

Resonant Prescription Drug Abuse Prevention Messages for Teens

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PRESCRIPTION DRUG ABUSE, particularly among teens, has become a major public health problem in the United States. In 2003, roughly 2.3 million teens in the U.S. reported lifetime nonmedical use of a prescription drug (Substance Abuse and Mental Health Services Administration [SAMHSA], 2004). By 2008, the number of teens who reported lifetime nonmedical use of a prescription drug rose to 4.7 million, or one in every five teens in the U.S. (Partnership Attitude Tracking Study [PATS], 2009). What is more, the rapid increase in the rate of prescription drug abuse corresponded to a dramatic growth in related poisoning and deaths among teens (Office of National Drug Control Policy [ONDCP], 2008). Taken together, these factors have raised the attention of public health practitioners and policy makers and created a need for effective prevention messages. A key issue for public officials is to determine what prescription drug prevention messages resonate with teens, because highly resonant messages are more likely to influence intentions to avoid drugs (Harris, 2006). This brief begins to explore that issue.

Developing effective messages – and preventing prescription drug abuse among teens more broadly – faces substantial challenges for four reasons. First, there is a relative perceived safety in abusing prescription drugs. Roughly 40 percent of teens report that prescription drugs are safer to abuse than illicit drugs and nearly 33 percent believe there is “nothing wrong” with occasionally using prescription medicines without a prescription (PATS, 2009). Second, unlike illicit drugs, prescription drugs are widely available and legal to treat medical conditions. More than 60 percent of teens report that prescription drugs are easy to obtain from their own or someone else’s prescription (Substance Abuse and Mental Health Services Administration [SAMHSA], 2008). Third, media messages, such as direct-to-consumer prescription

drug advertising, may be strong normative influences, creating relatively high social acceptability toward prescription drug abuse. Finally, the motivations for prescription drug use among teens differ from most illicit drugs. Teens rank self-medication as a stronger motivation for abuse than partying or getting high (PATS, 2009).

Because of the unique characteristics of prescription drugs, traditional drug prevention messages may be ineffective to combat prescription drug abuse. Research on illicit drug prevention messages suggests that message characteristics that relate to protective substance use behavior emphasize positive alternatives to use or dispel inaccurate social norms (Hecht & Krieger, 2006). But because prescription drugs are viewed differently than illicit drugs (Boyd, McCabe, Cranford, & Young, 2007), one may hypothesize that different types of prevention messages will resonate strongly with teens when those messages focus on prescription drugs.

Methodology

To test the types of messages about prescription drug abuse that resonate with teens, we conducted two focus groups with students in the Atlanta metropolitan region. The first focus group included 8 seventh grade students. The second focus group contained 8 eighth grade students. We conducted the groups on the same day in March of 2009. The focus groups were moderated by an experienced facilitator and guided by a multifold interview guide.

Because our chief interest is the extent to which different types of prevention messages about prescription drugs resonate with teens, we used existing research (Palmgreen, Donohew, Lorch, Rogus, Helm, & Grant, 1991; Stephenson, Morgan, Lorch, Palmgreen, Donohew, & Hoyle, 2001; Hecht & Krieger, 2006) to create nine categories of messages

in drug prevention (Table 1). The message categories include building self esteem among teens to resist illicit drug use, information about drug abuse, the perceived harm of drug abuse, positive alternatives to drug abuse, refusal skills, scare tactics, science education that connects drug abuse to its impact on the brain and body, social norms about drugs, and general social skills that may positively relate to a teen's ability to avoid drug abuse. We used these categories to develop 20 prevention messages for prescription drug abuse. We created three messages in both the scare tactic and social norms categories, and two messages for each of the other seven categories.

