The Innocent Victims of Increased Opioid Availability
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A recent study sought to describe the clinical impact of the increased societal availability of opioids on children.

70,650 patients <6 years old were exposed to 85,852 opioids and 22,682 other medications between 2000 to 2007 based on national poison control center data.

Pediatric exposure cases increased 49% over the course of the eight year period.

Opioid related deaths in children <6 years of age increased by 280% from 2000 to 2007.

Notably, methadone was involved in 2.6% of the overall cases, but accounted for 20 deaths (42%).

As prescription opioids have become more available in society and in homes, exposures and consequences to children have increased. Methadone is a particular problem. Although related to only 2.6% of cases, methadone was linked to 16% of moderate outcomes, 31% of major outcomes and 42% of deaths.

Tramadol abuse has been reported from several countries. Observationally, calls to poison centers in the United States related to tramadol, particularly the abuse of tramadol, are increasing. A recent study evaluated the impact of tramadol utilizing post-marketing surveillance techniques.

The study examined the call trend of poison center calls with tramadol as the primary drug, over the period of 2000 to 2007, in comparison to other opioids.

42,138 unique calls came in to Poison Centers across the nation where tramadol was the first named opioid. Tramadol calls rose 155% over the 8 years of the study. In the same period, pharmaceutical exposures to the National Poison Data System (NPDS) database rose 30.5%. As a percent of all opioid related calls tramadol calls rose 43%.

The increase in tramadol abuse and misuse was statistically significant.

Prescribers may think tramadol is less likely to be abused than other opioid pain relievers. The data suggest otherwise.

Tramadol has an impact on children as well—11% of all tramadol cases (4,706) were in children <6 years, exposed unintentionally. The number of children exposed per year more than doubled over the 8 year period (from 409 to 953), but was a stable portion of tramadol calls.

Overall, tramadol exposure, particularly abuse and misuse, has increased significantly and a majority of cases were evaluated at a health care facility.

This “non-narcotic” opioid is behaving more like a narcotic in this post marketing survey.

Proposed increased FDA regulation (scheduling) may limit abuse.

Teen ADHD Drug Abuse
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A recent study shows that calls to poison centers about teen abuse of stimulant Attention Deficit/Hyperactivity Disorder (ADHD) medications have increased 76% over the 8 years from 1998 through 2005. Teen abuse and misuse is up in proportion to prescriptions of these medications to teens (up 80%).

This suggests that as sales increase to treat teens for ADHD, abuse and misuse increased proportionately—NOT that a greater percentage of teens that have these drugs are abusing them. But more total teens are abusing and misusing stimulant ADHD medications and more are suffering consequences. This is a significant health care issue for of teens, their parents and those providing care, including emergency departments.

Other sources estimate there are 4.5 ED visits/yr/ 100,000 US residents related to non-medical use of ADHD medication by teens.

Based on these findings, more teens are abusing and misusing stimulant ADHD medications because they have access to those medications, not because a higher percentage of those treated have turned to abusing their medication.

However, the treatment of appropriately diagnosed ADHD may actually decrease overall teen drug abuse (including other substances). Other research shows that teens that have ADHD and are on an appropriate medication regimen are LESS likely to abuse drugs than kids with ADHD who are not treated.

Within the limits of the NPDS database, we noted that the short term symptom severity of abuse and misuse of mixed amphetamines was more severe than that of methylphenidate.

Over time, the abuse of mixed amphetamines was disproportionately represented in the ADHD medication calls with a corresponding increase in the overall severity of clinical effects.

Stimulants have a long history of abuse—from WW II to the recent methamphetamine crisis. Teen abuse (to get high) and misuse (e.g., to stay up to cram) of ADHD medication has been noted as long as these medications have been prescribed. Pediatricians and parents need to remain aware of the abuse potential of these drugs.

Congratulations to the Prevention Research Unit! The PRU has earned an Exemplary Prevention Award from the Ohio Department of Alcohol and Drug Addiction Services for helping to prevent the use of alcohol, tobacco and other drugs. The program used mentors to target African American youth ages 6 to 12 years. The focus was on making positive decisions, creating good relationships and promoting healthy lifestyles.

December 2009, The Prevention Research Unit, hosted a gala in collaboration with People of Color Wellness Alliance (POCWA).