

RESEARCH ARTICLE

Surveying Teens in School to Assess the Prevalence of Problematic Drug Use

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ABSTRACT

BACKGROUND: Illicit drug use by school-aged teens can adversely affect their health and academic achievement. This study used a survey administered in schools to assess the prevalence of problematic drug use among teenagers in a Midwestern community.

METHODS: Self-report data were collected from 11th- and 12th-grade students ($N = 3974$) in 16 school districts in the Dayton, Ohio, area. Students responded to a drug use survey that also included CRAFFT, a brief substance abuse screening instrument. Binomial and zero-inflated Poisson regressions were used to examine the association between CRAFFT scores and drug use practices, including abstinence.

RESULTS: More than one third of students had CRAFFT scores suggestive of problematic use. Of these, 14.1% had scores suggesting drug dependence. Although alcohol, marijuana, and tobacco were the drugs most commonly used, an array of other drugs including opioids, benzodiazepines, stimulants, hallucinogens, and dextromethorphan were also commonly used. Higher CRAFFT scores were associated with a greater number of drugs used ($p < .0001$). Proportionately more 12th graders than 11th graders had CRAFFT scores indicating problems ($p < .0001$). Among 12th graders, boys were more likely than girls to have CRAFFT scores indicating dependence ($p = .01$).

CONCLUSIONS: The results suggest that problematic drug use among high school students is more prevalent than has been recognized previously. CRAFFT can be used easily to assess the prevalence of problematic drug use among teenagers in school settings. CRAFFT results can also inform prevention and intervention activities, particularly if the CRAFFT instrument is paired with a drug use survey.

Keywords: schools; CRAFFT; screening test; tobacco; drugs; alcohol; substance abuse; drug dependence; substance use disorders; adolescents; teenagers; survey research; prevalence; epidemiology.

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Illicit drug use by school-aged adolescents continues to be a concern for a number of groups including parents, educators, health professionals, and teens themselves. There is good reason for the concern. Research shows that the earlier the age of onset of drug use, the greater the likelihood of later abuse and/or dependence.¹⁻³ In addition to abuse and addiction, there are a host of other problems associated with illicit drug use by adolescents. For example, early-onset alcohol use is associated with

injury to oneself and others, with motor vehicle crashes and physical fights figuring prominently among the causes of the injuries.^{4,5} Research also suggests that alcohol-related neurocognitive damage, and subsequent developmental delays, occurs among young imbibers.⁶ The use of drugs other than alcohol by teens can be problematic as well. Research findings on very young marijuana users suggest that cannabis may adversely affect frontal lobe development.⁷ Teens who become addicted to tobacco continue using

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into adulthood, increasing the chances of them encountering the assortment of health problems that have long been linked to tobacco smoking and chewing.⁸ Of course, the abuse of drugs other than alcohol, tobacco, and marijuana can also result in a litany of adverse consequences for the adolescent user.⁹ It may well be that when considering the long-term consequences of adolescent drug use, past is prologue.

Epidemiological studies of teen drug use show that the phenomenon is widespread. Results from the *Monitoring the Future* (MTF) study show that nearly three fourths of the 12th graders surveyed in 2010 reported having used alcohol at least once, and 54.1% reported having been drunk at least once. Almost a quarter (24.7%) of high school seniors reported having used an illicit drug other than marijuana at least once, and 43.8% reported having smoked marijuana at least once. The use of opioids other than heroin was reported by 13% of the 12th graders, while 8.5% reported using tranquilizers. Daily cigarette use was reported by 10.9% of the sample.¹⁰ Results from the 2009 National Survey on Drug Use and Health, which employs substance-specific groups of questions to assess *Diagnostic and Statistical Manual-IV* (DSM-IV)-defined substance use disorders, suggest that abuse or dependence on alcohol or illicit drugs was in evidence in 10.7%, 14.2%, 17.4%, and 20.2% of 16-, 17-, 18-, and 19- year- olds, respectively.¹¹

Behaviorally oriented screening tests for substance abuse can identify persons whose alcohol or other drug use may be problematic. If the results of a screen are positive, a more thorough evaluation is needed to confirm the screen's findings. Usually inexpensive, if not free, a number of screening tests for substance abuse problems are available for use with adolescents. Reliability and validity vary as does their ease of administration, length, and scoring. The 139-item Problem Oriented Screening Test for Teenagers (POSIT),¹² the 27-item Drug Abuse Screening Test (DAST-A),¹³ and the 40-item Personal Experience Questionnaire (PESQ)¹⁴ are several of the instruments designed for use with teens. In addition to being useful tools in a variety of clinical settings, substance abuse screens may have epidemiological utility as well.

