Hidden deficits: The developmental outcomes of children born prematurely

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Research demonstrates that children born preterm are at increased risk for a range of neurobehavioral impairments, although substantial individual variability exists with regards to the profile and severity of deficits. In addition to scoring lower on measures of general intelligence, preterm children tend to perform more poorly on tests of motor functioning, visual-perceptual skills, as well as attention and executive functioning. Language is also particularly vulnerable, with specific deficits being reported in all simple and complex tasks. Preterm survivors have been reported to be at increased risk for demonstrating behaviors consistent with ADD/ADHD and ASD. Consequently, preterm children are more likely to underperform at school and exhibit emotional and behavioral problems.

96 infants born prematurely in Northern Ontario, Canada were assessed by registered health professionals using standardized and non-standardized assessment tools measuring the development of gross motor, fine motor, expressive and receptive language. The objective of this study was to determine the overall presence and severity of delays in all domains assessed, as well as to determine the influence of gestational age and birth weight. Overall, the results demonstrated that the majority of children assessed fell within the average range. However, a significant proportion showed a mild delay in at least one developmental domain. The participants referred for therapy, the largest proportion were those born moderately preterm, followed closely by those born extremely preterm. Finally, the results also demonstrated that these delays could be identified as early as the child’s preschool years.

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