Drug-Related Emergency Department Visits Involving Pharmaceutical Misuse and Abuse by Older Adults

In Brief

- In 2004, there were an estimated 115,803 emergency department (ED) visits involving pharmaceutical misuse and abuse by adults aged 50 or older; in 2008, there were 256,097 such visits, representing an increase of 121.1 percent.

- One fifth (19.7 percent) of ED visits involving pharmaceutical misuse and abuse among older adults were made by persons aged 70 or older.

- Among ED visits made by older adults, pain relievers were the type of pharmaceutical most commonly involved (43.5 percent), followed by drugs used to treat anxiety or insomnia (31.8 percent) and antidepressants (8.6 percent).

- Among patients aged 50 or older who visited the ED for pharmaceutical misuse or abuse, more than half (52.3 percent) were treated and released, and more than one third (37.5 percent) were admitted to the hospital.

As the baby boom generation ages, a large cohort of older adults with a history of moderate to high rates of drug use may levy a costly burden on the American health care and substance abuse treatment systems. In fact, researchers have predicted that both the number of adults aged 50 or older with a substance use disorder and the rate of pharmaceutical misuse or abuse in this age group will double by 2020.\(^1\,^2\) Data from the National Survey on Drug Use and Health (NSDUH) confirm that the rates of nonmedical pharmaceutical use among adults aged 50 to 59 increased from 2.2 percent in 2002 to 3.9 percent in 2009.\(^3\)

The Drug Abuse Warning Network (DAWN) is a public health surveillance system that monitors drug-related emergency department (ED) visits in the United States.\(^4\) To be a DAWN case, an ED visit must have involved a drug, either as the direct cause of the visit or as a contributing factor. This issue of The DAWN Report provides trend statistics from 2004 through 2008 with a focus on 2008 findings concerning ED visits involving pharmaceutical misuse or abuse by adults aged 50 or older (hereafter referred to as “older adults”).
DAWN REPORT: DRUG-RELATED EMERGENCY DEPARTMENT VISITS INVOLVING PHARMACEUTICAL MISUSE AND ABUSE BY OLDER ADULTS

November 25, 2010

Overview

In 2004, there were an estimated 115,803 ED visits involving pharmaceutical misuse and abuse by older adults (Figure 1). In 2008, there were 256,097 such visits, representing an increase of 121.1 percent.

Age, Gender, and Race/Ethnicity

Of ED visits involving pharmaceutical misuse or abuse by older adults, more than one third (35.6 percent) were made by those aged 50 to 54 (Figure 2). Visits by adults aged 55 to 59 accounted for 23.2 percent of such visits, and 19.7 percent were made by adults aged 70 or older.

Slightly more of these ED visits were made by females (53.6 percent) than by males. The majority of such visits were made by older non-Hispanic white adults (78.1 percent), 15.2 percent were made by older non-Hispanic black adults, and 5.2 percent were made by older Hispanic adults.

Drugs Involved in ED Visits by Age Group

Pain relievers were the type of pharmaceutical most commonly involved (43.5 percent) in ED visits by older adults; the majority of these visits involved narcotic pain relievers (33.9 percent) (Table 1). After pain relievers, drugs used to treat anxiety or insomnia (31.8 percent) and antidepressants (8.6 percent) were the most commonly reported for such visits.

Pain relievers were involved in 45.4 percent of visits by those aged 50 to 64 and 38.8 percent of visits by those aged 65 or older. Drugs used to treat anxiety or insomnia were involved more commonly in visits made by patients aged 50 to 64 than those made by patients aged 65 or older (35.6 vs. 22.5 percent). Antidepressants were involved in 10.1 percent of drug-related ED visits made by those aged 50 to 64 and 5.0 percent of visits by those aged 65 or older.

Alcohol in Combination with Pharmaceuticals

One in five (20.4 percent) ED visits related to pharmaceutical misuse or abuse by older adults also involved alcohol (Table 1). Visits involving alcohol in combination with pharmaceuticals were more likely to be made by adults aged 50 to 64 than by adults aged 65 or older (24.9 vs. 9.5 percent). Specifically, in comparison with patients aged 65 or older, patients aged 50 to 64 had a higher proportion of ED visits involving alcohol in combination with drugs used to treat anxiety and insomnia (47.3 vs. 32.1 percent) and alcohol in combination with antidepressants (13.2 vs. 5.0 percent).

Disposition of ED Visits

Among older adults who visited the ED for pharmaceutical misuse or abuse, more than half (52.3 percent) were treated and released, and more than one third (37.5 percent) were...
Because many substance abuse treatment and prevention programs were designed for adolescents and young adults, new approaches to addressing substance abuse in older adults may be necessary. Specifically, prevention messages that target older adults could warn against the dangerous combination of alcohol and pharmaceuticals. With one fifth of ED visits by older adults involving pharmaceutical misuse or abuse occurring among adults aged 70 or older, caregivers (e.g., adult children of aging parents) may be able to help prevent abuse by being alert to the symptoms and dangers. Education for caregivers about the abuse potential of certain medications and the early warning signs of abuse may be needed.

Moreover, the administration of pharmaceuticals requires oversight by medical professionals to guard against life-threatening interactions and dependency. Thus, it is important that physicians know about all pharmaceuticals (prescription and over-the-counter) a patient is taking before prescribing additional medications. Educating pharmacy and medical personnel as well as behavioral health specialists such as social workers and psychologists about substance abuse trends in older adults may help them to be more vigilant about the serious public health problem of pharmaceutical misuse and abuse by older adults.

End Notes
4 To learn about DAWN and other SAMHSA surveillance systems, please go to http://oas.samhsa.gov/.

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The Drug Abuse Warning Network (DAWN) is a public health surveillance system that monitors drug-related morbidity and mortality. DAWN uses a probability sample of hospitals to produce estimates of drug-related emergency department (ED) visits for the United States and selected metropolitan areas annually. DAWN also produces annual profiles of drug-related deaths reviewed by medical examiners or coroners in selected metropolitan areas and States.

Any ED visit related to recent drug use is included in DAWN. All types of drugs—licit and illicit—are covered. Alcohol is included for adults when it occurs with another drug. Alcohol always is reported for minors even if no other drug is present. The classification of drugs used in DAWN is derived from the Multum Lexicon, copyright 2009, Multum Information Services, Inc. The Multum Licensing Agreement governing use of the Lexicon can be found at http://dawninfo.samhsa.gov/drug_vocab.

DAWN is one of three major surveys conducted by the Substance Abuse and Mental Health Services Administration’s Center for Behavioral Health Statistics and Quality (SAMHSA/CBHSQ). For more information on other CBHSQ surveys, go to http://oas.samhsa.gov. SAMHSA has contracts with Westat (Rockville, MD) and RTI International (Research Triangle Park, NC) to operate the DAWN system and produce publications.

For publications and additional information about DAWN, go to http://DAWNinfo.samhsa.gov/.