

Co-occurring Conditions and Change in Diagnosis in Autism Spectrum Disorders

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KEY WORDS

autism spectrum disorder, co-occurring conditions, diagnosis change

ABBREVIATIONS

aOR—adjusted odds ratio
ASD—autism spectrum disorder
CI—confidence interval
IEP—individualized education plan
NSCH—National Survey of Children's Health
PBNC—past but not current
PDD-NOS—pervasive developmental disorder, not otherwise specified

All 4 authors had full access to the total data set used and guarantee the integrity of the study and study findings. Ms Close developed the study design, acquired the data set, performed portions of data analysis, and drafted/revised the manuscript; Dr Lee also developed the study design and oversaw reported statistical findings and preparation/revisions of the manuscript for important intellectual content; Mr Kaufmann completed study data analysis and assisted in drafting the initial manuscript; and Dr Zimmerman assisted in understanding the clinical implications of the findings and final edits of the draft.

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WHAT'S KNOWN ON THIS SUBJECT: Mixed prevalence rates of co-occurring psychiatric and neurodevelopmental conditions have been reported in children diagnosed with an autism spectrum disorder (ASD). ASD diagnoses remain fairly stable within a continuum, but some do not meet criteria for an ASD diagnosis years after initial diagnosis.



WHAT THIS STUDY ADDS: Co-occurring neurodevelopmental and psychiatric conditions may explain, in part, why the diagnosis of an ASD may change with age.

abstract

OBJECTIVE: This study aimed to investigate descriptive characteristics and co-occurring neurodevelopmental and psychiatric conditions in young children, children, and adolescents with a current and consistent or past but not current (PBNC) diagnosis of autism spectrum disorder (ASD) and how such characteristics and conditions may engender a change in diagnosis of an ASD.

METHODS: Cross-sectional data of 1366 children with a parent-reported current or PBNC ASD diagnosis were obtained from the National Survey of Children's Health 2007 data set across 3 developmental stages: young children (aged 3–5 years), children (aged 6–11 years), and adolescents (aged 12–17 years). Multinomial logistic regression was used to examine demographic characteristics and co-occurring conditions that differentiate the groups with a current ASD from groups with a PBNC ASD.

RESULTS: Results indicated the co-occurring conditions that distinguish groups currently diagnosed with an ASD from groups with a PBNC ASD diagnosis. In young children, current moderate/severe learning disability, and current moderate/severe developmental delay; in children, past speech problem, current moderate/severe anxiety, and past hearing problem; and in adolescents, current moderate/severe speech problem, current mild seizure/epilepsy, and past hearing problem.

CONCLUSIONS: These findings suggest that the presence of co-occurring psychiatric and neurodevelopmental conditions are associated with a change in ASD diagnosis. Questions remain as to whether changes in diagnosis of an ASD are due to true etiologic differences or shifts in diagnostic determination. *Pediatrics* 2012;129:e305–e316