The primary purpose of the study described here was to increase understanding of the nature and extent of problematic drug use among high school students in a Midwestern metropolitan area. A school-based, self-report drug use survey, which included an established substance abuse screening tool, was employed to answer the following research questions:

(1) What is the prevalence of problematic drug use among 11th- and 12th-grade students? and (2) Which drugs are most often associated with problematic use? This study's results as well as its methodology can be used to help inform substance abuse prevention and intervention efforts targeting high school students.

METHODS

Participants

Participants in this study were 11th- and 12th-grade students (N = 3974) from 16 high schools in the Dayton, Ohio, area. In fall 2007, school districts received a letter from the lead author inviting them to participate in the Dayton Area Drug Survey (DADS), at no charge. All districts accepting the invitation had participated previously in the survey. Young people who were seniors in high school in the spring of 2008 accounted for 59.8% of the sample, juniors the remainder. Girls constituted 54.2% of the sample. In terms of race/ethnicity, 86.4% of the students identified themselves as white, 4.1% as African American, and 9.6% as other races/ethnicities. All but 1 of the schools participating in the survey was suburban, ie, schools that were located within the Dayton metropolitan statistical area but outside of Dayton's city limits. The socioeconomic status (SES) of students in participating districts varied widely. In several districts, nearly half of the students were considered to be "economically disadvantaged," as defined as being eligible for free or reduced-price school lunches or members of families who were recipients of public assistance, while in other districts fewer than 5% were so labeled.

Instrument and Data Collection Procedure

The 2008 edition of the DADS questionnaire was used to collect the data. The DADS is a self-report, self-administered, paper and pencil instrument that blends drug use questions modified from the University of Michigan's MTF survey,¹⁵ the CRAFFT substance abuse screen,¹⁶ and items developed by the authors.¹⁷ Students, whose parents gave passive consent for their children to participate in the DADS, responded on a voluntary basis.

Each school district was responsible for the administration of the survey, following a written protocol approved by the Wright State University's institutional review board (IRB). Although logistics varied somewhat from school to school, the DADS was administered in classroom settings, either in an extended homeroom period or in a class through which all eligible students passed. In some districts,

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the counseling staff administered the DADS, while in other districts the counseling or administrative staff oversaw its administration by teachers. Students responded anonymously on optical mark recognition (OMR) answer forms which, upon completion, were deposited, as a group, in envelopes or boxes to protect confidentiality. Answer forms were scored by machine at the university.

Students took less than 30 minutes to complete the survey. The DADS has been used to monitor drug use practices by young people in grades 7-12 in the Dayton area since 1990, and has been modified periodically to include new items. For example, items to assess the prevalence of dextromethorphan (DXM) abuse were added to the DADS in 2006.¹⁷

Measures

Dayton Area Drug Survey. The DADS drug use questions included in this study covered 16 categories of drugs that had been used over lifetime and 30-day timeframes. Lifetime use was defined as ever having used a drug, even just once. Current use was defined as having used a drug at least once in the 30 days before the survey.

DADS drug use questions were presented in the following formats. For tobacco cigarettes, students were asked: "Have you ever smoked cigarettes?" Never, once or twice, occasionally but not regularly, regularly but stopped or cut back, and regularly now were the response options. For getting drunk on alcohol, students were asked: "On how many occasions (if any) have you been drunk or very high from drinking alcohol?" "In your lifetime?" "In the last 30 days?" Never, 1-2, 3-5, 6-9, 10-19, and 20 or more were the frequency response options. To help young people understand which drugs they were being asked about, examples of the drug terms and classifications appeared immediately before the questions. For example, the statement: "Marijuana is sometimes called grass, pot, reefer, blunts, hash, or hash oil" preceded the marijuana items. Students then were asked: "On how many occasions (if any) have you used marijuana or hashish in your lifetime?" "In the last 30 days?" The same frequency response options used for alcohol drunkenness were used for marijuana and other drugs. Other drugs covered in this study included smokeless tobacco, over-the-counter (OTC) stay-awake and diet pills, cocaine HCl, crack, heroin, nonprescribed prescription opioids, nonprescribed stimulants, including amphetamine, methamphetamine, and Ritalin, nonprescribed depressants such as tranquilizers and barbiturates, hallucinogens, MDMA/ecstasy (methylenedioxymethamphetamine), and DXM. In an effort to reduce overreporting, the survey contained questions on a bogus drug. Students (N = 106) who affirmed their use of the nonexistent

