Drug Prevention in Schools: Mandatory Random Drug Testing

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Drug Prevention in Schools

This issue brief, issued in September 2013 and updated in 2016, reviews what is known about the best ways to prevent drug abuse in middle and high school youth with particular attention to the recent interest in mandatory random drug testing (MRDT). It begins by reviewing the legal history of MRDT, then turns to the scientific evidence regarding the practice, and ends with a consideration of alternative strategies for educating adolescents about the harms of drugs.

Supreme Court Rulings on MRDT

Since the 1990s, interest has been growing in the use of mandatory random drug testing to deter the use of drugs in middle- and high-school students. The practice involves the use of biological assays, such as urinalysis, to detect drug use and requires students who participate in extracurricular activity or who drive to school to agree to take those tests if they are selected at random during the school year. The idea behind the strategy is that it will discourage students from using drugs and may give them a reason to "just say no" to peer pressure for drug use. However, because the practice can be considered an invasion of privacy, it often has been challenged in the courts.

Two Supreme Court decisions have ruled that the practice is constitutional if schools have reason to believe that their students have drug use problems that might interfere with their health and safety. The first case (Vernonia School District v. Acton, 1995) concerned students participating in sports and was less controversial than the second (Board of Education v. Earls, 2002), which centered on students in other extracurricular activities that involve competition with other schools (e.g., chess clubs). The 2002 case said the drug testing was constitutional by a 5-4 vote. Nevertheless, the court stated that regarding the practice, "we express no opinion as to its wisdom." In supporting the opinion, Justice Stephen Breyer noted, "I cannot know whether the school's drug testing program will work. But, in my view, the Constitution does not prohibit the effort."

The four dissenting justices were less sympathetic. In their dissent, they noted that the drug testing of students who participate in extracurricular activities without suspicion (i.e., at random) "invades the privacy of students who need deterrence least, and risks steering students at greatest risk for substance abuse away from extracurricular involvement that potentially may palliate drug problems." Numerous organizations, including the American Academy of Pediatrics[1] and the ACLU, oppose the practice on similar grounds.

Here we review what is known about the efficacy of the practice in the context of other strategies that have been tested regarding the control of student drug use.

Does MRDT Work?

The strongest evidence in support of MRDT comes from a study funded by the U. S. Department of Education that was conducted in 36 schools across eight districts in 2007-08.[2,3] The study randomly assigned about half of the schools within each district to either receive MRDT or to continue their usual drug deterrence programs without MRDT for that school year. The study examined reports of drug use in the spring of the school year in more than 2,000 students who had participated in sports or other extracurricular activity in the 30 days prior to the survey, as well as students who were not subject to MRDT. The drugs that were subject to detection varied across districts, but all focused on illegal drugs, such as marijuana and cocaine. The study examined reports of drug use in the past six months as well as the past 30 days. With regard to students in schools using MRDT, the study found:

- No effect of the program on students' reports of using substances subject to testing (possibly including tobacco and alcohol) during the past 6 months.
- No effect on illegal substance use, whether it was tested for or not, over the past 6 months.
- No effect on any substance use in general in the past 6 months.
- No difference in reports of substance use in general or of illegal substances in general within the last 30 days of the surveys.

However, there was a statistically significant difference in reports of past 30-day use of substances that were subject to testing in the MRDT program (16.9 percent of students reported using those substances vs. 22.9 percent in non-MRDT schools).

Thus, the program's effect appeared to be limited to those students who were subject to testing, for the drugs that were likely to be detected, and only during the 30-day period prior to taking the survey.

Overall, other outcomes that were examined were even less encouraging. The drug-testing program showed no effect on students in schools with MRDT who were not subject to testing (because they did not participate in sports or extracurriculars). In addition, students in MRDT schools reported having intentions to use drugs in the future at the same levels as those in the control schools, indicating that the program did little to discourage future drug use. Furthermore, students who were not subject to testing (those not involved in sports or other activities) reported 50 percent higher intentions to use illegal drugs in the future than students who did not participate in those activities, and this was true whether the schools employed MRDT or not. This supports the contention that testing students in sports and extracurricular activity overlooks students at greater risk of illegal drug use. Finally, there were no apparent effects of the program on students' perceptions of the harmful consequences of drug use. Hence, there was no evidence that the program did anything to educate students about the harms of drug use.

On the positive side, and contrary to fears that MRDT might discourage participation in sports and other extracurriculars, there was no evidence that the MRDT program discouraged students from participating in those activities. On the other hand, students more likely to use drugs may well opt not to participate in those activities anyway.

Although the use of MRDT appears to have limited effectiveness in reducing drug use over the course of the school year, many school boards and administrators have been drawn to it as a method to give students an excuse to "just say no" to peers who might encourage drug use. No study has directly examined this presumed effect. But even if it were true, the effect would appear to be quite limited.

A large national study of students from 1998 to 2011 conducted by researchers at the University of Michigan found that schools that employ MRDT and student drug testing (SDT) in general may encourage the use of drugs that are not as readily detected through urinalysis, such as opioids and stimulants.[4] As the researchers stated, "Students may know that marijuana metabolites remain in the body for a longer time than metabolites of most other drugs, making other drugs less likely to be detected even if included in testing." Although they found some evidence that marijuana use was lower among students (especially athletes) eligible for testing, they concluded: "These findings raise the question of whether SDT is worth this apparent trade-off. Until further research can clarify the apparently opposing associations, schools should approach SDT with caution."

