

## *Treatment of postpartum depression*

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## Treatment of Postpartum Depression

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### **Topic**

*Maternal depression*

### **Introduction**

Maternal postnatal depression (PND) is common with a prevalence in the developed world of around 13%<sup>1</sup> and a far higher prevalence in some developing world contexts.<sup>2,3,4</sup> There is a considerable body of evidence attesting to the fact that PND limits a mother's capacity to engage positively with her infant, with several studies showing that PND compromises child cognitive, behavioural and emotional development.<sup>5</sup> It has proved difficult to predict PND antenatally<sup>6</sup> and, in any event, preventive interventions have largely proved ineffective.<sup>7</sup> Research and clinical attention has, therefore, been focused on the treatment of manifest PND.

### **Subject**

PND is now recognized, by virtue of the distress caused to mothers, as well as the wider adverse impact on the family, as a significant public health issue. There has, therefore, in recent years, been considerable interest in the development and evaluations of treatments for PND, and there have been several randomized controlled trials. A careful evaluation of the findings of this body of research is important to the provision of services to mothers with PND and their children, as well as to the elucidation of causal processes.

### **Problems**

Most studies of the treatment of PND have been concerned with its impact on maternal mood. Correspondingly, few studies have examined the impact of treatment on the quality of the mother-child relationship and the associated risks to child development. There are, therefore, problems in evaluating the clinical significance of the research findings beyond the narrow concern of maternal mood.

### **Research Context**

There are several well conducted naturalistic studies of the impact of PND on the mother-child relationship, and the architecture of parenting disturbances in this context is now well understood; similarly, the evidence on the consequences of PND for child development is detailed and robust.<sup>5</sup> There have also been several randomized controlled

trials of the impact of treatment on PND.<sup>7,8</sup> However, the treatment trials have almost all had limited follow up and have principally been concerned with the impact on maternal mood rather than on the quality of the mother-child relationship and child development outcome.

### Key Research Questions

1. Does the provision of specific treatment for PND produce a better outcome in terms of improvement in maternal mood than no treatment or ‘treatment as usual’?
2. Are certain forms of treatment of PND better than others at improving maternal mood?
3. Do treatments of PND improve the quality of the mother-child relationship?
4. Do treatments of PND benefit child developmental progress (and, if so, is this by virtue of their impact on the mother-child relationship)?

### Recent Research Results

The bulk of the research on treatment has concerned the efficacy of *psychotherapeutic interventions*. A review of several randomized control trials<sup>9</sup> concluded that both specific psychological treatments and more generic psychosocial interventions were moderately effective at improving maternal mood, and they were similarly beneficial. A recent meta-analysis of psychotherapeutic interventions for PND (including cognitive behavioural therapy (CBT), social support, interpersonal therapy, non-directive counselling, and psychoanalytic therapy) similarly concluded that these forms of treatment are moderately effective.<sup>8</sup> Both reviews highlighted the short-term nature of most trials and their brief follow-ups.

Limited data are available on the role of *pharmacological intervention*. An early UK study<sup>10</sup> found similar benefit from Selective serotonin reuptake inhibitors – SSRI (fluoxetine), counselling, or the drug plus counselling. Notably, more than half the women approached for this study declined to participate, primarily because of reluctance to take medication. A small Canadian study of the treatment of PND with comorbid anxiety<sup>11</sup> found similar levels of improvement for another SSRI (paroxetine) alone, and for the drug plus CBT. There is a need to further evaluate the role of antidepressant medication in the treatment of PND,<sup>12</sup> especially when the disorder has become chronic. The possibility of drug transmission to the infant via breastfeeding is a source of concern.<sup>13</sup>

A critical question regarding the treatment of PND concerns the extent to which treatment effects are reflected in *improvements in mother-infant relationships and infant developmental outcomes*. Few studies have specifically addressed this issue.<sup>14,15</sup> A large scale randomized control trial (RCT) comparing CBT, counselling and psychoanalytic therapy with routine care found that, while all active treatments were moderately effective in treating depression and brought about short term benefits in the quality of the mother-infant relationship, there was limited evidence of benefit to infant outcome; and effects (including those on maternal mood) were not apparent at follow-up.<sup>16,17</sup> Similarly, a recent RCT found that, although interpersonal psychotherapy was effective in treating maternal depression, there was no benefit in terms of observed mother-infant interactions, infant negative emotionality, and infant attachment security.<sup>18</sup>

