

## Assessing the Risks and Issues: Prescription Drug Abuse on Campus

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Paper Presented at the 2010 National Conference for Law and Higher Education,  
Stetson University College of Law, Orlando, Florida

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A student blog published on *CollegeCandy.com* in 2008 may best encapsulate the complexities of what many in college health prevention and treatment consider to be a disconcerting trend of Generation Rx<sup>1</sup>:

Sunday night at 3 a.m. again. The lines on the page have long since run together. I have written the same sentence three times. My roommate is blaring the television set that is constantly tuned to E!. I have seen all of the *True Hollywood* stories. Twice.

“Bailey, can I have an Adderall?”

“Sure. You know where to find them.”

I rummaged around in the clutter of her desk drawer, and my fingertips having connected with the plastic of a prescription bottle, I tipped a tiny capsule into my palm.

Ah, yes, here was my chemical savior. Focus city, here I come.

Studying was never my forte. I had always managed to ace my tests and whip out my papers based on my class attendance and spectacular ability to bullsh\*t.

When I got to college, I discovered that however wonderful my skills may be,

it is nigh-on impossible to BS a 15-page paper, even if it is philosophy. I was floundering, and here was my quick-fix. Because who wants to do things the hard way?

So Adderall became my study buddy and I owe many successful all-nighters to those tiny capsules. What's more, with all of this extra energy and focus, I stopped munching on Cheetos and Doritos while studying and I lost a pants size (which I have since gained back).

Now, addictive tendencies run in my family, so I had to be careful. Adderall has the same chemical components as speed (so watch out if you're going to be getting drug tested), and its dispensing is tightly regulated. Only one month's supply at a time may be prescribed and a visit to the doctor is required in order to renew the prescription. Meaning: there can be habit-forming side effects and this is something to be monitored.

But, I never once had the least shadow of a negative side effect. No crashes, no moodiness, no nothing. Just complete focus and an increase to my G.P.A.

Obviously, I would do it again if it were available to me. I've even considered going to the psychiatrist myself and getting a prescription.

It's not necessary, though; if you know the right people (and I do), you can usually just score on campus.<sup>2</sup>

The non-medical use of prescription drugs by college students – defined by most health researchers as “use without a prescription of the individual's own or simply for the experience or feeling the drugs caused<sup>3</sup>” – has been raised as a significant concern by many of the same institutions that rang the alarm bell about alcohol abuse among college students in the early 1990s.<sup>4</sup> In fact, many aspects of the current discourse on collegiate prescription drug misuse mimics the early conversations about alcohol abuse on campuses during that decade. Much like then, the dialogue about prescription drug misuse is laden with conflicting views about the problem and its impact on the individual, the campus, and society in general. There is a great deal of anecdotal evidence that a problem exists, with sensational media accounts of collegiate “pharming parties” that rival the drug panic of the 1960's,<sup>5</sup> but little hard data available to provide an accurate assessment of the problem or identify clear environmental or individual

strategies to address it. Even the simple task of naming and defining the problem has created confusion and a bit of controversy among researchers, practitioners, and students. Most importantly, however, non-prescription drug use among college students, much like the uses and abuses of alcohol on and around campus, reflects and is influenced by a wide range of moral, ethical, biomedical, social, and cultural forces that make prevention strategies much more difficult to devise and enact.

In this paper, we will identify the current trends and issues surrounding the misuse of prescription drugs among college students with the intent of providing insight into appropriate directions for campus and community policies and prevention practices. To do so, we will first look at the prevalence data, then try to better capture the key issues surrounding the problem, and finally identify several implications for campuses attempting to address the issue.

### **Prevalence of Illicit and Non-Medical Drug Use**

Studies indicate that three families of prescription medications have been used by college students for non-medical purposes:

- Pain relievers (Opioids) such as OxyCotin®, Vicadin®, or Percocet®
- Stimulants such as Ritalin® or Adderall®
- Benzodiazapines such as Valium® or Xanax®

Although drug use among various age groups has been collected for several decades by the Substance Abuse and Mental Health Services Administration (SAMHSA) and the National Institute for Drug Abuse (NIDA), among others, the first heavily publicized report about college student use came from the University of Michigan in 2005 using data from the Harvard College Alcohol Study. The study found that 7 percent of college students reported using stimulants for non-medical purposes, and that the most likely users were male, white, members of fraternities and sororities and earned lower grade point averages. According to the data, rates of non-medical stimulant use were higher at colleges located in the north-eastern region of the United States and at colleges with more competitive admission standards.<sup>6</sup>

