Mellow Babies: A group intervention for infants and mothers experiencing postnatal depression

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Maternal postnatal depression has been associated with both short- and long-term negative effects for the child's emotional, social and cognitive well-being (Murray & Cooper 1997; Halligan et al., 2007). Therapies that focus on supporting mothers have shown accelerated improvement in maternal well-being, but few positive effects for infants (Cooper et al., 2003; Murray et al., 2003). Where interventions focus on addressing mother-infant interaction there appears greater chance of benefit to both mothers and children (Poobalan et al., 2007).

A small waiting list controlled trial of a 14-week Mellow Babies group intervention was carried out with 17 mothers and infants under one year. Mellow Babies aims to promote both mother-infant interaction and maternal well-being. Changes in maternal depression (Edinburgh Postnatal Depression Scale) and the quality of mother-infant interaction (video observation) were assessed.

Maternal mood in mothers attending Mellow Babies improved, with a significant difference in EPDS scores, relative to the control group, at follow-up. Post-intervention, there was a significant difference in levels of positive interactions between groups, favouring mothers attending Mellow Babies. The difference in negative interaction between Mellow Babies and waiting-list control group approached significance, with less negative interaction observed between mothers and infants who attended the group. Participant feedback on the content and process of Mellow Babies was highly positive.

The study showed benefits from Mellow Babies for mothers and infants who had exposure to postnatal depression. Further studies with longer-term follow-up and infant outcome measures may substantiate these initial findings.

POSTNATAL DEPRESSION is estimated to affect 10 to 20 per cent of women, with around 70,000 women and their families suffering the effects in the UK each year (Glover et al., 2002; Cooper et al., 2003; Royal College of Midwives Survey, 2007). A number of authors (e.g. Halligan et al., 2007; Puckering, 2005) highlight that in relation to the welfare of mothers, postnatal depression does not differ in quality from depression at any other life-stage. It is greatly distressing but can often be relieved through various approaches. The critical, unique characteristic of postnatal depression is, of course, the presence of the infant and the many reports of potential adverse short and long term effects for the child's emotional, social and cognitive development (e.g. Murray & Cooper, 1997; Halligan et al., 2007). Thus this difficulty can potentially impact two generations and represents a significant public health concern (SIGN, 2002; NICE, 2007; Poobalan et al., 2007).

It is recognised that women experiencing postnatal depression can experience extra obstacles in relating to their new baby (Glover et al., 2002; Murray et al., 1996; Field et al., 1990). Mothers with depression show more negative and fewer positive responses to their babies (Puckering, 2005). Glover et al. (2002) describes how mothers may be withdrawn, with little smiling and talking to their infant; or they may be overly intrusive and rough in handling their baby. In response babies can become distressed with prolonged crying or withdrawn and passive (Glover et al., 2002).

These effects begin early: studies have shown that as early as two to three months infants will accommodate to maternal style, in a process of taking the best from the environment. Two- to three-month-old infants of depressed mothers, in face-to-face situations where mothers were asked to make their faces go still, failed to show the disengagement and distress common in babies of well mothers. They had accommodated to a muted pattern of interaction (Cohn & Tronick, 1983; Field et al., 1990). These effects begin early and can persist with attunement between the mother and infant becoming disrupted.

Associations have been found between postnatal depression and adverse emotional/social and cognitive functioning in later infancy, around 12 to 21 months (Murray & Cooper, 1997). Stein (1991) rated the quality of mother-infant interactions between mothers and their 19-month-old children. Where there was a history of postnatal depression infants showed less affective sharing, a lower rate of interaction, less concentration and more negative responses and were less sociable with strangers. This relationship was still found where the postnatal depression had remitted. Where mothers experience postnatal depression, a number of studies evidence poorer cognitive development in boys (Murray, 1992); higher levels of insecure attachment (Lyons-Ruth et al., 1986; Murray, 1992) and behavioural difficulties such as problems with sleeping, eating, tantrums and separations (Murray, 1992).

In terms of later cognitive development, Hay et al. (2001) found that the 11-year-old children of women who were depressed three-months postpartum had significantly lower IQ scores, with boys more severely affected. These children were also more likely to have difficulties with attention and to have special educational needs. In reviewing mediating factors between postnatal depression and adverse child outcomes Murray and Cooper (1997) stress early maternal interactional style, secondary to exposure to depression/social adversity, as critical in contributing to adverse outcomes.

