

Intervention Fidelity in Nonpharmaceutical Interventions for Stress and Anxiety During The First 1000 Days: A Systematic Review

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Stress and Anxiety

Pregnancy and up to two years postpartum ('the first 1000 days') is considered a transitional period involving changing roles, responsibilities and identity, which can result in increased stress and anxiety.

Parental stress and anxiety is associated with a wide range of adverse outcomes for both parent and child (Neece et al., 2012).

Current nonpharmaceutical interventions for parents in the first 1000 days have been inconsistent and since little is known about fidelity reporting in these areas, it signals a potential opportunity to improve research in this area.

What is Intervention Fidelity?

Fidelity refers to whether or not an intervention was implemented as intended (Bellg et al., 2004).

Methods

The electronic databases MEDLINE, Embase, CINAHL, PsychINFO, and Maternity and Infant Care were searched from inception to March 2019. Reference lists of identified papers and reviews were also searched.

Studies were eligible if they reported on randomised controlled trials including parents during the first 1000 days and utilized effects of non-pharmacological interventions to reduce stress and/or anxiety.

The National of Health Behaviour Change Consortium (NIHBCC) recommendations were used to assess fidelity of non-pharmaceutical interventions for parents in the first 1000 days. The NIHBCC recommendations cover 5 domains: (i) Study Design, (ii) Training of Providers, (iii) Treatment Delivery, (iv) Treatment Receipt and (v) Treatment Enactment.

Results

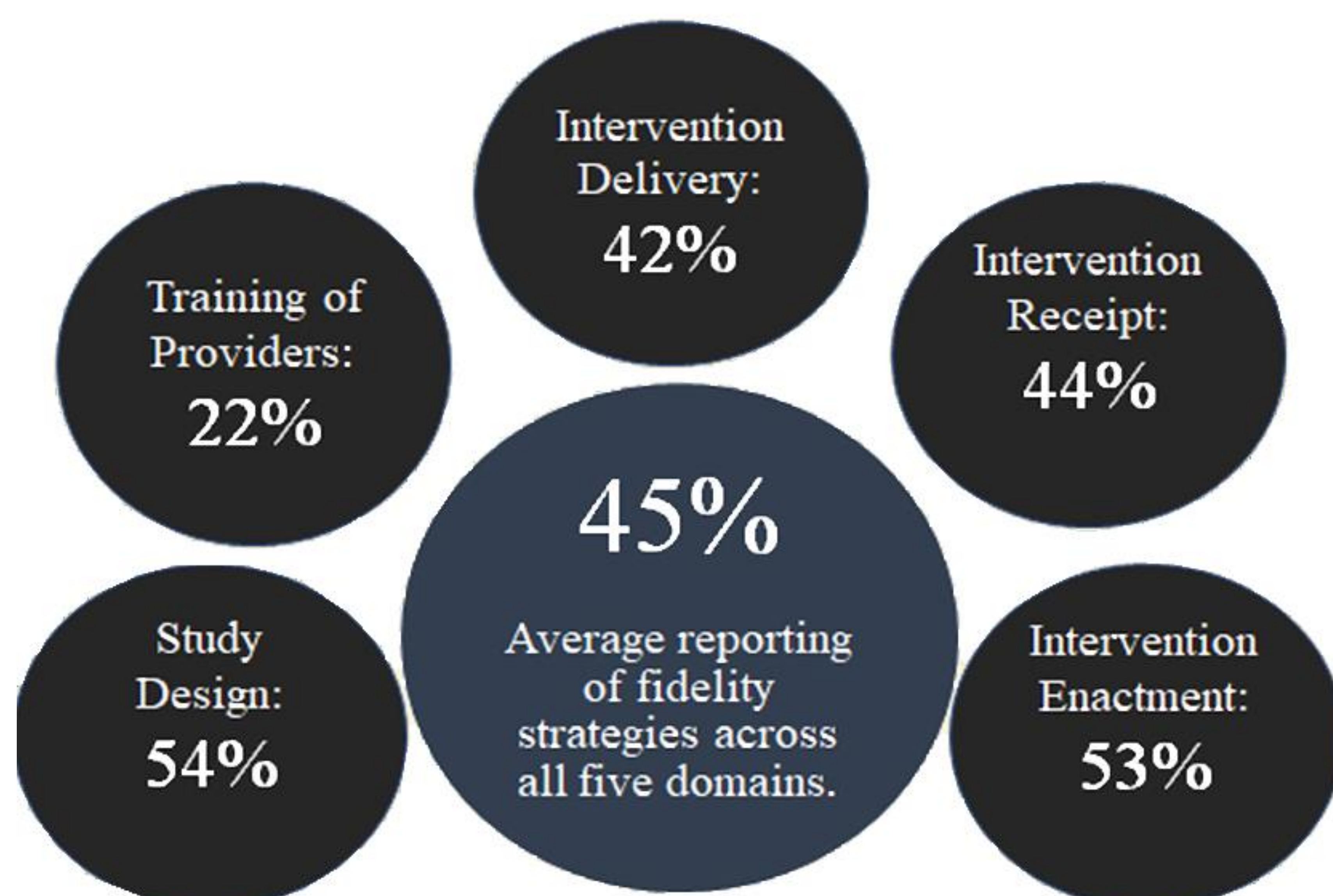


Figure 1. Average Rates of Fidelity across Studies and Domains

16 papers were identified and rated using the NIHBCC checklist.

- Most studies were rated as having 'low' fidelity, with 10 of the studies scoring below 50% on reported use of fidelity components.
- Six studies were rated as having 'moderate' fidelity scoring between 50% and 79%.
- No study achieved a 'high' fidelity score with >80%

Overall ratings and fidelity domain ratings can be seen in Fig. 1

There was typically poor fidelity reporting of

- The control condition
- Theory use
- Non-specific Treatment Effects
- Provider Assessment
- Delivery Assessment
- Multicultural Factors
- Assessment of Participant Comprehension & Skills

Implications and Recommendations

Inconsistent results in this field might be due to a lack of fidelity reporting which make it uncertain whether interventions were carried out as intended. Therefore, intervention results may not reflect effects of interventions that were intended to be delivered.

Improving the use and reporting of fidelity strategies will facilitate more robust evaluations on the effects of interventions that can benefit (expectant) parents, and their children in the first 1000 days.

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