More recently, SAMSHA produced two reports on the non-medical use of prescription drugs using data from the National Survey on Drug Use and Health (NSDUH). The first focused the non-medical use of pain relievers across multiple age groups and reported that there was an

increase of use among 18 – 25 year-olds, from 4.1 percent in 2002 to 4.6 percent in 2007.<sup>7</sup> The second report looked at the nonprescription use of Adderall® among full-time college students, with results similar to the University of Michigan study.<sup>8</sup>

Data from NSDUH (2008) indicates that overall non-medical use of psychotherapeutic medications -- defined as including pain relievers, tranquilizers, stimulants, or sedatives -- among 18 to 25 year olds in the past month actually remained the same or declined slightly from 15 percent in 2007 to 14.8 percent in 2008.<sup>3</sup> Still, this represents a significant increase in use from 1992 for this age group, and the rate is cause for some concern.

NIDA's Monitoring the Future study, which collects data from 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> graders, serves as an important indicator of the types of substance use issues that colleges and universities will soon inherit. According to that study's 2009 data, non-medical use of the painkillers Vicodin® and OxyContin® have increased over the past five years among 10<sup>th</sup> graders. Nearly 1 in 10 high school seniors reported non-medical use of Vicodin®; 1 in 20 reported abuse of OxyContin®. The same study indicates that more than 5 percent of 10<sup>th</sup> and 12<sup>th</sup> graders reported non-medical use of stimulants in the past year.<sup>9</sup> The National Center for Addiction and Substance Abuse (CASA) suggests that the usage of these medications and other prescription drugs has tripled since 1992.<sup>10</sup>

A study conducted at Ohio State University in 2008 found that the reported use of non-prescribed drugs at least once per year was 9.2% for pain medications, 5.1% for sedatives, and 4.4% for stimulants<sup>11</sup>. The "Non-medical Use of Prescription Drugs Survey," a collaboration between Ohio State's Office of Student Life and College of Pharmacy, assessed both student use rates as well as perceptions about the prescription drug misuse of fellow classmates<sup>12</sup>.

Each of these substances, however, is used for wildly different reasons, and it is important to note that significant research into understanding these motives is limited. Most clear to researchers is the motivation for the nonmedical use of the stimulants Ritalin®, Concerta® and Adderall®, which are used primarily as "performance enhancers" for students, like the young woman featured in the opening blog, who desire improved focus or stamina to accomplish their academic work. A 2007 study at the University of Michigan found that 69% of respondents said that the drugs helped them to concentrate, and 67% said the drugs helped them study.<sup>13</sup> A 2005 study, however, reported that most students were using Ritalin® for recreational purposes.<sup>14</sup>

This contradiction may, in fact, represent a change in motivation over time. Data from studies dated 2005 and earlier indicate more students reporting recreational use of stimulants than studies conducted in 2007 through 2009.<sup>13, 15</sup> Although a meta-analysis has yet to be conducted across the studies, the differences appear to be significant. There is a belief among researchers, however, that motives may be mixed; the same students who use stimulants for performance enhancement may also be using these drugs to get high<sup>13</sup>.

A single study published in 2007 found that among students using opioids, 63% stated that the drug was used to relieve pain while 32% stated that they used the drug to get high. Another 27% used it simply as experimentation, and 14% reported using the drug to help them sleep.<sup>16</sup> No studies have been conducted to determine the motives for benzodiazepines, though there is anecdotal evidence that these drugs are more associated with suicide attempts than others.<sup>17</sup>

While a clear picture of misuse emerges from the data, less is known about the primary or secondary harms (harms to the individual user or to others impacted by the user) created by the non-medical use of prescription drugs across any population and particularly for college students. None of the studies report harms data, including addiction rates. The NSDUH reports percentage of 18 – 25 year-olds with substance dependency or abuse at 7.8 percent. The CORE Institute of Southern Illinois University and the Harvard College Alcohol Study relates primary and secondary harms to both alcohol and other drug use, but does not distinguish effect between substances, and most harm is attributed to alcohol by the authors. Without specific data of resulting harm, it is difficult at best to determine the scope of the “problem” surrounding the non-medical use of prescription drugs.