The Michigan study also found that reports of drug use were higher in the groups not targeted for testing whether they were in schools that tested or not. This pattern of findings supports the concern that using MRDT as a general deterrent for drug use will not target the students most likely to be using drugs in a school.

School Climate Approaches to Drug Prevention

The Annenberg Public Policy Center has conducted national surveys to determine the efficacy of student drug testing. In our studies we have contrasted the effects of SDT with another approach that involves the whole school, namely enhancing a school's social climate. School climate initiatives recently have been the focus of the U.S. Department of Education's attempts to make schools more hospitable, safer and more respectful of all students and to reduce emotional and social barriers to academic achievement. In our research, we have identified an important component of school climates, especially the way the school explains and handles school discipline. Schools that treat students with respect in enforcing rules have much better climates than those that impose rules in an authoritarian manner.[5] In schools with better climates, school officials explain to students why they are expected to avoid drugs and other harmful behavior. When students feel that they are treated with respect regarding enforcement of the school's rules, they are much more likely to adopt positive norms of behavior and to treat each with respect as

well. Schools with better climates also appear to have fewer problems with bullying and other antisocial behavior.

In a 2003 national study in which we assessed school climates in high school students,[5] the students that reported more favorable school climates were less likely to have emotional problems, to perceive favorable norms for drug use, and to use drugs than in schools where climates were less favorable. This study replicated what has been found in other research on school climate.[6]

In a national study in 2008, we compared students in schools that engage in drug testing with those that have good climates.[7] Although some schools have both, it was the schools with better climates that appeared to have fewer students using drugs. SDT appeared to make no difference for boys, and it appeared to be associated with more drug use among girls in schools with poor climates. In a second national study, we followed high school students over the period of one year (from 2008 to 2009) and again looked at students in schools that used SDT vs. those with good climates.[8] Here we found that SDT was not associated with any reductions in drug use over the course of the year. However, students in schools with good climates reported lower incidence of starting to use tobacco and marijuana, as well as less progression in the use of cigarettes. Nevertheless, there was no effect of climate on the use of alcohol.

In a 2013 exchange in the journal *Addiction*, Sharon Sznitman, a former postdoctoral fellow of the APPC and a member of our research team[9], responded to a supporter of MRDT[10] that the absence of strong evidence of efficacy is not the only reason to be skeptical of the strategy. Schools should consider alternative strategies that have been shown to be effective in discouraging drug use. In addition to school climate efforts, drug education that explains the harmful effects of drugs and teaches life skills for avoiding drug use in an interactive rather than merely didactic way has been shown to be effective in reducing drug use. In a 2008 review that examined multiple studies with more than 7,000 students,[11] researchers concluded that "school-based programs based on life skills seem the most effective in reducing incidence of drug use." These programs are typically administered in middle school when pressures to start using drugs begin.[12] Although some drug-education programs have been criticized over the years for being

ineffective (e.g., the DARE program), even this program has been revised with greater attention to strategies that have been shown to work.[13,14]

Other Interventions

In the realm of tobacco prevention, mass media programs have been found to be effective with youth and are recognized as an important component of recent declines in youth smoking.[15] Reducing tobacco smoking is an important anti-drug strategy because it makes it less likely that adolescents will try smoking other substances. Unfortunately, the use of alcohol by youth remains a challenge, as our research has shown. Nevertheless, there are prevention programs involving families that have shown promise if they are initiated during middle school.[16]

Another approach to helping youth with substance abuse and mental health problems that bears some semblance to MRST is increasing the ability of teachers and other staff to recognize students who are exhibiting these problems. A survey of mental health professionals in schools found that the best predictor of effectiveness in helping students with those problems was an effective system of identifying and referring them for treatment.[17]

From this perspective, MRDT's approach of randomly selecting students from among those less likely to have problems is less effective than strategies that assess the entire student body. A strategy using this approach, known as Screening, Brief Intervention, and Referral to Treatment (SBIRT), has been shown to be feasible in school settings.[18] Such strategies include confidential surveys that assess recent mental health and substance use problems among all students. Those reporting symptoms of drug abuse are given a brief intervention that is followed up with referral to treatment for those with more severe conditions. Another strategy is providing training to school staff and parents to better recognize youth who are experiencing drug abuse and other mental health problems so that they can be referred for treatment.[17]

Summary

In sum, the evidence does not support the use of MRDT over other interventions. If schools are concerned about students going down a dysfunctional path of drug use, they should consider other approaches that have been found to be effective in preventing the initiation of regular drug use or in identifying students in need of treatment. Those include the training of life skills, family-based interventions, universal confidential screening using self-reporting of drug use and other behavioral health problems with referral to treatment when appropriate, better school climates that encourage norms of drug avoidance, and greater involvement of parents and teachers to help recognize the signs of drug use so that they can intervene and refer youth for treatment, if necessary. Looking for those cases by randomly testing students is less effective, does little to educate students about the hazards of drug use, and misses the ones more likely to be at risk.

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