

SAFE AND EFFECTIVE PRESCRIPTION OF CONTROLLED SUBSTANCES

Jassin M. Jouria, MD



Dr. Jassin M. Jouria is a medical doctor, professor of academic medicine, and medical author. He graduated from Ross University School of Medicine and has completed his clinical clerkship training in various teaching hospitals throughout New York, including King's County Hospital Center and Brookdale Medical Center, among others. Dr. Jouria has passed all USMLE medical board exams, and has served as a test prep tutor and instructor for Kaplan. He has developed several medical courses and curricula for a variety of educational institutions. Dr. Jouria has also served on multiple levels in the academic field including faculty member and Department Chair. Dr. Jouria continues to serve as a Subject Matter Expert for several continuing education organizations covering multiple basic medical sciences. He has also developed several continuing medical education courses covering various topics in clinical medicine. Recently, Dr. Jouria has been contracted by the University of Miami/Jackson Memorial Hospital's Department of Surgery to develop an e-module training series for trauma patient management. Dr. Jouria is currently authoring an academic textbook on Human Anatomy & Physiology.

ABSTRACT

Many states are moving toward making changes to existing laws regulating the scope of practice for Advanced Registered Nurse Practitioners (ARNPs) to include independent prescribing authority. Independent prescribing authority refers to the ability to prescribe controlled medications without collaboration with a physician. This is a key component of APRN scope of practice, and an important part of the APRN Consensus Model. Prescription of controlled substances represents significant risks, and understanding these risks is critical in order to provide safe and effective patient care. A primary concern centers on prescription opioid use disorder, affecting patients, health care providers, and the community at large.

Policy Statement

This activity has been planned and implemented in accordance with the policies of NurseCe4Less.com and the continuing nursing education requirements of the American Nurses Credentialing Center's Commission on Accreditation for registered nurses. It is the policy of NurseCe4Less.com to ensure objectivity, transparency, and best practice in clinical education for all continuing nursing education (CNE) activities.

Continuing Education Credit Designation

This educational activity is credited for 3 hours. Nurses may only claim credit commensurate with the credit awarded for completion of this course activity.

Statement of Learning Need

Health professionals who prescribe or handle controlled substances are required to know the Controlled Substance Act regulating practice. This includes knowledge of the schedule of controlled substances, the risk and prevalence of a substance use and addiction disorder, and the treatment guidelines for prescribing controlled substances as well as prevention of prescription drug abuse and misuse. Patient assessment and evaluation of outcomes related to the treatment plan, including a prescriber-patient opioid agreement, are necessary skills for providers prescribing scheduled drugs.

Course Purpose

To provide nurses with knowledge of prescribing regulations, prescription use disorder treatment planning, including patient assessment and monitoring of patient use of controlled medications.

Target Audience

Advanced Practice Registered Nurses and Registered Nurses

(Interdisciplinary Health Team Members, including Vocational Nurses and Medical Assistants may obtain a *Certificate of Completion*)

Course Author & Planning Team Conflict of Interest Disclosures

Jassin M. Jouria, MD, William S. Cook, PhD, Douglas Lawrence, MA,
Susan DePasquale, MSN, FPMHNP-BC – all have no disclosures

Acknowledgement of Commercial Support

There is no commercial support for this course.

Please take time to complete a self-assessment of knowledge, on page 4, sample questions before reading the article.

Opportunity to complete a self-assessment of knowledge learned will be provided at the end of the course.

- 1. The following act of Congress is part of the Comprehensive Drug Abuse Prevention and Control Act passed in 1970:**
 - a. Narcotic Control Act
 - b. Controlled Substance Act
 - c. Opioid Control Act
 - d. Cannabis Control Act

- 2. _____ drugs have the highest potential for abuse.**
 - a. Schedule I
 - b. Schedule II
 - c. Schedule IIa
 - d. Schedule III

- 3. Schedule IIN drugs are often prescribed as _____.**
 - a. narcotics
 - b. stimulants
 - c. hypnotics
 - d. psychotropics

- 4. An example of a schedule V drug is:**
 - a. Lyrica
 - b. Fentanyl
 - c. Adderall
 - d. Xanax

- 5. Among Schedule I drugs, _____ is becoming increasingly popular and is a serious cause of addiction among some population groups.**
 - a. cocaine
 - b. crack
 - c. heroin
 - d. cannabis

Introduction

Controlled substances are those drugs or medications that have the potential for being misused from their original purposes. They are also considered to be substances that have a high risk of becoming a substance use and addiction disorder. When it comes to preventing misuse of controlled substance and the risk of a substance use and addiction disorder, prescribing providers can follow several clinical practices and prescribing practices that can minimize or prevent these consequences. When prescribing drugs, providers need to understand drug Schedules and to know which drugs are classified according to the Schedules of Controlled Substances. The provider should also be familiar with the laws and guidelines surrounding prescription of substances within each Schedule, which organize drugs according to purpose and risk for a substance use and addiction disorder.

Controlled Substances: Schedules And Terminology

In the United States controlled substances are regulated and constrained in terms of their manufacture and distribution. Controlled substances are those drugs or medications that have the potential for being misused from their original purposes. They are also considered to be substances that have a high risk of becoming a substance use and addiction disorder. Controlled substances are classified into *Schedules*, which are categories that organize drugs according to their purposes and risk for a substance use and addiction disorder. As the numbers describing each category increase, the drugs listed within each category decrease in their potential to cause a substance use or addiction disorder.

While many controlled substances are referred to as “narcotics,” not all drugs listed in the Schedules can be classified as such. The general public,

patients, and even some professional organizations will refer to these types of medications as simply *narcotics*, which is not necessarily a correct use of terminology. The term is sometimes applied to describe opioid analgesics. It also is a general label that has been used to define illegal drugs. A study at Ohio State University discussed the implications of calling all controlled substances *narcotics*, as the term often has a negative connotation that many people associate with drug use and addiction. Often, the lay public may refer to any controlled substance, whether an opioid analgesic, a stimulant, a muscle relaxant, or an illicit drug all under the umbrella term of a narcotic.⁵ Instead of making a comprehensive statement about controlled substances that fall under one heading, the healthcare provider should seek to clarify the differences between each type of drug based on their purposes. All controlled substances will be referred to according to their particular class or purpose in this course, rather than listing controlled substances as *narcotics*.

Controlled substances, by their very description, are drugs that must be controlled to protect the safety and welfare of members of the population who use them. Control of these special medications is done through appropriate prescribing by healthcare providers, monitoring of use and utilization of the drugs, and understanding the signs or symptoms that may indicate a substance use and addiction disorder.

Controlled Substance Act

The management of controlled substances originally started with regulation through legislative actions. Congress enacted the Controlled Substance Act as part of the Comprehensive Drug Abuse Prevention and Control Act, which was passed in 1970. There are several components of the Controlled Substance Act (CSA), including regulation and classification of drugs

according to their content and purpose, regulating the manufacture of such drugs, ensuring lawful distribution of these drugs, and regulating the sale and exportation of certain medications. One of the main purposes of the CSA, though, was to establish a list of Schedules, into which each drug and medication is classified, in order to control their manufacture and distribution.

When the CSA was developed, it consolidated several laws that already regulated the manufacture and distribution of certain substances into one law. The controlled substances that are regulated through the CSA are various types of drugs that can increase the potential for a substance use and addiction disorder among those using those drugs. While opioid analgesics make up a substantial number of controlled substances, there are various other drugs that are also classified into the different categories, including anabolic steroids, stimulants, hallucinogens, and depressants.

The Drug Enforcement Administration (DEA), whose job is to implement and carry out controlled substance laws and regulations, enforces the CSA. Among many other tasks, the organization investigates and prosecutes those who violate the CSA and works to track and take action against those involved with illicit drug trafficking. The DEA was originally developed in 1973 as a single organization dedicated to the control of drug use; prior to its implementation, there were multiple organizations that controlled different aspects of drug enforcement, but the DEA became an establishment to combine the duties of these organizations. Although the DEA is a government institution that works at a national level to regulate the prescription of controlled substances, individual state laws may vary slightly from national standards, so it is important to be familiar with the specific laws in the appropriate state of practice.

In order to regulate the prescription of controlled substances, prescribing providers must register with the DEA. This registration also applies to pharmacists in order to be able to dispense controlled substances. The DEA requires this registration to track and monitor those prescribing and dispensing controlled substances according to specific numbers, which limits access of these drugs to the general public and maintains accountability.

