SYSTEMATIC REVIEW OF PARENTING PROGRAMS FOR PRETERM AND LOW BIRTHWEIGHT INFANTS ON ENHANCING PARENT-INFANT INTERACTION BY IMPROVING PARENTAL SENSITIVITY

M Danansuriya, J Barlow, A Underdown. Warwick Medical School, University of Warwick, Coventry, UK

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Background and Aims Parental sensitivity has been identified as being important to the infant’s developing central nervous system and capacity for affect regulation. However, this can be compromised in parents of preterm and low birthweight (LBW) infants, as a result of stress associated with giving birth to a preterm or low birthweight baby, and the associated processes (eg, threat of death; extended hospitalisation; intrusive procedures etc. A number of interventions have been developed to improve parent-infant interaction by improving parental sensitivity, and the aim of this review was to synthesise evidence about the effectiveness of such interventions.

Methods Key biomedical and social science databases were searched from 1990 to 2010. Only randomised controlled trials (RCTs) of interventions directed at parents of preterm (>37 weeks) and/or LBW (<2500 kg) infants. Included studies were critically appraised using standardised criteria. Data were not combined in a meta-analysis due to the presence of clinical heterogeneity, and a narrative summary is provided.

Outcome measures: Parental sensitivity and/or parent-infant interaction.

Results Eleven RCTs were included evaluating interventions aimed at promoting human touch (n=4), improving parent education (n=3) or that comprised multiple components (n=4). All included studies had numerous threats to internal and external validity (eg, poor allocation concealment; lack of intention-to-treat analysis and high dropout). The results suggest that six interventions had a significant impact on improving either parental sensitivity or parent-infant interaction (including two multi-component; two parent education and two touch-based programmes). The remaining five studies showed no evidence of benefit.

Conclusion There is limited evidence from a number of medium-quality RCTs suggesting that interventions delivered to parents of preterm or LBW infants can improve maternal sensitivity and/or parent-infant interaction. Further research is needed to identify whether improved parental sensitivity leads to improved parent-infant interaction.