Of course, a variety of real harms do exist around the non-medical use of prescription drugs for college students, ranging from overdose and other adverse events to dependency. When these medications are combined with alcohol, these effects can be even more devastating. CASA, for example, reported in 2005 that controlled prescription drug-related visits to emergency departments have increased three and a half times more than heroin related visits and four times more than visits linked to cocaine abuse, although they do not specify the college population in that statistic.<sup>10</sup> SAMHSA also reports a sharp increase in emergency room visits for benzodiazepine misuse or overuse.<sup>17</sup>

Much more importantly, however, is the fact that students themselves do not see the non-medical use of prescription drugs as potentially harmful. A study published in 2008 found that only 25% of the 1,253 undergraduates students studied at the University of Maryland perceived any harm in the use of stimulants, and only 28% perceived any risk from the use of analgesics. Low perceived harmfulness and high sensation-seeking were independently associated with the increased risk of non-medical use of prescription drugs across all demographics. Conversely, high perceived harmfulness of non-medical prescription drug use proved to be a key protective factor in all groups except for high sensation-seekers, who maintained use despite their knowledge of harm<sup>18</sup>.

### **Non-Medical Drug Use in Perspective: Five Key Issues**

Making sense of these statistics, particularly for the purpose of developing effective policies and prevention programs, requires a bit of perspective. Five key issues emerge from the data that are worthy of consideration:

#### **1) The data represents a significant trend in self-diagnosis and self-medication.**

As the more recent (though limited) motive data indicate, the use of prescription drugs by college students may more likely be an issue of self-medication than one of illicit recreation. The very definition of non-medical prescription drug use as outside of medical supervision or for the purposes of a specific effect may very well be viewed as an issue of insufficient or undesired access to medical care for college students, who are clearly experiencing the effects of a highly competitive socioeconomic social system with inadequate coping skills. More importantly, the data may suggest a much more disconcerting cultural trend captured by Critser in 2005 as “Generation Rx”. Certainly, our broader culture has become focused on symptom-alleviation and enamored by the science of biochemistry which promises that a pill or substance can resolve a vast array of problems, or at least delay their experience for a period of time. The data from these studies may not paint an accurate picture of prescription medication use as many students – like their adult counterparts – have learned the fine art of describing a set of symptoms to one or more doctors that is sure to lead to a prescription.

This is one of many facets of the problem that must be addressed both on campus, in the immediate community, and in broader society. Students, like many non-students, are “self-

diagnosing” their conditions and are enacting their newfound roles as medical consumers, usually with little training or guidance.

Critser’s point is that, due to a variety of congressional acts and relaxed standards by the Food and Drug Administration, the pharmaceutical industry has successfully marketed a variety of medications as common consumer goods. It is not surprising, then, that non-medical prescription drug use is experienced across all ages of the population and not simply by college students. It is also not surprising that young adults represent the highest rates of use, and that this correlates to high rates of consumption across all consumer goods for this age group.

Critser specifically identifies “high performance youth” as one of the key targets of pharmaceutical industry, and makes the vital connection between pharmaceutical marketing and the rise in ADHD diagnosis. He also makes the point that direct-to-consumer advertising itself threatens the physician-patient relationship, as more young adults see no need to seek a medical assessment to treat an obvious problem that is well defined by the drug manufacturer.<sup>1</sup> From this perspective, it may be difficult to argue against the use of a performance enhancing stimulant for a student at an academically challenging institution who has become convinced that his or her future success lies in their ability to maintain a high grade point average while also remaining highly active in significant extra-curricular and co-curricular activities (usually while also working at least part-time to cover the expenses of the experience). It may be equally hard to argue that a student-athlete who must regularly step beyond the normal boundaries of physical ability in order to assure a place in professional sports should not use pain-relievers, and may be more inclined to do so outside of the medical establishment for fear of a loss of faith within the coaching staff.

History has made clear that our definitions of any social problem have a direct influence on our approach to addressing that problem.<sup>19</sup> If, in fact, the increase in non-medical prescription drug use among college students represents self-diagnosis and self-treatment, then an entirely different set of policies and programs are needed to increase medical supervision of student drug use, increase the knowledge of drug interactions and other potential adverse effects, and address the environmental, social, and cultural factors that affect student mental and physical health.

## **2) Explanations for prescription drug use need more study from a variety of perspectives.**

Illicit drug use, like alcohol use, suffers particularly from what Hamilton and Collins described as an “assumption of malevolence” where researchers and policymakers focus on harm and ignore the potential or reported benefits to substance consumption<sup>20</sup>. In much of the literature concerning non-medical and illicit prescription drug use among college students, this assumption is clearly evident, despite the lack of clear harms data to support the assumption.

