

PSYCHOSOCIAL SUPPORT

Key components of early intervention programs for preterm infants and their parents: a systematic review and meta-analysis.

Background

Given the fact of greater risk for neurodevelopmental disabilities for preterm infants compared to full term infants, many interventions focus on parents support to improve the quality of the infant's environment and hypothesize to enhance developmental outcomes for preterm infants. Yet, many interventions do not measure parental change at all, nor it is investigated which intervention components are associated with improved parental outcomes. This review contributes to the categorization of key components of early intervention programs and determination of direct effects of components on parents and their preterm infants.

Summary of results

Key components of interventions are categorized as psychosocial support, parent education, and/or therapeutic developmental interventions targeting the infant. Meta-analyses demonstrated limited effects of interventions on maternal stress and sensitivity/responsiveness and also effects on maternal anxiety, depressive symptoms and self-efficacy. The study emphasizes the link between parenting education as a key intervention component, maternal anxiety and child outcomes.

Strength

The review is one of the first to categorize components of early interventions for preterm children and parents, and link them to maternal outcomes. The given differentiated analysis of intervention effects on maternal anxiety, stress and depression puts the prioritization among these parental outcomes and their link to child outcomes into new perspective.

Limitations

Studies were included which exclusively published in English, and many studies used data for mothers, only. Statistic suggested a significant heterogeneity among the studies. Outcome measures varied across interventions, and there is a lack of socio-demographically homogeneous samples in most of the studies.

Practical conclusion

Further research should focus on the content of parenting education and investigate the most efficient and effective manner of delivering this content, taking into account variations of information, demonstration and discussion, and active engagement with feedback from a professional. In particular, interventions for parenting education should consider state of science in early brain development and regulatory competence of preterm children as early aspects of parent-child-communication.

Benzie KM, Magill-Evans JE, Hayden KA et al. Key components of early intervention programs for preterm infants and their parents: a systematic review and meta-analysis. *BMC pregnancy and childbirth* 2013; 13 (Suppl 1): 1-10. doi:10.1186/1471-2393-13-S1-S10

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