There are five Schedules, or classifications, of controlled substances according to the CSA. Each Schedule has a specific set of parameters that describes the classified drugs' ability to cause harm, risk of causing addiction or likelihood of being abused, and overall medical value. Schedule I drugs have the highest potential for being abused and causing addiction; the severity of risks associated with the drugs in each of the Schedules then decreases as the Schedule numbers increase. The Schedules are listed up to Schedule V, which consists of controlled substances that are considered to have the least potential threat for abuse. The CSA may move a drug or re-classify it from one Schedule to another, or remove it entirely, depending on the drug's manufacturing process, state and national laws regarding the drug's use, and public interest.

Schedule I Drugs

Schedule I drugs are those that have the highest potential for abuse. They have been shown to be those that have no medical use within the healthcare community. Schedule I drugs are generally not accepted within healthcare and are mostly considered to be illicit drugs or "street" drugs in that their manufacture and distribution is usually illegal. Occasionally, these drugs may be used as part of research within limited situations.

Drugs that are classified as being Schedule I substances are not available by prescription and would not be legally found in a pharmacy or healthcare institution. Examples of Schedule I drugs include heroin, lysergic acid diethylamide (LSD), methylenedioxymethamphetamine (Ecstasy), methaqualone (Quaalude), and mescaline (peyote).

Marijuana, which is legal for use in some states, has been classified as a Schedule I drug. The DEA recently received petitions requesting to change the status of marijuana to a lower Schedule for research purposes and because it is thought to provide some medical benefits. However, the DEA announced in August 2016 that marijuana will continue to remain a Schedule I controlled substance, despite these petitions.²¹ This does not mean that marijuana cannot be used as part of research for its health effects; keeping the drug at a Schedule I status means that its use, whether as a research component or as medical therapy in some states, must remain tightly controlled.

Schedule II and IIN Drugs

Schedule II and IIN drugs have less potential for abuse than Schedule I drugs, but they still have a very high capacity for abuse and addiction. Abuse of these drugs can lead to dependence, including physical or psychological dependence or both types. Unlike Schedule I drugs, Schedule II drugs have an acceptable use within healthcare and can be prescribed. When prescribed, the orders must be written and no prescriptions may be called in. No refills are allowed in order to reduce the chance of theft or misappropriation of these drugs.²

In some ways, Schedule II/IIN drugs have the tightest regulations when compared to the other levels of drugs. Unlike Schedule I drugs, which have

no medical purpose and are usually illegal, Schedule II/IIN drugs can be legally prescribed, making them the most dangerous of legal controlled substances. Schedule II drugs are sometimes classified as narcotics and are often prescribed for pain control. Examples of Schedule II drugs include methadone, hydromorphone (Dilaudid®), oxycodone (Oxycontin®), morphine, meperidine (Demerol®), and fentanyl.

Schedule IIN drugs have the same potential for addiction as other Schedule II drugs but are not considered narcotics. They are often prescribed as stimulants, to control anxiety, for control of ADHD, or to induce sleep. Examples of Schedule IIN drugs include methamphetamine, dextroamphetamine (Adderall®), methylphenidate (Ritalin®), pentobarbital, and secobarbital.³

Schedule III and IIIN Drugs

Drugs that are classified as Schedule III or IIIN have less potential for abuse than those in Schedules I and II, but they still have an increased chance of causing addiction and dependence. Schedule III/IIIN drugs can cause physical dependence but they may more commonly cause psychological dependence when compared to some other Schedules. When prescribed, these drugs can be refilled and the prescriptions may be called in to the pharmacy. Refill requirements are such that the drug can only be refilled five times within a six-month timeframe.

Drugs in Schedule III are narcotics used for pain control. When products contain codeine, such as with Tylenol® with codeine, they must contain no more than 90 mg of codeine per dosage unit to be considered Schedule III drugs. Another example of a drug in this category is buprenorphine (Suboxone®).³

Non-narcotic Schedule III drugs (Schedule IIIN) are prescribed for various other health conditions, such as appetite suppressants or anesthesia, but obviously must still be tightly controlled because of their potential for abuse. Examples of Schedule IIIN drugs include ketamine, anabolic steroids or those products containing testosterone, phendimetrazine (Bontril®), and benzphetamine (Didrex®).³

Schedule IV Drugs

Schedule IV drugs are more commonly prescribed and used within healthcare and have a lower propensity for addiction and abuse when compared to drugs in Schedules I, II, or III. While these drugs may still have a risk of causing physical or psychological dependence, the risks are considered minimal. Prescription orders may be called in to the pharmacy without a written order required. Refills are allowed up to six times in a six-month timeframe from the date of issue.³

As with drugs classified in Schedules II, III, and V, Schedule IV drugs have medical purposes and are often prescribed by healthcare providers. If a patient needs a Schedule IV drug for pain control, the prescribing provider is not restricted in administering or dispensing these drugs to control pain, as long as the provider has deemed the prescription to be medically necessary and that the patient would benefit from the drug.²⁵ Examples of Schedule IV drugs include alprazolam (Xanax®), diazepam (Valium®), midazolam (Versed®), temazepam (Restoril®), tramadol (Ultram®), carisoprodol (Soma®), triazolam (Halcion®), and clonazepam (Klonopin®).

Schedule V Drugs

As expected, Schedule V drugs are those that are the least likely to cause abuse or addiction among controlled substances. However, these drugs are

still classified according to the Schedule of Controlled Substances and, like any other drug prescribed in healthcare, should be administered with care and kept under control when prescribing. They are less likely to be prescribed for pain control and instead are often prescribed to control conditions such as diarrhea or cough. In cases of mild pain, Schedule V substances may be prescribed for gentle analgesia. When codeine is included as part of the preparation, it must contain no more than 200 mg of codeine per 100 mL.⁴

A partial filling of a prescription for a Schedule V drug is also allowed in some circumstances. When a partial filling takes place, it is treated in the same manner and with the same rules as a refill of the drug. As with refills, partial prescription filling of Schedule V drugs still cannot occur more than six months after the date of issue. Examples of drugs that are classified as Schedule V medications include Robitussin AC, atropine/diphenoxylate (Lomotil®), pregabalin (Lyrica®), and ezogabine.

Substance Use And Addiction Disorder

Unfortunately, because of the nature of drugs that are classified as controlled substances, they are more likely to be taken in ways that are beyond that which they are intended. People who use controlled substances for non-medical purposes, often to get high, have various methods of obtaining the drugs. Historically, those who used drugs illicitly needed to know a dealer or otherwise have access to be able to buy the drugs in secret. While this practice still occurs, the rise of prescription drugs as sources of drug use and addiction has now led people who use controlled substances for non-medical purposes to establish new ways of accessing the drugs. *Diversion*, for example, describes the process of transferring

prescription drugs, whether by theft or by sale, to another person for whom they were not intended or prescribed.

Diversion is seen with established patients who sometimes genuinely need medication for pain control but who may sell their extra medications as a way of making money. Some people practice diversion because they are addicted to specific drugs and by selling their prescriptions, they can make money to buy the drugs they need to support their addictions. For instance, some healthcare providers who have developed addictions to opioid analgesics may divert the drugs they routinely administer to patients and sell them to someone else or use them for their own purposes.

Those who misuse controlled substances of prescription drugs may also practice *doctor shopping*, which involves seeing several healthcare providers to get prescriptions for controlled substances and to ultimately acquire large amounts of medication. An individual who tries to access controlled substances may see physicians or nurse practitioners in different practices that do not necessarily communicate with each other. By complaining of non-specific pain or another general condition, the patient may then get a prescription for medication. Each medication is then filled at a different pharmacy so that those dispensing the drugs are unaware of the volume of medication being accessed by the individual.¹⁶

There are a multitude of other methods that people use to gain access to controlled substances and to use them in an unsafe manner. These techniques hurt not only those that the drugs were intended for, but they also can quickly lead to problems with substance abuse and overwhelming addiction.

Drug Abuse, Misuse and Addiction

The American College of Preventive Medicine defines the term *abuse of a controlled substance* as “the self-administration of substances to alter one’s state of consciousness and an intentional and maladaptive pattern of using a medication leading to significant impairment or distress”⁶ Abuse and misuse of controlled substances differs from actual addiction to drugs. The controlled substances used in these situations may be those that are legally prescribed by a healthcare provider or they may be illicit drugs. An individual noted to be abusing controlled substances is using a drug in a detrimental way to one’s health and well being, and the impairment caused from drug use leads to problems with personal, social, and professional roles that a person is obligated to fulfill. For example, a person evaluated to abuse opioid analgesics may have difficulty getting to work on time, may be unable to complete duties at work, and coworkers may notice behavior that is erratic and unpredictable when the impaired person has been using these drugs.

