New insights into the developmental trajectory of autism

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In a study published in *JAMA Pediatrics*, researchers at Boston Children's Hospital shed new light on the evolving nature of Autism Spectrum Disorder (ASD) diagnoses in early childhood. Diagnosing
ASD at a young age is important for early intervention and treatment, but this new study suggests that not all kids continue to meet the criteria for ASD as they get older.

The team found that 37% of children diagnosed with ASD as toddlers no longer meet the criteria for ASD around the age of six. Children with lower adaptive skills—essential everyday abilities encompassing communication, self-care, and decision-making—tend to be more likely to have ASD persist later in life.

These findings underscore the nuanced nature of ASD and the importance of ongoing assessments throughout a child's developmental journey. Elizabeth Harstad, MD, MPH, Attending Physician in Developmental Medicine at Boston Children's and the leader of the study, emphasizes the significance of seeking evaluations for developmental concerns and encourages parents and caregivers to remain open to the possibility of evolving diagnoses over time.

Dr. Harstad notes, "It is important to recognize that diagnoses can evolve as a child develops. Our research shows how important it is that we monitor kids over time, because some children may really have changes in their social communication and behavioral function. This underscores the need for continuous assessments and adaptable intervention strategies."

While the study provides crucial insights into the developmental trajectory of ASD, William Barbaresi, MD, Chief of Developmental Medicine at Boston Children's and senior author on the paper, emphasizes the need for further evidence to determine the effectiveness of interventions on long-term outcomes.

All of the children in this study received interventions after their initial ASD diagnosis, with the highest amount of interventions received in the
18 months after diagnosis. The team did not find a significant relationship between the persistence of ASD and intensity of interventions received by children in the 18 months after the initial diagnosis. Thus, these findings suggest that more research on the impacts of individualized interventions on development is needed.

The implications of this research are far-reaching, as it calls for a reevaluation of current practices in caring for young children with ASD. The study signals the need for a shift towards a more dynamic and individualized approach to intervention.

"It is possible that children who no longer have autism at age six may have responded better to treatment than children whose autism persisted. The findings of the study should cause a very frank reconsideration of the need for far more research to understand if current treatment for autism is working, or if major new efforts to develop treatment approaches are needed," said Dr. Barbaresi.


*Provided by Children's Hospital Boston*