Table 1. Prevention Messages by Message Category

Message Category	Message
Building Self Esteem	Don't worry about what people think of you. Think about yourself and how to stay safe by avoiding prescription drug abuse. People who know who they are and where they're going in life don't need to abuse prescription drugs.
Informative	Deaths from prescription drug abuse are rapidly increasing, so don't abuse prescription drugs. Even though prescription drugs are legal, they are not safe when abused.
Perceived Harm	Abusing prescription drugs is the same as using other illegal drugs. Sharing prescription drugs with friends can get you arrested and put in jail.
Positive Alternative	Seeing your life clearly will help you accomplish your goals, and you can't see life clearly when you abuse prescription drugs. Avoid prescription drug abuse so you can focus on what makes you "you" – your style, what you think, and the way you do things.
Refusal Skills	Just say no to prescription drug abuse. If your friends ask you to abuse prescription drugs, then maybe you need new friends.
Scare Tactic	Prescription drug abuse can kill. That kid who took the "mystery" pills at the party? Now he needs a new liver. Prescription drug abusers never plan to become addicted. They thought that they were under control.
Science Education	Prescription drug abuse changes the way your brain and your body normally work. Prescription drugs require prescriptions for a reason. They can be deadly if abused.
Social Norms	Drug companies make prescription drugs seem safe, but abusing prescription drugs is definitely not safe. Abusing prescription drugs will not reduce stress or fix problems. Only 3 out of every 100 kids your age have abused prescription drugs. Everyone's not abusing prescription drugs, so why would you?
Social Skills	Stand up to influences that push you to abuse prescription drugs. Abusing prescription drugs can isolate you from your family and friends.

The dependent variable is a three-fold categorization of message resonance, which we define as the extent to which a student reports that a message may influence him or her and peers to refrain from abusing prescription drugs. To collect data on message resonance, we gave three cards to each student. The cards were shaded green, yellow, and red. During each focus group, the facilitator read aloud the 20 messages. After reading the message, the facilitator asked each student to hold up a green card if the message was highly resonant, a yellow card if it was moderately resonant, and a red card if the message had no resonance. We randomized the order of the messages presented by the facilitator by using a random number generator.

In total, the 16 students generated 320 responses from the nine message categories. To create a balanced analytic approach across categories, we collapsed the responses for the three messages for the scare tactic and social norms categories, respectively, into two messages, giving each message category 16 corrected responses per focus group, or 32 responses in the two focus groups. In the end, we had 288 corrected responses from our 16 students. We descriptively analyzed the responses in the aggregate and by the grade of the students.

There are limitations to this study. For example, because the students in the study include only seventh and eighth graders in the Atlanta metropolitan region, the generalizability of the results should be viewed cautiously. Still, the data suggest several surprising findings regarding the types of preventive messages about prescription drug abuse that resonate with teens.

Findings

Messages that use scare tactics resonated most highly with students.

While students reported that roughly 25 percent of all prevention messages resonated highly, nearly 69 percent of students indicated that messages with scare tactics are highly resonant as a prescription drug abuse prevention tool. Another 22 percent reported that messages that involve scare tactics are moderately resonant. Only 9 percent of students reported that scare tactics had no resonance. The effect was even higher for seventh graders. Among seventh grade respondents, nearly 69 percent indicated that scare tactics highly resonated. Another 25 percent reported moderate resonance. These findings are surprising because there is little evidence that scare tactics appeal to youth in traditional drug prevention campaigns. What is more, there are potential conceptual problems with using messages that involve scare tactics to prevent prescription drug abuse. Indeed, the use of scare tactics may produce the unintended consequence of stigmatizing drugs that have legitimate purposes when prescribed by a doctor. Still, these findings suggest the need to carefully examine why students in this study gravitated toward scare tactics and the extent to which this message category may be used effectively in prescription drug prevention efforts.

Messages that focus on refusal skills had little resonance.

Overall, students reported that roughly 30 percent of messages showed no resonance, but students were substantially more likely to rate messages that center on the development of refusal skills, such as “just say no to prescription drug abuse,” as non-resonant. In fact, nearly 70 percent of students indicated that messages that focus on refusal skills had no resonance. Another 22 percent of students considered refusal skill messages as moderately resonant, and only 8 percent of students found them to highly resonate. What is more, eighth graders (90 percent) were more likely than seventh graders (50 percent) to rate refusal skill messages as non-resonant. Taken together, the data suggest that messages that center on refusal skills, particularly related to the “just say no” campaign from the 1980s, were spurned by most teens in the focus groups, particularly skeptical eighth graders.

Messages that highlight positive alternatives to prescription drug abuse showed limited resonance.

Often considered a bulwark in traditional drug prevention, messages that focus on positive alternatives to prescription drug abuse fared relatively poorly among students in this study. Overall, only 3 percent of students considered the positive alternative messages to be highly resonant, and all of those students were seventh graders. Seventh graders also tended to be more ambivalent about positive alternative messages than eighth graders. Nearly 70 percent of seventh graders rated these messages as moderately resonant, compared with only 38 percent of eighth graders. In contrast, eighth graders were substantially more likely to consider positive alternative messages as non-resonant. Indeed, nearly 63 percent of eighth grade respondents rated positive alternative messages as non-resonant, compared with 25 percent of seventh graders.