drug were eliminated from the sample used in the analysis. Most of the DADS drug use questions mirrored the MTF drug use questions,¹⁵ except the DADS items had 1 less response option category. Specifically, the frequency response categories of the MTF items incorporated into the DADS ended at "20 or more" occasions of use, whereas the original MTF response options offered "20-39" occasions and terminated with "40 or more" occasions. Monitoring the Future drug use questions were incorporated in the DADS because acceptable levels of item reliability and validity have been established for them.¹⁸⁻²⁰

CRAFFT. CRAFFT, whose name is an acronym based on the first letter of the key concept in each of its questions, is a screening test for problematic drug use in adolescents. Problematic drug use is that which either (1) meets diagnostic criteria for drug abuse or dependence or (2) facilitates engagement in risky behaviors that do not rise to the level of disorder but threaten the user's well-being, eg, an unintentional sexual encounter or act, going to school "high." CRAFFT was developed in the late 1990s by a group of medical and public health practitioners and researchers to provide pediatricians with a brief, reliable and practical instrument to screen for substance use problems in clinical settings.¹⁶ CRAFFT was chosen for use in this study because of its reliability, validity, ease of use, and ability to detect problematic drug use.

The 6-item CRAFFT screen consists of the following questions: (1) Have you ever ridden in a *Car* driven by someone (including yourself) who was 'high' or had been using alcohol or drugs?; (2) Do you ever use alcohol or drugs to *Relax*, feel better about yourself?; (3) Do you ever use alcohol or drugs while you are by yourself, *Alone*? (4) Do you ever *Forget* things you did while you were using alcohol or drugs?; (5) Do your *Family* or *Friends* ever tell you that you should cut down on your drinking or drug use?; and (6) Have you ever gotten into *Trouble* while you were using alcohol or drugs? The response option is yes/no for all CRAFFT items.

CRAFFT scores, which are the sum of affirmative responses to the questions, can range from 0 to 6, with values ≥ 2 suggestive of problematic drug use. Scores ≥ 4 are indicative of DSM-IV drug dependence. Scores of 0-1 are not considered to be associated with problematic use. CRAFFT's correlation to DSM-IV abuse and dependence was determined by comparing its scores with the results of 2 criterion standards, the 17-item Substance Use/Abuse Scale from the POSIT and the Adolescent Diagnostic Interview, a 30-90 minute structured diagnostic interview.²¹ CRAFFT has an acceptable internal consistency reliability coefficient ($\alpha = .68$) as well as established validity for detecting problematic drug use among adolescents in private pediatric practices and various clinic settings.^{16,21} CRAFFT's criterion validity does not vary significantly

by age, gender, or race/ethnicity. Sensitivity and specificity, ie, scores ≥ 2 , are 0.76 and 0.94 for any problematic use, and 0.92 and 0.80 for drug dependence.²¹ The CRAFFT screening test was added to the DADS for 11th- and 12th-grade students in 2008. CRAFFT items appeared at the end of the DADS.

Data Analysis

Univariate statistics were used to describe the data. Binomial and zero-inflated Poisson regressions were used to examine the association between CRAFFT scores and specific drug use practices, including abstinence. Models were fit using SAS PROC LOGISTIC for binomial regressions and PROC COUNTREG for zero-inflated Poisson regressions.²² Prior to model fitting, missing data were handled using multiple imputation^{23,24} via the *aregImpute* function in the R library *Hmisc*.^{25,26} The results of the regression models were adjusted to account for multiple imputation with SAS PROC MIANALYZE. Gender and grade differences in CRAFFT scores were explored using the chi-square test and multinomial regressions.

RESULTS

Problematic drug use was not uncommon with 22.5% of the students scoring 2-3 and 14.1% scoring ≥ 4 . Getting drunk on alcohol was by far the most common drug abuse practice for students who reported any lifetime drug use, regardless of CRAFFT score. Tobacco and marijuana followed alcohol in popularity of use.

