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Treatment Episode Data Set

The TEDS Report

December 13, 2012

Admissions Reporting Benzodiazepine and Narcotic Pain Reliever Abuse at Treatment Entry

Benzodiazepines, such as Valium®, are prescription drugs that treat anxiety, sleep disorders, and drug and alcohol withdrawal symptoms.[1] Benzodiazepines can enhance or boost the effects of drugs such as narcotic pain relievers, including oxycodone, when used either medically or nonmedically.[2] Emergency department and substance abuse treatment data show that the combined use of benzodiazepines and narcotic pain relievers is common, and that people who co-abuse these drugs have been described as a high-need, treatment-resistant population.[3,4,5] This is partly because people who abuse both benzodiazepines and narcotic pain relievers report more severe withdrawal symptoms than patients withdrawing from narcotic pain relievers alone, resulting in higher treatment attrition rates.[6] Developing a profile of those who co-abuse these drugs and drawing distinctions between these admissions and others in treatment can help inform treatment approaches and therapies to better treat this population.

The Treatment Episode Data Set (TEDS) is a national data system that captures annual admissions to substance use treatment and can thus provide a unique national perspective of the characteristics associated with people coming to substance abuse treatment with concurrent benzodiazepine and narcotic pain reliever abuse. TEDS collects data on the primary substance of abuse and up to two additional substances of abuse reported at the time of admission. This report provides trend data and uses 2010 data to describe the demographic and treatment characteristics of the 33,701 treatment admissions who reported the co-abuse of benzodiazepines and narcotic pain relievers (hereafter referred to as "benzodiazepine and narcotic pain reliever combination admissions") at treatment entry. Selected comparisons are made between these admissions and admissions who did not abuse either of these drugs (hereafter referred to as "other admissions").

IN BRIEF

- The number of substance abuse treatment admissions reporting both benzodiazepine and narcotic pain reliever abuse increased 569.7 percent from 5,032 admissions in 2000 to 33,701 admissions in 2010, while the number of all other admissions decreased by 9.6 percent during the same period
- In the month prior to treatment admission, 57.1 percent of benzodiazepine and narcotic pain reliever combination admissions reported daily use of narcotic pain relievers and 45.5 percent reported daily use of benzodiazepines
- Almost half (45.7 percent) of benzodiazepine and narcotic pain reliever combination admissions reported a co-occurring psychiatric disorder compared with slightly more than one quarter (27.8 percent) of other admissions

Overview

The number of annual benzodiazepine and narcotic pain reliever combination admissions increased 569.7 percent from 5,032 admissions in 2000 to 33,701 admissions in 2010 (Figure 1). By contrast, the annual number of other admissions decreased by 9.6 percent during the same period (from 1,675,736 to 1,514,940 admissions from 2000 to 2010).

In 2010, 43.1 percent of benzodiazepine and narcotic pain reliever combination admissions occurred in the South, while only 5.3 percent occurred in the West.