Beyond self-diagnosis and treatment, the use of prescription drugs for purely recreational purposes may also have alternative explanations. Intoxicating substances have had a place across civilizations and appear in some form in the popular culture of every generation<sup>21</sup>. In many cases, these substances – whether deemed legal or illegal by social authorities – have been a key aspect in social practices that focus on community-building. While alcohol tends to be the most common drug of choice for this purpose in contemporary Western culture, marijuana use closely mimics alcohol use in this manner; most uptake occurs within groups during social occasions and, like alcohol, is used to increase social interaction.

Currently, there is no evidence that prescription drug use holds the same social and cultural function as alcohol and marijuana, and very disputable evidence that suggests that these substances are ingested in group settings. A variety of news media outlets have reported the prevalence of “Pharming Parties” where young adults bring prescription or over the counter medications and throw them all into a bowl so that individuals can grab handfuls of unlabeled pills, a practice known as “trailmixing<sup>22</sup>,” but the prevalence of these events has been challenged<sup>23</sup>.

A more plausible social theory explaining social prescription drug use (and pharming parties in particular) may be found in the notion of edgework. Edgework is a concept originated by sociologist Stephen Lyng that explains voluntary risk-taking as a transcendent activity, much like hallucinogenic drug use itself was described in the 1970’s. The transcendence of risk-taking, however, is found in the act of coming as close to destruction as possible without going “over the edge.” The greater the danger, Lyng has discovered, the greater the thrill, and the greater the sense of freedom from social constraint<sup>24</sup>. Yet, there is a

second advantage to edgework in that successful risk-taking also yields entry into the broader “edgework community,” a group of like-minded individuals who bond through shared risk-taking experiences. Examples of these closely bonded edgework communities abound in our society, from firefighters to cliff divers, surfers to test pilots, roller coaster fan clubs to street gangs.

It is interesting to note that the studies of non-medical and illicit prescription drug use indicate that sub-population use rates among college students mimic heavy episodic drinking rates; the highest use occurs among white upper-middle class students and members of fraternities and sororities or intramural athletic teams. These groups share classic edgework community characteristics, including elaborate and dangerous membership rituals and group risk-taking activities that facilitate member bonding and socialization<sup>25</sup>.

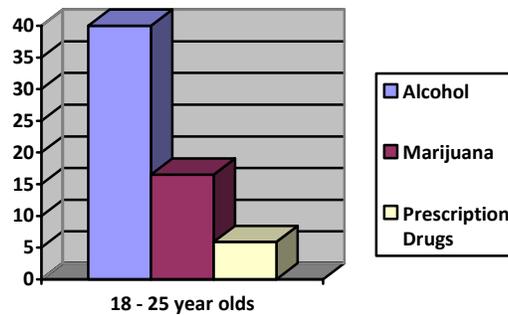
From this perspective, non-medical prescription drug use can be viewed as a social phenomenon that, through social engineering, can be restructured to meet student social needs in safer ways. The edgework perspective also provides a unique approach to individual intervention; failure to successfully negotiate the edge of dangerous prescription drug use (seen in overdose, addiction, adverse physical effects, or emergency room visits) is often leads to rejection of the edgeworker by the edgework community. Many collegiate social groups view student members who are unable to control their intoxication and become violent, ill, or place the group in legal danger as a burden to the group and are often rejected. Efforts to refocus the failure of the individual as an opportunity for intervention and treatment have proven successful in fraternity and sorority settings<sup>25</sup>.

Rethinking the issue of non-medical prescription drug use to more accurately reflect the beliefs and behaviors of our students may actually point us to a set of environmental, medical, and cultural solutions that address the need rather than criminalize the behavior<sup>5</sup>.

### **3) Alcohol and Marijuana are still the recreational drugs of choice for the majority of college students.**

Without question, the prevalence data collected across a variety of studies on college substance use indicates that alcohol and marijuana continue to be the recreational drugs of choice for the vast majority of college students. According to the 2008 NSDUH data,

excessive alcohol use for college students (defined as five or more drinks in one occasion) remains at 34 percent for 18 – 20 year-olds and a whopping 46 percent for 21 – 25 year olds. Marijuana use for the same population was reported at 16.5 percent, more than double the reported 5.9 percent use of non-medical prescription drugs (see Figure 1). Use rates for other illicit drug, such as cocaine, heroin, LSD or methamphetamines, remains significantly lower than prescription drugs.<sup>3</sup>



