

EVERY 15 MINS.

Why prescription drug abuse is more serious than you might think

Facilitator's Notes

General approach to the workshop: This program is designed to be a peer-directed, discussion-based workshop (not a "lecture"). Facilitators should guide discussions and engage the audience with appropriate insights, but audience participation is vital to its success. Faculty and staff members may certainly be effective facilitators for these sessions, but we believe student-to-student education to be the best approach. So, we encourage the use of trained students in delivering the workshop. Workshop audiences may be of any size, but smaller groups are best in order to facilitate meaningful discussion. The program can be adjusted to various timeframes but is designed to last 30 to 60 minutes.

The workshop leads participants through a linear discussion of the serious public health dilemma created by prescription drug abuse. It begins with an introduction to the problem (where are we?), and then asks the audience to consider: causes of this problem (how did we get here?), its significant consequences (does it really matter?), and ways in which we can prevent prescription drug abuse (where do we go from here?).

Definition of "misuse" and "abuse" of prescription

medications: The words "misuse" and "abuse" are commonly used when talking about this issue, often interchangeably.

We are actually trying to prevent both of these behaviors.

The "misuse" of a prescription drug refers to its use in ways other than as directed by the prescriber, but not for non-medical reasons or the feeling it causes (e.g., to get "high"). The "abuse" of a prescription medication typically refers to its non-medical use for the feeling it causes.

[**Note:** This workshop focuses on the dangers of prescription drug misuse and abuse toward the goal of prevention. However, do not imply that the danger lies in taking prescription medications per se. It is the non-medical use of these medications, their use without a prescription from a healthcare provider or their use in ways other than prescribed, that we are trying to prevent. The legitimate use of prescription medicines is a cornerstone of modern medicine; however, their improper use is one of our most serious public health problems.]

Materials needed: The accompanying workshop booklet is designed to help guide participants through various discussions and provides space for student note-taking. It also summarizes key concepts and provides additional resources for students. A post-workshop evaluation tool is also provided to assess the effectiveness of the program.

Workshop Agenda

1) Introduction of facilitators and participant icebreaker

Facilitators should introduce themselves and express why they have volunteered to lead this discussion. It may also be helpful to provide facilitators' e-mail addresses for follow-up if desired. Depending on the size of the audience, it may be useful to have participants introduce themselves as well, perhaps with an icebreaker reflective of the program's theme. The icebreaker we recommend is to ask participants to introduce themselves and mention something that they do about every 15 minutes.

2) Set the stage

Facilitators should present the introductory comments (where are we?) provided in the facilitator's notes (**Note:** some of these are also reproduced in the workshop booklet) and explain the process to be observed in the discussions to follow.

3) Hold the discussions

Participants should be divided into small groups of 3-5 students for an initial discussion of the workshop questions prior to conducting a broader discussion with the entire group. Facilitators should begin each of the three discussion blocks by introducing the broad, open-ended questions provided in the facilitator's notes and workshop booklet. Allow time for students to consider and discuss their responses within their small groups, and then ask the larger group to share insights gleaned from these discussions. Facilitators may wish to interject information or statistics provided in these facilitator's notes to elucidate discussion points (note: you may pick and choose which of these points to utilize), or they may ask follow-up questions to address issues not yet discussed as necessary.

4) Conclude the workshop

Facilitators should conclude the program by discussing resources available to students and taking questions. Finally, the program evaluation should be administered.

Introduction – Where are we?

In September 2011, the Los Angeles Times reported data from the Centers for Disease Control and Prevention (CDC) indicating that unintentional drug overdoses have surpassed motor vehicle accidents to become the leading cause of accidental death in the United States.¹ Approximately 100 Americans die every day from these drug overdoses, the majority of which are caused by prescription drugs.² This means that, on average, someone in the United States dies from a drug overdose about every 15 minutes.³ Opioid painkillers account for most of the increase in these deaths.⁴

College students, in particular, are at significant risk of misusing or abusing prescription drugs. According to the National Survey on Drug Use and Health, the average age of first non-medical use of a prescription drug is 21-22 years old, and the rate of prescription drug abuse is higher among those 18-25 years of age than in any other group⁵. But the predisposition of college students to use prescription drugs non-medically is not just related to their age. For example, studies have shown that full-time college students are more than twice as likely to use Adderall (a prescription stimulant sometimes misused to study) without a legitimate prescription than their non-student peers.⁶

So, we have reached a prescription drug abuse epidemic in the United States. Let's consider three different aspects of this problem: How did we get here? Does it really matter? And where do we go from here? We will do so by asking our audience to first discuss three blocks of questions in small groups. Then we will come back together to share insights with the larger group.

