

Recommendations To Prevent Teen Misuse of Prescription Drugs

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THE MISUSE OF PRESCRIPTION DRUGS by teens in the United States is a growing problem. Results of national surveys of youth drug use report such substantial increases in nonmedical use of prescription drugs that the current generation of youth has been referred to as “Generation Rx” (PDFA, 2005). Although there is basic information on patterns of misuse among teens, there are few systematic analyses of what influences teens’ knowledge about and attitudes towards prescription drugs – key factors for the creation of effective prevention programs – and even less research on methods to curb these increases. To address this information gap, this brief combines multiple bodies of research to construct recommendations to stem the growing problem of prescription drug misuse by teens.

Teen Prescription Drug Misuse as a Public Health Problem

Prescription drug misuse by teens is substantial and growing. More than 9 percent of teens aged 12 to 17 misused prescription drugs in 2005, and prescription drugs have become the most common drug of abuse for 12 to 13 year-olds (NSDUH, 2004; 2006). In 2006, there were as many new abusers of prescription drugs as new users of marijuana (NSDUH, 2006). Meanwhile, teen use of all other drugs, including marijuana, nicotine, and alcohol, decreased during the past decade (Johnston et al., 2006).

One reason for teen drug misuse relates to misconceptions about the safety of prescription drugs. Despite the documented dangers of prescription drug misuse, one-third of teens believe there is nothing wrong with occasionally using prescription medications for non-medical purposes (PATS, 2006). Teens often characterize their misuse of prescription drugs as responsible, controlled, or safe, and 40 percent indicate that prescription drugs are much safer to use than illegal drugs, even without a prescription (PATS, 2006).

The consequences of prescription drug misuse can be severe for teens. There may be harmful short-term effects on physical health, cognition, and motor skills,

and users risk addiction and medical complications, including death. Deaths due to opioid poisoning increased by 97 percent from 1997 to 2002 (Paulozzi, 2006), and emergency room visits involving misuse of prescription drugs increased 21 percent from 2004 to 2005 (DAWN, 2007).

Influential Factors on Prescription Drug Misuse

Social-ecological theory suggests that proximal and distal influences in the environment shape child development, and that these influences impact teens’ knowledge about and attitudes toward the misuse of prescription drugs (Bronfenbrenner, 1979). Proximal influences are the contexts that are closest to teens and are most likely to directly impact their development. They include teens’ own motivations for prescription drug misuse and messages about prescription drugs from parents and peers. For example, teens’ motivations to use prescription drugs tend to differ from their motivation to use illicit drugs. While many teens use street drugs for recreational purposes, they more often report prescription drug use for practical effects, such as sleep, enhanced concentration and performance, or stress relief (Friedman, 2006).

Teens’ motivations to misuse prescription drugs may be reinforced by messages from family members and friends, and parental drug use may impact children through genetic and environmental influences. Moreover, familial communication may affect teen misuse. Indeed, many teens report that their parents have the greatest influence on their drug use attitudes and decisions (CASA, 2002), but parents are less likely to discuss prescription drug misuse than street drug abuse (PATS, 2006), a tendency that may stem from parents’ lack of knowledge about the problem and its risks (McCabe & Boyd, 2005) or from their belief that these drugs are not as dangerous as street drugs (PDFA, 2005).

Parents may be an unwitting source of prescription drugs for misuse. Over 60 percent of teens report

that prescription pain relievers are easily obtained from parents' medicine cabinets (NSUDH, 2006). Others report that they got prescription drugs for free from friends. Moreover, teens often share prescription drugs – whether their own or others – with family members and friends. This drug sharing may prompt teenagers to believe that self-medication without a prescription is normative and safe (Daniel, 2003). Parents and peers can influence knowledge about and attitudes toward prescription drug use while providing drugs that enable the behavior.

In contrast to proximal influences, distal influences are the developmental contexts outside teens' immediate spheres of control. They include school, community, and the larger culture and historical context in which the teen lives. These influences appear to impact knowledge and attitudes about prescription drugs in two ways. First, there are messages in the distal environment that can influence teens' knowledge, attitudes, and subsequent behavior. Second, distal messages may affect their friends and family, and their interpretation of this information can then influence teens.