Demographic Characteristics

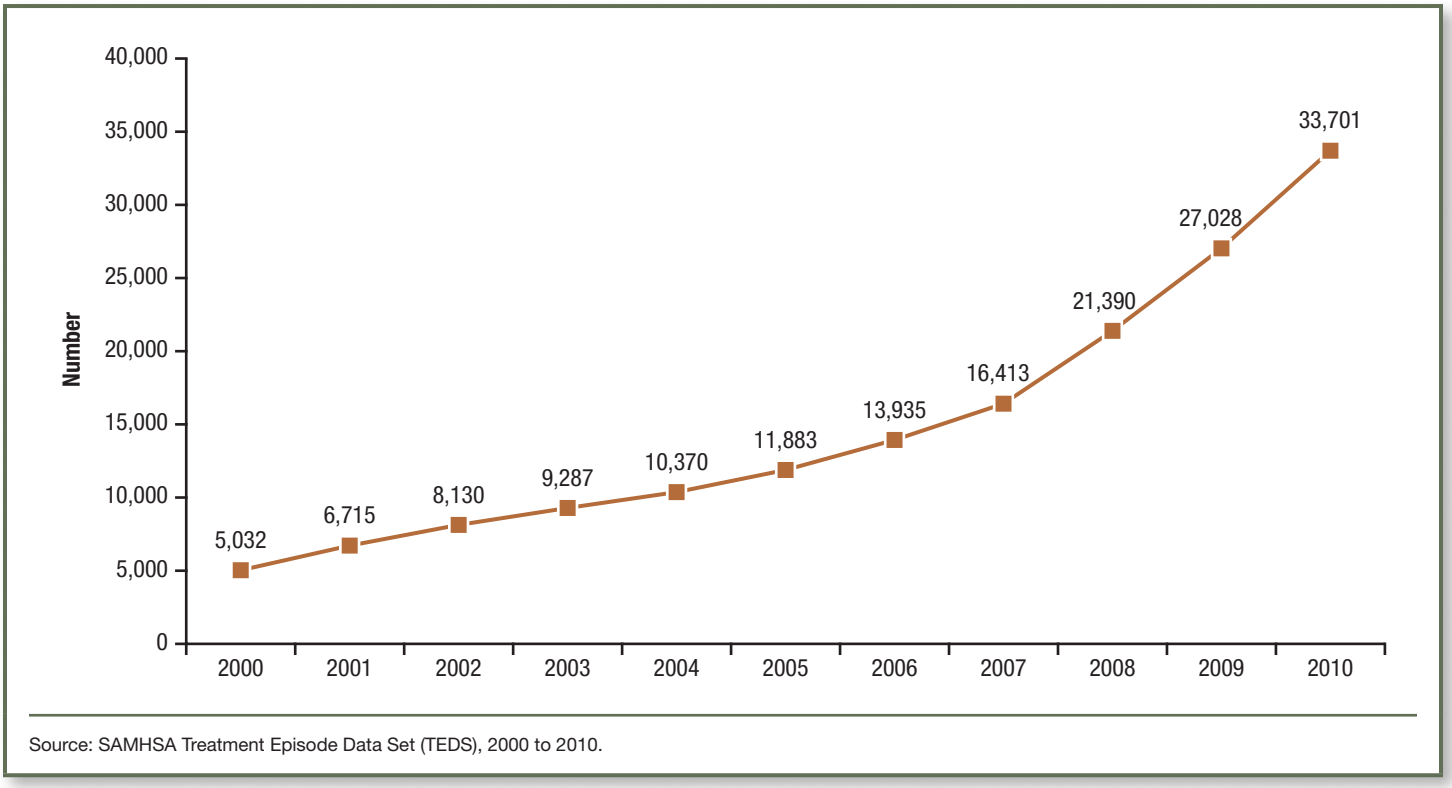
The 2010 demographic profile of benzodiazepine and narcotic pain reliever combination admissions shows that most of these admissions were non-Hispanic White (91.4 percent; Table 1). Benzodiazepine and narcotic pain reliever combination admissions were almost evenly divided between females and males (49.2 and 50.8 percent, respectively). The average age of benzodiazepine and narcotic pain reliever combination admissions was 31.2 years; 66.9 percent were aged 18 to 34 (Figure 2).

In comparison with benzodiazepine and narcotic pain reliever combination admissions, the other admissions group (that did not report either drug) had higher percentages of Hispanics (14.5 vs. 3.6 percent) and non-Hispanic Blacks (23.2 vs. 2.5 percent; Table 1). Other admissions were also more likely than benzodiazepine and narcotic pain reliever combination admissions to be male (69.8 vs. 50.8 percent). The age distribution of other admissions was more evenly distributed across the age groups between the ages of 18 to 54, ranging from 17.8 percent among those aged 18 to 24 to 25.9 percent among those aged 25 to 34 (Figure 2).

