

PSYCHOSOCIAL SUPPORT

Effectiveness of Hospital Based Video Interaction Guidance on Parental Interactive Behavior, Bonding, and Stress After Preterm Birth: A Randomized Controlled Trial

Background

In the context of preterm birth of a child, process of parental bonding and establishment of an affectionate parent-infant relationship can be affected by negative feelings and thoughts of the parents. Meta-analyses of video-feedback interventions in general revealed positive effects on the quality of parent-infant interactions, parental attitudes and on infant development. In the present study, the effectiveness of hospital-based Video Interaction Guidance (VIG) in parents with moderately and very preterm infants is evaluated, using a pragmatic, multicenter, randomized controlled trial (RCT).

Summary of results

VIG proved to be effective in enhancing sensitive behavior and diminishing withdrawn behavior in parents, whereby positive effects were particularly found in mothers who experienced the preterm birth as very traumatic. No intervention effects could be found for parents' intrusive behavior. Additionally, positive effects were found on parental bonding, but no significant effects on stress and well-being were detected.

Strength

The study is the first RCT to investigate the effect of video-feedback interventions on parental behavior in a NICU-setting. Behavior ratings distinguished between parental sensitivity and parental intrusiveness. Insensitive behavior, however, is qualitatively different from purely negative or intrusive behavior, which is important for prediction of infant attachment insecurity and disorganization. Intervention and study assessment involved both mothers and fathers, and thereby often neglected experiences and needs of fathers get into focus.

Limitations

Behavioral effects were relatively short-term, that is until three weeks postintervention assessment but not until sixth month postintervention assessment. With three sessions of each recording and feedback, time requirement is relatively high and further research about the optimal number of VIG review sessions is needed. There was no direct comparison between the outcomes of mothers and fathers conducted, so further research is needed to validate the notion of possible gender effects. Interrater agreement for the observational coding was relatively low with ICC between .64 and .78 for several scales of parental behavior.

Practical conclusion

Regarding public health significance, the study suggests that hospital based VIG is an effective intervention to support the early relationship between parents and their preterm infants, especially after traumatic birth. Since effectiveness was evaluated in everyday hospital practice, results can directly inform clinical decision making. Concerning to dissipating effects over time, booster sessions should be considered.

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