A related approach has been to focus more directly on *improving parenting*. For example, Cicchetti et al.<sup>19,20</sup> examined the impact of providing a prolonged psychotherapy (average 57 weeks) to depressed mothers which focused on promoting positive maternal attachment representations and mother-infant interactions. They found a benefit for child attachment and cognitive development. There have also been studies of briefer interventions in the postpartum period, focusing on improving mother-infant interactions; and beneficial effects have been reported for interactive coaching<sup>21</sup> and infant massage.<sup>22,23</sup> Further, relationship facilitation, based on maternal administrations of a neonatal assessment (the Neonatal Behavioral Assessment Scale – NBAS), produced improved infant communication and state organization at one month.<sup>24</sup> A longer-term intervention delivered as part of a large RCT in a South African peri-urban settlement, where community workers made home visits designed to improve maternal sensitivity, not only effected significant improvements in parenting but, at follow up, increased the rate of secure infant attachment.<sup>25</sup> Recently a home-based intervention for depressed mothers using video feedback<sup>26</sup> was found to have positive effects both for the quality of the mother-infant relationship and infant attachment. While these findings are encouraging, the extent to which improvements in the quality of the mother-child relationship lead to better long-term child outcomes remains to be demonstrated.

### Research Gaps

Although several forms of intervention have proved beneficial for mothers with PND, none has been shown to have enduring effects on maternal mood, and there is limited evidence that any intervention improves the long-term course of child development. It remains to be demonstrated which particular form of treatment is optimal, although on current evidence, targeting parenting appears to be the most promising strategy. Furthermore, although there are separable forms of parenting disturbance in the context of PND that are in turn associated with particular forms of adverse child outcome, it has yet to be empirically addressed whether particular features of the mother-infant relationship can usefully be addressed in interventions to improve particular child outcomes. In addition, although child outcomes are especially compromised in the context of chronic PND, no study to date has targeted this group of mothers to establish whether an intervention can improve maternal mood and benefit child outcome.

### Conclusions

A number of treatments have been shown to be effective in helping mothers with PND recover from their mood disorder, though none has yet to be shown to be superior to any other, and there is no evidence for long-term benefits to maternal mood. Some success has been achieved in improving the quality of mother-infant interactions by targeting parenting difficulties, though studies have tended to be short-term with brief follow up. While the longer term effects of these parenting interventions are not known, evidence is emerging that some may at least prevent poor short-term child outcomes associated with PND. Since adverse child outcomes associated with PND are more likely to occur in the context of chronic or recurrent depression, it is particularly important that this group be identified and targeted for intervention.

### Implications for Parents, Services and Policy

Given the high prevalence of PND and its adverse impact on the mother-child relationship and child development, it is important that community services are in place for the early detection and treatment of PND. It is crucial that attention be given in treatment to the quality of the mother-child relationship and that specific therapeutic measures be introduced to help mothers engage optimally with their infants. In high-risk contexts, where depression is more likely to be prolonged or recurrent, it is important that long-term monitoring takes place so that support can be provided responsively and on an ongoing basis.

### REFERENCES

1. O'Hara M, Swain A. Rates and risk of postpartum depression: a meta-analysis. *International Review of Psychiatry* 1996;8(1):37-54.
2. Cooper PJ, Tomlinson M, Swartz L, Woolgar M, Murray L, Molteno C. Postpartum depression and the mother-infant relationship in a South African peri-urban settlement. *British Journal of Psychiatry* 1999;175:554-558.
3. Patel V, Rodrigues M, DeSouza N. Gender, Poverty, and Postnatal Depression: A Study of Mothers in Goa, India. *American Journal of Psychiatry* 2002;159(1):43-47.
4. Rahman A, Iqbal Z, Harrington R. Life events, social support and depression in childbirth: perspectives from a rural community in the developing world. *Psychological Medicine* 2003;33(7):1161-1167.
5. Murray L, Halligan SL, Cooper PJ. Effects of postnatal depression on mother-infant interactions, and child development. In: Wachs T, Bremner G, eds. *Handbook of Infant Development*. Malden, MA: Wiley-Blackwell. In press.
6. Cooper PJ, Murray L, Hooper R, West A. The development and validation of a predictive index for postpartum depression. *Psychological Medicine* 1996;26(3):627-634.
7. Dennis CL, Creedy D. Psychosocial and psychological interventions for preventing postpartum depression. *Cochrane Database of Systematic Reviews* 2009;4:1-72
8. Cuijpers P, Brannmark JG, van Straten A. Psychological treatment of postpartum depression: a meta-analysis. *Journal of Clinical Psychology* 2008;64(1):103-118.
9. Dennis CL, Hodnett E. Psychosocial and psychological interventions for treating postpartum depression. *Cochrane Database of Systematic Reviews* 2007;4:1-49.
10. Appleby L, Warner R, Whitton A, Faragher B. A controlled study of fluoxetine and cognitive-behavioural counselling in the treatment of postnatal depression. *British Medical Journal* 1997;314(7085):932-936
11. Misri S, Reebye P, Corral M, Milis L. The use of paroxetine and cognitive-behavioral therapy in postpartum depression and anxiety: a randomized controlled trial. *Journal of Clinical Psychiatry* 2004;65(9):1236-1241.
12. Hoffbrand S, Howard L, Crawley H. Antidepressant drug treatment for postnatal depression. *Cochrane Database of Systematic Reviews* 2001;2:1-15.