Distal messages about prescription drugs relate to several factors, including an increase in the types of prescription drugs and the number of prescriptions written for them, direct-to-consumer marketing of prescription drugs, and the availability of prescription drugs on the Internet. These factors are associated with two historical shifts in prescription drug use. First, the establishment of pain management as a medical discipline in the late 1980s and the development of new pain medications in the early 1990s combined to significantly increase the supply of and demand for pharmaceuticals. Second, the U.S. Food and Drug Administration relaxed prohibitions on direct-to-consumer-advertising (DTCA) of prescription drugs in 1997, creating a media environment that now annually exposes the average adult to as much as 16 hours of prescription drug television advertising (Brownfield et al., 2004). The frequency with which people are exposed to drug advertising, as well as the content of the advertisements, impacts people's view of these drugs.

Promotional messages about prescription drugs in the media abound, and their abundance has been linked anecdotally with the increases in teen misuse of prescription drugs for two reasons. First, adolescents may perceive prescriptions drugs to be safer than illicit drugs largely because physicians prescribe them and messages about them are widely available in their social and cultural environment. Second, pharmaceutical advertisements and media portrayals of prescription drug use give teens the impression that use of these drugs is ubiquitous and routine. These misconceptions and attitudes may then be reinforced by friends and family members who have been similarly influenced by media messages.

Challenges for Prescription Drug Prevention

The complex proximal and distal influences that may affect teen use of prescription drugs create three unique and major challenges for prevention. They include:

- **Teen motivations.** Unlike other forms of adolescent drug use, the desire to feel good or get high ranks lower as a motivation for prescription drug misuse. As a result, the prevention messages common to universal programs may not resonate with teens at risk for misusing prescription drugs.
- **Direct-to-Consumer Advertising.** DTCA may be creating a societal norm that prescription drugs are ubiquitous and universally beneficial, which is particularly problematic because subjective norms, or the belief that a behavior is common in the peer group, correlate closely with actual behavior (Fishbein & Middlestadt, 1987).
- **The legitimate medical value of prescription drugs.** Unlike illicit street drugs, prescription medications play a vital role in reducing pain and treating serious medical conditions when used as directed. Prevention messages about prescription drug misuse must avoid stigmatizing the medical use of these pharmaceuticals.

Recommendations

From this analysis, two key recommendations stand out.

Prescription drug prevention should include explicit parental components.

Parents heavily influence their teen's perspective on drug use, but few parents talk about the specific hazards of prescription drug misuse. Moreover, by virtue of their own prescriptions, many parents are a key source of prescription drugs. As a result, prevention programs should include outreach components, information, and concrete strategies for parents to help them understand the risks of prescription drug misuse and to talk to their teens. Prevention programs should have information on the role of parents as gatekeepers of prescription drugs in the household and methods that they may use to secure and monitor prescription drugs. Prevention efforts should also address the multiple motivations for teen misuse of prescription drugs.

Schools should be reconsidered as venues for the implementation of prescription drug prevention programs.

For more than two decades, schools were key delivery points for universal drug prevention programs. However, recent public policy changes have related to the decline of school-based prevention (Orwin, 2004). Still, because large numbers of teens assemble at schools for many months annually, schools can be key conduits of accurate information about the risks of prescription drug misuse. The challenge for using time- and resource-

strapped schools as prevention delivery venues is to create programs that fit into existing curricula and standards of learning.

With these factors in mind, science education in classrooms as a form of school-based prevention may hold promise in the prevention of prescription drug misuse. Science education differs from traditional prevention in two ways. First, it is non-valenced and typically contains no overt messages against use. Second, it is often easier to integrate into standards-constrained schools than traditional school-based prevention, providing it is designed to match learning standards. Science education positively impacted knowledge and attitudes of students on drugs of abuse (Holtz & Twombly, 2007), likely because the information in science education programs is persuasive and increases knowledge about the risks of drugs.

Conclusion

To increase the likelihood of their effectiveness, prevention programs should target teens within their developmental context and address the multiple pro-drug influences with complementary anti-drug messages in order to build protective factors (Kumpfer & Turner, 1990). For this reason, multi-component programs – such as parental and school-based, science educational approaches – may produce significant benefits. For example, a program recently launched in Massachusetts to prevent Oxycontin abuse, which includes complementary components for teens, parents, and clinicians, has demonstrated preliminary success in reducing drug misuse (Herr-Zaya et al., 2007). What is more, even if a school does not have the resources to implement science education specifically on prescription drug abuse, universal prevention on drug abuse writ large should still be considered because it shows promise to decrease the risk of prescription drug misuse, even if those drugs are not specifically named by the curriculum (Spath et al., 2008).

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