Misuse of a controlled substance differs slightly in definition from abuse. Misuse refers to the use of a prescribed medication in a way that it was not intended. It may be intentional or unintentional, and a negative outcome may or may not occur from the inappropriate use. Misuse can include such actions as taking more of the medication than what is prescribed, taking the medication in a route that is different than prescribed (crushing and then injecting medications that are meant to be taken orally), or using a prescription written for another person to access drugs from a pharmacy.⁶

Although controlled substances may be considered either illicit drugs with no medical value or prescription drugs that can be given to combat certain diseases and ailments, both types of medications have the potential to be misused and abused. Often, people believe that drug abuse only occurs with

those drugs that are illegal, classified as Schedule I drugs. Yet prescription drug abuse is a very real threat to society and the numbers of patients abusing these types of drugs has increased dramatically in recent decades. In 2011, the Centers for Disease Control and Prevention (CDC) declared that prescription drug abuse is a nationwide epidemic.⁷ Without keeping restraints on controlled substances, including those that are prescribed for medical use, the potential for misuse and abuse of these drugs continues to increase.

Drug Addiction

In contrast to the above definition of drug abuse, addiction describes a biological condition that develops as a result of genetic and environmental factors, in which the affected individual has little to no control over drug use, has developed physiological craving for the drug, compulsively uses the drug, and is unable to control behavior or show an ability to stop using the drug.⁶ Physical dependence and addiction are also described as often related with drug use and abuse. The two terms are sometimes incorrectly used interchangeably. In contrast to addiction, drug dependence occurs when an individual adapts to use of the drug so much that he or she experiences symptoms of physical and/or psychological withdrawal, such as physical craving, irritability, sleep disturbances, anger, or anxiety, when the individual stops taking it. Withdrawal symptoms may also develop when there is an abrupt decrease of the dose of the drug.⁶

There are many patients and family members who mistakenly believe that using controlled substances, particularly opioid analgesics for pain, will inevitably lead to addiction. They then choose to forego any pain medications or any other controlled substances that could help their conditions and instead suffer out of fear of becoming dependent on a drug.

Unfortunately, over half of family health physicians also believe that controlled substances used as long-acting pain medication will lead to addiction.⁶

Alternatively, there are those who become addicted to controlled substances because of frequent misuse and abuse; these are people who, although they may have a genetic predisposition toward addiction and have contributing environmental factors, their choices to continue to abuse drugs have led to addiction and its associated consequences. Addiction leads to physical and psychological problems, including risks of contracting infectious diseases, breathing problems, damage to the gastrointestinal tract, alterations in hormone levels, chronic kidney damage, prenatal effects, and increased risk of injuries, among many other potential complications.²³

People who abuse or become addicted to controlled substances are also at greater risk of hospitalization or death from accidental overdose. Drug overdose is the leading cause of all types of accidental deaths in the United States, which means that drug addiction involves much more than the medical and social influences of those with addiction. The life-threatening consequences that can develop with drug addiction cause harm not only to the addicted patient, but can be devastating to family and loved ones, as well as lead to serious implications for the prescribing provider if steps to regulate the substance use were not taken or contributed to the condition by continuing medication prescription.

Prevalence Of Controlled Substance Use And Addiction

There are various reasons why drug use and addiction of controlled substances is so prevalent within society today. At one time, drug addiction was an idea reserved mostly for “dependence” on and the illicit use of street

drugs; however, in recent decades, substance use and addiction to prescription drugs has become much more common, even among those who do not necessarily fit the profile of having a drug problem. Unfortunately, there are many people who believe that just because a healthcare provider orders prescription drugs, they cannot lead to a substance use and addiction disorder. Prescription drugs are often easier to access, and their use is often seen as normal within many groups.

Prescription drug abuse is more likely to develop among certain groups of people and those with certain backgrounds. The practice is more commonly seen among those who already use opiates and who either use them inappropriately or add another prescription drug to their repertoire. Women are more likely to abuse prescription drugs when compared to men, especially drugs such as sedatives and tranquilizers. Those who use controlled substances alongside other substances, such as alcohol or tobacco, are also at greater risk of using them inappropriately and are more likely to get high with their use.⁶

Among Schedule I drugs, heroin is becoming increasingly popular and is a serious cause of addiction among some population groups. Young people, namely teens and young adults, who start misusing prescription drugs and become addicted to these substances often move on to using heroin and then become addicted to it as well. They may eventually find that one substance over the other — heroin or prescription drugs — are easier to access and end up using those substances more prominently. According to the Substance Abuse and Mental Health Services Administration, heroin use rose by 75 percent between 2007 and 2011.²⁶

When controlled substances such as opioids or benzodiazepines are prescribed for pain or anxiety, there is potential for misuse because of the lack of education available about the dangers of these substances, and they are seen as easily accessible, particularly if patients seek more than one healthcare provider to obtain prescriptions. A review in the journal *Medical Care* looked at prescriptions given for controlled substances in emergency departments to assess for misuse of opioid analgesics by patients seeking the drugs for non-medical use as well as the prescription practices of physicians in emergency departments who routinely prescribe these controlled substances. The study reviewed a database of over 400,000 patients who had received at least one opioid analgesic prescription from an emergency department and found that approximately 7.7 percent had high daily doses of opioids and that 2 percent had drugs that overlapped.¹⁶

According to the Center for Lawful Access and Abuse Deterrence (CLAAD), in 2012, an estimated 493,000 people over age 12 used a prescription drug for non-medical purposes for the first time, and visits to emergency rooms and medical emergencies due to prescription drug abuse have increased 132 percent over the last seven years.²⁶ Many of these facts speak for themselves. Prescription drug misuse and abuse is much more prevalent and widespread among most age groups and among various social backgrounds. The risks of serious illness and death are very high when controlled substances are not well regulated and managed to prevent people from taking advantage.

Not enough has been said about the effect of prescription drug abuse on children and adolescents however a recent retrospective nationwide study focused on admissions to emergency departments from 2006 to 2012 found that “poisonings by prescription opioids largely impact both young children and

adolescents”,¹ and that future preventive strategies need to focus on this target population. Specifically, the study reported that both accidental and intentional exposure to opioids by children and adolescents occurred for varied reasons. In a sample population of 21,928 pediatric patients admitted to emergency departments for prescription opioid poisonings more than half of cases were unintentional. The gender and age of patients in the study showed that 1) slightly more than half of the poisonings occurred in females, 2) in children 5 years of age or less the poisonings tended to be unintentional, and 3) in the adolescent age group of 15-17 years the majority of poisonings were intentional. The economic cost of emergency visits was factored into the study findings as well, showing an average cost of \$14,235 for hospital admissions and > \$81 million in total cost for the cases reviewed.¹

Risk Factors

The risk factors for developing addiction to controlled substances may vary depending on the age of the patient, life circumstances, medical history, and physical health. While prescription drug abuse and the numbers of overdoses that occur every year is not necessarily consistent with one particular age group, there are differences between social, physical, and environmental factors that can increase the risks of abuse and addiction more for some age groups. According to the National Council on Drug Abuse, risk factors can affect people at different stages of their lives; however, with each risk, there are preventive measures that can change the gravity of the risk through intervention.¹³

When an individual is exposed to a larger number of risk factors related to substance use and addiction, there is a greater chance that he or she will develop a substance use disorder related to the controlled substance(s)

involved. For instance, an adolescent who witnesses misuse of prescription sedatives by a parent to aid in sleep may be more likely to develop a substance use disorder with a similar type of controlled substance as well.

Those who engage in practices designed to gain access to large volumes of medications, such as through doctor shopping, are at higher risk of addiction and death through overdose. When prescriptions are not well regulated because the individual has several prescriptions from various providers, there can be considerable overlap in the amount of medication taken. Some people may overdose by trying to get high from prescription drugs because there is no one to regulate their dosages or the numbers of pills that they take each time.

Many students are at risk of becoming addicted to controlled substances through the practice of *academic doping*, which involves using drugs to be able to study and achieve better grades. Some students who face hours of study time and who want to concentrate to be able to achieve high scores on tests or to finish writing a paper will take stimulants to get through stressful times. Some of the most commonly abused drugs in these cases are stimulants used to treat attention deficit hyperactivity disorder (ADHD), such as amphetamine/dextroamphetamine, which is classified as a Schedule IIN medication. The stimulant effects of the drugs keep a person without ADHD awake and on high alert, which can allow the person to study and focus much longer. The drugs are often cheap and easy to come by in schools and on college campuses.

