COCHRANE CORNER

Parent–infant psychotherapy for improving parental and infant mental health

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See commentary on pp. 217–221, this issue.

Background

Parent–infant psychotherapy (PIP) is a dyadic intervention that works with parent and infant together, with the aim of improving the parent–infant relationship and promoting infant attachment and optimal infant development. PIP targets the mother's view of her infant, linking her own early experiences to her current relationship to her child, in order to improve the parent–infant relationship directly.

Objectives

To assess the effectiveness of PIP in improving parental and infant mental health and the parent–infant relationship. To identify programme components that appear to be associated with more effective outcomes and factors that modify intervention effectiveness (e.g. programme duration, programme focus).

Search methods

We searched (on 13 January 2014): Cochrane Central Register of Controlled Trials (CENTRAL, 2014: Issue 1), Ovid MEDLINE, EMBASE, CINAHL, PsycINFO, BIOSIS Citation Index, Science Citation Index, ERIC, and Sociological Abstracts. We also searched the metaRegister of Controlled Trials, checked reference lists, and contacted study authors and other experts.

Selection criteria

Two review authors assessed study eligibility independently. We included randomised controlled trials (RCTs) and quasi-randomised controlled trials (quasi-RCTs) that compared a PIP programme directed at parents with infants aged 24 months or less at study entry, with a control condition (i.e. waiting-list, no treatment or treatment as usual), and used at least one standardised measure of parental or infant functioning. We also included studies that only used a second treatment group.

Data collection and analysis

We standardised the treatment effect for each outcome in each study by dividing the mean difference (MD) in post-intervention scores between the intervention and control groups by the pooled standard deviation. We presented standardised mean differences (SMD) and 95% confidence intervals (CI) for continuous data, and risk ratios (RR) for dichotomous data. We undertook meta-analysis using a random-effects model.

Main results

We included eight studies (846 randomised participants), four of which involved comparisons of PIP with control groups only. Four studies involved comparisons with another treatment group (i.e. another PIP, video-interaction guidance, psychoeducation, counselling or cognitive–behavioural therapy); two of these studies included a control group in addition to an alternative treatment group. Samples were women with postpartum depression, anxious or insecure attachment, maltreated women and prison populations. We assessed potential bias (random sequence generation, allocation concealment, incomplete outcome data, selective reporting, blinding (masking) of participants and personnel, blinding of outcome assessment, and other bias). Four studies were at low risk of bias in four or more domains. Four studies were at high risk of bias for allocation concealment, and no study blinded participants or personnel to the intervention. Five studies did not provide adequate information for assessment of risk of bias in at least one domain (rated as unclear). Six studies contributed data to the PIP *v.* control comparisons, producing 19 meta-analyses of outcomes measured at post-intervention, or follow-up or both, for the primary outcomes of: parental depression (both dichotomous and continuous data); measures of parent–child interaction (maternal sensitivity, child involvement and parent engagement; infant attachment category (secure, avoidant, disorganised, resistant)); attachment change (insecure to secure, stable secure, secure to insecure, stable insecure); infant behaviour; and secondary outcomes (e.g. infant cognitive development). The results favoured neither PIP nor control for incidence of parental depression (RR 0.74, 95% CI 0.52 to 1.04, 3 studies, 278 participants, low-quality evidence) or parent-reported levels of depression (SMD –0.22, 95% CI –0.46 to 0.02, 4 studies, 356 participants, low-quality evidence). At post-intervention, there were improvements favouring PIP in the proportion of infants securely attached (RR 8.93, 95% CI 1.25 to 63.70, 2 studies, 168 participants, very low-quality evidence); a reduction in the number of infants with an avoidant attachment style (RR 0.48, 95% CI 0.24 to 0.95, 2 studies, 168 participants, low-quality evidence); fewer infants with disorganised attachment (RR 0.32, 95% CI 0.17 to 0.58, 2 studies, 168 participants, low-quality evidence); and an increase in the proportion of infants moving from insecure to secure attachment (RR 11.45, 95% CI 3.11 to 42.08, 2 studies, 168 participants, low-quality evidence). There were no differences between PIP and control in any of the meta-analyses for the remaining primary outcomes (i.e. adverse effects) or secondary outcomes. Four studies contributed data at post-intervention or follow-up to the PIP *v.* alternative treatment analyses, producing 15 meta-analyses measuring parent mental health (depression); parent–infant interaction (maternal sensitivity); infant attachment category and attachment change; infant behaviour and infant cognitive development. None of the remaining meta-analyses of PIP *v.* alternative treatment for primary outcomes (i.e. adverse effects) or secondary outcomes showed differences in outcome or any adverse changes. We used the Grading of Recommendations, Assessment, Development and Evaluation Working Group (GRADE) approach to rate the overall quality of the evidence. For all comparisons, we rated the evidence as low or very low quality for parental depression and secure or disorganised infant attachment. Where we downgraded the evidence, it was because there was risk of bias in the study design or execution. The included studies also involved relatively few participants and wide CI values (imprecision), and, in some cases, we detected clinical and statistical heterogeneity (inconsistency). Lower-quality evidence resulted in lower confidence in the estimate of effect for those outcomes.

Authors' conclusions

Although the findings of this review suggest that PIP is a promising model in terms of improving infant attachment security in high-risk families, there were no significant differences compared with no treatment or treatment as usual for other parent-based or relationship-based outcomes, and no evidence that PIP is more effective than other methods of working with parents and infants. Further rigorous research is needed to establish the impact of PIP on potentially important mediating factors such as parental mental health, reflective functioning and parent–infant interaction.

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