



What works to support vulnerable women during the perinatal period

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Fr- and atypical parenting behaviours

Fr-behaviour – frightened AND frightening (Main and Hesse 1990)

Hostile-Helpless Behaviour (Lyons-Ruth et al 2005)

Atypical/anomalous parenting behaviours (Lyons-Ruth 2003):
threatening (looming); dissociative (haunted voice; deferential/timid);
disrupted (failure to repair, lack of response), affective
communication errors (mother laughing while child distressed)

Meta-analysis (12 studies) – strong association between atypical behaviours and disorganised attachment at 12/18months (Madigan et al 2006)



What works to improve outcomes?

Intervention Approaches

- Treatment of the mothers mental health problems – not reviewed further here - NICE Guidance clear recommendations
- Interventions that offer support for interactional difficulties - key issues
 - how to identify interactional problems
 - what works to improve outcomes
 - which outcomes are improved



Interventions targeting interactional outcomes

Common components of effective interventions

- This review aimed to systematically evaluate the shared elements of successful perinatal mental health interventions that underpin improved outcomes for infants whose mothers experience perinatal mental health difficulties.
- Nine electronic databases were searched comprehensively for relevant controlled studies of perinatal mental health interventions, and a narrative synthesis undertaken to assess whether statistically significant benefits were noted.
- Sixteen studies, trialing 19 interventions, were analyzed using a narrative approach and grouped according to reported effectiveness.
- Eight interventions demonstrated significant improvements in infant outcomes and/or mother–infant relationship outcomes and were used to inform the analysis of the included interventions’ components.
- While the interventions identified were diverse, there were common components which potentially underpin successful interventions for infants whose mothers are experiencing mental health difficulties, i

Included mental health problems

- Eight studies included mothers with postnatal depression (PND; Goodman, Prager, Goldstein, & Freeman, 2015; Letourneau et al., 2011; Murray et al., 2003; Onozawa et al., 2001; O’Higgins, 2006; Puckering et al., 2010; Tambelli et al., 2015; Tsivos, Calam, Sanders, & Wittkowski, 2015)
- Two studies recruited participants from inpatient mother–baby units (MBUs; Kenny et al., 2013; Schacht et al., 2017)
- Two recruited participants with a diagnosis of major depressive disorder based on Diagnostic and Statistical Manual of Mental Disorders, fifth edition (DSM-IV) criteria (Clark et al., 2008; van Doesum et al., 2008)
- One included mothers with any “mental health problems” (Fonagy et al., 2016)
- One study included mothers diagnosed with obsessive compulsive disorder (OCD; Challacombe et al., 2017), and another mothers with bulimia nervosa (Stein et al., 2006).

Effective interventions

The following studies all identified significant improvements in infant or mother–infant relationship outcomes:

- Four studies using video feedback to guide positive Mother×Infant interactions (Kenny et al., 2013; Schacht et al., 2017; van Doesum et al., 2008 and Stein et al., 2006)
- An infant massage study (Onozawa et al., 2001)
- Mother–infant group therapy model (Clark et al., 2008), and Mellow Babies (Puckering et al. 2010);
- Relationship-based, parent–infant intervention aiming to promote positive interactions, showed significant improvements (Tambelli et al 2015)

Infant massage

- Group-based intervention delivered over 6-8 weeks
- Main aim to improve maternal responsiveness through the teaching of massage strokes that are attuned to the infants needs in the moment.
- Also provide the opportunity to socialise

Evidence of effectiveness

- Numerous systematic reviews most of which point to the importance of delivering infant massage to targeted groups of women (i.e. experiencing post-natal depression or sociodemographic deprivation)
- Only one RCT to date that explicitly demonstrates that infant massage improves interaction in women with PND (Onazawa et al 2001)
- There is also some evidence to suggest that it might improve the mother's mood or depression

Video feedback

- Video based recordings and coaching of actual interactions
- VIG; VIPP/VIPP-SD
- Attuned, mentalising guider: increases affect regulation; and reflective functioning;
- Viewing of positive interactions: meta-cognitive changes (resulting from the discrepancy between own beliefs and video); empowerment and self-efficacy