In a prospective longitudinal study, Halligan et al. (2007) report the impact of postnatal depression, and later depression, on emotional well-being in 13-year-old adolescents. It was found that adolescents exposed to maternal post-natal depression showed elevated rates of affective distress. Mothers who experienced postnatal depression were significantly more likely to experience further depression (83 per cent did) relative to mothers without postnatal depression. The presence of postnatal depression was only associated with depression in the 13-year-olds where there had also been subsequent maternal depression. In contrast, 13-year-olds exposed to postnatal depression experienced greater anxiety, regardless of re-occurrence of maternal depression. Clearly a wide range of infant, parent and environmental factors influence outcome, however, overall disruptions to early mother-infant interactions, associated with maternal depression, increases risk to the infant's later emotional, social, behavioural and cognitive development. Many of these social and environmental factors are not amenable to psychological intervention within a health setting, but it is arguable that the impact on the infant is through the baby's proximal experience of mother-child interaction (Murray et al., 1993) and if that can be ameliorated then the effects on the child will be minimised.

While highly physically vulnerable at birth, the infant is born with developed capacities to respond socially to certain visual, olfactory and auditory stimuli and development within these brain regions occurs over the early months and years. It is thought that the sensitive window for emotional sensitivity and empathy may also lie within the first 18 months of life (Shore, 1997). This development is largely shaped in relationship, within interaction with caregivers. Early interventions to support mothers and infants facing the obstacles to relating that may emerge with postnatal depression would thus seem vital. In the report *Breakthrough Britain: The Next Generation* (Social Justice Policy Group, 2008),

the Centre for Social Justice Commission highlight that until recently policies have typically focused on dealing with the consequences of early adversity, when arguably difficulties are full blown, harder and more costly to address. It is noted that support for families to improve early relationships is arguably the most effective focus for prevention and that 'infancy is both a critical window of vulnerability and also a critical window of opportunity'.

A variety of interventions including non-directive Counselling, Cognitive Behaviour Therapy, Psychodynamic Psychotherapy and medication have demonstrated benefits in terms of accelerating improvement in mother's mood (Cooper et al., 2003; Appleby et al., 1997). However, relatively few studies have examined the impact of therapy for infant outcomes and the mother-infant interaction. Given the importance of the quality of mother-infant interaction to later development, this represents an important gap.

In a randomised-controlled-trial, Cooper et al. (2003) and Murray et al. (2003) demonstrated that despite benefits in maternal mood, psychological interventions targeting only mothers with postnatal depression produced few positive effects for infants at short and five-year follow-up. Recent reviews (Poobalan et al., 2007; Nylen et al., 2006) emphasise that interventions, which target the mother-infant relationship, had the best chance of improving outcomes for the children of depressed mothers, as well as reducing maternal depression. Within Poobalan et al.'s (2007) review, of five randomised-controlled studies that included assessment of mother-child relationship, all five demonstrated some improvements in mother-child relationship irrespective of the type of intervention (e.g. O'Hara et al., 2000; Horowitz et al., 2001; Hart et al., 1998). For example, Glover et al. (2002) and Onozawa et al. (2001) demonstrated significant improvement on every observed dimension of mother-infant interaction, and improved maternal mood, among mothers attending an infant massage class.

It is increasingly evident from the literature that there is a need for interventions to target both the mother's needs and attend to the mother-infant interaction. Addressing maternal depression alone is insufficient for the infant. In the studies above, where interventions have directly targeted mother-infant interactions, there has been a greater improvement. Earlier studies involving cognitive-behavioural strategies (McDonnough, 1993); mother-baby psychotherapy (Cramer et al., 1990) and teaching infant cues/massage (Field et al., 1996b) where the quality of mother-infant interaction was targeted, have also shown benefit (Onozwawa et al., 2001). The Mellow Babies programme was developed in response to this literature and stems from a modification of Mellow Parenting (Puckering et al., 1994, 2004, 2006), which was previously developed for families with a pre-school child with whom there were relationship problems.

