

Maternal postnatal depression is a distressing condition affecting 10-20% of women in the first few months of a child's life, with a strong association with economic hardship, lack of support and previous episodes of depression. It is associated with long-term negative effects on the child's cognitive, social and emotional wellbeing because of the singular sensitivity of the infant's brain to experiences of interaction.

In terms of interventions for postnatal depression, Cooper *et al*¹ showed that, in a randomised controlled trial, non-directive counselling, brief psychodynamic psychotherapy and cognitive behaviour therapy were all equally effective in alleviating mothers' depression when compared with treatment as usual by health visitors in the community. However, few positive effects on mother-child interaction were seen and no differences persisted by the time the children were five years old².

The Mellow Babies intervention was designed to develop close attunement between the mother and the child using a combination of baby-massage, interaction coaching and infant focussed speech. As well as the explicit parent-child interaction skills, the programme offers mothers support for their own mental health difficulties. The programme is delivered as a group day-programme over fourteen weeks, in which mothers and children attend from 10-3pm one day a week. Fathers are invited to three evening sessions which include psycho-educational material on post-natal depression, and activities to promote father-baby interaction.

1 Cooper, P *et al* (2003) Controlled trial of the short- and long-term effect of psychological treatment of post-partum depression: 1. impact on maternal mood, *BJPsych*, 182, 412-419.

2 Murray, L *et al* (2003) (as above) 2. Impact on the mother-child relationship and child outcome, *BJPsych*, 182, 420-427.

A waiting-list-controlled evaluation of the Mellow Babies intervention was designed. The objectives were to measure change in maternal depressive symptoms and the quality of interaction between mothers and babies.

The research was designed as a randomised waiting-list controlled trial with before and after measures. Mothers in Coatbridge who scored above the clinical threshold of the Edinburgh Postnatal Depression Scale (EPDS) at 12-16 weeks were invited (by their health visitors) to participate in the trial and those who agreed were randomised to immediate intervention or waiting list control groups. Mothers who were floridly psychotic, or who were uncontrolled drug users were excluded as it was considered that they were unlikely to be able to participate in the group.

Measures taken were of the mother's mood (EPDS) and of mother-child interaction, filmed before and after the group or waiting list period and coded independently by coders blind to group status. Tapes were coded according to the Mellow Parenting observation system and the Care Index³ which is predictive of later attachment.

The intention was to recruit 24 mothers (12 in each group). However, engagement was poorer than expected and ultimately:

- 11 mothers completed a group
- 1 mother dropped out of treatment and refused to be followed up
- 6 mothers completed a waiting list period
- 2 mothers from the waiting list could not be followed up.

Average attendance at group sessions was 83%.

3 Crittenden, P (1981) Abusing, neglecting, problematic and adequate dyads: differentiating by patterns of interaction, *Merril Palmer Quarterly*, 27, 1-18.

Health visitors were responsible for initial screening and referrals to the groups and reported using the referral protocol. In view of the low rate of referrals, a series of structured interviews were carried out with 12 health visitors. Those interviewed generally felt they had followed the protocol and any mother scoring over 10 on the EPDS was asked if she would like to attend the group. According to the health visitors, reasons given by mothers who did not want to join the study included reluctance to join a group, fear of what might come out in the group and being recorded on video-tape.

Health visitors' views of the programme and its effects on the mothers they had referred, their babies and the interaction between mothers and babies were uniformly positive.

In the final session, participants were asked to give their views of the group (anonymously) in a self-completion questionnaire. Responses were strikingly positive. Mothers felt that the most important things they had learnt were:

- how to look after themselves and enjoy their relationship with their babies
- a better understanding of depression
- that other mothers were going through the same thing.

They particularly enjoyed meeting other mums and developing a bond with them, and appreciated the opportunity for their child to mix with others. Suggestions for making the groups better included a longer programme; more practical advice and discussion about the causes of depression earlier in the early sessions of the group.

Changes in the EPDS and observational measures were analysed using non-parametric statistics. The difference in EPDS scores between the intervention and control groups following intervention was statistically significant ($p=0.005$) Mann Whitney) The difference in positive interaction between the intervention and waiting list control group following the intervention period

was statistically significant ($p=0.015$). The differences in negative interaction between the intervention and waiting list control group approached statistical significance ($p=0.07$).

Only two out of the seven scales of the Care index showed a statistically significant change and in each case the change seemed to favour the waiting list group. This is a surprising result but, at least in part, it may be because the Care index reflects a longer-term perspective of the mother-child interaction and is less amenable to rapid change.

A waiting list controlled trial of the 14-week Mellow Babies intervention for depressed mothers and their infants was undertaken. Recruitment was less than had been hoped, although the health visitors on whose initial approach the study rested reported that they had followed the protocol. For those mothers who completed the group, feedback from referrers and participants was extremely positive, both in terms of the process and outcome of the Mellow Babies intervention.

The trial provides a strong basis for a larger trial with long-term follow-up which should include examination of the direct effects on the development of the babies as this is known to be compromised in the children of depressed mothers. Meanwhile it would be useful to focus on the referral process and, in particular, how concerns expressed by mothers reluctant to engage with the programme might be addressed.

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