Unfortunately, those who practice academic doping are at higher risk of moving into more extreme forms of drug use. While academic doping involves misuse of controlled substances, it does not necessarily lead to

addiction in all cases. Those who do practice it are misusing stimulant drugs, which can lead to tolerance and a need for more drugs later to achieve the same effects. It is also possible to overdose on stimulants, even when the individual believes that he or she is only taking it to get good grades.¹⁷

Other risk factors seen among those who develop problems with controlled substance use and addiction include those that impact the individual, the family, and the community at large. Some risk factors include exposure to others who misuse controlled substances or who are addicted, early exposure to drug and alcohol use, such as during childhood or adolescence; problem behaviors, including conduct and behavioral disorders during adolescence; a history of mental illness, a history of trauma, including diagnosis of post-traumatic stress disorder; and having problems utilizing coping skills or responding to stressful situations in a healthy manner. Clearly, these are not the only risk factors that increase the chance that an individual will abuse drugs or become addicted. The reasons for addiction are complex and there is no one single factor that causes addiction or that explains why one person becomes addicted to drugs and another person does not.

As an alternative to those who are at higher risk of abuse and misuse of controlled substances, those who are less likely to develop substance use problems are people who are middle-aged, those without any history of illicit drug use or misuse of prescription medications, and people without any psychiatric health history. The personalities of these people have generally been associated with being relaxed and laidback, being thoughtful of others, slow to anger, compliant with rules and instructions, and being generally responsible.¹⁹

Prevention Of Prescription Substance Use And Addiction

When it comes to preventing misuse of controlled substance and the risk of a substance use and addiction disorder, prescribing providers can follow several clinical practices and prescribing practices that can minimize or prevent these consequences. Most importantly, it is essential to understand drug Schedules and to know which drugs are classified according to the Schedules of Controlled Substances. The provider should also be familiar with the laws and guidelines surrounding prescription of substances within each Schedule.

When writing a prescription, the provider should write the script legibly to reduce the risk for forgery of the document. Sloppy or illegible writing of a prescription can result in a patient or another person altering the dose or number of pills without it being noticed. Because the drugs within Schedule II/IIN require written prescriptions, protection of the actual prescription pad is essential to prevent theft. By keeping it locked up and in a safe place, it is less likely to be stolen and used to forge a prescription for a controlled substance.¹² In cases where electronic prescriptions can be written instead of paper prescription pads, the provider should try to write an electronic prescription or use e-prescribing software to reduce the risk of forgery and falsification.

A practitioner who prescribes controlled substances needs a DEA number associated with a license to practice. The provider should monitor the DEA number to ensure that no one else has tried to use it and that prescriptions written associated with that number were only written by the provider. Often, pharmacists and pharmacy technicians can check a prescriber's DEA number through the database to verify prescriptions and to determine whether a prescriber has been prescribing controlled substances

appropriately. In understanding policies regarding number of refills allowed according to each Schedule, the prescribing provider should follow these guidelines closely, educating staff and colleagues about policies for refills, if necessary.

When considering whether a specific patient needs a prescription for a controlled substance, the prescribing provider can also potentially prevent misuse and substance abuse by performing thorough patient examinations that assess the patient's medical history, history of substance use and abuse, and assessing for patient pain levels. The types and amounts of concomitant medications the patient is taking should also be documented. When possible, alternative therapies, including those medications that are not controlled substances or nonpharmacological adjuvant therapies should be employed instead. In extreme circumstances, such as when the patient is acutely intoxicated with a controlled substance or demonstrating an inability to safely utilize a prescription for one of these drugs, the prescribing provider should consult with a specialist for substance abuse treatment and avoid writing the prescription for the controlled substance.

Prescription drug monitoring programs have been developed in the majority of states within the U.S., to track the prescribing of controlled substances. Although research about the long-term effects of these programs and their prevention of contributing to controlled substance abuse is limited, there has been renewed interest in further development of programs in each state to be able to observe and examine how controlled substances are prescribed and used. Ideally, these programs are easy to access and have standardized content for any prescriber to utilize, the information is confidential, and the programs are restricted to use only by prescribing providers, according to the New England Journal of Medicine.¹¹ These programs can identify

inappropriate drug use and prescribing, as well as overlapping of prescriptions that may occur when some patients seek to obtain drugs from more than one prescriber. Ultimately, participation in these types of programs by prescribing providers can work toward prevention of the misuse of and addiction to controlled substances.

Communication is extremely important as part of the process of prescribing controlled substances. Communication with other providers, pharmacists, other members of the interdisciplinary team, and the patient to ensure that substances are being filled and used correctly and appropriately and that they are successful in helping the patient, will go a long way toward preventing the misuse of these drugs.

Patient Assessment

A thorough assessment and evaluation of the patient's condition and needs must be completed prior to prescribing controlled substances. The assessment should consist of various components, including a physical examination, medical and psychological history, a check for a history of substance abuse, assessment of pain, and an explanation of potential treatments or therapeutic measures that could be implemented instead of using controlled substances.⁷

History of Substance Use

Assessment for a history of substance use is necessary prior to prescribing any controlled substances. A patient with a history of a substance use disorder is not necessarily excluded from receiving a prescription for a medication that is a controlled substance, but the knowledge of the underlying substance use issue and the patient's history will help the

healthcare provider to better understand the patient's background and the provider should monitor the patient's use of the controlled substance closely.

The substance use history assessment should be performed in an open and non-judgmental manner, demonstrating empathy and respect for the patient. If possible, family members or others who are familiar with the patient's substance use history (or lack thereof) should be present to provide insight and to fill in missing information, when necessary.⁸ Additionally, if there are other members of the interdisciplinary team present who may be able to assist with obtaining a substance abuse history, they may also be included in the assessment portion as well. Because of the potentially sensitive nature of this part of the exam, only those members that the patient trusts or does not feel threatened by should be present. For instance, a patient may accept having a clergy member present but may not want a social worker in the room. The patient's comfort with the process must be considered in order to garner accurate information and to help the patient to avoid feeling threatened. Regardless of who is present during the exam, the information should be later shared with the interdisciplinary team that is managing the patient's condition, if applicable.

Keep in mind that depending on the patient's substance abuse history, more than one consultation may be necessary. Starting with a screening tool, such as the National Institute for Drug Abuse (NIDA) Quick Screen Questionnaire can point out areas that need further clarification. The NIDA Quick Screening Tool asks basic questions that clarify whether the patient has used alcohol, illicit or prescription drugs, or tobacco within the last year, as well as how much of each. If the patient answers "yes" to any substance use, the tool then helps the provider to further clarify which types of substances and how often they are used. At the end of the screening, the answers are scored to

determine the patient's risk level based on patient substance involvement (SI) score.⁹

While screening tools such as the NIDA Quick Screen are helpful for identifying the potential for problems, it is only through further questioning and discussion that more information is usually relayed. It is at this point, if the patient acknowledges using illicit substances or having a substance use disorder, that other disciplines, such as a counselor or therapist may need to be present for the assessment or should at least be consulted for further guidance.

When the patient acknowledges a history of substance use, further clarification is needed to determine the impact of use. Questions should be directed toward determining how the substance use has impacted the patient's social functioning, relationships, and physical health. Assessment of social functioning includes asking the patient about how substance use has impacted:

- The ability to hold a job and maintain the requirements of the job
- An increase in criminal activity
- Whether the patient has harmed himself or herself, or others, due to substance use
- The patient's education
- Activities of daily living and personal responsibilities or financial problems

Relationships are often affected by substance abuse, which is why it may be necessary to have family members or close friends of the patient available during the assessment to account for changes. Family or friends should only be part of the exam if they do not cause further stress and anxiety for the

patient and if they are helpful to the process. The healthcare provider should clarify with the patient whether there has been a noticeable change in the relationships with family and friends, if there is a history of violence or abuse in the home because of substance use, and if the patient's children are being well cared for and their needs are being met (if applicable).

