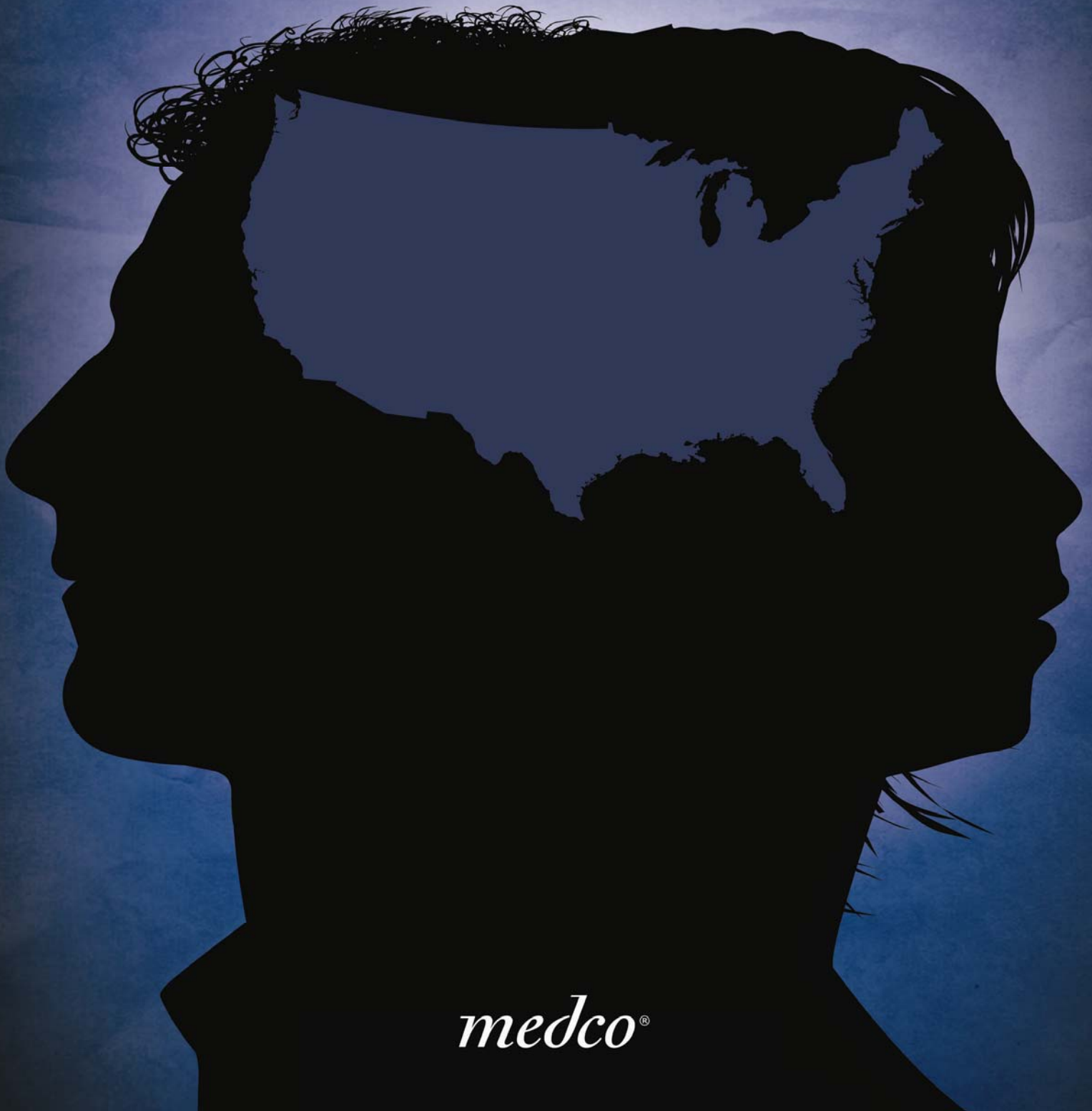


AMERICA'S STATE OF MIND

A Report by Medco



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America's State of Mind Report is a Medco Health Solutions, Inc. analysis examining trends in the utilization of mental health-related medications among the insured population. The research reviewed prescription drug claims of over two million Americans to assess the use of antidepressants, antipsychotics, attention deficit hyperactivity disorder drugs and anti-anxiety treatments between 2001 and 2010.

The Report provides revealing insights into the utilization of mental health treatments along gender lines, age groups and geography, as well as changes that have occurred over the decade.