Patterns and Frequency of Use

Of the benzodiazepine and narcotic pain reliever combination admissions in 2010, 48.2 percent reported primary narcotic pain reliever abuse and secondary benzodiazepine abuse, while 9.9 percent reported primary benzodiazepine abuse and secondary narcotic

Figure 1. Number of Benzodiazepine and Narcotic Pain Reliever Combination Admissions: 2000 to 2010



Source: SAMHSA Treatment Episode Data Set (TEDS), 2000 to 2010.

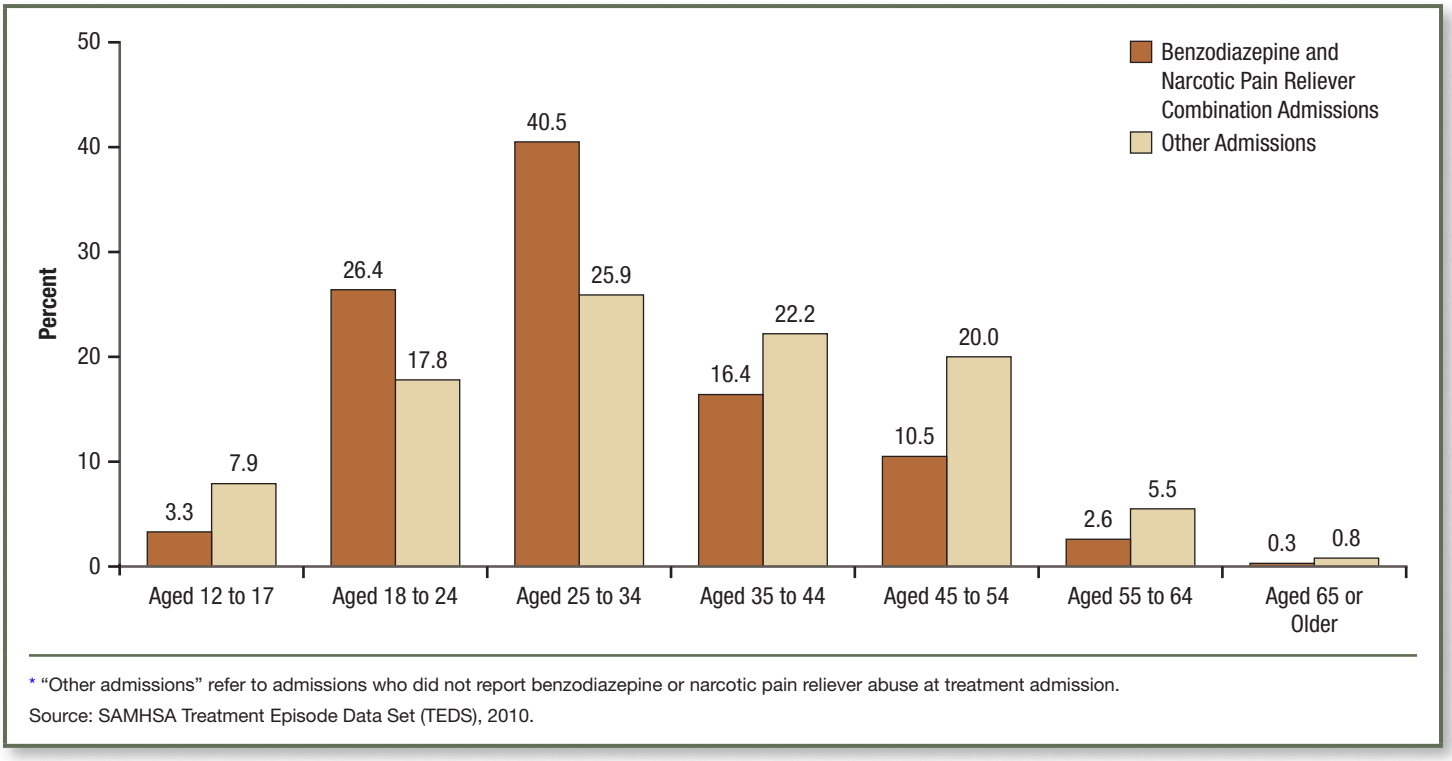
Table 1. Demographic Characteristics of Benzodiazepine and Narcotic Pain Reliever Combination Admissions and Other Admissions*: 2010