First discussion block – How did we get here?

How did the misuse/abuse of prescription medications become one of the deadliest public health crises we currently face? Why do college students sometimes choose to misuse or abuse prescription drugs? Do college students view the abuse of prescription and illegal "street" drugs differently? Why?

Discussion points

How did the misuse/abuse of prescription medications become one of the deadliest public health crises we currently face?

Pharmaceutical populism: First, it is helpful to consider the misuse or abuse of prescription drugs within the larger context of medication use in our society. American college students have grown up in a drug-taking culture. We use more medications than any other country, we expect "quick fixes" for our problems through the use of pharmaceuticals, we are one of only two developed countries which allow direct-to-consumer advertising of prescription drugs (New Zealand being the other country), and we have access to an unprecedented amount of information about medications through the Internet. These phenomena may contribute to the normalization of drug use and a growing campus culture of self-diagnosis and self-prescribing, which Greg Critser⁷ called "pharmaceutical populism."

Misperceptions of safety and legality when abusing prescription drugs: The pervasive message that the public receives regarding illegal “street” drugs is one of danger, illegality, and negative consequences. However, the message may be mixed with regard to the misuse/abuse of prescription drugs, and students may not appreciate that the non-medical use of medications may have potentially serious negative effects. For example, 41% of surveyed teens in 2008 agreed that prescription drugs are safer to use than illegal drugs, even if they are not prescribed by a doctor.⁸ In a similar survey, 29% of teens agreed that prescription painkillers – even if not prescribed by a doctor – are not addictive.⁹ And many believe that it is legal to use them non-medically (without a prescription), because prescription drugs can be obtained legally with a doctor’s prescription and are approved by the government. About one-third of teens believe that there is “nothing wrong” with using prescription drugs without a prescription “once in a while.”¹⁰ The invalidity of these beliefs will be further explored in the workshop’s second discussion block.

Easy access to prescription medications: We use about four billion prescriptions a year in the U.S. In fact, there were enough prescription opioids (narcotic painkillers) prescribed in 2010 to medicate every adult around the clock for one month.¹¹ This means that the available supply is enormous, and those who wish to misuse or abuse medications may have relatively easy access to them. In fact, over 70% of those who use prescription drugs non-medically obtain them from family members or friends.¹²

Why do college students sometimes choose to misuse or abuse prescription drugs?

Self-diagnosis and self-prescribing: Greg Critser’s reference to “pharmaceutical populism” provides our first insight into the reasons college students misuse or abuse medications. Sometimes we forget that there is a reason for the prescription (i.e., the FDA has determined that certain medications should require a prescription because they are not safe for use without medical supervision), and we self-diagnose, self-prescribe, and use prescription medications without medical supervision in an effort to manage our hectic lives. College students report using medications without a legitimate prescription to reduce anxiety or stress, treat pain, relax, get to sleep, stay alert, etc.

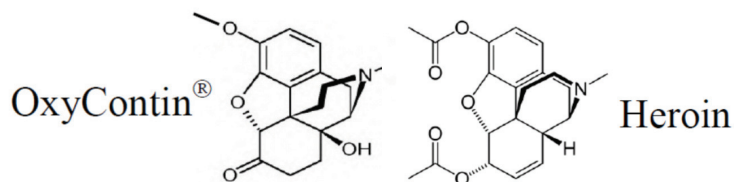
To party or get “high”: Prescription opioid painkillers (e.g., Vicodin®, OxyContin®), sedatives (e.g., Xanax®, Valium®) or stimulants (e.g., Adderall®, Ritalin®) are sometimes misused to self-treat pain/anxiety/stress or perhaps as a study aid, but they are also commonly abused for their ability to bring their user to a euphoric state or “high”. Drugs like these which activate the brain’s reward center induce euphoria and also have the potential for the user to develop dependence or addiction.

So-called “cognitive enhancers” for studying: Prescription stimulants (e.g., Adderall®, Ritalin®, Concerta®) are sometimes misused by college students to enhance their focus while studying or working on school projects. In fact, the abuse of these substances among full-time college students (18-25 years of age) is twice the rate of abuse among non-students.¹³ These medications can be very useful in treating patients with ADHD, but when misused or abused they have potentially serious negative effects and in some cases may be addicting. (**Note:** See the skit-based resource in this toolkit relating specifically to this issue entitled “The Adderall Dilemma”.)