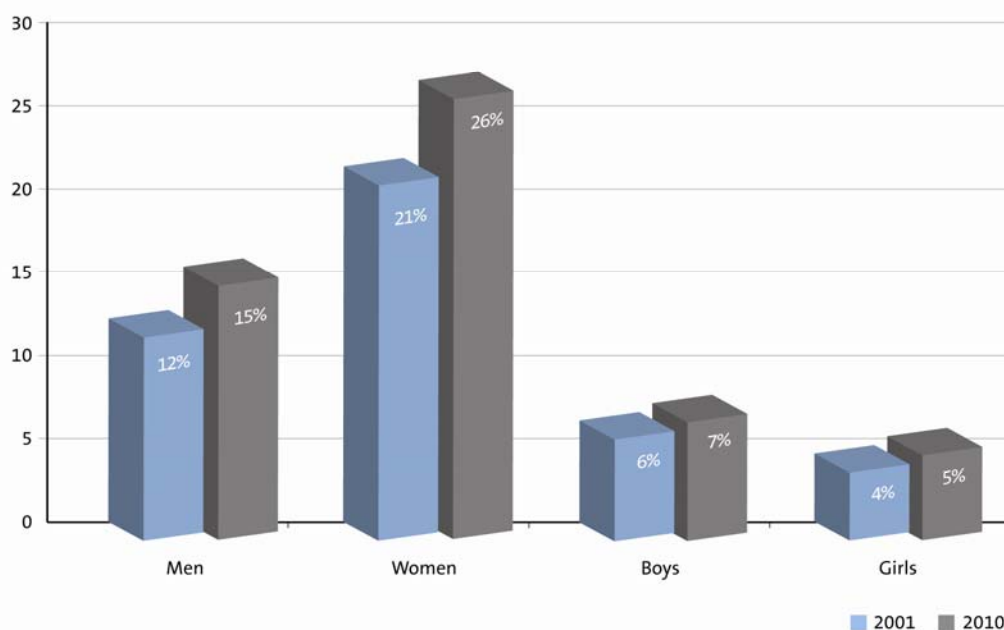
Overview of Mental Health Medication Trends

Overall, the number of Americans on medications used to treat psychological and behavioral disorders has substantially increased since 2001; more than one-in-five adults was on at least one of these medications in 2010, up 22 percent from ten years earlier. Women are far more likely to take a drug to treat a mental health condition than men, with more than a quarter of the adult female population on these drugs in 2010 as compared to 15 percent of men.

Women ages 45 and older showed the highest use of these drugs overall. Yet surprisingly, it was younger men (ages 20 to 44) who experienced the greatest increase in their numbers, rising 43 percent from 2001 to 2010.

The trends among children are opposite those of adults: boys are the higher utilizers of these medications overall but girls' use has been increasing at a faster rate.

Percent of Population Using Mental Health Medications
2001 vs 2010



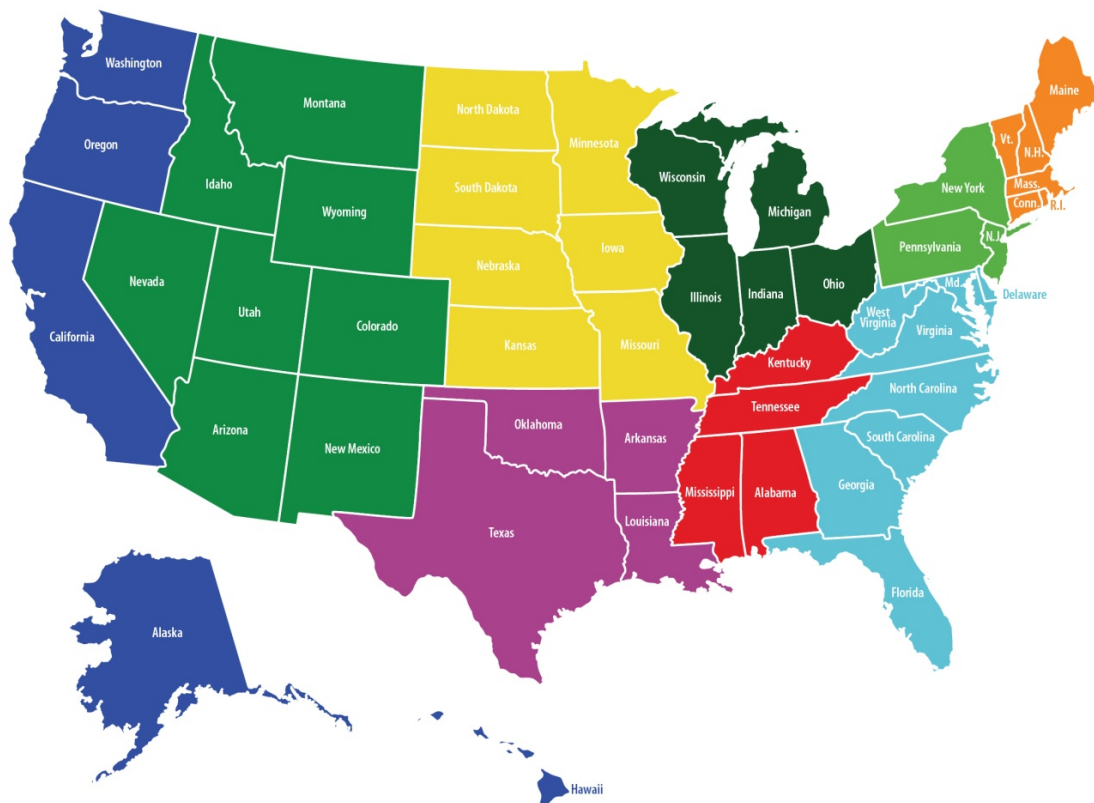
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The State of the States

