effect on mean scores.

### Psychological interventions

There was a significant reduction (39%) in depressive symptomatology (eight trials,  $n = 3405$ ) and a short-term effect, with no significant effect on clinical depression or means.

### Sub-group analysis

#### *Variations in interventions*

For psychosocial interventions, professional-based home visits showed benefit (44%; two trials,  $n = 1262$ ) as did *postpartum* lay-based telephone support (46%; one trial,  $n = 612$ ). Antenatal and postnatal classes, *postpartum* lay-based home visits, early *postpartum* follow-up or continuity/model of care showed no significant effect. Interpersonal psychotherapy reported a protective effect on mean scores (five trials,

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$n = 366$ ) but psychological debriefing and CBT showed no overall effect. Professionally based provider interventions showed a reduction (22%) in depressive symptomatology (15 trials,  $n = 6790$ ) with no significant effect on clinical depression or means. Lay-based interventions showed a significant protective effect (30%) for depressive symptomatology (four trials,  $n = 1723$ ), a short-term effect (48%) in clinical depression (two trials,  $n = 677$ ) and no significant mean effect.

#### *Professionally based provider*

There was no significant effect on depressive symptomatology or mean scores for interventions provided by nurses, physicians, midwives or mental health professional.

#### *Intervention mode*

Individually based interventions showed a significant reduction (25%) in depressive symptomatology (14 trials,  $n = 12\ 914$ ), a significant reduction (47%) in clinical depression (three trials,  $n = 714$ ) and no significant mean effect. Group-based interventions showed no significant effect on depressive symptomatology, clinical depression or mean scores.

#### *Intervention duration*

Single-contact interventions showed no significant effect on depressive symptomatology or mean scores. Multiple-contacts showed a significant reduction (22%) in depressive symptomatology (16 trials,  $n = 11\ 850$ ), clinical depression (52%; five trials,  $n = 939$ ) and a small mean effect.

#### *Intervention onset*

Antenatal-only intervention showed no mean effect; antenatal followed by postnatal interventions showed no significant effect on depressive symptomatology or means scores, and a significant reduction (56%) in clinical depression (three trials,  $n = 292$ ), although two trials were of poor methodological quality. Postnatal-only interventions showed a significant protective effect (27%) on depressive symptomatology (12 trials,  $n = 12\ 786$ ), with no significant effects on other outcomes.

#### *Interventions for at-risk women*

There was a significant reduction (34%) in depressive symptomatology (eight trials,  $n = 1853$ ), mean scores (seven trials,  $n = 1087$ ) and clinical

depression (52%; five trials,  $n = 939$ ), although removing three poor quality trials showed a non-significant effect. Women from the general population showed no significant effect.

### Implications for practice

There is good evidence to consider recommendations for intensive, professionally based *postpartum* home visits, telephone-based peer support and interpersonal psychotherapy. There is not enough evidence to recommend antenatal and postnatal classes, early *postpartum* follow-up care, lay-based interventions at home, CBT, psychological debriefing or continuity of care models. Targeting at risk mothers may be more beneficial than all women.

### Implications for research

Research needs to examine the components of psychosocial interventions that reduce *postpartum* depression and the use of a screening tool for early detection and flexible, individualised postnatal care. Further evaluations include a peer-led telephone-based support among new mothers with early depression, individually tailored and lay-based interventions, delivery modes and providers of interpersonal psychotherapy, targeting

vulnerable groups and partners of mothers and economic evaluations.

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### Conflicts of Interest

None.

### Ethical Standards

Not applicable. This is a summary based on secondary research and is not dealing with animals

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