The Mellow Babies programme incorporates more work focused on maternal depression using cognitive behavioural models. Mellow Babies is a group day programme, run one day a week over 14 weeks. The focus is to: (a) explicitly enhance close mother-infant attunement, using a combination of baby-massage, interaction coaching and infant focussed speech (Puckering, 2004, 2005); and (b) offer mothers support for their own distress. Early pilots of the Mellow Babies approach were well attended and the outcomes were positive: mother's depressed mood reduced significantly and video ratings of mother-infant interactions showed significant increase in positive interaction and reduction in negative interaction.

The current study was developed within the Scottish Government's National Programme for Improving Mental Health and Well-Being research initiatives (2005–2006). A waiting list controlled trial of the Mellow Babies intervention was undertaken, aiming to improve outcomes for the infants of mothers with postnatal depression. The objectives were to measure change in

maternal depression and the quality of interaction between mothers and babies.

Method

Design/Ethics

The research was designed as a randomised waiting list controlled trial with before and after measures of maternal mood and mother-infant interaction. Ethical approval was given by Lanarkshire Local Research Ethics Committee.

Participants

Recruitment took place within the geographical area covered by the local Investing in Infants Programme within North Lanarkshire. Within this area, health visitors routinely screen all new mothers, at six weeks, using the Edinburgh Postnatal Depression Scale (Cox et al., 1994). Mothers scoring >10 (consistent with possible postnatal depression) are offered non-directive counselling listening visits by health visitors, and then re-screened around 12 to 16 weeks. For those mothers scoring above the clinical threshold at 12 to 16 weeks, health visitors were asked to explain the nature of the trial of Mellow Babies and offer referral to the programme. Where mothers agreed, informed consent was obtained and they were randomised, by the toss of a coin, to immediate intervention or waiting list control. Waiting list participants had subsequent opportunity to participate in a group.

Only mothers who were experiencing florid psychosis or whose drug use was uncontrolled were excluded, as it was considered that they were unlikely to be able to participate in the group. Liaison with social work and child protection agencies was intrinsic to the programme and carefully maintained. All other supports (e.g. referral to adult psychiatry, medication) were offered to the women as usual, according to the local Integrated Care Pathway for the management of postnatal depression.

The hope was to recruit 24 mothers (12 in each group). There was a lower rate of referral than expected and ultimately:

- Eleven mothers completed a group.
- One mother dropped out of treatment and did not wish follow-up.
- Six mothers completed a waiting list period.
- Two mothers from the waiting list could not be followed up (e.g. moved away, returned to work).

Average attendance at group sessions was 83 per cent.

Procedures

Mothers were seen at home by the group facilitators prior to the beginning of the group or waiting list period, and again at the end of the group or after a comparable time for the waiting list group. At visits the Edinburgh Postnatal Depression Scale were completed and videotapes were taken during the baby's mealtime, at a time that suited them. Videos varied in length, depending on the time taken to feed the baby, and were on average 15 minutes.

Mellow Babies Group

Mothers and infants attended the group from 10 a.m. to 3 p.m., once a week for 14 weeks. Taxis were provided to facilitate transport to and from the group, lunch was provided and crèche facilities were required.

While babies were cared for in the crèche, the morning psychotherapeutic group provided mothers opportunity to reflect on their own lives, draw links between past and present feelings and relationships, and consider ways of managing depression using broadly cognitive behavioural approaches. Most women had suffered very adverse childhoods and a safe and non-judgemental atmosphere of the group was fundamental. In a previous Mellow Parenting group, anonymous feedback had indicated 'being listened to' and 'not being judged' as crucial factors that made the most difference to mothers (Puckering, 2004).

Mothers, children and staff took lunch together and this was followed by play-time, where interaction coaching, baby massage, looking at picture books, lap games and

nursery rhymes were all used as a means of promoting close and attentive interaction and attunement.