	Benzodiazepine and Narcotic Pain Reliever Combination Admissions (%)	Other Admissions (%)
Race/Ethnicity		
Non-Hispanic White	91.4	55.8
Hispanic	3.6	14.5
Non-Hispanic Black	2.5	23.2
American Indian/Alaska Native	0.7	2.5
Asian/Pacific Islander	0.3	1.1
Other	1.5	2.8
Gender		
Female	49.2	30.2
Male	50.8	69.8
Education		
8 Years or Fewer	8.4	8.7
9 to 11 Years	20.0	24.4
High School/GED	41.0	42.5
Some College	30.7	24.4
Employment		
Unemployed	46.4	38.8
Not in Labor Force	37.0	37.7
Full-Time Employment	10.7	15.7
Part-Time Employment	5.9	7.8
Health Insurance Status		
Not Insured	58.7	60.0

* "Other admissions" refer to admissions who did not report benzodiazepine or narcotic pain reliever abuse at treatment admission.

Source: SAMHSA Treatment Episode Data Set (TEDS), 2010.

Figure 2. Age Distribution of Benzodiazepine and Narcotic Pain Reliever Combination Admissions and Other Admissions*: 2010



* "Other admissions" refer to admissions who did not report benzodiazepine or narcotic pain reliever abuse at treatment admission.

Source: SAMHSA Treatment Episode Data Set (TEDS), 2010.

pain reliever abuse. The remaining 41.7 percent of these admissions reported some other primary substance of abuse, with benzodiazepines or narcotic pain relievers as secondary or tertiary drugs of abuse.

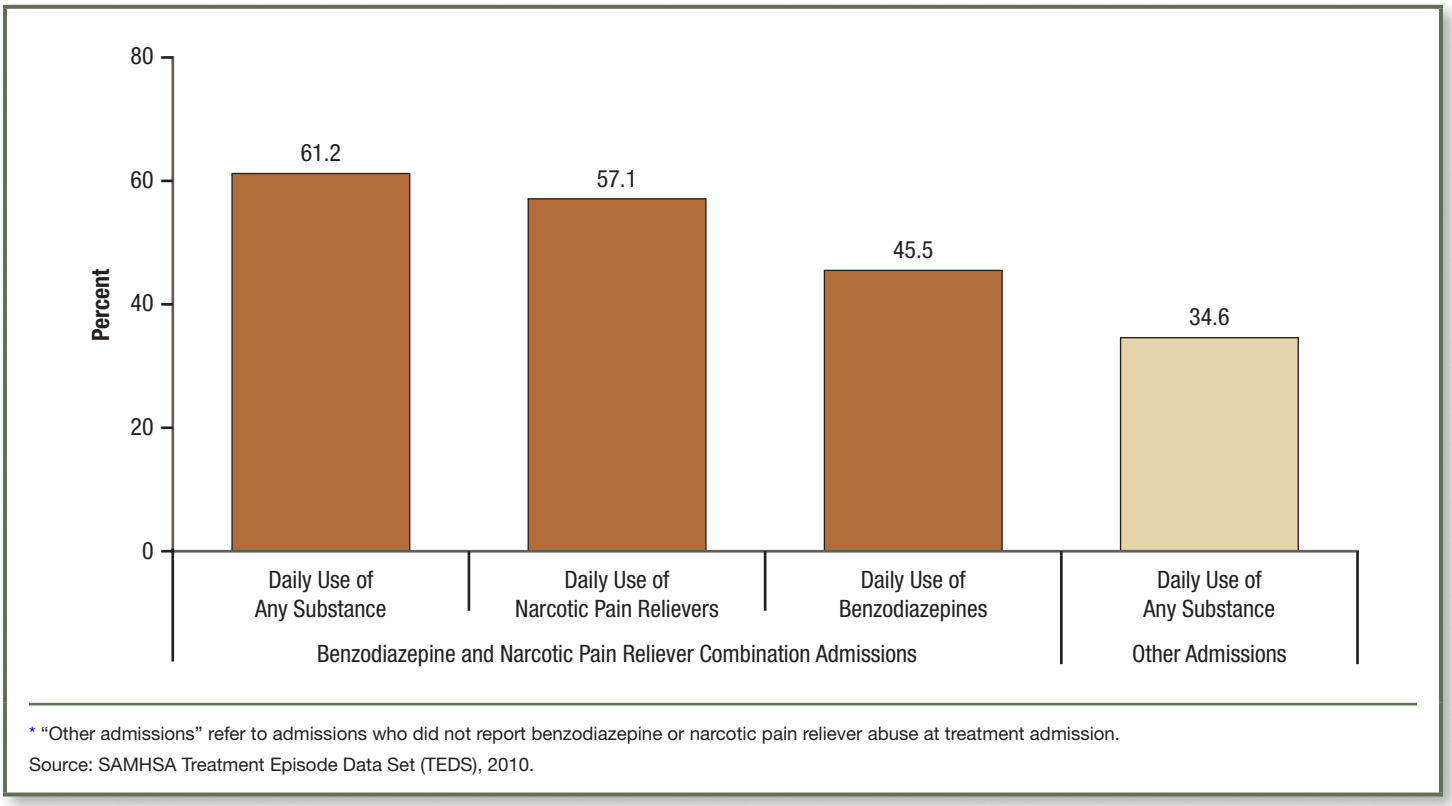
TEDS allows for the identification of the order of drug initiation. More than one third of benzodiazepine and narcotic pain reliever combination admissions reported initiating narcotic pain relievers first (34.1 percent); more than one quarter reported initiating benzodiazepines first (27.1 percent). For the remainder of admissions (38.7 percent), the two drugs were initiated during the same year.

