

PSYCHOSOCIAL SUPPORT

Efficacy of Preventative Parenting Interventions for Parents of Preterm Infants on later Child Behavior: A Systematic Review and Meta-Analysis

Background

Preterm infants are at risk for a variety of developmental concerns. High severity dysfunctions as cerebral palsy are one kind of concerns, but prevalence rate is relatively low, compared to low severity dysfunctions, as attention problems, learning difficulties or behavior problems, which show a prevalence rate up to 50%. Compared to full-term infants, preterm infants are at greater risk of developing internalizing and externalizing behavior problems such as hyperactivity, conduct problems, depression, anxiety, and peer problems. Whereas the efficacy of parenting interventions to reduce these kind of difficulties of preterm and full-term children beginning in toddlerhood is well-established, greater clarity is needed to determine the impact of preventative parenting interventions, conducted from birth, on later child behavior.

Summary of results

Twelve randomized controlled trials could be identified for this review, including five preterm parenting intervention programs that assessed child behavior, but only data of three studies were able to be pooled for meta-analysis: Infant Mental Health and Development Program (IHDP), Mother-Infant Transaction Program (modified; MITP_M), Victorian Infant Brain Studies (VIBeS Plus). The meta-analysis indicated a small, but significant, effect favoring intervention groups, so there is evidence that the programs improve behaviors in preschool age. Thereby MITP-M and VIBeS Plus Program achieved more durable behavior outcomes using a shorter intervention and lower dosage than did other preterm parenting interventions. Nevertheless MITP-M is conducted across three months using 12 hr of direct contact, and the VIBeS Plus lasts over 12 months using 18 hr of direct contact.

Strength

Instead of focusing on factors as cognitive and motor outcomes, this review assess behavioral outcomes of preterm infants following preventative preterm parenting interventions and so highlights one of the most frequently risk developmental concerns after preterm birth. By concentrating on RCT trials for meta-analysis, the potential of (ultra-)early-interventions is underlined.

Limitations

Review and meta-analysis based on only a small number of RCTs evaluating preterm parenting interventions that focus on child behavior. Additionally, intervention studies are only from Western culture population, so more RCT trials conducted in a variety of cultures are required.

Practical conclusion

The systematic review and meta-analysis highlight the potential of early and so preventative parenting interventions for reducing later behavior difficulties. A streamlined nature of these programs may make them more feasible for parents and cost-effective, so it is important to consider a balance between maximizing intervention effect and ensuring that the intervention does not become a additional source of stress for parents of preterm children.

Herd M. et. Al., Efficacy of preventative parenting interventions for parents of preterm infants on later child behavior: a systematic review and meta-analysis. *Infant Ment Health J.* 2014 Nov-Dec;35(6):630-41. doi: 10.1002/imhj.21480. Epub 2014 Oct 20.

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