Understanding and improving social development following very preterm birth

(Commentary on 'Social Development of Children Born Very Preterm: A Systematic Review' by Kirsten Ritchie et al, *Developmental Medicine and Child Neurology*)

Samantha Johnson, Senior Research Fellow, Department of Health Sciences, University of Leicester, 22-28 Princess Road West, Leicester, LE1 6TP, UK.
Tel: 0116 252 5798. Fax: 0116 252 3272. Email: sjj19@le.ac.uk.

Improved obstetric and neonatal care over recent decades means that many more babies survive than ever before, but for those born preterm, survival often comes at a cost. Brain injuries and altered developmental trajectories following birth before 32 weeks of gestation are associated with adverse outcomes across multiple developmental domains. Whilst neurodevelopmental disabilities are well-documented in this population, there is growing interest in the impact of preterm birth on survivors' mental health and well-being. The increasing body of evidence regarding the effects of preterm birth on behavioural and emotional outcomes has helped shape our understanding of the preterm behavioural phenotype and, in particular, has highlighted an increased risk of peer relationship problems and deficits in prosocial behaviour following preterm birth.¹

Ritchie and colleagues² present the results of a systematic review of studies of the social competence of very preterm children. Generally, the results show an increased risk for social maladjustment, particularly social withdrawal and peer relationship problems, and poor social skills, such as emotional regulation and compliance, throughout early and middle childhood. The paper is important in synthesising existing evidence and in highlighting the risk for these difficulties in preterm survivors. Education professionals and healthcare practitioners should be aware of the high prevalence of social and emotional difficulties in preterm children, particularly among those without other cognitive and behavioural impairments. The impact of such difficulties on children's lifelong adaptation and integration at school should not be overlooked.

The paper is also important in highlighting key methodological issues and avenues for future research. Despite conducting a comprehensive review, there was a lack of high quality studies and the authors were unable to carry out a meta-analysis due to the considerable heterogeneity in outcome measures. Most of the studies assessed only a single component of social competence as part of a wider outcome evaluation, which typically relied on data obtained from one or two short sub-scales of a brief screening questionnaire. This draws attention to the paucity of focussed research in this area and the need for researchers to work together towards building a standardised approach to outcome measurement. The review also highlights the notable lack of research in the adolescent years, a critical period in which individuals experience substantial physical, social and emotional changes that may impact on social competence. Moreover, many studies relied on questionnaires completed by a single informant, rather than by multiple informants as recommended for assessing childhood psychopathology. Perhaps most importantly, the lack of longitudinal data highlights that, although studies have documented the increased risk for social problems at different stages of childhood, there is still a way to go in understanding the *development* of social competence and the *pathways* that lead to peer problems in very preterm survivors.

Compared with their term-born peers, preterm individuals are at increased risk for autism spectrum disorders, poor school performance, peer victimisation and poorer occupational and family functioning in adulthood.^{1,3,4} Improving preterm children's social competence may reduce difficulties in these domains. However, in order to fashion appropriate intervention strategies, we need to elucidate the nature, origins and risk factors for poor social competence in preterm survivors. There is a lack of research exploring the mechanisms that underpin peer relationship problems and of the development of social cognition in preterm children. In other areas of development, such as the study of mathematics learning disabilities, research has shown that such difficulties have a different aetiology following preterm birth, which has implications for the development of population-specific interventions.⁴ Unravelling the factors that underpin preterm children's ability to relate to and form successful relationships with others is therefore a critical area for future research. As there are few perinatal interventions on the horizon that are likely to substantially reduce neurodevelopmental disability in very preterm populations, it is crucial that we continue our search to find the most appropriate ways of supporting the long-term development these children and maximising their lifelong health and well-being.

References

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