While the babies were again in the crèche, the afternoon parenting workshop used the mothers' own videos of interacting with their baby during the feed. Examples of incidents that went well and those that did not turn out the way they would have wished were discussed. Facilitators had been through the videos with mothers previously at home in preparation for this activity. From previous Mellow Parenting groups we had learned that mothers could be reticent about being in the spotlight but enjoyed and learned from seeing how others coped. The group was structured but not directive and facilitators avoided suggesting solutions but supported sharing by other group members. In previous groups, mothers had found being the provider of a solution for another mother very empowering. Mothers had also been found to be readily able to identify their failings but had found it very hard to give themselves credit for what they were doing well. An important part of the facilitators' role was in drawing attention to mother's success and skill (Puckering, 2004). Previously the video workshop had enabled mothers to develop empathy with their child in wondering, 'how it feels for him/her?'

Mothers were given encouragement to try tasks out between sessions. Fathers were invited to three evening sessions, information on postnatal depression was discussed and activities to promote father-baby interaction introduced. In the final session of each group, participants were asked to give their anonymous views of the group in a self-completion questionnaire. The group was delivered by a counselling psychologist and health visitor, with monthly supervision from the programme author. The combination of a psychologist with an understanding of adult psychological processes and harnessing these for change, and an expert on early development provided a sound basis to think about the welfare of the children as well as the well-being of the mothers.

Assessments[1]

Changes in maternal mood were assessed using the Edinburgh Postnatal Depression Scale (EPDS; Cox et al., 1994). Video-taped interaction between mothers and babies was analysed according to the Mellow Parenting observation coding scheme. The scheme is reliable, sensitive to change and shows concurrent validity with other measures of family functioning (Puckering et al., 2006; Robertson, 2006). Coding was carried out by two graduate psychologists, trained to research reliability criteria (>80 per cent reliability), who were blind to group status. There are six positive and six negative dimensions scored under the coding scheme. The dimensions, each with a positive and negative pole, are: (1) anticipation of the child's need; (2) responsiveness; (3) autonomy; (4) co-operation; (5) distress; and (6) control and conflict (see Table 1). The dimensions were summed to give a total positive and total negative interaction score for each mother.

Statistical analysis

Changes in the EPDS and observation measures were analysed using non-parametric statistics (Mann-Whitney U test), as the sample sizes were small, the groups not completely independent and distribution of scores not normally distributed.

Results

Maternal Mood:
Edinburgh Postnatal Depression Scale

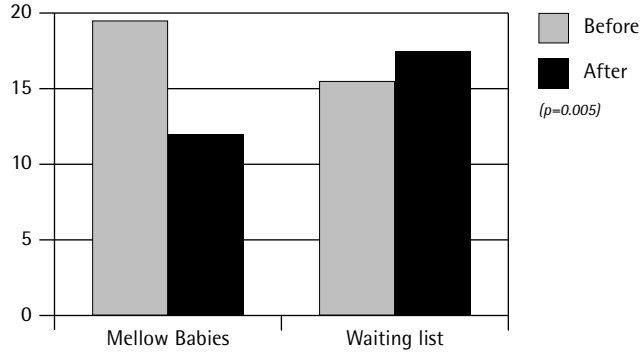
Figure 1 illustrates the changes in EPDS scores. Before the group, mothers in the intervention group had a mean score of 18.8 (*SD*=4.7), while the mean score for those in the control group was 15.7 (*SD*=7.1). By the end of the four-month follow-up period there was no significant change in mood among mothers in the control group

[1] For details of additional post-hoc assessment of observations and health visitor interviews see Puckering, Hickey and Longford (2005–2006), Mellow Babies, www.mellowparenting.org

Table 1: Brief description of observation coding dimensions.

Dimension	*Description (example)*
Anticipation of child's need	Is the child given advanced preparation for a change in activity? *(positive, e.g. let's change your nappy now – lifts infant)*
Responsiveness	Are the parent and child responsive/reciprocal with each other? *(positive, e.g. mother and infant looking in mirror, mother smiles 'beautiful baby', baby smiles looking closely)*
Autonomy	Does the parent show awareness of the child's individuality? *(positive, e.g. Do you want your bottle now? Have you had enough? negative, e.g. child fusses, parent continues dressing regardless)*
Co-operation	Do parent and child co-operate/negotiate together? *(positive, e.g. infant reaches for a pen, mother lifts it away and offers rattle, infant takes rattle)*
Distress	Is comfort/support offered to a crying child who is upset or hurt? *(positive, e.g. noise startles infant who cries, mother cradles child 'did you get a fright?' negative, e.g. child cries, mother says 'Shut up')*
Conflict and Control	Does parent intervene appropriately to achieve legitimate compliance?