Among students with scores ≥ 4 , 99% reported having gotten drunk at least once in their lifetime, 87% smoked cigarettes, 86% reported marijuana use, 50% had used benzodiazepines or similar drugs, and 47%

Table 1. Drug Rank, CRAFFT Score, and Percentage of Students Reporting Lifetime Use*

Rank	0-1 (N = 2520)	2-3 (N = 895)	4-6 (N = 559)
1	Alcohol (.29)	Alcohol (.93)	Alcohol (.99)
2	Cigarettes (.20)	Cigarettes (.67)	Cigarettes (.87)
3	Marijuana (.14)	Marijuana (.66)	Marijuana (.86)
4	OTC stim. (.08)	Smokeless (.26)	Non-Rx benzo. (.50)
5	Smokeless (.07)	Non-Rx opioid (.23)	Smokeless (.47)
6	Non-Rx opioid (.04)	OTC stim. (.20)	Non-Rx opioid (.47)
7	Non-Rx benzo. (.04)	Non-Rx benzo. (.18)	Hallucinogen (.33)
8	Non-Rx amp. (.02)	Hallucinogen (.10)	OTC stim. (.31)
9	Hallucinogen (.02)	Non-Rx amp. (.09)	Non-Rx amp. (.29)
10	Ritalin (.02)	Ecstasy (.05)	DXM (.23)
11	DXM (.02)	Methamp. (.05)	Cocaine HCl (.22)
12	Ecstasy (.01)	Ritalin (.05)	Ritalin (.22)
13	Cocaine HCl (.01)	DXM (.05)	Ecstasy (.19)
14	Heroin (.01)	Heroin (.05)	Methamp. (.19)
15	Crack (.01)	Cocaine HCl (.05)	Heroin (.18)
16	Methamp. (.01)	Crack (.03)	Crack (.12)

*DXM, dextromethorphan.

Table 2. Drug Rank, CRAFFT Score, and Percentage of Students Reporting Current Use*

Rank	0-1 (N = 2520)	2-3 (N = 895)	4-6 (N = 559)
1	Alcohol (.09)	Alcohol (.52)	Alcohol (.75)
2	Cigarettes (.05)	Cigarettes (.27)	Marijuana (.57)
3	Marijuana (.04)	Marijuana (.26)	Cigarettes (.52)
4	Smokeless (.03)	Smokeless (.12)	Non-Rx benzo. (.26)
5	OTC stim. (.03)	Non-Rx benzo. (.07)	Smokeless (.23)
6	DXM (.01)	OTC stim. (.06)	Non-Rx opioid (.22)
7	Non-Rx benzo. (.01)	Non-Rx opioid (.06)	DXM (.16)
8	Non-Rx opioid (.01)	DXM (.04)	OTC stim. (.12)
9	Non-Rx amp. (.01)	Non-Rx amp. (.03)	Non-Rx amp. (.11)
10	Heroin (.01)	Heroin (.02)	Hallucinogen (.10)
11	Ecstasy ($\leq .01$)	Cocaine HCl (.02)	Methamp. (.09)
12	Cocaine HCl ($\leq .01$)	Hallucinogen (.02)	Heroin (.08)
13	Hallucinogen ($\leq .01$)	Ecstasy (.02)	Cocaine HCl (.08)
14	Crack ($\leq .01$)	Ritalin (.01)	Ritalin (.08)
15	Methamp. ($\leq .01$)	Methamp. (.01)	Ecstasy (.06)
16	Ritalin ($\leq .01$)	Crack (.01)	Crack (.05)

*DXM, dextromethorphan.

had used nonprescribed prescription opioids (Table 1). In this same group, 75% reported having gotten drunk within the 30 days prior to the survey, 57% were current marijuana smokers, 52% were current cigarette smokers, and 26% were current users of benzodiazepines (Table 2).

Among students with CRAFFT scores in the 2-3 range, 93% reported lifetime drunkenness, 67% smoked cigarettes, 66% reported having smoked marijuana, 26% have used smokeless tobacco, and 23% report experience with nonprescribed prescription opioids. Current use among this group showed 52% had gotten drunk in the 30 days before the survey, 27% had smoked cigarettes, 26% had smoked marijuana, and 12% had used smokeless tobacco.

Among students scoring 0-1, 29% reported at least 1 occasion of drunkenness in their lifetime, 20% had smoked a cigarette, 14% reported marijuana use, 8% reported having used OTC stimulants or diet aids, and 7% reported smokeless tobacco use. Current use among this group was relatively uncommon. Drunkenness in the 30 days before the survey was reported by 9% of these students, current cigarette use by 5%, current marijuana use by 4%, and current smokeless tobacco or OTC stimulant use by 3%.