Substance use and abuse also impacts physical health, and part of the substance abuse assessment should include questioning about the impact of substance use on the patient's medical needs. This may be included as one of the last parts of the exam to transition into the actual physical assessment. The healthcare provider should ask questions about whether substance use has historically or currently affected the patient's sleep habits, weight, the patient has been hospitalized for problems with substance use, if any allergies to medications exist or there has been a significant allergic reaction, if there ever was an overdose, if medication is taken for other conditions, and if a history exists of any viral infection that may have developed as a result of drug use (such as HIV or hepatitis B infection). Other elements to consider when gathering information about the patient's substance use history include a basic nutrition assessment, as substance use often contributes to malnutrition; as well as whether the patient is up to date on immunizations and health history checks. If the patient appears to be acutely intoxicated during the assessment, laboratory levels to test for serum drug values and toxicology screenings may be warranted.

As stated, a patient with a history of substance abuse would not necessarily be prevented from receiving prescriptions for controlled substances, especially when the need for prescription medications is warranted. Instead, when a history of substance abuse is identified, the affected patient requires close monitoring and care to ensure that the prescribed substances are not

being misused. C. O'Brien, author of an article about managing patients with substance abuse listed in *Canadian Family Physician*, presents several guidelines to adhere to when prescribing controlled substances when there is a history of substance abuse, which include ensuring that only one clinician is responsible for writing prescriptions and only one pharmacist dispenses medications to avoid overlapping or "shopping" between prescribing providers. Both of these professionals should be part of the interdisciplinary team.¹⁰

Other guidelines include having a written treatment plan that specifically documents the treatments, the expectations from the patient and the team members, and the consequences of not adhering to the plan; and, utilizing nonopioid or nonpharmacologic adjuvant medications when possible, limiting the total quantity of medication available to be dispensed at any one time, and performing occasional spot urine checks or pill counts to monitor treatment adherence.¹⁰ As with prescribing controlled substances for any other patient, providing these drugs for a patient with a history of substance abuse requires adherence to the basic principles of prescribing in order to provide close monitoring and consistency with patient care.

Physical and Psychological Function

Because the risk of injury and death from overdose is so prominent and has reached epidemic proportions in the U.S., healthcare providers have a responsibility to carefully screen and assess all patients prior to prescribing controlled substances in order to protect them and to prevent injuries from drug misuse. The Centers for Disease Control and Prevention has issued a list of physical examination requirements by law according to each state. These laws describe the components of the physical examination of a patient that must be performed prior to prescribing any controlled substance

medications. Currently, 41 states have laws requiring prescribing providers ensure that medication prescriptions are given based on information obtained through the physical examination.²⁷

Assessment of physical function includes an assessment of all major body systems to check for deviations from normal. Any aberrations in body systems should be noted, as well as complaints from the patient about pain, dysfunction, or symptoms of illness within particular body systems. As an example, upon an initial examination, the patient may tell the provider that he or she sometimes has abdominal pain that starts after eating and feels like a burning sensation in the chest. The provider would then focus a part of the assessment on the patient's symptoms and how they impact level of functioning and then relate the information gathered to the patient's reason for seeking a controlled substance and whether the patient has any history of gastrointestinal illness.

Further functional assessment relates the current reason why the patient is seeking care to an ability to function in every day activities, including the ability to walk and get around, the ability to perform activities of daily living, and the ability to maintain expectations of routine tasks, such as holding a job and interacting with family and friends. The patient should be questioned about any changes in these activities and whether his or her current health status has affected functional abilities. For instance, a patient in pain who is seeking opioid analgesics may state that he or she is unable to walk across the room without suffering from severe pain. Someone who complains of severe insomnia may be so tired during the daytime that completion of duties at work becomes too difficult or impossible.

The assessment of psychological function is just as important as assessing physical function, as many psychological conditions and mental illnesses can contribute to misuse of controlled substances. A psychological condition may contribute to aberrant drug-related behavior when the affected individual with a mental illness is unable to control behavior when using and abusing drugs. As an example, a patient with poorly-controlled bipolar disorder, which is a condition that is commonly associated with concomitant substance abuse, may demonstrate drug-seeking behavior and ask for more prescriptions for opioids, claiming loss of a prescription; or, the patient may try to achieve a quick high from the drugs and use them inappropriately by crushing and injecting pills that are meant for oral ingestion. Obviously, not all patients with mental health disorders have problems with misuse of controlled substances, but because the risk of drug abuse is higher among persons with mental illness, it is important to assess psychological function and evaluate the patient's psychiatric history.

The assessment of psychological function can be started by utilizing a psychological screening questionnaire, including basic screenings to assess for substance abuse disorders, such as the CAGE questionnaire, the PHQ-9 Depression Test, or the Screening and Opioid Assessment for Patients with Pain – Revised (SOAPP-R). If the screening indicates that there are issues with the patient's psychological functioning, further consultation is needed. In addition to identifying any aberrations with psychological function, the provider should find out if the patient is taking medications that are controlled substances for a psychiatric illness and if they are drugs that would interact with a new prescription.

Depression and anxiety are some of the most commonly diagnosed mental health conditions, with more than 15 million people in the United States

diagnosed with major depressive disorder and 6.8 million adults affected by generalized anxiety disorder.²⁸ Not all people diagnosed with one of these disorders take medication to control symptoms, but these numbers indicate that there are large groups of people diagnosed and who may be receiving medication for these conditions. Some studies have indicated that women are more likely to be using antidepressant medications and are at greater risk of misusing controlled substances and of overdose, possibly because women are more likely to experience intense emotions.^{19,20} People who suffer from mood disorders, those with past histories of physical or sexual abuse, and those with chronic depression and/or anxiety have been shown to have greater instances of chronic, non-cancer pain that may necessitate opioid use.¹⁹

Chronic and unrelenting pain is also often the cause of mental health issues. An individual who suffers from chronic pain that is not well managed is at greater risk of depression, insomnia, and anxiety and may seek opioids or other controlled substances for pain relief.

Those who do not have a history of mental illness or any atypical psychological history are more likely to respond to the effects of controlled substances when compared to those with mental health diagnoses.¹⁹ Substance use disorders are also more prominent among patients with histories of mental illness. The reasons for this connection are numerous, but it is thought that some people with mental health diagnoses may seek to use illicit substances to self-medicate and to alleviate some psychiatric symptoms.

The term *dual diagnosis* refers to a coexisting mental health diagnosis and a substance use disorder. There is an important connection between a

psychological diagnosis or mental health issue and use of controlled substances, which is why assessment of the psychological history is so important.

Pain Control

Every person should receive adequate pain control and each person that seeks help for pain deserves to be assessed and to have appropriate measures taken to try to reach a level of comfort. Yet because of the underlying issues with abuse and addiction of controlled substances and drug diversion, many healthcare providers are reluctant to take the proper steps to prescribe medications that can help to curb patient pain.

Unfortunately, because of the corruption associated with misuse of controlled substances that has occurred in some cases, there are many more people who suffer in pain from inadequate pain control due to lack of availability or willingness to provide help from their healthcare provider.

Because of the risks associated with misuse of controlled substances, the increasing incidence of deaths from overdose, and the economic burdens that addiction and dependence have on the healthcare system, it is more important than ever that prescribing providers be well informed about the complexities of prescribing controlled substances for pain and for other health conditions; and, that controlled substances be regulated and monitored properly to reduce the risks of mismanagement, addiction, and drug abuse. In addition to performing assessments of physical and psychological function, pain assessment techniques are important elements of the overall evaluation. Because many patients are prescribed controlled substances for pain management, it is important to be able to adequately assess for and evaluate the patient's pain to be able to accurately prescribe the appropriate medications in each condition.

Ideally, pain assessment should consist of more than asking a patient to rate the intensity of his pain. While this method gives the clinician an idea about the overall amount of pain, as well as its location and possibly other contributing factors, it does not necessarily account for some of the complex issues that are contributing to the individual's pain.

There are different types and causes of pain for which each individual seeking medication may need care. People with cancer often suffer from severe pain that is unrelenting and may therefore require larger doses of opioids for pain control. In some end-of-life situations, the same is also true. Alternatively, there are many people who suffer from pain that is unrelated to cancer or terminal illness but who still require opioid medications to alleviate some of their suffering. They may have acute pain from a recent illness, which is often defined by the length of time it has been present and which usually resolves as an injury or illness heals.

Chronic pain describes pain, which is ongoing and is often not relieved with short-acting opioids. The patient with chronic pain may also suffer from other debilitating physical and psychological effects as a result of living with and being unable to control chronic pain. The type of pain, the length of its duration, the area of the body it has affected, the factors used to attempt to alleviate the pain, and any other untoward effects the pain is having on the patient's quality of life are all aspects that must be considered as part of the complex assessment of pain.