In the month prior to treatment admission, 61.2 percent of benzodiazepine and narcotic pain reliever combination admissions reported daily use of any substance compared with 34.6 percent of other admissions (Figure 3). Among these admissions, 57.1 percent reported daily use of narcotic pain relievers and 45.5 percent reported daily use of benzodiazepines.

Co-occurring Psychiatric Problems and Treatment Characteristics

The two admissions groups also showed distinctions by mental health status, treatment characteristics, and treatment history. Specifically, almost half (45.7 percent) of benzodiazepine and narcotic pain reliever combination admissions reported having a co-occurring psychiatric disorder.[7] Benzodiazepine and narcotic pain reliever combination admissions were most commonly self-referred to treatment (46.2 percent) (Figure 4). More than one third of benzodiazepine and narcotic pain reliever combination admissions received regular outpatient

Figure 3. Daily Use in the Month Prior to Treatment Entry by Benzodiazepine and Narcotic Pain Reliever Combination Admissions Compared with Other Admissions*: 2010



* "Other admissions" refer to admissions who did not report benzodiazepine or narcotic pain reliever abuse at treatment admission.

Source: SAMHSA Treatment Episode Data Set (TEDS), 2010.

treatment (35.7 percent), more than one quarter received detoxification (29.0 percent), and 15.8 percent received short-term residential treatment (Figure 5).

