Data Trends
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The use of psychotropic medication by children has been a source of recent public controversy with many concerned that prescription psychotropic medications are overused and misapplied to children with mental health problems. Little information exists to help clarify the debate concerning national patterns of psychotropic medication use by children and adolescents. Olfson and colleagues provide some insight into this issue by examining two nationally representative datasets to track changes in the use of prescription psychotropic medication by children and adolescents over a span of 10 years. The researchers found that children and adolescents were three times more likely to use a prescription psychotropic medication in 1996 than in 1987.

Data on 1987 prescription drug use was obtained from the National Medical Expenditure Survey (NMES). The NMES collected information during four interviews on a random sample of 10,389 children over a 16-month time period. The Medical Expenditure Panel Survey (MEPS) supplied data on 1996 prescription drug use. The MEPS collected information on a random sample of 6,490 children during six rounds of interviews over a 30-month time period. The respondents for both the NMES and MEPS were the parent or legal guardian of the child, and information was collected on primary insurance type and sociodemographic characteristics of the child. In addition, both surveys contacted medical providers for each child to verify the medication use reported by the parent.

Results indicate that from 1987 to 1996 the overall rate of any psychotropic medication use increased from 1.4 to 3.9 per 100 children and adolescents, with increases evident across all geographic regions and all age, race/ethnicity, sex, and insurance groups examined (see Table 1 for a breakdown of prescription psychotropic medication use by demographic characteristic). After controlling for these demographic characteristics, the researchers found that the likelihood of using a psychotropic medication was nearly three times higher in 1996 than in 1987.

Table 1. National rates of any psychotropic medication use per 100 children and adolescents (95% CI) in 1987 and 1996

	1987	1996
Age, years		
<6	0.46 (0.19-0.73)	0.82 (0.35-1.29)
6-14	1.89 (1.38-2.40)	5.41 (4.43-6.39)
15-18	1.76 (1.17-2.35)	5.15 (3.72-6.58)
Gender		
Female	1.04 (0.71-1.37)	2.51 (1.86-3.16)
Male	1.67 (1.30-2.04)	5.18 (4.20-6.16)
Race		
African American	0.56 (0.25-0.87)	2.79 (1.63-3.95)
Hispanic	0.55 (0.14-0.96)	2.16 (1.38-2.94)
White	1.69 (1.34-2.04)	4.68 (2.84-5.52)
Insurance		
Private	1.71 (1.32-2.10)	4.07 (3.38-4.76)
Public	1.09 (0.44-1.74)	5.27 (3.64-6.90)
None	0.53 (0.18-0.88)	1.52 (0.78-2.26)
Region of Residence		
Northeast	0.98 (0.47-1.49)	3.12 (2.14-4.10)
Midwest	1.73 (1.10-2.36)	4.42 (2.75-6.09)
South	1.54 (1.07-2.01)	5.20 (4.08-6.32)
West	0.86 (0.51-1.21)	2.04 (1.20-2.88)

Stimulant medication use by children and adolescents rose significantly from 0.6 in 1987 to 2.4 per 100 children in 1996. A significant increase was observed across all demographic groups, except among children without insurance. After controlling for demographic characteristics the likelihood of using a stimulant medication was almost four times higher in 1996 than in 1987.

Antidepressant medication use increased from 0.3 in 1987 to 1.0 per 100 children in 1996. After controlling for demographic characteristics, children in 1996 were 3.56 times more likely to use an antidepressant medication than were children in 1987. These increases were strongest in the 15- to 18-year age group.

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Use of psychotropic medications other than stimulants and antidepressants also significantly increased between 1987 and 1996 (0.55 to 1.23 per 100 children, respectively). Use of mood stabilizers significantly increased from 0.2 to 0.7 per 100 children. The rate of antipsychotic medications remained stable at 0.2 per 100 children, and the use of benzodiazepines increased only slightly, from 0.2 to 0.3 per 100 children.

Furthermore, the authors examined the frequency with which children used a medication from more than one psychotropic group. Among children who used at least one psychotropic medication, the rate of coprescription significantly rose from 4.7 to 11.6 per 100 during the 1987-1996 time period. In 1996, approximately one in three (33.7%) children who used antidepressant medications also used another class of psychotropic medication.

The authors provide several suggestions to explain the dramatic increases observed in the use of all psychotropic medications by children. Increases in prescribed stimulant use, which is used almost exclusively in the treatment of ADHD, may reflect an increasing public acceptance of the medications. Additionally, revisions of the Diagnostic and Statistical Manual of Mental Disorders reduced of the number of criteria needed for a diagnosis of ADHD from eight to six, which may have led to larger numbers of ADHD diagnoses. The authors suggest that the increase in prescription antidepressant use may be due to greater numbers of children and adolescents diagnosed with depression or that antidepressant medications are being used to treat conditions other than mood or anxiety disorders.

Although the findings of this study indicate that more children are receiving medication for mental health problems, the authors discuss the need to determine the appropriateness of these medications. Of particular importance is the finding that for the approximately one in six children in the United States without health insurance, use of prescribed psychotropic medications remained far below that of children with coverage. This finding highlights the fact that large numbers of uninsured children may have little access to psychopharmacological treatments.

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