Students were generally ambivalent about prescription drug prevention messages.

While scare tactics clearly positively resonated with students and refusal skill messages negatively resonated with them, there was relatively strong ambivalence toward many of the other message categories. Indeed, students reported that roughly 46 percent of all messages had moderate resonance, reflecting neither a full endorsement nor full rejection of the potential effectiveness of the messages. Eighth graders tended to be less ambivalent generally toward the prevention messages than seventh graders. In total, 38 percent of eighth grade respondents scored messages as moderately resonant, compared with 54 percent of seventh graders. Similarly, eighth graders were substantially more likely than seventh graders to reject the messages as non-resonant. Roughly 17 percent of seventh grade respondents scored the messages as non-resonant, compared with more than 41 percent of eighth grade respondents.

Implications

This brief presents some surprising results about messages that aim to influence teens’ views on prescription drug abuse. First, that scare tactics resonated highly with both groups of students tends to contradict mainline approaches to drug prevention. One needs to explore this finding with more generalizable data, but one may hypothesize that hard-hitting messages about the consequences of prescription drug abuse may grab the attention of teens who have not been exposed to much information about these drugs. Similarly, that positive alternative messages showed relatively low resonance may signal the need for different types of messages for prescription drugs than those generally used in prevention efforts on illicit drugs.

The results also show wide variation in message resonance between seventh and eighth graders. Although only separated by one year, seventh graders tended to be more positive about prevention messages than eighth graders. In contrast, eighth grade respondents appeared more skeptical and quicker to judge the messages as non-resonant. The distinction between the two groups reflects not only their different developmental characteristics, but also the potential need to craft and target different types of messages to the two groups of students. While creating varied messages by age or school grade may raise the cost of prevention efforts, the results of this study suggest that, because seventh and eighth graders view and respond to prevention messages in substantially varied ways, effective prevention of prescription drug abuse may require a multi-message approach.

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References

- Boyd, C. J., McCabe, S. E., Cranford, J. A., & Young, A. (2007). Prescription drug abuse and diversion among adolescents in a southeast Michigan school district. *Archives of Pediatric Adolescent Medicine*, 161, 276-281.
- Harris, M. S. (2006). *The role of emotion in anti-drug PSAs: Investigating the impact of guilt arousal on perceived message effectiveness and behavioral intentions to use drugs* (Doctoral dissertation). Retrieved May 24, 2009, from ProQuest Dissertations and Theses database. (Publication No. AAT 3259130)
- Hecht, M. L., & Krieger, J. L. (2006). The principle of cultural grounding in school-based substance abuse prevention; The Drug Resistance Strategies Project. *Journal of Language and Social Psychology*, 25(3), 301-319.
- Office of National Drug Control Policy [ONDCP]. (2008). *Prescription for Danger: A Report on the Troubling Trend of Prescription and Over-the-Counter Drug Abuse Among the Nation's Teens*. Retrieved May 24, 2009, from http://www.theantidrug.com/pdfs/prescription_report.pdf
- Palmgreen, P., Donohew, L., Lorch, E. P., Rogus, M., Helm, D., & Grant, N. (1991). Sensation seeking, message sensation value, and drug use as mediators of PSA effectiveness. *Health Communication*, 3(4), 217-227.
- Partnership Attitude Tracking Study [PATS]. (2009, February). *Teens 2008 Report*. Retrieved on March 1, 2009, from http://www.drugfree.org/Files/full_report_teens_2008
- Stephenson, M. T., Morgan, S. E., Lorch, E. P., Palmgreen, P., Donohew, L., & Hoyle, R. H. (2001). Predictors of exposure from an antimarijuana media campaign: Outcome research assessing sensation seeking targeting. *Health Communication*, 14(1), 23-43.
- Substance Abuse and Mental Health Services Administration [SAMHSA]. (2004). *Results from the 2003 National Survey on Drug Use and Health: National Findings* (Office of Applied Studies, NSDUH Series H-25, DHHS Publication No. SMA 04-3964). Rockville, MD.
- Substance Abuse and Mental Health Services Administration [SAMHSA]. (2008). *Results from the 2007 National Survey on Drug Use and Health: National Findings* (Office of Applied Studies, NSDUH Series H-34, DHHS Publication No. SMA 08-4343). Rockville, MD. Retrieved May 24, 2009, from <http://www.oas.samhsa.gov/NSDUH/2k7NSDUH/2k7Results.cfm>



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