Higher CRAFFT scores were associated with higher numbers of drugs ever having been used ($p < .0001$) and higher numbers of drugs currently being used ($p < .0001$). For students scoring 2-3, the average numbers of drugs ever and currently used were 3.7 (SE = 0.28) and 1.6 (SE = 0.25), respectively. Among students scoring ≥ 4 , these averages increased to 6.5 (SE = 0.39) (lifetime) and 3.5 (0.34) (current) (Figure 1). The majority, 70%, of students with a CRAFFT score of 0 had never used any drug.

Figure 1. Mean Number of Drugs Used by CRAFFT Score

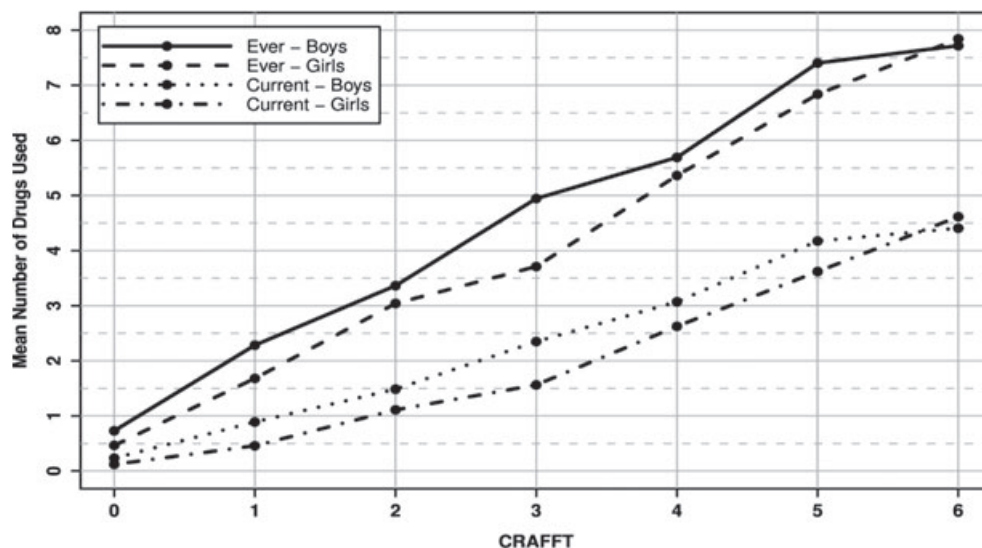


Table 3. CRAFFT Scores by Grade and Sex

	0-1	2-3	4-6
11th Grade	N = 1084	N = 318	N = 195
Boys	516 (0.69)	145 (0.19)	92 (0.12)
Girls	568 (0.67)	173 (0.20)	103 (0.12)
p = .79			
12th Grade	N = 1436	N = 577	N = 364
Boys	652 (0.61)	233 (0.22)	182 (0.17)
Girls	784 (0.60)	344 (0.26)	182 (0.14)
p = .01			

Proportionately more 12th graders than 11th graders had CRAFFT scores ≥ 2 , 39.6% and 32.1%, respectively ($X^2 = 22.94$, $df = 1$, $p \leq .0001$). Although multinomial regression results showed no significant differences between 11th grade boys and girls in the likelihood of scoring in 0-1, 2-3, or ≥ 4 ranges ($p = .79$), gender differences in CRAFFT scores were in evidence among 12th-grade students. Senior boys and girls were equally likely to score in the 0-1 range; girls were more likely to score in the 2-3 range, and boys more likely to score ≥ 4 ($p = .01$) (Table 3).

DISCUSSION

This study is among the first to use CRAFFT to assess problematic drug use in a nonclinical setting among a school-based population of adolescents. Several consequential findings have emerged from this study. Perhaps most importantly, the results suggest that large numbers of the young people who participated in the DADS had previously experienced or were currently experiencing drug abuse-related problems. In their study of CRAFFT in multiple primary care settings for adolescents, Knight and his colleagues²⁷