**Figure 1: NSDUH 2008 Data**

Epidemiologically, however, the comparison between drug and alcohol use is rather awkward and less helpful; alcohol and its effects are measured by quantity consumed, and a clear correlation has been established between the amount of alcohol consumed and the prevalence of harms that accompany overuse. In fact, harm reduction – a philosophy that is central to the alcohol prevention efforts on college campuses -- assumes that for students of legal age, limited use is both acceptable and non-problematic. Drug use is studied and addressed without attention to quantity consumed. All the studies cited here ask for whether or not a student has consumed a drug in the past year, month, or lifetime, and never inquires about the amount consumed in any given event. In fact, there is no research literature that describes the amount consumption for prescription or illicit drugs, though one could argue that, like alcohol, a small amount of Adderall® that is ingested will have profoundly different effects than a large amount of Adderall®, particularly over time. Moreover, the primary impact of alcohol consumption is consistent; alcohol causes intoxication, and a wide variety of medical, legal, and social harms can be tied to that state of being. The rate at which alcohol causes intoxication, measured by blood alcohol concentration, is often the centerpiece of alcohol education programming. Many students lack similar knowledge about

substances and effects when experimenting with prescription drugs for the purpose of intoxication or sensation-seeking.

#### **4) We may be talking about the same students.**

Several of the studies do establish a correlation between the non-medical use of prescription drugs and the use of other substances and high-risk behaviors, suggesting that there may be a limited set of students who misuse and abuse a wide array of substances for a variety of purposes. The University of Michigan study found that non-medical prescription stimulant users were more likely to report use of alcohol, cigarettes, marijuana, ecstasy, cocaine and other risky behaviors.<sup>6</sup> The NSDUH also found that among youths aged 12 to 17 who were binge drinkers, 68.5 percent also were current illicit drug users, which was higher than the rate among nondrinkers (4.3 percent).<sup>3</sup>

Data from the University of Maryland study also supports this conclusion. A clear group of students could be identified as “high sensation-seekers” who were most resistant to beliefs about prescription substance harm, and who showed tendencies across substances.<sup>18</sup> Other studies have drawn similar conclusions. Ultimately, the data indicates that for high sensation-seekers, choice of drug may be more an issue of opportunity than preference, and that the ultimate goal of intoxication, for whatever reason, may be the dominant factor in substance use.

Luckily, high sensation-seekers are rarely hidden in the college culture. Often, these students tend to be identified by their peers as the center of most legendary drinking or drug stories or as the bane of the group’s existence. They are rarely strangers to judicial officers, though they may be unknown by student health practitioners.

#### **5) Perceptions of use are significantly greater than actual use.**

Perhaps one of the most intriguing findings from recent studies is the dramatic misperception by college students of the non-medical use of prescription drugs by their peers. The University of Michigan found that undergraduates overestimated the prevalence of non-medical use of prescription stimulants (70.2%) and prescription opioids (69.9%) among peers on their campus.<sup>26</sup> The discrepancy between perceived and actual use rates is significantly

higher than student misperceptions of excessive alcohol use among their peers, which suggests that the misperception is more a reflection of cultural myth than of observed reality.

Although normative research of non-medical prescription drug use is limited to this single study, the data confirms the impact of popular culture on the belief among college students that non-medical prescription drug use is an expected and accepted “normal” behavior in college. Focus groups at the Ohio State University confirmed that students have come to accept the use of stimulants during final exams as commonplace, despite actual use figures that suggest that approximately 10% of students actually use stimulants during that time.<sup>27</sup>

### **Implications for Policy and Programming**

Given some clarified perspective on the issue, it seems appropriate to feel some concern over the non-medical use of prescription drugs by college students, particularly as an indication of increased self-medicating and pharmaceutical consumerism. Clearly, additional research is needed to better quantify the specific harms to students, the campus, and society caused by this trend, but there is regardless a need for colleges and universities to address prescription drug use along with alcohol and marijuana consumption. Yet, there are specific approaches that can and should be taken that can reduce the likelihood of prescription drug misuse.<sup>28</sup> As with all prevention approaches, the more comprehensive and collaborative the programs have been shown in evaluation to be more successful. Therefore, it is critical that campus approaches incorporate educational, individual, and environmental strategies.