Figure 1: Edinburgh Postnatal Depression Scale in Mellow Babies group and Waiting list controls.



(mean score=17.4, *SD*=8.0). Mood in mothers attending the group had improved, with the mean score falling to 11.9 (*SD*=5.6). The difference in EPDS scores between mothers in the intervention and control groups following intervention was statistically significant (p=0.005, Mann Whitney).

Observed Mother-Infant Interactions

Total scores from mother-infant observed interactions were compared. The difference in positive interaction between the intervention and waiting list control group following intervention was statistically significant (p=0.015). Thus greater positive interaction was observed between mothers and infants who had attended the group (see Figure 2).

The differences in negative interaction, between the intervention and waiting list control group approached statistical significance (p=0.07). Thus less negative interaction was observed between mothers and infants who had attended the group (see Figure 3).

Table 2 shows full analysis of the observations scores, for each dimension, from mother-infant interactions. The table shows that after group intervention or wait, significant differences were found for positive anticipation (p=0.02), positive responsiveness (p=0.018), negative autonomy (p=0.019) and negative control (p=0.007). These changes occurred in the expected direction, thus these positive dimensions were higher and negative dimensions lower among the intervention group.

Figure 2: All observed positive interaction in Mellow Babies group and Waiting list controls.

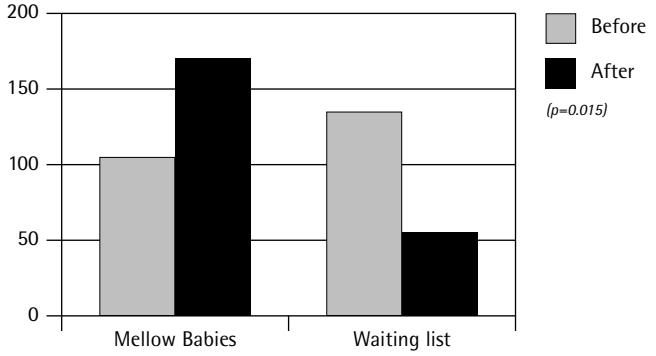


Figure 3: All observed negative interaction in Mellow Babies group and Waiting list controls.

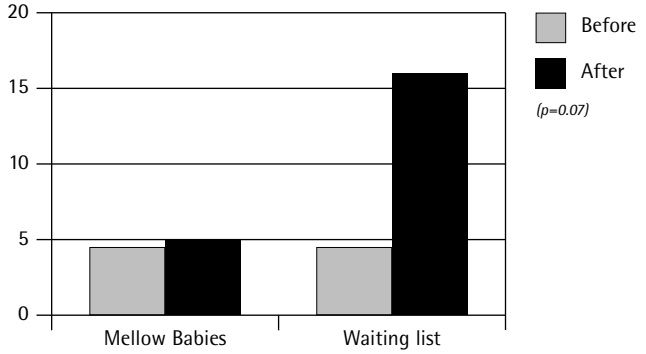


Table 2: Observation measures for Mellow Babies and Waiting list controls: means and (standard deviations).