reported the largest percentage of the highest CRAFFT scores was found in a sample of 122 students receiving health services in a school-based clinic, where 10.6% had scores ≥ 4 , whereas the smallest percentage of the highest scores, 2.3%, was found among 747 adolescents visiting a pediatric clinic at an urban hospital. In their study, problematic drug use, ie, scores ≥ 2 , followed the same pattern with the largest percentage (29.5%) found in the school clinic and the smallest (8.0%) in the hospital clinic. Our data show an even higher prevalence of problematic use with 36.6% scoring ≥ 2 , which includes the 14.1% of the DADS participants who scored ≥ 4 . There are at least 2 possible explanations for the higher problematic use prevalence rates in the DADS sample, both methodological. First, more than one third of Knight and colleagues' sample was 12-14 years old, and drug use is less common among younger adolescents than among older ones.¹¹ Our DADS sample was composed of relatively older teens. Second, the adolescents in Knight's sample responded to CRAFFT questions that were asked by a research assistant who reported the results to a primary care provider. There is evidence that responding to an interviewer who reports the answers of sensitive questions to another person, such as a physician, can result in the underreporting of drug use behaviors. There is less likelihood of this happening with self-administered questionnaires,²⁸ like the DADS.

Adding perspective to the prevalence of problematic use findings are the data on drugs used and the recency of their use. Among teens with CRAFFT scores ≥ 4 , the majority reported having gotten drunk and having used marijuana in the 30 days before participating in the DADS. About one fourth of them also reported the current use of nonprescribed prescription opioids

and benzodiazepines. Although the original CRAFFT items were designed to be asked without reference to a time frame, making it virtually impossible to ascertain whether responses are linked to recent or long ago events, our data, because of the time frame imposed in the DADS current use questions, suggest CRAFFT scores reflect very current problems for the majority of teens with scores ≥ 4 .

Not surprisingly, the data show that alcohol, cigarettes, and marijuana were the most popular drugs used by the teens in our sample (as defined by the percentage of respondents who reported either current and/or lifetime use). Indeed, this is consistent with national data.^{10,11} Also not surprising are the data showing that students who used drugs used more than 1 drug, and that CRAFFT scores rose as the number of drugs used increased, regardless of whether use was current or lifetime.

The breadth of illicit drug use experience is surprising and worrisome. Boys and girls with CRAFFT scores of 6 reported, on average, the lifetime use of more than 7 different drugs, and the current use of more than 4. Among teens with CRAFFT scores ≥ 4 , prevalence rates for drugs other than alcohol, marijuana, and tobacco are notable. The lifetime use of nonprescribed benzodiazepines and opioids was reported by about one half of this group. The lifetime use of Ritalin, amphetamine, and cocaine HCl was reported, respectively, by 22%, 29%, and 22% of the group. The lifetime use of crack, heroin, and methamphetamine was each reported to have been used by 12% or more of the students with CRAFFT scores ≥ 4 . Current use of DXM and hallucinogens was each reported by at least 10% of these students. Clearly, this is extremely high-risk drug use. Importantly, the CRAFFT screen has identified these teens as being high risk for being drug dependent. These particular findings support the validity of CRAFFT in detecting problematic drug use.

Findings on grade and gender are not entirely unexpected. The percentage of young people experiencing CRAFFT-defined problematic drug use increases between the junior and senior years because abstinence continues to erode. In all likelihood, teens who were using in the 11th grade and continued to use into the 12th grade have increased their chances of encountering problems because of their increased exposure to drugs. The findings on gender are a bit puzzling. In general, boys are more likely than girls to use and to use more often.^{10,11} This helps explain the significantly higher percentage of boys with CRAFFT scores ≥ 4 in the 12th grade. It is not clear, however, why CRAFFT scores were more similar across sexes in the 11th grade.

Limitations

This study's generalizability is limited by several factors. First, participating schools were not randomly

selected; they self-selected themselves for participation. Similarly, not all students eligible to respond to the survey did. Some chose not to participate and others were absent when the DADS was administered. Previously, we had determined that DADS participation rates by students were in excess of 80%,²⁹ similar to the rates found in national studies.¹⁰ Nevertheless, nonparticipation introduces an unknown degree of bias into the prevalence estimates of problematic use. Also, the results of this study are based largely on suburban, white teens. Generally, over the years, school districts in the Dayton area with large proportions of minority students have chosen not to participate in the DADS. Nevertheless, there is no clear reason to doubt that the results of this study are reflective of white, high schools students of varying SES living in suburban areas in the Midwest. Last, aside from tobacco, alcohol, marijuana, and some pills, ie, those pills whose identity is readily apparent, such as brand name DXM or methylphenidate, students' self-reports of use of less easily identifiable drugs, like cocaine and heroin, should be viewed with at least some skepticism since young people may not know what they actually used.