Evidence of effectiveness

- Meta-analysis of 29 studies shows statistically significant improvement in parenting sensitivity; behaviour and attitudes; child attachment security (Fukkinks et al 2008;)
 - 4 of these targeted children older than 5 years;
 - 17 targeted ‘high risk’ dyads (e.g. low SES 63%; parent clinical problems 17%; child clinical problems 52%)
- Aggregate effect sizes all VFs (Fukkinks et al 2011)
 - parental behaviour 0.49. - parent attitude 0.39. - child outcome 0.33
- VIG only results
 - parental behaviour: 0.76 - parent attitude: 0.56. - child development: 0.42

Mellow Babies

- This programme was explicitly developed to support women experiencing depression, and is delivered over the course of 14 weeks in sessions that take place over the course of a day (i.e. 5 hours).
- During the morning sessions babies are cared for in the creche while the mothers take part in a group-based session that is aimed helping women to develop ways of managing depression underpinned by CBT, and development of understanding about the relationship between their current problems and their early life experiences.
- The afternoon sessions involve a range of targeted interactions between mother and baby using infant massage, video feedback, and other play techniques.
- The final part of the day in which babies are returned to the creche, involves the use of videotape modelling to demonstrate sensitive parent-infant interactions.

Mellow Babies - evidence of effectiveness

- This appears to be a promising model of working, with existing evidence from a small RCT involving 20 mothers, suggesting significant improvements in both maternal depression and parent-infant interaction (Puckering et al 2010)
- A further trial is currently underway
- Parenting programmes such as Baby Triple-P are not dyadic, and a recent RCT showed no evidence of effectiveness when delivered to mothers with postnatal depression.

Directional effects

Studies reporting directional improvements in infant or mother– infant relationship outcomes but which did not demonstrate statistical significance, included:

- Infant massage study (O’Higgins 2006)
- cognitive behavioral therapy [CBT], psychodynamic therapy and nondirective counselling (Murray et al 2003)
- parent–infant psychotherapy program (Fonagy et al., 2016)
- Baby Triple P program (Tsivos et al., 2015).

Parent-infant Psychotherapy

Representational

- Focus on mother's representational world (e.g. the way in which the mother's current view of her infant is affected by representations from her own history)
- Linking of ghosts with mother's own history facilitates changes to her representational world and new paths for growth of both mother and infant

Representational and behavioural

- Infant-led (e.g. Watch, Wait and Wonder)
- Mother observes her infant's self-initiated activity whilst being physically accessible to infant
- Discussion of these experiences with therapist as a way of examining the mother's internal working models of herself in relation to her infant

Parent-infant Psychotherapy – evidence of effectiveness

- Recent systematic review 8 RCTs comparing PIP with control (n=4) other treatment (n=4)
- Greater attachment security with parent-infant psychotherapy compared with control
- Fewer avoidant in PIP
- More change from insecure to secure after PIP
- Less depression – not sig; no impact other outcomes
- PIP versus other interventions (e.g. home visits; CBT; counselling; other types of PIP) – no difference

(Barlow et al 2015)

No evidence of effectiveness

- Studies reporting no significant improvements to infant or mother–infant relationship outcomes were: the mothers-only treatment group in (Tambelli et al. 2015), the time-intensive CBT intervention (Challacombe et al. 2017) the peer support home-visiting intervention (Letourneau et al. (2011); the study of the “Community HUGS” therapeutic playgroup (Ericksen et al., 2018) and the perinatal dyadic psychotherapy intervention (Goodman et al. 2015).

Common components of effective interventions

Component 1: Guiding and facilitating positive Mother×Infant interactions

- Of the eight interventions in Group A, seven had facilitation of positive Mother×Infant interactions as a key component (Clark et al., 2008; Kenny et al., 2013; Onozawa et al., 2001; Puckering et al., 2010; Schacht et al., 2017; Stein et al., 2006; van Doesum et al., 2008).
- Techniques included interaction guidance or coaching to increase sensitivity to infant cues, and infant massage to encourage increased use of positive touch.