Misperceptions of the “social norm”: What a student perceives to be the social norm for behaviors like prescription drug abuse can affect their own behavior or their tolerance of prescription drug abuse by others. There may also be a “social norms push” to misuse medications like prescription stimulants if a student believes they are cognitive enhancers and that a majority of their classmates are using them. In recent studies at the Ohio State University, the differences between student self-reporting of prescription drug misuse/abuse and estimates of the behavior of other students were substantial (as much as eight-fold). So, it can be helpful to educate students about the real social norm in cases where their perceptions of abuse are inaccurately high. For example, in the latest National Survey on Drug Use and Health (2010), 25% of young adults aged 18-20 reported having used a prescription drug non-medically in their lifetime.¹⁴ While this is a relatively large percentage, it is important to emphasize that 75% of young adults have never used a prescription medication non-medically.

Do college students view the abuse of prescription and illegal “street” drugs differently?

Young people sometimes perceive the abuse of prescription medications to be a safe alternative to the use of illicit “street” drugs. For example, 41% of surveyed teens in 2008 agreed that prescription drugs are safer to use than illegal drugs, even if they are not prescribed by a doctor.¹⁵ An effective way to correct this misperception and illustrate the potential commonality between the dangers of prescription and illicit drug abuse is to show a comparison of chemical structures, such as those below (note: these structures are also reproduced in the workshop booklet provided for students):



The molecular structures of OxyContin and heroin are very similar. These compounds also act similarly in the user's body. The subtle changes in structure are enough to modify medical and abuse potentials; but, when these medications are misused (such as without appropriate monitoring by a healthcare professional or used in ways other than prescribed), the lines begin to blur and the "legal" and "illegal" substances may be more similar than you might think.

Second discussion block – Does it really matter?

What are the potential consequences that could result from the non-medical use of prescription drugs? How might the abuse of prescription drugs affect you legally, socially, and in terms of your health? How might your choice to abuse or share prescription drugs affect others?

Discussion points

What are the potential consequences that could result from the non-medical use of prescription drugs? How might the abuse of prescription drugs affect you legally, socially, and in terms of your health?

Potential legal consequences: While prescription medications are obviously legal for use under medical supervision, it is a violation of federal and state laws to use them non-medically (without a legitimate prescription). Most prescription drugs that are misused or abused are "controlled substances," meaning they may be used for legitimate medical purposes but have a high potential for abuse and/or the development of physical or psychological dependence. These substances are controlled by the U.S. Drug Enforcement Agency, and it is prohibited under federal law to manufacture, distribute, dispense, or possess them without a bona fide prescription.¹⁶ Depending on individual state laws, possession of a controlled substance without a prescription may result in a felony charge, with penalties which could include heavy fines and/or imprisonment. Many colleges and universities also have anti-drug abuse provisions in their codes of student conduct. This could result in disciplinary actions such as suspension or dismissal for students found to be in violation of federal or state drug laws relating to prescription medications.

Another legal consequence that students seldom consider is the liability which they may incur when sharing a prescription medication with someone else. The misuse/abuse of a prescription drug is illegal and potentially dangerous. How would a student feel if he or she shared a prescription medication with a friend and they were harmed? Do you think that student and his or her family could be liable if this happened?

Potential social & professional consequences: What seems like a personal choice (to misuse or abuse a prescription drug) may actually affect more than just the user. How might this behavior strain a student's relationship with their parents, other family members, friends, or significant others? What might supervisors, professors, or others whose opinions and respect matter to the student think? It's really drug abuse, and even if the user doesn't see it as a "big deal," others might see it differently. For those who may become addicted, the social ramifications quickly escalate. In fact, it is estimated that every addiction directly affects as many as 10 other people.

Students should also consider how any illegal activity might affect their future goals, such as graduate training (e.g., graduate or professional school) or professional employment. Remember that background checks are routinely required when applying for these opportunities. How might a drug-related offense impact a student's likelihood of entering that dream job or graduate program?

Potential Health Consequences: First, consider the worst-case scenario – death. This may sound far-fetched to a healthy young undergraduate, but people do actually die as a result of prescription drug abuse. In fact, the Centers for Disease Control and Prevention estimates that about 100 Americans die every day from unintentional drug overdoses, the majority of which relate to prescription drugs. Every year, more people die from prescription painkiller overdoses than from those due to heroin and cocaine combined – and the rate of overdose death from prescription painkillers alone has more than tripled since 1999.¹⁷ In fact, drug overdoses are now the leading cause of accidental death in the United States. These deaths may result from chronic long-term behaviors, or they could occur after the first abuse of one of these substances.

