Relationship of medical interventions in childhood and prevalence of later intellectual disability

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A study by Jeffrey P. Brosco, M.D., Ph.D., of the University of Miami, Florida, and colleagues examines the relationship between medical interventions in early childhood and the increasing prevalence of later intellectual disability (ID).

Researchers reviewed medical literature and other data from 1950 through 2000 to construct estimates of the condition-specific prevalence of ID over time in the United States and Western Europe in populations of children who received a life-saving intervention within the first 5 years of life and were evaluated for ID after 5 years of age.

The study found low birth weight is associated with approximately 10 percent to 15 percent of the total prevalence of ID. No other new medical therapies introduced during this period were associated with a clinically significant increase in ID prevalence.

"Previous research has shown that specific medical interventions, such as newborn screening for congenital thyroid deficiency and phenylketonuria have decreased the prevalence of ID approximately 16 percent in the United States since 1950. These results suggest that other medical interventions, particularly the advent of intensive care technologies, have increased the prevalence of ID," the study concludes.

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