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Abstract

Millions of Americans use prescription psychotherapeutic drugs for nonmedical purposes. The most commonly abused prescription drugs are painkillers, followed by sedatives and stimulants. The first step towards ending prescription drug abuse must be taken by the pharmacist. Professional and student organizations, as well as the newly founded Ohio Rx Abuse Prevention (OhioRAP) Coalition, provide resources to pharmacists and pharmacy students who want to reduce prescription drug abuse. This article discusses these various resources and provides a guide for pharmacists to take an active role in reducing prescription drug abuse and positively impact patient outcomes and their communities.

Background

Despite existing efforts to reduce prescription drug abuse, the National Drug Assessment 2009 reported that 6.9 million Americans over the age of 12 reported using prescription psychotherapeutic drugs for nonmedical purposes *within the last month* in 2007.¹ Prescription drug abuse most often refers to the use of prescription medication in ways not intended by the prescriber.² Some examples of drug abuse and misuse include taking higher doses than prescribed, illegally obtaining drugs without a prescription (such as online or through family and friends), or crushing and snorting the drug for a more intense high. The most commonly abused prescription drugs are painkillers, followed by sedatives and stimulants.

Prescription drug abuse has become a problem that American health care can no longer afford to ignore. Between 2003 and 2007, there was a 71 percent increase in the number of emergency department visits due to opiate abuse.¹ Such visits represent avoidable and preventable health care costs for both the patient and the provider, in addition to unnecessary risks to the patient's health. A 2009 study by Strasser estimated the average direct cost to treat a prescription opioid non-abuser to be \$1,830, while the cost to treat a prescription opioid abuser was \$15,884.³

Inappropriate prescribing and improper disposal of prescription drugs increase the number of drugs in circulation, contributing to prescription drug abuse.¹ The manner in which these drugs are obtained is often unclear, possibilities include doctor or pharmacy shopping, drug diversion by health care workers, or even the sharing of controlled substances among family and friends. What is clear is that the rate of prescription drug abuse is on the rise despite existing efforts to curtail it. Encouraging proper drug disposal, counseling patients and educating the community on these issues are all ways that pharmacists can be involved in reducing prescription drug abuse. As a profession, pharmacy must rise to face the challenge of prescription drug abuse.

Why pharmacists?

According to the 2009 results of a Gallup Poll, pharmacists ranked second only to nurses as the most trusted professionals, with 66 percent of Americans rating their trust in pharmacists as "high" or "very high."⁴ This trust, combined with the pharmacist's unmatched accessibility, places the pharmacist in a unique position to educate the patient about prescription drug abuse. While the physician should be the health care team member who initiates preventive education regarding prescription drug abuse, it is the pharmacist that has long been recognized as the drug expert. The pharmacist is the final protective barrier between an addictive substance resting safely on a shelf and the hands of a patient who may or may not use the drug appropriately.

In the pharmacy

One of the easiest ways for a pharmacist to prevent prescription drug abuse is to provide proper patient counseling when dispensing prescription drugs that have abuse potential before addiction has the opportunity to take hold. Prescription drug abuse can serve as a gateway for other types of illicit drug use, illustrated by 30.6 percent of illicit drug users who report initiating their addictions with a psychotherapeutic agent.¹ Counseling points should include ensuring patients are fully informed about the addictive potential of their medication and the importance of using the medication exactly as prescribed.⁵ Reinforcement that prescription drugs may not be shared with a friend or family member is also a necessary area for intervention. In a 2007 National Survey on Drug Use and Health (NSDUH) poll of prescription drug abuse, 56.5 percent of patients reported obtaining prescription drugs from a friend or acquaintance to whom they paid nothing to acquire the drugs.⁶ Pharmacists should also communicate to the patient the importance of storing their medications in a secure location and disposing of excess medication properly.⁷ Community pharmacies may consider offering periodic education for their customers regarding safe medication disposal practices. This could be accomplished through mailers, bag inserts, newsletters and even face-to-face communication. Smart Rx Disposal offers free information on its Web site (www.smartrxdisposal.net), including handouts and presentations for pharmacists to use to educate the community and promote safe drug disposal.⁸ Proper drug disposal reduces the number of drugs in community circulation, hence, reducing the potential for these drugs to be misused.