An examination of utilization among different regions of the United States found that the highest prevalence of mental health medication use (23 percent) was in the east south central region of the U.S., a section of the country known as the “Diabetes Belt” which includes Kentucky, Tennessee, Mississippi, and Alabama. Studies have shown higher levels of depression and anxiety disorders among people with diabetes which could account for the greater utilization of these medications in this geographic area.

The region with the fewest users of mental health medications (15 percent) is in the east north central section of the U.S. which includes Indiana, Ohio, Wisconsin and Michigan.

Percent of Population on Mental Health Medications by Region



East South Central (23.3%)	West South Central (20.6%)	Middle Atlantic (16.5%)
New England (22.2%)	South Atlantic (17.8%)	Mountain (15.2%)
West North Central (20.8%)	Pacific (17.5%)	East North Central (14.6%)

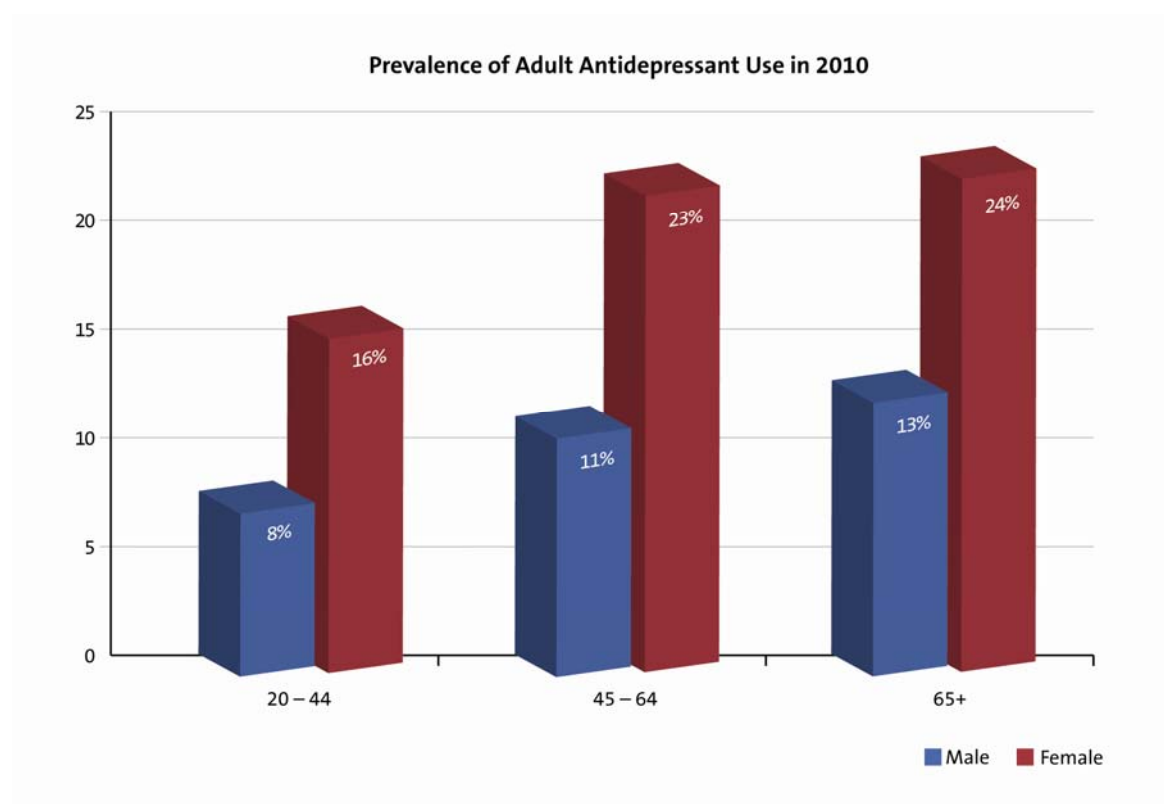
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Medication Trends: Antidepressants

Antidepressants are the psychiatric medications used to treat mood disorders that are defined by having depressive symptoms. The most widely used antidepressants are selective serotonin reuptake inhibitors (SSRIs), a class of drugs that includes medications such as Prozac (fluoxetine), Paxil (paroxetine), Zoloft (sertraline) and Lexapro (escitalopram). Less used, but a popular alternative to SSRIs are serotonin–norepinephrine reuptake inhibitors (SNRIs); some of the commonly used medications in this drug class include Effexor (venlafaxine) and Cymbalta (duloxetine).