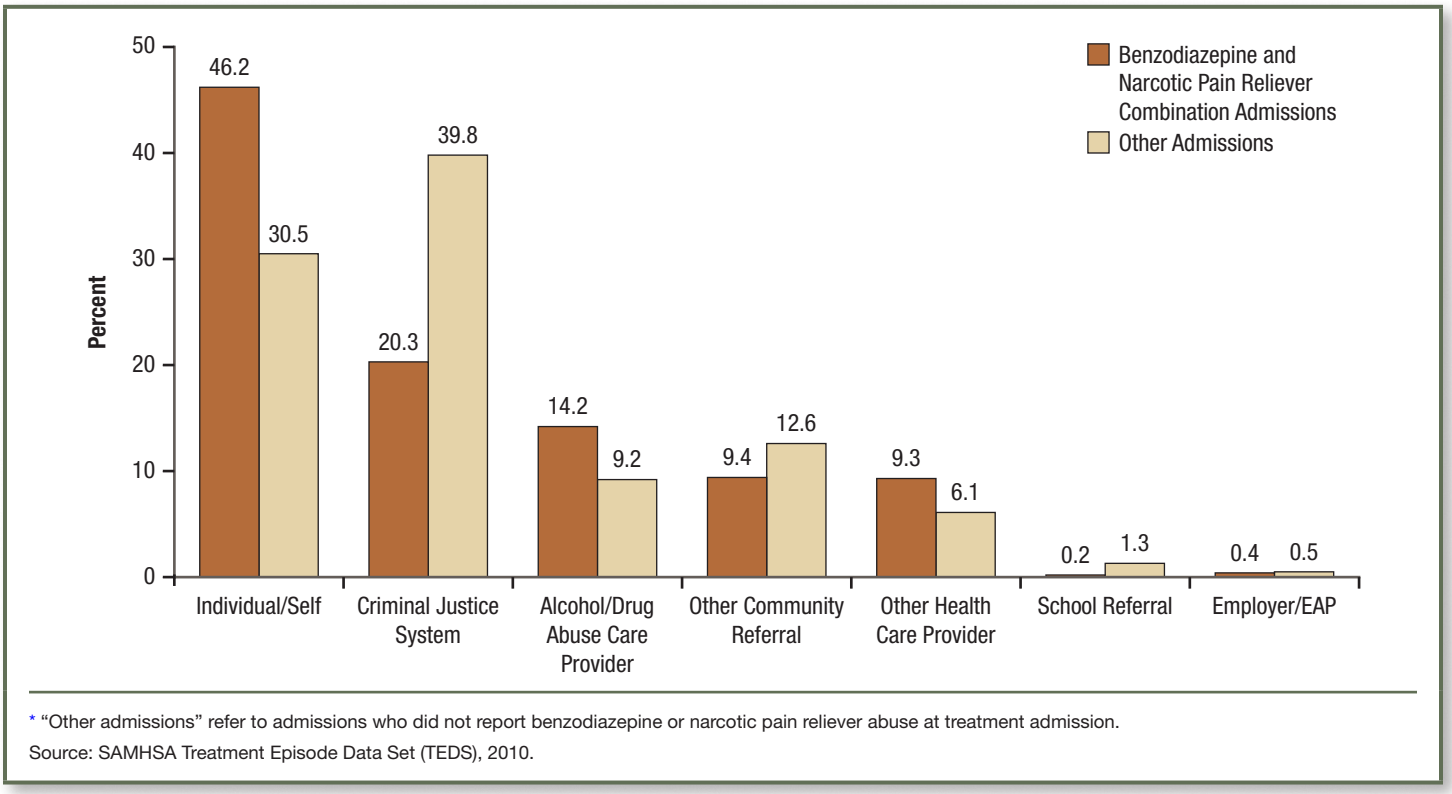
In contrast to benzodiazepine and narcotic pain reliever combination admissions, other admissions were less likely to report a co-occurring disorder (27.8 vs. 45.7 percent). Other admissions were also twice as likely as benzodiazepine and narcotic pain reliever combination admissions to be referred to treatment through the criminal justice system (39.8 vs. 20.3 percent) and less likely to be self- or individually referred to treatment (30.5 vs. 46.2 percent) (Figure 4). Other admissions had a higher likelihood of receiving regular outpatient services compared with benzodiazepine and narcotic pain reliever combination admissions (51.3 vs. 35.7 percent) but were also less likely to receive detoxification (20.3 vs. 29.0 percent) (Figure 5).