Pharmacists also need to be able to recognize signs of abuse so intervention can occur as soon as possible. Some of these signs include patients seeking early refills on controlled substances, patients obtaining similar prescriptions from multiple prescribers, patients presenting prescriptions from other states or patients visiting multiple pharmacies.⁹ Other examples of abuse indicators include insisting on paying cash for prescriptions (insurance will not approve their early refills) or abnormal behavior such as excessive anxiety or being overly friendly.¹⁰ Taking the time to evaluate the validity of each and every prescription is a tedious process, especially in the rushed work environment of most pharmacies; however, it is also an excellent opportunity for the pharmacist to deter prescription drug abuse. (Table 1)

Table 1: Red Flags for Recognizing Suspicious Prescriptions¹¹

- Prescriptions from a prescriber who writes significantly more prescriptions and in larger quantities than other prescribers in the area
- Patient presents a prescription for both a stimulant and a depressant at the same time
- Patient presents prescriptions bearing the names of other people
- Prescription handwriting is too legible
- Quantities, dosage or directions differ from typical prescribing guidelines
- Prescription does not contain abbreviations
- Prescription has multiple handwriting styles or ink colors

Recognizing signs of addiction or refusing to fill prescriptions is not enough. More effort needs to be made to educate pharmacists on how to address the issues of abuse with patients and how to direct patients who are struggling with abuse to available resources, including information about local drug abuse rehabilitation programs or pain clinics. Pharmacists should also have a basic understanding of how and when to refer patients in need of assistance for a drug abuse problem. Contacting the prescriber to discuss details of the patient's health status and the possibility of prescription drug abuse is a reasonable first step to investigate situations in which abuse is suspected.¹⁰ Staying informed about the details of local treatment plans better prepares the pharmacist to address questions patients may have. The confrontation of a patient whom the pharmacist suspects is abusing prescription drugs is a sensitive issue and should be handled at the pharmacist's discretion. Blatant situations of fraud and potentially hostile confrontations should be referred to law enforcement agencies for the pharmacist's safety.

On a broader level, pharmacists may also be involved with prescription drug abuse prevention efforts in the community. Staying abreast of current issues in the surrounding areas can help the pharmacist pinpoint specific areas for improvement. Knowing what medications are circulating in the community is vital to addressing the problem. Pharmacists can be a resource for law enforcement as a reference for medication identification for confiscated drugs. Sharing our knowledge with others and assisting in solving community drug-related issues will allow others to also consider utilizing pharmacists as information resources and community problem-solvers.

Pharmacists looking to become involved with prescription drug abuse prevention have a number of avenues for learning the signs of drug abuse and for extending their knowledge base relevant to prescription drug abuse prevention. Being on the front line and seeing patients face-to-face when dispensing drugs gives the pharmacist a responsibility to monitor drug use and potential abuse. Programs such as the University of Utah's School on Alcoholism and Other Drug Dependencies, Ohio Automated Rx Reporting System (OARRS), and similar systems in other states allow the pharmacist to be better informed about drug abuse prevention and thereby better equipped to monitor potential drug abuse.^{13,14}

Ohio Automated Rx Reporting System (OARRS) and other states

Starting Jan. 1, 2006, section 4729.75-4729.84 of the Ohio Revised Code created the Ohio Automated Rx Reporting System (OARRS). Currently, it is Ohio's primary prescription drug monitoring program (PDMP), operated by the Ohio State Board of Pharmacy. Under OARRS, all pharmacies licensed by the Ohio State Board must report information on the dispensing of all controlled substances, carisprodol and tramadol products. Such information should be submitted within seven days of dispensing and would include patient information, drug dispensed with directions for use, and payment method.¹⁴ This system is designed to monitor the use of drugs with high abuse potential. It can be especially helpful for pharmacists trying to ensure that a suspicious patient is not going to multiple pharmacies with prescriptions or getting prescriptions from multiple doctors in order to obtain multiple prescriptions of controlled substances.

