PATIENTS WITH DRUG-RELATED EMERGENCY DEPARTMENT VISITS INVOLVING SUICIDE ATTEMPTS WHO LEFT AGAINST MEDICAL ADVICE

AUTHORS

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INTRODUCTION

Suicide attempts and death by suicide are significant public health issues in the United States. In 2014, more than 1.1 million adults aged 18 years or older in the United States (0.5 percent) attempted suicide in the past year.1 A history of previous suicide attempts remains one of the most important risk factors for death by suicide.2 As many as 39 percent of people who die by suicide had been seen in an emergency department (ED) in the year before their death.2,3 For people who survive a suicide attempt, the period after an ED visit is a time of high risk for another suicide attempt. Reductions in the tragedy of subsequent suicide deaths, however, have been shown through engaging patients in timely treatment and providing follow-up services after discharge from the ED.4,5 Adults who received medical attention resulting from a suicide attempt are more likely to receive mental health treatment compared to those who did not receive medical attention.5 Thus, in addition to attending to immediate physical health issues, ED care represents an important opportunity to assess the patient's mental health needs and provide follow-up resources at a particularly critical juncture in his or her care. The full complement of services, however, may be delivered only if the patient completes the ED visit before being discharged, admitted, or transferred.

The Drug Abuse Warning Network (DAWN) was a public health surveillance system that monitored drug-related ED visits in the United States. DAWN can be used to examine ED visits involving drug-related suicide attempts. 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. Data were collected on illicit drugs, prescription and over-the-counter medications, and dietary supplements. Data were also collected for visits involving alcohol combined with other drugs and, for patients aged 20 or younger, visits where alcohol was the only substance involved in the visit. Although DAWN included only suicide attempts that involved drugs, those attempts were not limited to drug overdoses. If drugs were involved in a suicide attempt by other means (e.g., self-inflicted wounds while under the influence of marijuana), the case was included as drug related. Excluded were suicide attempts with no drug involvement and suicide-related behaviors other than actual attempts (e.g., suicidal ideation, suicidal thoughts). This issue of The CBHSQ Report highlights the characteristics of ED visits involving drug-related suicide attempts among people aged 12 or older from 2004 to 2011. Unless otherwise noted, all comparisons described as increases, decreases, or differences are statistically significant at the .05 level.

In Brief

- According to the Drug Abuse Warning Network, emergency department (ED) visits involving drug-related suicide attempts increased 41 percent from 2004 to 2011, from an estimated 161,586 to 228,366 visits.
- There was a total of about 1.5 million ED visits involving drug-related suicide attempts between 2004 and 2011.
- Combined 2004 to 2011 data indicate that among the ED visits involving drug-related suicide attempts, 5,396 ED visits (less than 1 percent) ended with the patient leaving the ED against medical advice.
- Just over half (54 percent) of the ED visits involving drug-related suicide attempts that ended with the patient leaving against medical advice involved males, and over a quarter (29 percent) involved patients between the ages of 35 and 44.
According to DAWN, ED visits involving drug-related suicide attempts increased 41 percent from 2004 to 2011, from an estimated 161,586 to 228,366 visits. Half (51 percent) of these visits resulted in the patient being admitted to the hospital (Figure 1). A quarter (25 percent) were transferred to another health care facility, and slightly less than a quarter (20 percent) were discharged after being treated. The remaining 4 percent of visits included patients who left against medical advice, died in the ED, or had some other disposition or an unknown disposition. Because relatively few patients whose suicide attempts involved drugs left the ED before completion of the visit, combined 2004 to 2011 DAWN data were aggregated and are used in the remainder of the analysis in this report.

Figure 1. Disposition of emergency department visits involving a drug-related suicide attempt: 2004 to 2011.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, Drug Abuse Warning Network (DAWN), 2004 to 2011.
According to DAWN, a total of about 1.5 million ED visits involved drug-related suicide attempts between 2004 and 2011. Less than 1 percent of these visits (5,396) ended with the patient leaving the ED against medical advice. Just over half of visits (54 percent, or 2,906 visits) where patients left against medical advice involved males (Figure 2); the difference between male and female patients was not statistically significant. More than a quarter of the visits (29 percent, or 1,567 visits) involved adults between the ages of 35 and 44.

