

Study Highlights Increased Use of Antipsychotics in Youth and the Elderly

The following is an extract of:

Crystal S, Olfson M, Huang C, Pincus H, Gerhard T. Broadened use of atypical antipsychotics: safety, effectiveness, and policy challenges. *Health Affairs* 2009; 28(5): w770-w781.

Corresponding author: Stephen Crystal

Bottom Line:

- Antipsychotic use has increased overall in youth and the elderly. The most marked increases are for non-psychotic conditions.

Youth

- From 2001 to 2004, use of antipsychotics was roughly five times higher, and increased more rapidly, for youth in Medicaid vs. those with private insurance.
- Medicaid (2001-2007): use of antipsychotics in children nearly doubled, from 2.7% to 4.2% (2007).
- Private Insurance (1996-2006): use of antipsychotics increased from 0.21% to 0.90%.
- Fewer than 30% of children receiving antipsychotics in Medicaid or with private insurance had an FDA indicated diagnosis.

Elderly in Nursing Homes

- From 1999-2006, use of antipsychotics increased overall by 7.4%.
- Government Owned Homes: rates increased from 21.2% (1999) to 25.9% (2006).
- Private For-Profit Homes: rates increased from 21.0% (1999) to 28.8% (2006).
- Private Not-For-Profit Homes: rates increased from 17.4% (1999) to 24.7% (2006).
- In 2006, 27.6% of all nursing home residents had received an antipsychotic. Roughly 80% of antipsychotic prescriptions were for off label use.

Since the introduction of second generation antipsychotics (SGAs), a larger and more diverse clinical population is now being prescribed antipsychotics. Despite this broadened use, the evidence base still contains major gaps regarding the safety and effectiveness of these medications. Of particular concern is the recent increase in antipsychotic use among two vulnerable populations: children and the elderly with dementia.

Study Background

Use of antipsychotics for non-FDA-approved indications in youth has grown faster than for FDA approved indications. Off label use now accounts for most use of antipsychotics in youth.¹ The expansion of SGA treatment in youth is accompanied by increased concerns over their metabolic adverse effects, motivating calls for routine laboratory monitoring of youth receiving SGAs. Antipsychotic use among the elderly has also increased.² Evidence of increased death rates associated with antipsychotic treatment in the elderly led the FDA to issue a public health advisory in 2005. Further evidence, including several large studies and meta-analyses, has

¹ Cooper WO et al. New users of antipsychotic medications among children enrolled in TennCare. *Archives of Pediatrics and Adolescent Medicine*. 2004;158(8):753-759.

² Jeste DV, et al. ACNP white paper: update on use of antipsychotic drugs in elderly persons with dementia. *Neuropsychopharmacology* 2008;33(5):957-970.

accumulated. The current study looked at antipsychotic prescribing trends over time, by demographics, and by diagnosis.

Children and Adolescents: Study Details and Results

The authors analyzed Medicaid Analytic Extracts (MAX) data to look at trends in antipsychotic use among youth in Medicaid aged 6-17 in seven states from 2001 to 2004. For privately insured youth, the authors analyzed the national Thomson MarketScan data (1996-2006). Rates among these two populations were examined by age, race, sex, diagnosis and medication class. Use of antipsychotics in children in Medicaid was higher and increased more rapidly than for those in private insurance from 2001-2004. Among youth in Medicaid, prescriptions for at least one antipsychotic increased from 2.7% (2001) to 4.2% (2004). The proportion of children in Medicaid on antipsychotics by demographic group was: 3.8% for ages 6-12; 4.7% for ages 13-17; 5.8% (white); 3.4% (African American); 2.1% (Hispanic). Among privately insured youth ages 6-17, use of antipsychotics was less common, but increased 4 – 5 fold from 0.21% in 1996 to 0.90% in 2006.

In 2004, less than 30% of children receiving antipsychotics had an FDA indicated diagnosis for their use. Of those with externalizing disorders (conduct disorder, ADHD, disruptive behavior disorder), more youth in Medicaid than privately insured youth received antipsychotics (47% vs. 26.2%, respectively). Further, off label use of antipsychotics increased for both Medicaid and privately insured youth, but such use increased more rapidly for those on Medicaid. Among the Medicaid youth who received an antipsychotic, the leading diagnoses were ADHD (29.1%), followed by bipolar disorder (18.7%), conduct disorder (17.9%), and anxiety or depression (9.1%).

Elderly Nursing Home Residents: Study Details and Results

Using data from the Nursing Home Minimum Data Set (MDS) for 1999 and 2006, the authors looked at patterns of antipsychotic use in elderly nursing home residents in eight states. Rates were examined by age, sex, race/ethnicity, facility ownership status (government, private for-profit, private not-for-profit), and diagnosis. Between 1999 and 2006 antipsychotic use increased by 7.4% in this population. This increase occurred despite decreases (from 39.4% to 34.8%) in diagnoses for schizophrenia, bipolar disorder, or dementia with aggressive behavioral symptoms.

In 2006, 27.6% of all nursing home residents had received an antipsychotic. Among those with dementia, antipsychotics were received by 51.2% with aggressive symptoms; 39.5% without aggressive symptoms; and 22.6% without any behavioral symptoms. In 2006, nearly 80% of antipsychotic prescriptions were for non-FDA-indicated conditions. Only 14.1% of those receiving off-label antipsychotic prescriptions had dementia with aggressive behavioral symptoms.

Clinical and Policy Implications

The authors note that their findings indicate important recent changes in antipsychotic prescribing, including an overall increase in antipsychotic treatment among youth and the elderly. Antipsychotics are being increasingly used to treat nonpsychotic symptoms in youth in Medicaid, in privately insured youth, and in the elderly. This increase is especially marked for youth in Medicaid. The large number of youth in Medicaid receiving SGAs despite their known metabolic risk and despite little evidence for their efficacy is cause for concern, especially since

low-income children are already at increased risk for obesity and metabolic disorders.³ Also of concern is the increase in off-label antipsychotic prescriptions among elderly nursing home residents despite increased safety concerns, and despite clinical recommendations calling for careful monitoring, short-term use only, and periodic trials of antipsychotic discontinuation in the elderly.⁴ These concerns point to the need for further safety and effectiveness data to help guide clinicians and policymakers in providing quality care in the use of antipsychotics in vulnerable populations.

No potential conflicts of interest were reported for this study.

³ Shrewsbury V, Wardle J. Socioeconomic status and adiposity in childhood: a systematic review of cross-sectional studies, 1990-2005. *Obesity* 2008;16(2):275-284.

⁴ Salzman et al. Elderly patients with dementia-related symptoms of severe agitation and aggression: consensus statement on treatment options, clinical trials methodology, and policy. *Journal of Clin Psychiatry* 2008;69(6):889-898.