Conclusion

These results suggest that problematic drug use among high school students is more prevalent than has been previously recognized. Further, although the findings showing that alcohol, tobacco, and marijuana are the most commonly used drugs are not surprising, indeed they are in consonance with other studies,^{10,11} the breadth of substances used by young people at the most problematic level sheds additional light on a most troubling phenomenon. Additional research with large samples of students in school settings that seek to identify the nature and extent of problematic drug use is needed to help confirm these findings. Beyond this, school-based prevention and intervention strategies to address these more socially, psychologically, and pharmacologically complex types of drug abuse (as compared to tobacco, alcohol, and marijuana, which have longer use histories among teens and about which more is known) are needed. After all, school is where many of these children can still be found and reached.

IMPLICATIONS FOR SCHOOL HEALTH

Our use of CRAFFT has shown the ease with which the instrument can be incorporated into needs assessment studies involving young people in school settings. Administering CRAFFT alone, with students responding anonymously, will quickly and inexpensively provide school officials and parents an estimate of the prevalence of problematic use within a school district. Administering CRAFFT with a drug use

survey will provide richer information upon which to build a programmatic response. Obviously, programs and activities can take many different forms. One possibility would be to use a CRAFFT screen as a mini-motivational interview to encourage students to stop abusing drugs and/or seek guidance or help. Similarly, CRAFFT results could be used as a motivational tool to get teachers and parents involved, as well.

Regardless of the potential utility of survey research, administrators and board members in some school districts may shy away from collecting data on student drug use practices out of fear of what may be found and of then, in some way, having to address the findings not only with the students in their schools but also in various public forums as well. This can be difficult and time-consuming. The demands on schools are already substantial and varied. And these demands, often unfunded, continue to grow. Still, there is little question that illicit drug use by adolescents is a serious threat to academic achievement,^{6,30,31} the schools' primary function. Arguably then, it is in the best interests of schools and the students and communities they serve to address substance use by teens. The best way to address it will ultimately be determined by the resources available and the scope of the problem in any given locale. Notably, previous research has shown the very local nature of the problem, both in terms of prevalence and drugs used.^{29,32} Consequently, localized assessments of the problem are needed to respond appropriately.

There are a number of practical issues to be addressed when considering the collection of personal information, such as drug use practices, from students. First, the school community must embrace the need for a survey. There are ample resources, some local and some national, of which school leaders can avail themselves to build a case for a survey. A key strategy here is to argue that the nature and extent of the problem are unknown (maybe there is no problem), and the results of a survey will allow the school and the community to proceed on the basis of data, not ignorance or rumor. Second, parents of students must be apprised a school's intention to conduct a drug use survey, and give either active or passive consent, depending on the funding source for the survey. Third, a valid and reliable survey instrument should be used. Fourth, an individual within the school district should be designated to coordinate the survey's administration. The coordinator should follow a protocol that has been approved by an IRB. Institutional review board approval helps guarantee the protection of participants and provides credibility to the endeavor. School districts can enlist an IRB by partnering with a local hospital or university. Fifth, while scoring the surveys is not difficult, analyzing and interpreting data can be. Again, if necessary, partnering with other community organizations, such as a health

department, hospital, or university, can enhance data analysis and interpretation efforts. Sixth, a plan for releasing the results of the survey should be developed. Seventh, time and money are always a concern. Nevertheless, surveys like the one described in this article can be conducted for less than \$1 per student and the students' time taken from the school day is less than 30 minutes. Finally, the school community should use the survey results to inform prevention and intervention efforts. An advisory group or coalition is an ideal vehicle for putting the findings into action.

Perhaps the most difficult obstacle to overcome in conducting a drug use survey is apathy toward or denial of drug use by school-aged teens. In 2001, the Robert Wood Johnson Foundation issued a widely publicized report proclaiming substance abuse was our nation's number one health problem. The report highlighted the implications of early onset of use.³³ Ten years later, Columbia University's National Center on Addiction and Substance Abuse issued a report proclaiming adolescent substance use was our country's number one public health problem.³⁴ Although schools alone certainly cannot solve the problem of teen drug use, they must take an active role in calling attention to it. The results of this study suggest why it should be done and its methods suggest how it might be done.

Human Subjects Approval Statement

This study was approved by the Wright State University's IRB.

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