Component 2: Helping the mother to understand the infant's internal world, needs, and unique perspective

- Six of the interventions in Group A aimed to help the mother understand her infant's internal world and unique perspective, with increased awareness of the infant's needs (Clark et al., 2008; Kenny et al., 2013; Puckering et al., 2010; Schacht et al., 2017; Stein et al., 2006; van Doesum et al., 2008).
- For example, Schacht et al. (2017) trialed a “mind-mindedness” focused intervention designed to encourage mothers to comment on their infants internal thoughts, feelings and states.

Component 3: Use of video feedback

- Five of the interventions in Group A used videos of Mother×Infant interactions as a prompt for discussions with mothers focusing on moments of attunement and sensitivity to infant cues (Kenny et al., 2013; Puckering et al., 2010; Schacht et al., 2017; Stein et al., 2006; van Doesum et al., 2008), and sometimes also highlighting missed opportunities for positive interactions (van Doesum et al., 2008).

Component 4: Cognitive behavioral strategies

Four studies from Group A included some use of cognitive behavioral strategies; however, this was not a core component of any of these interventions

Components with no clear benefits

- Psychodynamic
- Exploration and understanding of interpersonal relationships with infant and others
- Psychoeducation/pedagogical support

Mode of delivery

- Group and individual delivery were spread across Groups A, B, and C.
- Most studies were delivered by trained professionals, with the exception of one study (Letourneau et al., 2011), which investigated an intervention delivered by peers. This study identified no significant improvements in the treatment group when compared to control, instead they reported a statistically significant ($p = .05$) change in favor of the control group
- Of note, three studies included some involvement of the infants' fathers in their interventions, and all of these reported significant improvements



Final thoughts...CoS

Mentalisation-based therapy for parents (MBT-P)

- Mentalisation Based Therapy for Parents (MBT-P), a reflective parenting programme for parents with Borderline Personality Disorder (BPD) and their infants.
- Focussing on the infant's internal states and intentions is particularly important for parents with BPD, who may be more likely to attribute bad intent to their infants.
- Parents received group sessions as well as individual sessions of mentalisation-based parent infant therapy.
- The primary therapeutic aim of the parent-infant sessions was to support the parent in reflecting on their infant's behaviour and to understand that behaviour (eg crying, food refusal, throwing) in terms of what their infant may be experiencing or feeling.
- Pilot testing suggests this is a promising intervention (Nijssens, L., Luyten, P., & Bales, D. L. (2012).

More recent evidence

- SR includes 22 studies from eight countries in Europe and North America, with a total of 1,889 randomised parent-child dyads or family units.
- **Parental sensitivity:** A meta-analysis of 20 studies (1,759 parent-child dyads) reported a significant impact of video feedback on parental sensitivity compared with a control or no intervention from postintervention to six months follow-up (standardised mean difference 0.34, 95% confidence interval (CI) 0.20 to 0.49, **Parental reflective functioning:** No studies reported this outcome.
- **Attachment security:** A meta-analysis of two studies (166 participants) indicated that receiving a video feedback intervention increased the odds of being securely attached, measured using the Strange Situation Procedure, at postintervention (odds ratio 3.04, 95% CI 1.39 to 6.67; A second meta-analysis of two studies (131 participants) that assessed attachment security using a different measure (Attachment Q-sort) found no effect of video feedback compared with the comparator groups, with a mean difference of 0.01 (95% CI -0.08 to 0.09, very low-certainty evidence).

Summary

- Parental mental health problems can interfere with the interaction with significant long-term consequences for the child;
- Practitioners supporting parents experiencing mental health problems should a) assess the interaction; and b) provide an evidence-based dyadic intervention where appropriate; c) consider further actions needed;
- Type of intervention should be determined by level of interactional problems experienced; care may need to be stepped