The pain assessment should include a discussion of the potential cause of the pain; what the patient believes is the source of pain and if there were any circumstances that led to its onset. The provider should also perform a functional assessment to determine how the pain is affecting the patient's

ability to carry out certain tasks. This assessment can be as simple as asking the patient to complete a few basic or simple tasks or exercises, and then determining whether the person is able to complete each item. Functional tools, such as the Brief Pain Inventory or the Roland-Morris Disability Questionnaire, could also be included to determine physical function in relation to pain.²⁹

In some cases in which a patient presents with pain and requests opioid pain relievers, the clinician may not have adequate time or ability to perform a comprehensive exam complete with physical and psychological history, a history of drug abuse, and the presence of any underlying or coexisting factors. Such cases occur in outpatient or urgent care clinics or within emergency departments where prescribing providers may see many patients with pain over the course of one shift but have little access to medical records or pertinent history. Patients who seek controlled substances for non-medical use often are aware of this and purposely present for care at these places to try to acquire controlled substances. When a patient with an unknown history presents for urgent care with a non-specific complaint of pain (such as low back pain) and requests opioids, the American College of Emergency Physicians makes several recommendations:⁷

- Determine whether the patient's pain can be relieved with non-pharmacologic measures or with non-opioid pain relievers before immediately prescribing opioid analgesics.
- Assess whether the patient has tried to use opioid analgesics without success, as well as what level of pain intensity the patient is experiencing and only prescribe opioid medications for those who are

suffering from severe pain that has not responded to other types of pain relievers.

- If the prescriber does provide a prescription for opioid pain relievers, the dose should be small and controlled, with a minimal amount to be dispensed; in other words, enough medication to “get the patient through” until he or she can follow up with a primary care provider or pain specialist.

Pain assessment is a fundamental element to include when evaluating the patient prior to prescribing controlled substances. Because so many controlled substances are prescribed as analgesics and because the extent of a patient’s pain may be difficult to identify at times, the prescribing provider must take extra time, when able, to assess for the degree of the patient’s pain and consider how a prescription for a controlled substance will manage the condition.

Underlying or Coexisting Disorders

The connection between underlying and/or coexisting disorders in the patient who may need medication that is a controlled substance can be complex and it can be difficult to navigate through associated symptoms and complications. A patient may present with one set of symptoms that may or may not be related to another coexisting condition. The symptoms from one disorder may have started long before the patient developed a current health problem; alternatively, symptoms of a newly diagnosed condition may exacerbate the symptoms of a preexisting condition. The timeline of events of what condition developed first and in relation to subsequent conditions can be confusing and challenging to break down and organize.

An underlying condition is a health issue or diagnosis that usually was present before the patient's diagnosis or period of seeking treatment for the current condition. In many cases, the underlying condition is a chronic illness, but the patient may or may not have gotten control over its symptoms. Some people work at trying to manage chronic conditions after diagnosis and keep symptoms under control; there are also others who may have been diagnosed with another health condition but they make little effort to manage their health. Underlying health conditions, particularly those that are not well managed, can significantly complicate the patient's current condition and can affect a response to prescription controlled substances.

Many patients are already taking medications to combat symptoms of other health conditions. Some of these drugs could interact unfavorably with prescribed controlled substances. Patients may be taking any number of additional medications for coexisting health conditions, such as anticoagulants, antihypertensive medications, inhalers, or allergy medications. These and any other drugs prescribed for the patient must be assessed for and documented to prevent drug interactions and complications.

Substance abuse disorders are considered coexisting conditions and their assessment should be included as part of the evaluation. Other medication conditions that the patient may have that are coexisting with a current need for treatment could potentially take over as the focus condition, which can then affect how treatment is administered. For example, a patient may be seeking a prescription for opioid analgesics because of persistent back pain associated with a herniated disk. The patient does have a history of alcohol abuse but does not use illicit drugs and has never misused prescription

drugs. Because of the patient's coexisting illness of an alcohol abuse disorder, which is ongoing until the patient seeks appropriate treatment, he or she may eventually shift focus so that the alcohol abuse disorder dominates over the back pain. If the prescribing provider fails to consider the effects of the coexisting disorder, the back pain treatment will be unsuccessful because the patient has not considered the effects of the coexisting illness on the current situation and has not attempted to resolve the substance abuse disorder before prescribing more medication.³⁰

It may be necessary to also conduct a urine toxicology screening when assessing for underlying disorders and conditions. The provider should ask for a urine sample and a list of the medications the patient is already taking to make comparisons and to assess whether there are any other drugs of abuse in the patient's system that may or may not have brought up. The process should be carried out in a non-threatening manner to avoid alienating the patient, but it should be done early on in the assessment.

As with other elements of the patient assessment, managing underlying or coexisting disorders can significantly complicate the prescribing process for controlled substances. Yet these disorders are important components of the patient's history and current state of health. In order to best protect the patient and to prescribe controlled substances safely, any other disorders or illnesses must be considered.

Treatment Guidelines

The process of prescribing controlled substances for pain or for other chronic conditions must follow a specific path that begins with assessing the patient and coming up with an appropriate treatment plan, selecting the correct prescription for the situation and prescribing appropriately, and ensuring

that the patient takes the medications as directed. During the course of treatment, the practitioner may need to consider other elements that would contribute to adherence to prescription guidelines, such as by including contracts or consent for the patient to consider and sign, which better ensures compliance with treatment.

Treatment Plan

Before prescribing any kind of treatment or providing a prescription, the healthcare provider must develop a treatment plan for the patient. The treatment plan essentially informs those involved with the case, including the patient and provider, as well as any pertinent family members, about the types of services the patient will receive, the goals and possible outcomes of the treatment, the consequences of not adhering to the treatment guidelines, and indicators of progress throughout.

A treatment plan may consist of one or more documents pertaining to the patient's plan of care, including the results of the patient assessment and diagnosis, the strategies the provider plans to use to treat the patient's condition, a schedule or timeline of how the plan will proceed, an outline of who will provide the prescriptions and who will dispense the medications for the patient, and a timeline for when the patient needs to check in with the provider for follow-up.

The patient and important family members should be included as part of developing the plan. The process does not need to be extensive and time consuming, but it should consist of a frank discussion about the patient's needs and the expectations of both the patient and the prescribing provider. The information during the discussion should be documented in the patient's

medical record, with copies of any documents that are part of the treatment plan added as well.

Ultimately, the plan is based on the patient's diagnosis and needs for prescription controlled substances. The timing of follow-up is also included as part of the plan so that when the patient begins taking the medication, the patient knows when to return for follow-up care. Follow-up with the patient is important so the healthcare provider may ensure that the patient is adhering to the prescription requirements, to let the provider know how the medication is working, and to make changes in the prescription, if needed. If the patient will need long-acting drugs for an extended period of time, the plan may need to be renewed after a certain period to ensure that the information included is still accurate and that nothing significant has changed in the patient's diagnosis or goals, and that the patient is making progress in proceeding through treatment.

Prescribe Practices

Prescribing practices are just as important as patient assessment when assisting a patient with controlled substances. The provider must prescribe appropriately and in the correct proportion for the patient's condition to be able to adequately help the patient and to prevent the complications of drug misuse or abuse.

When prescribing, the provider should keep some general guidelines in mind to avoid prescribing inappropriately and potentially contributing to misuse of the controlled substances. The provider should assess the situation and determine what medication would be most appropriate for the patient's condition. A consult with a specialist or expert in prescribing specific types of controlled substances may be warranted if there is any question. Select the

most appropriate drug for the patient's condition. For example, a patient suffering from acute pain from an injury does not need a long-term prescription for opioids or an extended-release formulation. Consulting with a pharmacist and reading through a drug guide are two other options to consult for small details related to prescribing correctly.

Avoid prescribing controlled substances to be used "prn" or "as needed," if possible. Instead, the parameters of the prescription should be very clear about when and how much of the drug the patient should take each time. If the patient continues to require an increase in dosage and still does not find relief for an existing condition, a specialist should be consulted to determine if a different drug or an adjuvant therapy would be more successful in this situation. While it may be necessary to increase the dose at times, continued increases in dosage without adequate relief must be examined and alternative solutions found for the patient's situation.