Discussion

While the volume of benzodiazepine and narcotic pain reliever combination admissions is comparatively small relative to the annual number of treatment admissions, substance abuse treatment programs are treating an increasing number of patients who co-abuse these drugs. This report shows that benzodiazepine and narcotic pain reliever admissions differed from other treatment admissions in many respects. By magnitude, the most striking differences are related to race/ethnicity and gender, daily use prior to admission, referral sources, and co-occurring disorders (Table 2). All of these differences have treatment implications.

The high proportion of benzodiazepine and narcotic pain reliever combination admissions reporting daily use suggests behavioral patterns that may be difficult

Figure 4. Sources of Referral to Treatment among Benzodiazepine and Narcotic Pain Reliever Combination Admissions and Other Admissions*: 2010



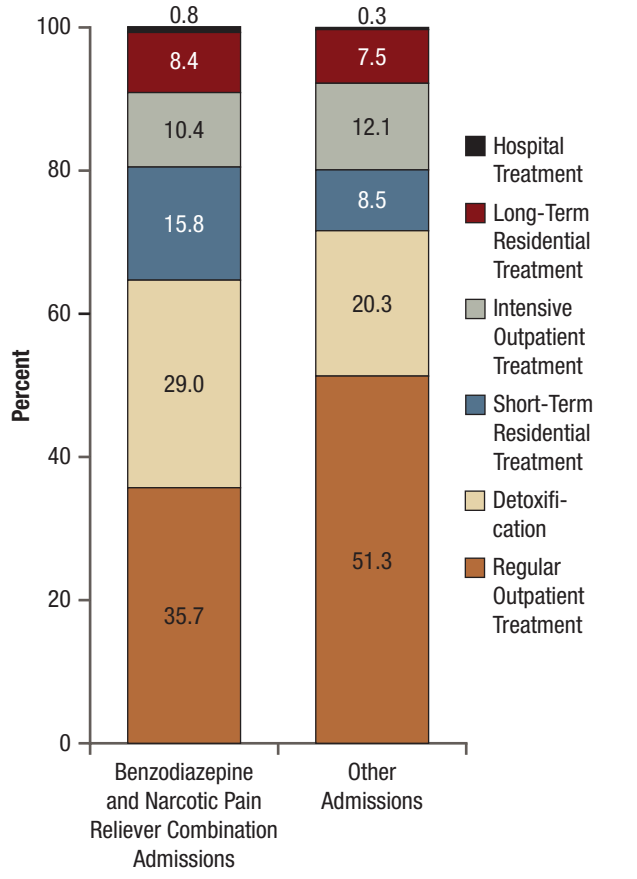
* "Other admissions" refer to admissions who did not report benzodiazepine or narcotic pain reliever abuse at treatment admission.

Source: SAMHSA Treatment Episode Data Set (TEDS), 2010.

to change. These admissions need to be prepared for the severe withdrawal effects from both drugs, particularly since benzodiazepines compound the withdrawal effects of narcotic pain relievers.[6] Providing medical and supportive services to mitigate the severe withdrawal effects may be critical to avoid treatment attrition and relapse.[6]

The high rate of co-occurring mental health disorders among the benzodiazepine and narcotic pain reliever combination admissions may reflect in part that benzodiazepines are used to treat some mental health problems, such as anxiety. Substance abuse treatment may provide a unique opportunity to facilitate access to both substance abuse treatment and mental health services for people who co-abuse these drugs.

Figure 5. Treatment Type among Benzodiazepine and Narcotic Pain Reliever Combination Admissions and Other Admissions*: 2010



* "Other admissions" refer to admissions who did not report benzodiazepine or narcotic pain reliever abuse at treatment admission.

Source: SAMHSA Treatment Episode Data Set (TEDS), 2010.

Table 2. Summary of Differences Found among Benzodiazepine and Narcotic Pain Reliever Combination Admissions and Other Admissions*: 2010

Benzodiazepine and narcotic pain reliever combination admissions are MORE likely than other treatment admissions to be or report:

- Non-Hispanic White
- In the South region
- Daily drug use
- Female
- A co-occurring psychiatric disorder
- Self-referred to treatment
- Aged 25 to 34

Benzodiazepine and narcotic pain reliever combination admissions are LESS likely than other treatment admissions to be or report:

- Non-Hispanic Black
- In the West region
- Referred to treatment through the criminal justice system
- Hispanic
- Male
- Receiving regular outpatient treatment

* "Other admissions" refer to admissions who did not report benzodiazepine or narcotic pain reliever abuse at treatment admission.