There are also many other catastrophic health consequences of prescription drug abuse. For example, hospital emergency department visits involving non-medical prescription drug use now outnumber those involving the use of illicit “street” drugs.¹⁸ Between 1998 and 2008, the number of admissions to substance abuse treatment centers involving prescription painkillers more than quadrupled.¹⁹ And any medication may have side effects which are sometimes quite serious. The table below provides examples of serious side effects from prescription painkillers, sedatives and stimulants.

Drug class	Potentially serious side effects
Opioid Painkillers (e.g., Vicodin, OxyContin, Percocet)	- Liver damage (with some medications)
	- Decreased mental alertness, lowered inhibitions
	- Decreased heart rate, breathing rate, and blood pressure
	- Potential for addiction or dependence
Sedatives (e.g., Valium, Xanax, Ambien)	- Decreased mental alertness, lowered inhibitions
	- Decreased heart rate, breathing rate, and blood pressure
	- Potential for addiction or dependence
	- Risk of anterograde amnesia – the inability to form memories while on the medication
	- Hallucinations, aggressive behavior
Stimulants (e.g., Adderall, Ritalin, Concerta, Vyvanse)	- Insomnia
	- Anxiety and exacerbation of psychiatric disorders
	- Induction of seizures
	- Visual disturbances
	- Potential for addiction or dependence
	- Increased heart rate, breathing rate, and blood pressure
	- May increase risk of serious cardiovascular events

Third discussion block – Where do we go from here?

How do we fix this? What can we do to prevent prescription drug misuse and abuse among college students? What are some important safe medication-taking guidelines? Where can a college student go if they need help with a prescription drug abuse problem? What other resources are available relating to this issue?

Discussion points

How do we fix this? What can we do to prevent prescription drug misuse and abuse among college students?

Sharing isn’t caring: Over 70% of those who abuse prescription drugs get them from family members or friends. So, three things we can do to prevent prescription drug abuse among our peers are: (1) never share your prescription medications with others or use someone else’s medications, (2) store prescription medications in a safe and secure location protected from those who may wish to abuse them, and (3) properly dispose of prescription medications you no longer need to keep them out of the reach of others.²⁰

Spread the word: Most college students don't understand the potentially catastrophic consequences of misusing or abusing prescription medications. You can help raise awareness of this serious public health problem among your family and friends. We need to remember that "there's a reason for the prescription." When we use medications without medical supervision or share our medications, we expose ourselves or others to potentially dangerous consequences. And when we abuse prescription drugs, it can be deadly.

Consider healthy alternatives to managing our lives with pharmaceuticals: We live in a drug-taking culture where pharmaceuticals are very commonly used, and we expect "quick fixes" to life's myriad problems. We need to think about what we can do to change these behaviors toward healthier alternatives where appropriate. For example, how can our diet and level of exercise impact some of the conditions for which we may take prescription medications? Another good example on our campuses relates to how we study. Some students rely on the misuse of prescription stimulants like Adderall or Ritalin to help them study or complete large projects. Students may hear this all the time, but how can they best prepare themselves for a successful academic and professional career? Is the illegal use of prescription stimulants the answer? Doesn't it really make more sense to establish the habits in college that will lead to long-term personal and professional success? For example:

- Stay current with class material and review a little every day.
- Establish good study habits and a regular study schedule. Set aside extra time before important tests or deadlines.
- Use healthier "stimulants" – snacks, exercise, light, and even caffeine in moderation.
- Get a good night's sleep, especially the night before a test. This has been shown to improve the retention of learned material and academic performance.
- Use your other available resources (TAs, professors, tutors, friends, etc.) to get help when needed.
- Establish a study group to help reinforce the material you have learned.

What are some important safe medication-taking guidelines?

Some guidelines for the safe use of prescription medications: It is important that participants leave this workshop with a clear picture of behaviors to avoid with prescription drugs; but it is also important to provide a clear picture of permitted and encouraged behaviors as an alternative. If a prescription was not written for you, simply do not use it. If a medication has been prescribed for you, use it only as directed and do not share it with others. The Agency for Healthcare Research and Quality has laid out a simple summary of other ways to be safe with medications:²¹ (1) Give your healthcare team important information. (2) Get the facts about your medicines. (3) Stay with your treatment plan. (4) Keep a record of your medicines.

Where can a college student go if they need help with a prescription drug abuse problem?

Contact your college or university counseling, student health or wellness center.

Talk with your family, your doctor or pharmacist, academic advisor, or resident advisor.