	Mellow Babies		Waiting list control		Difference between intervention and waiting list group after intervention/wait (Mann-Whitney)
	Before	*After*	*Before*	*After*	
Positive Anticipation	11.7 (8.3)	22.1 (19.8)	17.4 (10.1)	8.8 (5.7)	***z*=–2.042** ***p*=0.020**
Positive Autonomy	28.7 (28.8)	41.4 (19.5)	32.8 (25.2)	17.8 (5.5)	*z*=–1.417 *p*=0.090
Positive Responsiveness	61.1 (36.7)	93.7 (36.0)	63.0 (14.4)	30.4 (20.4)	***z*=–2.097** ***p*=0.018**
Positive Co-operation	2.7 (3.1)	5.8 (10.5)	19.8 (39.4)	2.2 (3.4)	*z*=–1.536 *p*=0.062
Positive Distress	0.5 (0.9)	5.8 (10.8)	0.20 (4.5)	1.2 (1.3)	*z*=–0.117 *p*=0.456
Positive Control	0.3 (0.6)	0.1 (0.3)	0. (0)	0.4 (0.9)	*z*=1–1.116 *p*=0.081
Negative Anticipation	0.2 (0.4)	0.6 (1.2)	1.0 (1.7)	0 (0)	*z*=–1.308 *p*=0.205
Negative Autonomy	2.55 (4.8)	2.1 (3.0)	2.0 (3.5)	7.8 (6.5)	***z*=–2.078** ***p*=0.019**
Negative Responsiveness	1.4 (2.4)	2.2 (4.8)	0.8 (0.8)	3.6 (7.0)	*z*=–0.474 *p*=0.871
Negative Co-operation	0.09 (0.3)	0.2 (0.6)	0.2 (0.4)	1.8 (2.5)	*z*=–1.304 *p*=0.182
Negative Distress	0.09 (0.3)	0.09 (0.3)	0 (0)	1.6 (3.1)	*z*=–1.565 *p*=0.059
Negative Control	0.2 (0.6)	0 (0)	0.3 (0.8)	1.6 (2.6)	***z*=–1.043** ***p*=0.007**

Participant feedback

At the final session anonymous feedback was provided using self-completion questionnaires (*N*=11). The responses were strikingly positive with no adverse feedback given. Mothers indicated that the most important things they had learnt were around how to look after themselves and enjoy their relationships with their babies; understanding more about their experiences and depression; that other mothers were going through the same thing.

- *'I got a lot out of the group; it gave me insight into how I was feeling and how to cope.'*
- *'How to deal with things reasonably and how to get the most out of my relationship with my child.'*
- *'Understanding what can cause depression. Knowing that there are others in the same boat.'*

The women particularly enjoyed meeting other mums and developing a bond with them and valued the opportunity for their child to mix with other children. Suggestions

for improving groups included a longer programme; more practical advice; and discussion about the causes of depression earlier in initial group sessions.

When asked Have you got what you wanted? mothers' responses were 'yes' 60 per cent and 'partly' 40 per cent. Eighty per cent of mothers indicated that they had changed their behaviour, with 20 per cent changing 'in some ways'.

When asked Have your children changed? 50 per cent of mothers noted, 'yes', 25 per cent noted 'partly' and 25 per cent 'not sure'.

- *'I've stopped letting things I cannot control affect me.'*
- *'I spend more time with my child.'*

No specific feedback was requested from fathers but the very high attendance at three parallel partners' sessions in the evenings was a testament both to their thirst for information and the value they placed on the group.

Discussion

This waiting list controlled trial has shown benefits for mothers experiencing postnatal depression and their infants from attending the 14-week Mellow Babies intervention. Participant mothers reported improved mood with Edinburgh Postnatal Depression Scores falling significantly. Maternal mood for mothers in the waiting list control did not show significant change and the difference in mood scores between both groups at follow-up was statistically significant.

Video assessments, using the Mellow Parenting Coding system, found that observed positive mother-infant interactions increased significantly following the intervention group as compared with the control group. Conversely, relative to the control group, the lower levels of total observed negative interaction approached a significant level in the intervention group. At follow-up, two positive dimensions (anticipation and responsiveness) were significantly higher among the intervention group and two negative dimensions (negative autonomy and negative control) significantly lower. Overall 10 out of 12 dimensions changed in a direction that favoured those who took part in the group. Feedback on the content and process of Mellow Babies, from mothers who completed the group, was highly positive.

The main limitations of the study were the small sample size and retention within the waiting list group. It had been hoped to recruit two groups of 12 mothers, however, ultimately fewer referrals to the programme were made. Health visitors, who organised initial screening and referrals, indicated that reasons given by mothers who did not wish to join the study included reluctance to join a group, fears of what may come out and concerns about being video-taped, not uncommon responses (Puckering et al., 2005–2006)[2]. It may be that with additional time, continued careful preparation and engagement could allay fears and enable more mothers to accept referrals in the future. Two mothers within the waiting list group were lost to follow-up due to change in circumstances (e.g. moving/seeking other help). It may be that the period of rapid development within the baby's first year, demands rapid adjustments for families that are inconsistent with 'waiting'. Infant development is so urgent and so active at this period, not intervening is not an ethical option when, as this study reinforces, not intervening leads to a deterioration in families where distress has already been identified. Despite limitations significant findings emerged from the small sample of participating mothers, suggestive of substantial effect sizes that carry clinical as well as statistical weight.