Source: SAMHSA Treatment Episode Data Set (TEDS), 2010.

End Notes

1. U.S. Department of Health and Human Services. (2011, October). *National Institute on Drug Abuse Research Report. Prescription drugs: Abuse and addiction* (NIH Publication Number 11-4881). Bethesda, MD: National Institutes of Health.
2. Lintzeris, N., Mitchell, T. B., Bond, A. J., Nestor, L., & Strang, J. (2007). Pharmacodynamics of diazepam co-administered with methadone or buprenorphine under high dose conditions in opioid dependent patients. *Drug and Alcohol Dependence, 91*(2-3), 187-194.
3. Substance Abuse and Mental Health Services Administration, Office of Applied Studies. (April, 2004). *The DAWN Report: Benzodiazepines in drug abuse-related emergency department visits: 1995-2002*. Rockville, MD.
4. Substance Abuse and Mental Health Services Administration, Center for Behavioral Health Statistics and Quality. (June 2, 2011). *The TEDS Report: Substance abuse treatment admissions for abuse of benzodiazepines*. Rockville, MD.
5. Ghitza, U. E., Epstein, D. H., & Preston, K. L. (2008). Self-report illicit benzodiazepine use on the Addiction Severity Index predicts treatment outcome. *Drug and Alcohol Dependence, 97*(1-2), 150-157.
6. De Wet, C., Reed, L., Glasper, A., Moran, P., Bearn, J., & Gossop, M. (2004). Benzodiazepine co-dependence exacerbates the opiate withdrawal syndrome. *Drug and Alcohol Dependence, 76*(1), 31-35.
7. *Psychiatric problem in addition to alcohol or drug problem* is a Supplemental Data Set item.

Suggested Citation

Substance Abuse and Mental Health Services Administration, Center for Behavioral Health Statistics and Quality. (December 13, 2012). *The TEDS Report: Admissions Reporting Benzodiazepine and Narcotic Pain Reliever Abuse at Treatment Entry.* Rockville, MD.

The Treatment Episode Data Set (TEDS) is an administrative data system providing descriptive information about the national flow of admissions aged 12 or older to providers of substance abuse treatment. TEDS intends to collect data on all treatment admissions to substance abuse treatment programs in the United States receiving public funds. Treatment programs receiving any public funds are requested to provide TEDS data on publicly and privately funded clients.

TEDS is one component of the Behavioral Health Services Information System (BHSIS), maintained by the Center for Behavioral Health Statistics and Quality (CBHSQ), Substance Abuse and Mental Health Services Administration (SAMHSA). TEDS records represent admissions rather than individuals, as a person may be admitted to treatment more than once. Information on treatment admissions is routinely collected by State administrative systems and then submitted to SAMHSA in a standard format.

There are significant differences among State data collection systems. Sources of State variation include the amount of public funding available and the constraints placed on the use of funds, facilities reporting TEDS data, clients included, services offered, and completeness and timeliness of reporting. See the annual TEDS reports for details. TEDS received approximately 1.8 million treatment admission records from 48 States and Puerto Rico for 2010.

Definitions of demographic, substance use, and other measures mentioned in this report are available in Appendix B of the annual TEDS report on national admissions (see latest report at http://www.samhsa.gov/data/2k12/TEDS2010N/TEDS2010NAppB.htm).

The TEDS Report is prepared by the Center for Behavioral Health Statistics and Quality, SAMHSA; Synectics for Management Decisions, Inc., Arlington, VA; and RTI International, Research Triangle Park, NC. **Information and data for this issue are based on data reported to TEDS through October 10, 2011.**

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