The U.S. Substance Abuse and Mental Health Services Administration provides a searchable directory of drug and alcohol treatment programs, see <http://findtreatment.samhsa.gov>.

For a poisoning emergency (e.g., drug overdose) in the U.S. call **1.800.222.1222**.

What other resources are available relating to this issue?

The Generation Rx Initiative:

www.go.osu.edu/generationrx or www.cardinalhealth.com/generationrx

The National Council on Patient Information and Education:

www.talkaboutrx.org/college_resource_kit.jsp

GenerationRx

Preventing the Misuse and Abuse
of Prescription Medications

References:

- 1 "Drugs now deadlier than autos; Fueled by highly addictive prescription pain medications, fatal overdoses have surpassed traffic deaths nationwide." *Los Angeles Times* (September 18, 2011, p. A1).
- 2 The prescription medications of greatest concern for abuse are: painkillers (e.g., Vicodin®, OxyContin®), sedatives (e.g., Xanax®, Valium®), and stimulants (e.g., Adderall®, Ritalin®).
- 3 *Vital Signs: Overdoses of Prescription Opioid Pain Relievers – United States, 1999-2008*. CDC, 2011. (<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6043a4.htm>)
- 4 *Increase in Fatal Poisonings Involving Opioid Analgesics in the United States, 1999-2006*. CDC, 2009. (<http://www.cdc.gov/nchs/data/databriefs/db22.htm>)
- 5 *National Survey on Drug Use and Health, 2010*. Substance Abuse and Mental Health Services Administration. (<http://www.oas.samhsa.gov/NSDUH/2k10NSDUH/2k10Results.pdf>)
- 6 *Non-Medical Use of Adderall Among Full-Time College Students*. SAMHSA, 2009. (<http://www.samhsa.gov/data/2k9/adderall/adderall.pdf>)
- 7 *Generation Rx: How Prescription Drugs are Altering American Lives, Minds, and Bodies* (2005, New York: Houghton Mifflin Co.)
- 8 *Partnership Attitude Tracking Study, 2008*. Partnership for a Drug-Free America. (http://www.drugfree.org/wp-content/uploads/2011/04/Full-Report-FINAL-PATS-Teens-2008_updated.pdf)
- 9 *Prescription for Danger: A Report on the Troubling Trend of Prescription and OTC Drug Abuse Among the Nation's Teens*. Office of National Drug Control Policy, 2008. (http://www.theantidrug.com/pdfs/prescription_report.pdf)
- 10 *Teens and Prescription Drugs: An Analysis of Recent Trends on the Emerging Drug Threat*. ONDCP, 2007. (http://www.theantidrug.com/pdfs/TEENS_AND_PRESCRIPTION_DRUGS.pdf)
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- 13 *Non-Medical Use of Adderall Among Full-Time College Students*. SAMHSA, 2009. (<http://www.samhsa.gov/data/2k9/adderall/adderall.pdf>)
- 14 *National Survey on Drug Use and Health, 2010*. SAMHSA. (<http://www.samhsa.gov/data/nsduh/2k10NSDUH/tabs/Sect1peTabs1to46.htm>)
- 15 *Partnership Attitude Tracking Study, 2008*. Partnership for a Drug-Free America. (http://www.drugfree.org/wp-content/uploads/2011/04/Full-Report-FINAL-PATS-Teens-2008_updated.pdf)
- 16 *Title 21, United States Code, Controlled Substances Act*. (<http://www.deadiversion.usdoj.gov/21cfr/21usc/index.html>)
- 17 *Prescription Painkiller Overdoses in the US*. CDC, 2012. (<http://www.cdc.gov/Features/VitalSigns/PainkillerOverdoses/>)
- 18 *DrugFacts: Drug-Related Hospital Emergency Room Visits*. National Institute on Drug Abuse, 2011. (<http://www.drugabuse.gov/publications/drugfacts/drug-related-hospital-emergency-room-visits>)
- 19 *New Study Shows Fourfold Increase in Substance Abuse Treatment Admissions Involving Non-Medical Use of Prescription Narcotic Pain Relievers in Ten Year Period (1998-2008)*. SAMHSA, 2010. (<http://www.samhsa.gov/newsroom/advisories/1007140544.aspx>)
- 20 See www.fda.gov for safe medication disposal guidelines
- 21 *Your Medicine: Be Smart. Be Safe*. Agency for Healthcare Quality and Research, 2011. (<http://www.ahrq.gov/consumer/safemeds/yourmeds.htm>)