When prescribing medications for pain, the provider must carefully consider the most appropriate type and amount of opioid medication needed for each situation. Additionally, the patient may need to attempt a trial of non-opioid pain relievers or non-pharmacologic measures first to determine whether these items would be more effective before releasing a prescription for opioids.⁷

When any controlled substance is prescribed, the number dispensed should be limited to a small amount so that the patient can only take the drugs for a short period before needing a refill. The prescribing provider should follow-up with the patient by discussing the effects of the drugs before providing the next refill, if it is a drug in a Schedule where refills are allowed. When treating acute pain, if the patient continues to take the medication and has

reached the end of its availability through refills but still suggests more of the drug is needed, the provider should carefully consider whether there are any signs of misuse or abuse before writing another prescription.

The Medical Board of California has published guidelines for prescribing controlled substances for pain and specifies that, although there are many guidelines for the safe writing of prescription controlled substances to avoid misuse and addiction, not all situations of patients presenting with pain warrant such extended and careful monitoring. For example, a patient with an obvious injury who is clearly in pain could receive a prescription for pain medication of an opioid analgesic; however, this patient would still require follow-up after the acute stage of the injury has passed and healing started, when pain should be dissipating.⁷ Nevertheless, if there is any question about the patient's condition, if the prescriber does not know the patient well or is unfamiliar with the patient's history for potential substance misuse, or the patient requires long-term treatment with controlled substances, a thorough treatment plan that is followed through with correct and proportionate prescribing must be carefully followed.

Opioid Trial

When a patient is suffering from chronic, non-cancer pain, a trial of opioid analgesics can allow him to experience pain relief when the prescribing provider selects the most appropriate drug for his condition, titrates the dose as needed, and monitors its effects. An opioid trial is an effective method of managing opioid analgesics that are controlled substances while controlling the situation to reduce the risk of drug misuse. The purpose of the trial is to determine whether a patient achieves adequate pain relief when using prescribed opioids for a painful condition. An opioid trial consists of several stages, including trial initiation, titration, and maintenance.¹⁴

During the initiation stage of the trial, the patient first begins to take the medication for his condition. The prescribing healthcare provider has taken the patient's history, performed a physical examination, and is aware of any underlying/coexisting conditions or substance abuse problems. During this time, the provider and the patient can discuss what the goals of therapy might be, any expectations that the patient may have for opioid therapy, and ideas about how opioids will help the patient's situation. This is also a chance to discuss some of the negative effects related to opioid use, possible side effects, and what to do if the opioid therapy does not produce the intended results. The initiation begins with the prescription for the medication. It should be provided in an obvious manner that does not allow room for theft or forgery of the prescription so that the patient fills the correct prescription exactly as it was given.

After the patient takes the medication for a specified period of time, the provider checks in to determine the medication's effectiveness. The amount of time to allow before titrating the dose of the opioid depends on the patient's condition and the type of medication prescribed. Severe pain that requires a Schedule II/IIN controlled substance should be monitored and follow-up given within a short period of time. The exact amount of time varies per condition, but in many cases of Schedule II drugs, the provider should have the patient check in after 1 to 2 weeks of medication use. Schedule II drugs are more likely to be used for significant pain or disability and obviously have greater potential for misuse so they need to be monitored more frequently when compared to drugs in Schedules III, IV, or V. When checking in after two weeks of medication use, the provider can determine if the drug is being effective or if the prescription needs to be modified slightly.

For example, a patient with significant, unrelenting pain would not tolerate an extended opioid trial if the drug is ineffective. Instead, follow-up for drug effectiveness should take place relatively soon after initiation. Depending on the drug's effectiveness, the healthcare provider then titrates the dose based upon the patient's response. If the drug is not effectively controlling the patient's pain, the dose may be increased. Follow-up for dose effectiveness is again required to determine its success. The amount of the drug may need to be changed more than once, with the dose being titrated several times in order to reach a level of comfort for the patient.

Once an effective dose has been established, the patient enters the next stage of the opioid trial, which is the maintenance phase. During this phase, the patient remains on the selected dose of medication for a specific period of time. The length of the maintenance phase also depends on the patient's underlying condition and the type of medication prescribed.

Note that studies have shown that some of the most successful opioid trials have been with more than one medication prescribed. The prescription of more than one controlled substance at a time requires close monitoring and substantial preventive efforts to avert drug misuse and addiction. There is also evidence that indicates that rotating the types of medications administered during the trials is more effective at achieving pain control. For instance, a patient may undergo an opioid trial with hydrocodone for a time period to control his chronic neck pain following an injury and may then switch to hydromorphone to continue to provide effective pain management.¹⁴ The disadvantages of using more than one drug through opioid trials is that the patient is being exposed to more than one controlled substance and it may take longer to find an appropriate drug that will suitably treat the patient's condition. Further, a short-term opioid trial,

whether with one drug or more than one medication, is not necessarily an accurate indication of pain management when the patient has a chronic pain condition.

During the trial, the patient may document his own results in a diary or journal to better determine effectiveness of the drug. This serves several purposes: the patient will be able to remember whether the specific drug was effective in controlling his pain for future reference, he will better understand if the drug had side effects or unexpected outcomes that occurred with its use, and he can bring up his notes when discussing the trial with the healthcare provider as a form of reference and to remember important information.¹⁵

The healthcare provider documents the process of the opioid trial starting with the education and discussion provided prior to drug initiation throughout the maintenance phase. If possible, a copy of the documentation may be given to the patient for reference. Documentation benefits the healthcare provider because it serves as a form of reference in what type and dose of opioid medication was successful as well as what needed to be changed. Documentation is also necessary to record information about the trial as part of the patient's chart and legal medical record.

Informed Consent

When a patient is preparing to undergo a procedure or treatment, an informed consent form is signed to indicate that the patient understands the situation, as well as its risks and benefits. The prescription of controlled substances is also considered a type of treatment that may require informed consent from the patient before starting on a regimen of the drug.

Prior to administering a treatment, the healthcare provider must explain the process to the patient, as well as its risks and benefits, and any alternatives available instead of going through the treatment. When prescribing a controlled substance, the provider must explain the possible risks of addiction and the health consequences that can occur if the drug is misused. The patient should be taught exactly why he is being prescribed the drug and what the mechanisms of action of the drug are, as well as any common side effects that may develop. Finally, the provider should discuss with the patient the possibilities of other forms of treatment that he could use instead of the controlled substance.

By signing the informed consent, the patient is agreeing that he has been informed about the pertinent information related to his treatment and that he consents to taking the drug. He should be given the opportunity to ask questions about the drug and should ensure that he agrees with the course of treatment and does not feel coerced into signing the document. He should also know that by taking a controlled substance for management of a certain condition does not necessarily guarantee that he will be free from the symptoms of his condition and that he may still struggle with some effects.

In some cases, a patient may sign a treatment agreement prior to starting with a prescription for controlled substances. This type of agreement, when signed, means that the patient is willing to comply with all of the requirements needed for safe use of the drug as outlined by the prescribing provider. This document is not the same as an informed consent for treatment, although the two documents may be presented and signed together.

In contrast, the informed consent may or may not be utilized before issuing controlled substances. Situations vary according to facility policy as to whether informed consent is required for controlled substance use. Whether or not a patient must sign an informed consent form prior to using controlled substances often varies between states. For example, in the state of Florida, a patient must sign a controlled substance agreement prior to using opioids for pain relief.²² A portion of this agreement may include informed consent, stating that the patient understands and agrees to the treatment plan.

Managing Ongoing Treatment

Long-term treatment with controlled substances requires continued monitoring of the patient's drug use and adherence to appropriate prescription policies. Obviously, a prescribing provider should not write a prescription and send a patient on his way with little follow through. Ongoing treatment requires checking in with the patient to determine drug effectiveness, ensuring that the patient is using the drug appropriately, whether he has enough of the drug or needs to have a refill, whether the drug type or dosage amount needs to be changed, if the patient is experiencing side effects that are intolerable, and if there are signs that the controlled substance is causing patient dependence, or is leading to abuse or addiction.

Monitor Utilization

Studies have shown that frequent and ongoing monitoring of the use of controlled substances decreases the risk of illicit drug use and drug abuse.⁶ Monitoring utilization of drug use by the patient involves several steps on the part of the prescribing provider and those working to control use of the substance.

Control of the Drug

This means that the provider is in control of how much to dispense and is responsible for writing the dose and schedule of how often the patient takes the drug on the prescription. The pharmacist filling the prescription maintains the stock of the medication and only dispenses the amount assigned.