There are currently 34 states with fully functional PDMPs, and five other states have enacted legislation but have not yet fully established their electronic databases. Another five states are in the process of proposing, preparing or considering legislation that would set up a PDMP. Every state has designated a state agency to administer and oversee its PDMP, which includes state law enforcement, health departments and state boards of pharmacy. A complete list of contacts for each state's program is maintained at the Alliance of States with Prescription Monitoring Programs.¹⁵

Student pharmacists also make a big impact

Student pharmacists also serve as valuable resources to combat prescription drug abuse. Educational efforts in the community aimed at all age groups, especially young people, are an important factor in decreasing prescription drug abuse. A common misconception among teens is that prescription drug abuse is safer than illicit drug use. Up to 56 percent (12.8 million) of teens do not recognize the risks of using prescription pain relievers without a prescription.¹³ Student pharmacists are currently involved in many activities that aim to clarify this as well as many other misconceptions held by young people about prescription drugs.

Members of Ohio Northern University's chapter of the Student Society for Health-Systems Pharmacists are involved in drug abuse prevention at the elementary school level. Student pharmacists teach children about safe medication use and storage and also send letters home to the parents to encourage them to do the same. For more than two decades, ONU student pharmacists have participated in the College of Pharmacy's AWARE program, a coalition of students dedicated to educating junior high school and high school students as to the effects and hazards of drug addiction and substance abuse. Greek life offers yet another avenue for student pharmacists to contribute to drug abuse prevention education. The Alpha Upsilon chapter of Phi Delta Chi operates a program titled "Your Role in Prescription Drug Abuse," an interactive presentation targeted at fifth-grade students. The program teaches students that, although a drug may be legal, it still can be unsafe when

used inappropriately. After their presentation, the student pharmacists challenge the fifth-graders to take an active role in the fight against drug abuse by pledging to abstain from prescription misuse and abuse and educate others about prescription drug abuse.

Prescription drug abuse prevention is also of significant importance at The Ohio State University, where freshmen are required to attend seminars as part of The First Year Experience. These "success seminars" help orient the students to the university and prepare them for a successful college experience. Pharmacy students and pre-pharmacy students have created two different seminars pertaining to drug abuse prevention that freshmen may elect to take. The first, "Pharming to Get By," presents the dangers of abusing stimulants in college through a variety of skits. The second, "Generation Rx and the Abuse of Medications in a Drug-Taking Society," is a discussion-based program that covers the abuse of over-the-counter and prescription drugs.

The future

The Council of Ohio Colleges of Pharmacy has launched a new program called the Ohio Rx Abuse Prevention (OhioRAP) Coalition.¹⁷ In this program, schools share information with one another with the ultimate goal of reducing prescription drug abuse. Members can choose to share programs, handouts, seminar curriculums, or other materials with other members of the group. Students and graduates of any profession are welcome to join. OhioRAP is a work in progress; eventually, the group hopes to host a repository of evidence-based information online, which would be accessible to students, pharmacists and even the media.

Conclusion

The first step towards ending prescription drug abuse must be taken by the pharmacist. There is simply no other health professional with both the prescription drug knowledge and the ease of access for this knowledge to be shared with the community. With the number of people who abuse prescription drugs rising, today's pharmacists and pharmacy students must commit to play a direct part of the solution. There are many avenues and resources available to pharmacists and pharmacy students who want to take responsibility to reduce prescription drug abuse, including the newly founded OhioRAP and professional and student organizations. They must provide proper counseling to patients on how to take prescription medication, the proper disposal of such medication, recognizing the signs of abuse, and if necessary, where patients can seek help if they are abusing medications. The pharmacy profession needs to dispel the myth among adolescents that prescription drug abuse is a safer alternative to illicit drugs. Pharmacists need to ensure that their focus is not limited to dispensing but also includes what occurs beyond the pharmacy. By taking an active role in reducing prescription drug abuse, pharmacists can positively impact patient outcomes and their communities as a whole.

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