Trends in Use

Medco data shows that antidepressants are the most commonly used mental health medications and that women have the highest utilization rates. In 2010, 21 percent of women ages 20 and older were using an antidepressant. From 2001 to 2010 the number of women on an antidepressant grew 29 percent. The most significant increases (40 percent) were among women 65 and older. Men's use of antidepressants is almost half that of women, but has also been on the rise with a 28 percent increase over the past decade.

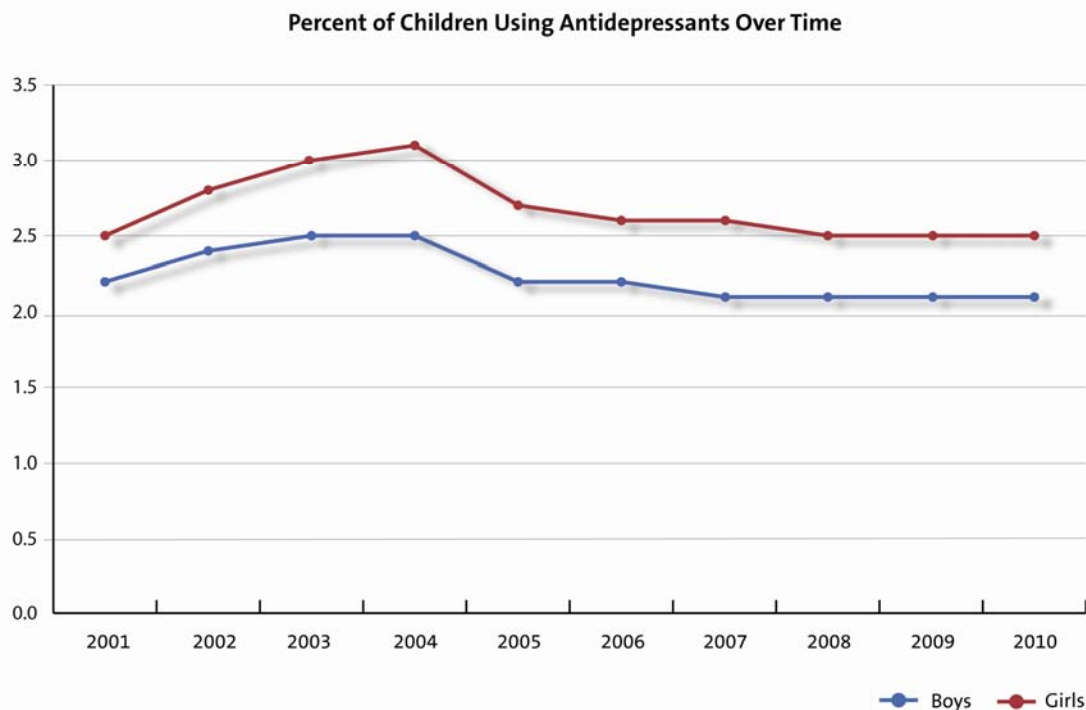


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Antidepressants (cont.)

FDA Warnings Impact Children's Use of Antidepressants

According to Medco's data, use of antidepressants among children rose significantly at the beginning of the decade, reaching its peak in 2004 and then falling back down in 2010 to levels similar to what was seen in 2001. The drop in use of these drugs can be correlated to the Food and Drug Administration's (FDA) issuing of a black box warning in 2004 for SSRIs such as Celexa, Prozac, Luvox, Paxil and Zoloft, due to evidence that these drugs may be linked to increased "suicidality" in children. Further decline in pediatric use will eventually moderate, since these drugs will continue to be a necessary therapy for some patients. This was evident in 2010 as the number of children on these drugs inched up slightly from the prior year for the first time since FDA warnings were issued.



Evidence of Non-adherence

A Medco Research Institute study presented at a 2010 American Psychiatric Association annual meeting found that nearly one-third of patients who were prescribed an increased dosage of antidepressants were not taking their original prescriptions regularly. These findings indicate that physicians may assume that the current dose of a medication is ineffective and raise the dosage based on that assumption, when in fact the reason the patient is not responding to the antidepressant is that he or she is not taking it regularly. The study points to the need for adherence problems to be identified and addressed to enable patients to fully benefit from their medications.