13. Berle JO, SteenVM, AamoTO, Breilid H, Zahlsen K, Spigset O. Breastfeeding During Maternal Antidepressant Treatment With Serotonin Reuptake Inhibitors: Infant Exposure, Clinical Symptoms, and Cytochrome P450 Genotypes. *Journal of Clinical Psychiatry* 2004;65(9):1288-1234.
14. Poobalan AS, Aucott LS, Ross L, Smith WCS, Helms PJ, Williams JHG. Effects of treating postnatal depression on mother-infant interaction and child development: Systematic review. *British Journal of Psychiatry* 191(4):378-386.
15. Nylen KJ, Moran TE, Franklin CL, O'Hara MW. Maternal depression: A review of relevant treatment approaches for mothers and infants. *Infant Mental Health Journal* 2006;27(4):327-343.
16. Cooper PJ, Murray L, Wilson A, Romaniuk H. Controlled trial of the short- and long-term effect of psychological treatment of post-partum depression. I. Impact on maternal mood. *British Journal of Psychiatry* 2003;182(5):412-419.
17. Murray L, Cooper PJ, Wilson A, Romaniuk H. Controlled trial of the short- and long-term effect of psychological treatment of post-partum depression, 2. Impact on the mother-child relationship and child outcome. *British Journal of Psychiatry* 2003;182(5):420-427.
18. Forman DR, O'Hara MW, Stuart S, Gorman LL, Larsen KE, Coy KC. Effective treatment for postpartum depression is not sufficient to improve the developing mother-child relationship. *Development and Psychopathology* 2007;19(2):585-602.
19. Cicchetti D, Toth SL, Rogosch FA. The efficacy of toddler-parent psychotherapy to increase attachment security in offspring of depressed mothers. *Attachment & Human Development* 1999;1(1):34-66.
20. Cicchetti D, Rogosch FA, Toth SL. The efficacy of toddler-parent psychotherapy for fostering cognitive development in offspring of depressed mothers. *Journal of Abnormal Child Psychology* 2000;28(2):135-148.
21. Horowitz JA, Bell M, Trybulski J, Munro BH, Moser D, Hartz SA, McCordic L, Sokol ES. Promoting responsiveness between mothers with depressive symptoms and their infants. *Journal of Nursing Scholarship* 2001;33(4):323-329.
22. GloverV, Onozawa K, Hodgkinson A. Benefits of infant massage for mothers with postnatal depression. *Seminars in Neonatology* 2002;7(6):495-500.
23. Onozawa K, GloverV, Adams D, Modi N, Kumar RC. Infant massage improves mother-infant interaction for mothers with postnatal depression. *Journal of Affective Disorders* 2001;63(1-3):201-207.
24. Hart S, Field T, Nearing G. Depressed mothers' neonates improve following the MABI and a Brazelton demonstration. *Journal of Pediatric Psychology* 1998;23(6):351-356.
25. Cooper PJ, Tomlinson M, Swartz L, Landman M, Molteno C, Stein A, McPherson K, Murray L Improving quality of mother-infant relationship and infant attachment in socioeconomically deprived community in South Africa: randomised controlled trial. *British Medical Journal* 2009;338(7701):b974.
26. van Doesum KTM, Riksen-Waraven JM., Hosman CMH, Hoefnagels C. A randomized controlled trial of a home-visiting intervention aimed at preventing relationship problems in depressed mothers and their infants. *Child Development* 2008;79(3):547-561.

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