The collective evidence, from previous studies, clearly underlines the potential short and longer-term adverse effects of postnatal depression for the infant's relationships, social/emotional, language/cognitive

[2] For details of Health Visitor Interviews see Puckering et al. (2005–2006), Mellow Babies, www.mellowparenting.org

and behavioural development (Field et al., 1990; Stein, 1991; Murray, 1992; Murray & Cooper, 1997; Halligan et al., 2007). Wider vulnerability factors (e.g. infant gender, socioeconomic resources, chronicity/timing of depression) have been associated with outcomes and it appears that, alongside these factors, the quality of the mother-infant interaction and relationship particularly contributes, at least in part, to outcome (Murray & Cooper, 1997, 2003; Poobalan et al., 2007). Recent reviews (Poobalan et al., 2007; Nylen et al., 2006) highlight both that interventions targeting maternal depression are insufficient for infant outcomes (Cooper et al., 2003; Murray et al., 2003) and that approaches directly addressing the mother-infant relationship showed the best chance in improving outcomes for both mothers and infants (Horowitz et al., 2001; Hart et al., 2002; Onozawa et al., 2001; Cicchetti et al., 2000).

The Mellow Babies approach, adopted in this study, focuses both on providing support to vulnerable mothers to alleviate depression and explicitly addressing mother-infant interaction and relationship. The group draws on approaches such as interactive coaching; baby massage; infant focused speech; cognitive behavioural strategies previously shown to benefit both the interaction and mothers' mental state (Glover et al., 2002; Field et al., 1996; Murray et al., 1993; Appleby et al., 1997; McDonnough, 1993). Positive change in maternal mood and observed infant interaction (e.g. increased maternal sensitivity in anticipation and responsiveness) suggests that the dual aims of addressing maternal mental state and the interaction were both met. The findings are also consistent with previous evidence that direct support with parenting may be needed to make an impact on key aspects of the mother child interaction (Puckering, 2004; Murray et al., 2003).

Importantly, feedback would indicate that the group's format is one that parents like. Attendance was good (83 per cent of sessions) and mothers remained largely engaged in what is an intensive 14-week programme. One mother noted that being in the group felt *'Good, I felt included, comfortable, able to talk or stay quiet without any pressure.'* Active care was taken, in facilitation, to provide an experience of nurture and acceptance for mothers – beginning to meet some of their needs that so often get overlooked when caught up with caring for a new infant and wider stress. Thus providing the basics: a safe environment, transport, lunch and, of course, respect/valuing/empathy, were important containing components. In turn mothers became more equipped to provide this care for their infants.

An opportunity for children to mix with other children and for mothers to form a bond with others at the group was highlighted as a key component for participants. Provision of an environment that enables mothers to sample supportive relationships, has been a key component of both Mellow Parenting and Mellow Babies. Traditionally, due to a history of social and interpersonal challenges, those most at risk of postnatal depression and mental health/relationship distress are those least likely to engage with routine parenting supports (Puckering, 2004). Whilst initially engaging mothers in a group environment may require careful preparation, the power of the group includes reducing isolation and the direct message/experience of 'not being alone', clearly a component valued by the mothers in the group.

The Centre for Social Justice Commission (Social Justice Policy Group, 2008) has recently underlined the need for effective, timely supports for families to be made available at antenatal, postnatal and infant stages. Too often babies and young children, society's most vulnerable members, have been overlooked by support services and in policy. The Mellow Babies intervention is one approach that aims to prioritise infant mental health while concurrently offering support for mothers experiencing postnatal depression and their families. The evidence would suggest that investing support for

mother-infant relationships is a key element in protecting against later distress (Shore, 1997; Murray & Cooper, 1997).

The study has shown substantial benefit among those attending the group and provides a strong basis for a larger study. Following the rigour of studies such as Murray et al. (2003), it would be helpful to include long-term follow-up and assessment of the direct effects on infant development, seen to be compromised in the context of maternal depression.

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