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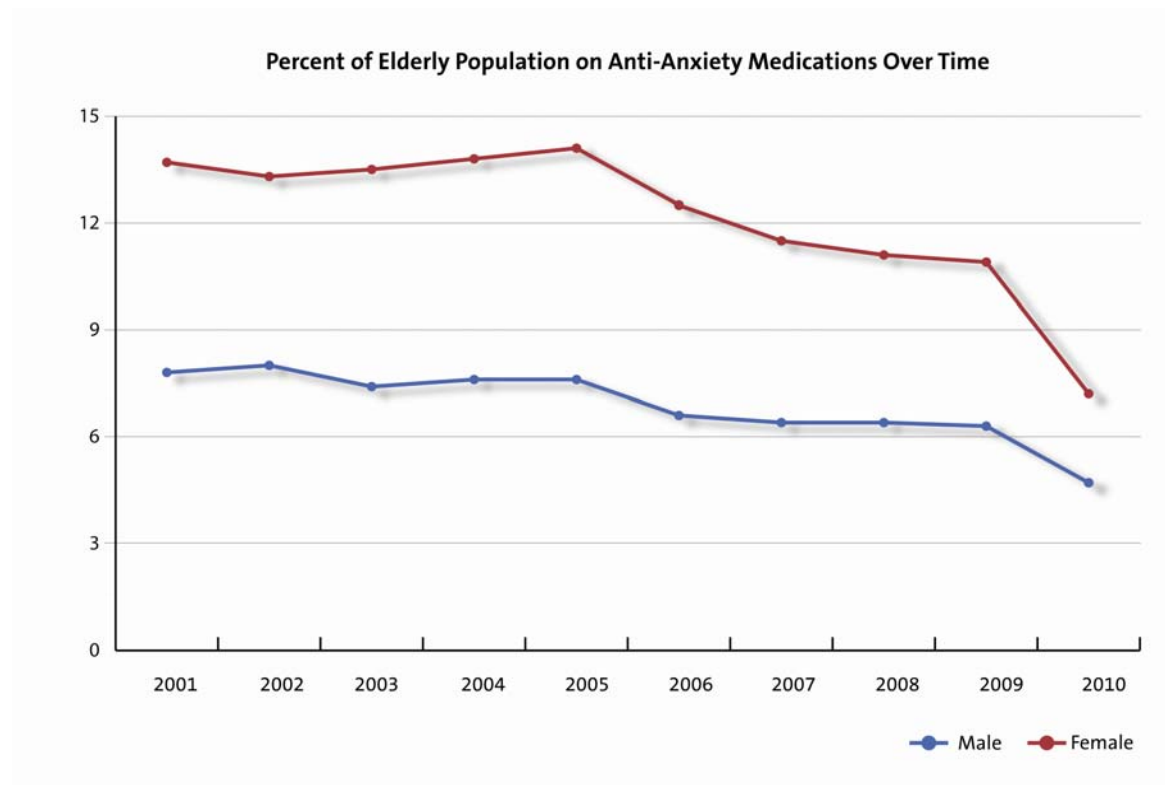
Medication Trends: Anti-Anxiety Treatments

Anxiety disorders are the most common psychiatric illnesses affecting children and adults. An estimated 40 million American adults suffer from anxiety disorders. Although anxiety disorders are highly treatable, only about one-third of sufferers receive treatment. Benzodiazepines are often used to treat anxiety disorders, such as general anxiety, panic disorder and social phobias. Common benzodiazepines include Xanax (alprazolam), Klonopin (clonazepam), Valium (diazepam), and Ativan (lorazepam).

Trends in Use

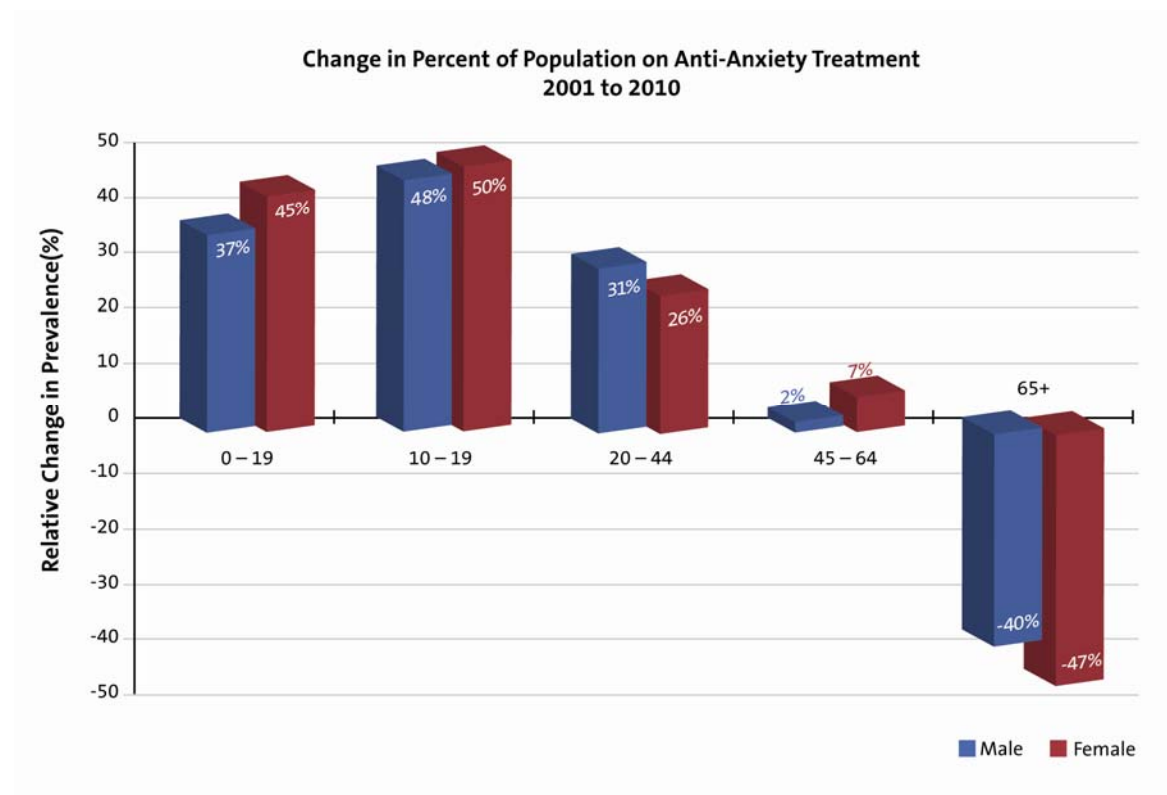
Medco data shows that women have the highest utilization rate of anti-anxiety medications; in fact, 11 percent of middle-aged women (ages 45-64) were on an anti-anxiety drug treatment in 2010, nearly twice the rate of their male counterparts (5.7 percent).