Figure 2. Emergency department (ED) visits involving drug-related suicide attempts where the patient left against medical advice, by gender and age group: 2004 to 2011

Note: Estimates for patients in the 12 to 17, 55 to 64, and 65 or older age groups are suppressed because of lack of precision.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, Drug Abuse Warning Network (DAWN), 2004 to 2011.
DISCUSSION

The vast majority of ED patients with a drug-related suicide attempt remained in the ED to complete their treatment. However, those patients who left the ED before their treatment was completed may have missed a critical opportunity to receive medical follow-up. Programs that follow up with patients after they are discharged from suicide-related ED visits have been proven effective at reducing subsequent suicide deaths. EDs may want to consider extending these types of services to patients who leave against medical advice.

Because release from the ED is a high-risk period for repeated suicide attempts and death by suicide, it is critical to provide outreach and mental health follow-up services to male and female patients whose suicide attempts involved drugs and who left the ED against medical advice. Moreover, findings from this report indicate that more than a quarter of drug- and suicide attempt-related ED visits involved patients between the ages of 35 and 44. This underscores the importance of follow-up interventions targeting suicide attempters in this age group, as well as the need to understand not only their risk factors for suicide, but also their barriers to treatment.

For additional information on how EDs can best respond to patients with suicide risk, please visit the Substance Abuse and Mental Health Services Administration's Suicide Prevention Resource Center at [http://www.sprc.org/edguide?sid=46758](http://www.sprc.org/edguide?sid=46758). When people feel that they are in an immediate crisis, they can call the National Suicide Prevention Lifeline at [1-800-273-TALK](tel:1-800-273-TALK)(8255) to be connected to a skilled, trained counselor at an area crisis center anytime, 24/7.

ENDNOTES


SUGGESTED CITATION

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SUMMARY

**Background:** Suicide attempts and death by suicide are significant public health issues in the United States, and a history of previous suicide attempts remains one of the most important risk factors for death by suicide. An emergency department (ED) visit for a suicide attempt is an important opportunity to provide mental health services and follow-up resources for the patient, but only if the patient completes the ED visit. **Method:** The Drug Abuse Warning Network provided annual estimates of ED visits that involved drug-related suicide attempts and the outcomes of these visits. Estimates from 2004 to 2011 were aggregated to produce an estimate of ED visits from drug-related suicide attempts where the patient left the ED before treatment was completed (“left against medical advice”). **Results:** Findings in this report indicate that from 2004 to 2011, less than 1 percent (5,396) of the ED visits involving drug-related suicide attempts ended with the patient leaving the ED against medical advice. Male and female patients were equally represented in these visits, and more than a quarter of the visits involved patients aged 35 to 44. **Conclusion:** Patients with drug-related suicide attempts who leave the ED before their treatment is completed may miss critical follow-up services that could help prevent subsequent death by suicide.

**Key words:** suicide attempt, drug use, emergency department

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KEYWORDS


The Substance Abuse and Mental Health Services Administration (SAMHSA) is the agency within the U.S. Department of Health and Human Services that leads public health efforts to advance the behavioral health of the nation. SAMHSA's mission is to reduce the impact of substance abuse and mental illness on America's communities.

The Drug Abuse Warning Network (DAWN) was a public health surveillance system that monitored drug-related morbidity and mortality. DAWN used 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 produced 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 was included in DAWN. All types of drugs - licit and illicit - were covered. Alcohol involvement was documented for patients of all ages if it occurred with another drug. Alcohol was considered an illicit drug for minors and was documented even if no other drug was involved. The classification of drugs used in DAWN was derived from the Multum Lexicon, copyright 2012 Lexi-Comp, Inc., and/or Cerner Multum, Inc. The Multum Licensing Agreement governing use of the Lexicon can be found at [http://www.samhsa.gov/data/emergency-department-data-dawn](http://www.samhsa.gov/data/emergency-department-data-dawn).

DAWN was one of three major surveys conducted by SAMHSA's Center for Behavioral Health Statistics and Quality (CBHSQ). For more information on other CBHSQ surveys, go to [http://www.samhsa.gov/data/](http://www.samhsa.gov/data/). SAMHSA contracted with Westat (Rockville, MD) and RTI International (Research Triangle Park, NC) to operate the DAWN system and produce publications.