#### **1) Limit access to prescription medications on campus**

Several policy approaches have been attempted to reduce access for students to prescription drugs, though no evaluation data has been collected to measure their success. Access to prescription medications is a difficult issue to manage on college campuses, as many students come to college with legitimate diagnoses and prescriptions. Like alcohol, there is a mix of medical drug users who share space and relationships with non-medical drug users. Unlike alcohol, however, fewer campuses have established a clear policy (or have adapted their present substance policy) to include the provision or sales of prescription medications for non-medical users. While such a policy may be difficult to enforce, it is

critical that it be included in discussions of student conduct policy for new students and parents, and that a campus judicial system has created an infrastructure for addressing such cases. It is important to remember when doing so that a college campus does not have the same burden of evidence as the courts and can use reasonable assumptions to enact an appropriate and educational sanction for students who provide or sell. It is critical that such sanctions are communicated broadly across campus to increase student likelihood of consequences, which has been shown to be a deterrent.

One access policy approach that has been adopted at campuses across the country is the prohibition of campus health centers to fill pre-existing prescriptions for commonly misused drugs from an off-campus physician. While this may limit some access for students, the policy may actually increase the sale or provision of drugs by fellow students. A more appropriate policy may be to insist that each prescription refill request be filled only after a physician's approval, verified by an appointment between the doctor and student. Encouraging students to maintain contact with a local or campus health clinic physician can both ensure the student's medical needs are addressed while also providing tracking for prescription abuses.<sup>29</sup>

Several campuses have begun communicating to students about protecting their prescription medications by storing those substances in a locked compartment. This message, combined with messages about sales and provision, communicates to students a sense of community standards about non-medical prescription drug use, and when combined with appropriate education and appropriate enforcement and adjudication, send a clear message about non-medical prescription drug use on campus.

## **2) Brief intervention on prescription drug use by medical, judicial, housing and Greek Affairs staff**

Brief intervention strategies have proven to be a successful approach to addressing substance use in general<sup>30</sup>, and a variety of approaches have been taken to raise student awareness of potential substance use issues and to connect students to appropriate campus staff for assistance. On-line and in-person brief intervention systems are being actively used for alcohol and marijuana<sup>31</sup>, and other illicit drug use and are being developed for prescription drug use as well, but these programs have been designed to build student

awareness around recreational use. Critical to individual intervention in non-medical drug use is enabling students to connect a set of self-diagnosed symptoms to trained medical care. This is best accomplished through standardized brief intervention and screenings where campus health care services, local clinic, and emergency room staff and physicians discuss potential substance use issues with students who come for reasons ranging from the flu to other illnesses or injuries. There is good evidence that these programs can be successful for prescription drug use.<sup>32-34</sup> It is plausible that, despite the use of a prescription drug to increase concentration, an 18 to 20 year-old student may not recognize the lack of focus as a medical issue that can be accurately diagnosed and treated, or the chronic pain or lack of appetite control as a symptom of an underlying medical problem. Having clinic staff ask specific and pointed questions about self-treatment through non-prescribed medications, and then offering help in identifying the problem and treating it medically, holds promise in changing current behavior for the 7 – 10% of students engaged in this practice.<sup>35</sup>

### **3) Social norms correction education across campus**

Several campuses have added social norm marketing programs around prescription drugs to change student misperceptions that a majority of students are engaged in non-medical use.<sup>11</sup> These programs are identical to the alcohol-related social norms programs that have been popular and effective on college campuses for more than a decade.<sup>36</sup> In social norms marketing, students are exposed to actual rates of use or attitudes regarding prescription drug misuse. The strategy is most effective when the information used is from fellow students, the message dosing is consistent and comprehensive, and the messages are co-created by students. Norms programs are relatively inexpensive and have shown success in reducing student misperceptions about non-prescription drug abuse.<sup>37</sup>

The Ohio State University provides a model of a cooperative, comprehensive program that addresses the issue, though it remains to be seen if the effort can yield reductions in use across key populations. Titled the “Generation Rx Initiative,” the program was created by a grant to OSU’s College of Pharmacy, which has cooperative relationships campus wide across academic and student affairs units. The program reaches beyond the campus and includes education and outreach to elementary, middle, and high school populations as well as the general

community. The program combines social norms marketing, policy development, peer education, consistent student data collection, and research.<sup>27</sup>

Ultimately, any campus effort to address and reduce non-medical prescription drug use will need to also challenge the broader social and cultural beliefs that make up Generation Rx. Institutions of Higher Education, however, have as their core mission the improvement of society, and in this case, such efforts are truly self-serving. National attitudes concerning tobacco use and alcohol abuse, particularly drunk driving, have been changed in part by college and university attention to the issues on their own campuses. Evaluations of environmental alcohol programs at campus-communities across the United States have shown that the simplest and perhaps most important action that can be taken is to increase community attention to the issue.<sup>38</sup> Discussion in a variety of contexts and setting across campus and the surrounding community is an essential first step.

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