The most notable increase in the use of these medications was seen in children ages 10-19; utilization increased among this age group by almost 50 percent. While younger people showed marked increases, older people showed declines. A significant decrease in the numbers of seniors on anti-anxiety treatments was posted over the decade, down 44 percent from 2001.



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Anti-Anxiety (cont.)



Seniors and Anxiety

Studies have confirmed that seniors taking anti-anxiety medications may be at increased risk for memory impairment, balance issues, confusion and a loss of inhibitions. The use of these medications has decreased since Medicare Part D was enacted and the medications lost coverage under the bill.

FDA Warnings

In 2007 the FDA underscored some health risks associated with anti-anxiety medications, such as Ativan and added safety labeling information. The use of benzodiazepines was found to potentially worsen cases of pre-existing depression and therefore it was urged that these patients should be under strict evaluation for the first several weeks and should only continue use after being reevaluated by their physician.

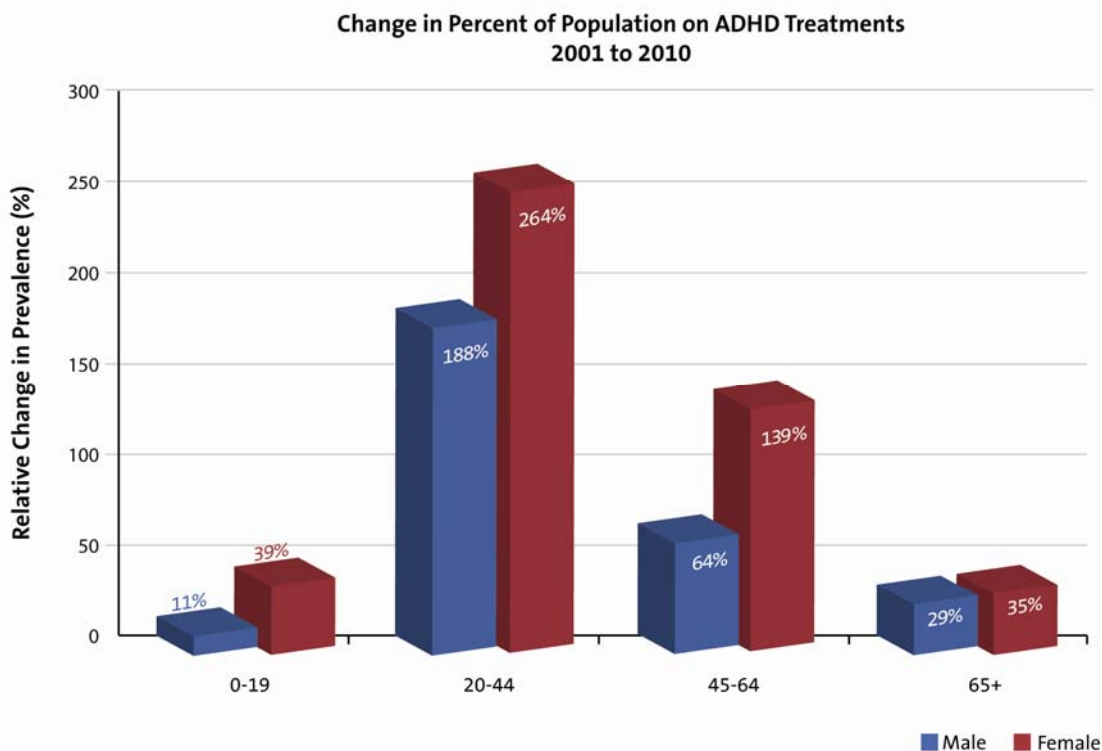
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Medication Trends: ADHD Treatments

Central nervous system stimulants are the medications used to treat attention deficit hyperactivity disorder (ADHD). Some symptoms of ADHD include hyperactive impulsive thoughts and actions and inattentiveness that can impact behavior and learning. Stimulants can help to focus the thoughts and ignore distractions in those with ADHD. Drugs in this category include Adderall (amphetamine and dextroamphetamine), Concerta (methylphenidate), Vyvanse (lisdexamfetamine), Provigil (modafinil) and Nuvigil (armodafinil). First time generics for Provigil are likely to enter the market in 2012. Since Nuvigil is similar to Provigil, the new generic is likely to displace both brands in the marketplace in 2012, resulting in substantial savings.

Trends in Use

Medco data shows that boys are the most prevalent users of ADHD medications, although the number of girls taking ADHD drugs has been on the rise – up nearly 40 percent since 2001. In the United States, an estimated 5.4 million children ages 4 to 17 have been diagnosed with ADHD and the percentage of children with a parent-reported ADHD diagnosis increased by 22 percent between 2003 and 2007 according to the Centers for Disease Control (CDC).

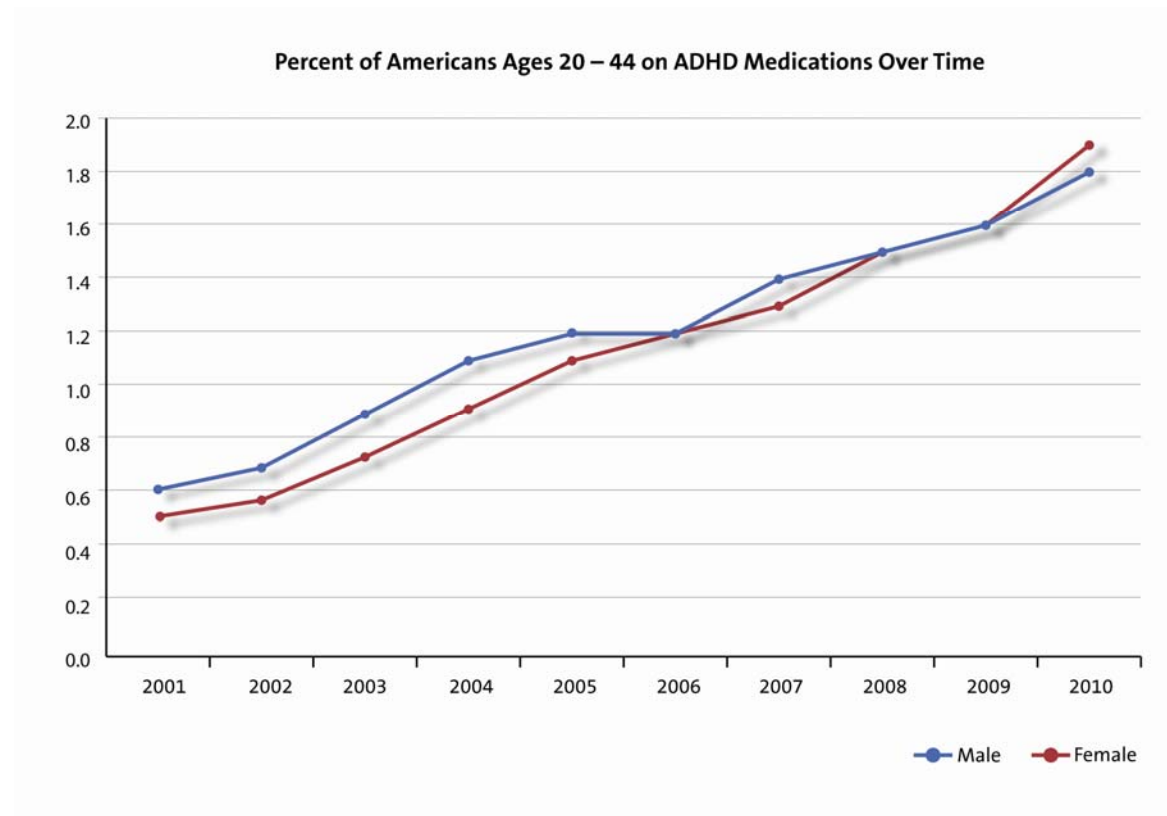


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ADHD (cont.)

ADHD Medication: No longer a kids disease

While it is well known that ADHD is prevalent among children, diagnosis and treatment of ADHD has in fact grown at a much faster rate among adults. Additionally, a gender shift occurs in adulthood when slightly more women are shown to be using ADHD drug treatments than men. Among adults, women ages 20-44 showed the highest prevalence in use of ADHD drugs in 2010 (nearly 2.0 percent) and saw the greatest spike in their numbers, rising 264 percent from 2001-2010.



Medication Risks

Medication safety warnings appear to have had an impact on the utilization of ADHD medications. In 2005, the FDA called for stronger warnings for ADHD medications due to reports of psychosis or mania seen in patients on these drugs, primarily in younger children. Since then, the number of children on these medications has been on the decline.

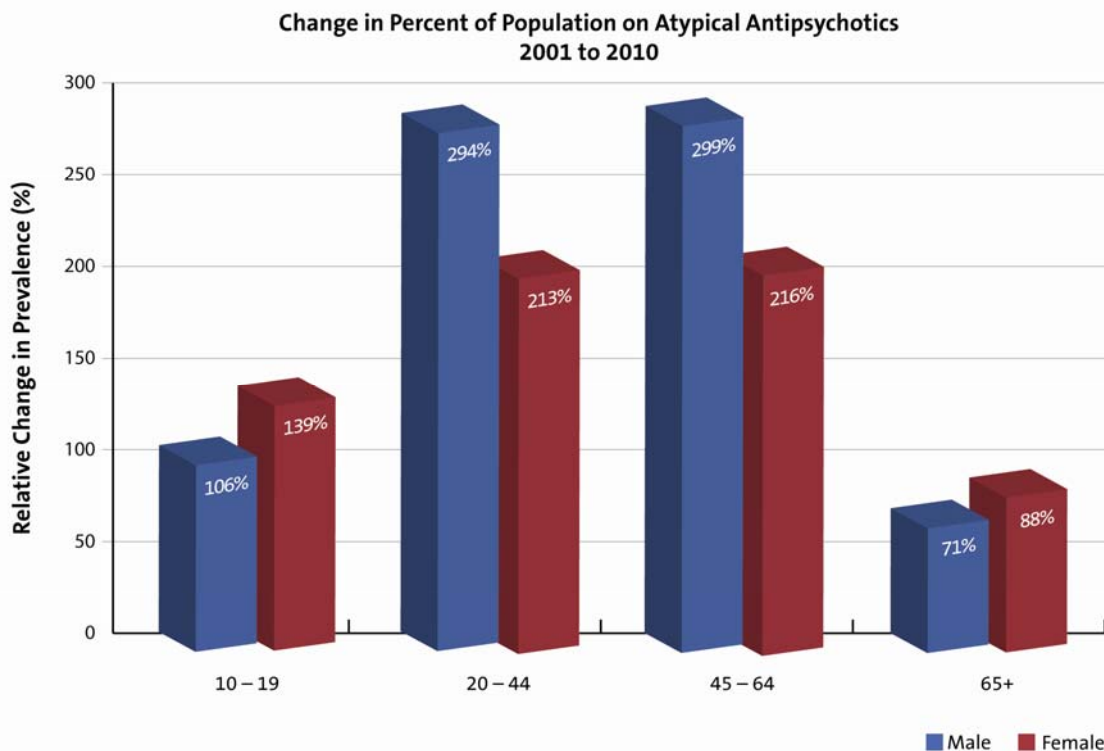
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Medication Trends: Atypical Antipsychotics

Atypical antipsychotics are considered second generation antipsychotics and have almost entirely replaced traditional agents in the treatment of schizophrenia and schizophrenia-related disorders. Some of the most widely used atypical antipsychotics include Risperdal (risperidone), Zyprexa (olanzapine), Seroquel (quetiapine), Geodon (ziprasidone), Abilify (aripiprazole) and Invega (paliperidone). Generics for Risperdal have provided a useful option for all-branded formularies. Additionally, first-time generics for Zyprexa (expected in 2011), Seroquel and Geodon (both expected in 2012) are likely to have significant impact on costs in this category in the next few years.

Trends in Use

Medco data shows that use of atypical antipsychotics has soared over the decade, with the greatest spike among adults ages 20-64, up more than 3.5 times from 2001-2010. While prevalence in use is higher among women, the number of men on these drugs increased more dramatically over this period; men ages 20-64 quadrupled their use from 2001-2010. Additionally, while the actual prevalence of children ages 10-19 on atypical antipsychotics is low – about one percent - their numbers more than doubled from 2001-2010. While other age groups have shown greater increases over the decade, older Americans have the highest use overall.



Atypical Antipsychotics (cont.)

Risks to Children

Increased use of atypical antipsychotics, especially among children may be due to the fact that they are seen as less dangerous than older antipsychotics and can be helpful for conditions that were previously treated with other medications. However, these drugs are not without their risks. There is evidence that the risk of diabetes and metabolic disorders from using atypical antipsychotics could be much more severe for pediatric patients than adults, and there is a need for more studies to understand the long-term effects of these drugs on children. Some of these drugs have warning labels regarding the possible exacerbation or increased risk of new-onset diabetes, although the metabolic side effects appear to be somewhat different for each drug.

Risks to the Elderly

Atypical antipsychotics are frequently used in the 65+ demographic to treat aggression in patients with dementia. However, these medications carry a boxed warning regarding increased mortality risk associated with their use in treating elderly patients with dementia. Further education on these risks is needed given that 30 out of 1000 seniors are taking atypical antipsychotics.