Monitor Refills

Depending on the Schedule of the drug prescribed, refills may or may not be allowed. The prescribing provider and pharmacist should monitor the number of refills that the patient uses, as well as the number of refills the patient attempts to make (even if more refills are not allowed).

Documentation

The results of the patient's assessments and examinations, the patient's diagnosis, and the type and amount of drug prescribed should all be recorded. Any follow-up conversations with the patient regarding adverse effects of the drug, as well as the success or failure of the drug to help the situation should also be documented. The provider should make a note of any other unusual or suspect information that develops during the time of monitoring patient drug use and if specialists or consults are needed, this data should be recorded as well.

The prescribing provider should remain in contact with the patient to monitor drug use and to ensure that the prescribed substance is being used appropriately. Staying in contact and keeping the lines of communication open to discuss the patient's medication use provides clarity and may reduce some of the risk of inappropriate drug use. The patient should have routine

follow-up appointments with the prescribing provider to discuss how well the drug works and whether the patient is having any side effects.

Clear and ongoing communication with the patient regarding drug usage is also a form of education about appropriate use of the medication. For example, a patient may tell his healthcare provider that he is afraid of becoming addicted so he has not been taking much of the medication. This is an opportunity for the provider to teach the patient about the risks of addiction with controlled substances but also to reiterate that with appropriate use according to prescribed guidelines, the risks of addiction are small. When a patient uses controlled substances inappropriately or develops a drug addiction, the healthcare provider is required to report the situation to the appropriate authorities.

Most states have prescription drug monitoring programs in place that assist with supervising patient use of medications and controlled substances. The programs may vary slightly between states. These programs are generally run by administrative, regulatory, or law enforcement agencies within the state government. The main purposes of prescription drug monitoring programs are to decrease the risk of drug abuse by identifying signs that patients are misusing drugs or developing symptoms of addiction, supporting the access to legal prescription controlled substances to better prevent illicit drug use, encouraging the identification and treatment of people who have become addicted to controlled substances, and educating the public and communities at large about the dangers of prescription drug abuse and the purposes of the drug monitoring program. Currently, there are 37 states that have working prescription drug monitoring programs in place.³¹

A prescribing provider must have a plan in place prior to providing controlled substances for how the drug will be monitored. Whether the provider utilizes the assistance of a prescription drug-monitoring program or has another system in place for drug utilization, ongoing monitoring is an essential part of the drug prescription process when controlled substances are involved.

Review and Evaluate Treatment

As discussed, ongoing evaluation must be performed to determine the effectiveness of the treatment program and to ensure that the patient is complying with the requirements of the controlled substance prescription. If there are signs of misuse or addiction, the prescribing provider should be familiar with resources and have information already in place so that if the person does need help, he does not have to wait.

Patient Counseling

Counseling about controlled substances is an opportunity for the provider to educate the patient about the significance of these specialized medications. Counseling should take place prior to dispensing any medications. It involves a period of time teaching the patient about the effects of the drugs, their purpose, their expected results, and the common associated side effects. The counseling period is a time for the patient to ask questions about using the medication and the provider should explain the process of follow-up after starting the drugs as well as how to contact the provider if adverse events occur.

Counseling should also be initiated if the healthcare provider realizes that the patient is having difficulty regulating his use of the drug or has developed an addiction to the substance. In this case, referral to a licensed

therapist who specializes in substance abuse and addiction is warranted to help the patient enter treatment and to recover.

The process of motivational interviewing involves a patient-directed program that focuses on the patient's willingness and desire to change.³³ Motivational interviewing seeks to determine whether the patient wants to change and if so, to educate him about how to make the change. The process can be utilized among patients who use controlled substances when they have problem behaviors or are misusing their prescribed medications.

A study by Bohnert, *et al.*, in the journal *Drug and Alcohol Dependence* looked at the use of motivational interviewing techniques to determine its effect on patients who present to emergency departments for care. The study provided a provider-administered intervention that utilized motivational interviewing strategies to promote changes in patient health-related behaviors, including substance abuse with opioid analgesics. The study showed that participants who received motivational interviewing interventions during their time in the emergency department showed significantly lower levels of overdose risk behaviors.³²

Patient counseling through motivational interviewing or therapy can result in behavioral changes that can significantly help the patient who is struggling with drug dependence or substance abuse. When counseling techniques are included, the patient is better informed about the nature of the drug and about how to care for his health, which may lead to a decrease in risk of unhealthy behaviors. Whether the prescribing provider is the person to initiate the counseling period or the patient is referred to a counselor or specialist, counseling about controlled substances helps the patient to succeed in taking the medications in a safe and regulated manner.

Opioid Agreement

Prescribing providers may consider an opioid agreement, which is a document signed by the patient that states that he will follow the directions and maintain the parameters set for use of the controlled substance, as delineated by the healthcare provider. The opioid agreement should never be signed until the patient has discussed all of the parameters of the agreement with the prescribing provider and he is agreeable to the terms of the agreement. The agreement is drawn up with the stipulation that the patient must sign it and follow the parameters in order to receive a prescription for a controlled substance and to be able to continue to receive prescriptions in the future.

Ideally, an opioid agreement should explain the roles of the patient and the practitioner throughout the prescription, dispensation, and use of the controlled substance; it will explain the process of the patient's treatment and why the opioid medications are being prescribed, it will outline expectations of the patient that he should follow while taking the medication, and it will list the consequences that will occur if the patient does not take the medication as prescribed and violates the opioid agreement.⁶

The document will list the items that the patient is expected to do while taking the drug, as well as those items that the patient must avoid. Some of the terminology that may be included as part of an opioid agreement includes that the patient:^{6,18}

- Will not use alcohol or other substances while taking the medication
- Will use only one pharmacy to obtain the medication, the location of which has been previously decided
- Will not sell the medication or share it with others

- Will receive and use opioids only from the prescribing provider listed on the agreement
- Will access or make requests for medication in person and not over the phone
- Will not seek out more of the medication from other healthcare centers, such as the emergency room or another healthcare practice
- Will keep the medications safe and out of reach of others
- Will report side effects that disrupt the patient's quality of life in order to maintain an appropriate level of treatment
- Will not change the amount of the dose, the route, or the times to administer the medication from the original prescription
- Will need to stop taking the medication if he does not follow through with the parameters of the agreement

Jamison, *et al.*, in the journal *Pain Research and Treatment*, state that any patient who starts to use opioid therapy should sign an opioid agreement prior to receiving the prescription. The opioid agreement is not meant to make the patient feel as if he is being controlled or manipulated, rather, it should be considered as a mutual arrangement between the patient and the practitioner about the required conditions for using the controlled substance.¹⁹

In addition to outlining the parameters of what the patient must agree to and what he must avoid, the opioid agreement may list other information that might be helpful for the patient when he is taking the drugs. For instance, some providers have opioid agreements that list the risks associated with taking controlled substances, including the signs of drug dependence, what occurs with drug withdrawal, the risks associated with addiction, and how the drug can affect a pregnant patient, among other

items. The agreement may also provide other data that the provider has discussed and provided through patient education and counseling prior to writing the prescription.

A sample opioid agreement used by the Washington State Department of Labor and Industries not only lists the parameters of the agreement in which the patient and the prescribing provider must sign, but it also describes safety risks while working under the influence of opioids so that the patient knows not to drive or operate heavy machinery; common side effects associated with the drugs, descriptions of common risks associated with use, including physical and psychological dependence, tolerance, and addiction; and key recommendations for the best ways to manage medications, such as by keeping a diary about medicine use and storing the medications safely if using while traveling.³⁴

The opioid agreement is not always developed with each treatment plan that involves these types of drugs. Patients who use controlled substances often need varying levels of monitoring and contact with their use. Opioid agreements should be developed for those patients who are at highest risk of drug abuse or misuse because of their medical or psychological histories, or if their scores suggest problem areas after taking screening questionnaires. When delivered in a non-threatening manner, this type of agreement can be very successful in assisting patients to follow the parameters of prescription drug use and can decrease the risk of misuse and mishandling of controlled substances.

Referrals/Consultations

Because the misuse and abuse of controlled substances can vary within different populations of people, referrals to specific treatment programs may

be warranted with specific patients. For example, women are more likely to abuse certain types of controlled substances prescribed for conditions such as depression or anxiety when compared to men. If substance abuse treatment is available that is specifically targeted toward the treatment of women and their unique needs for care, it should be considered.⁶ Treatment aimed at working with specific populations of people, such as treatment centers based on gender, age, or occupation, should be implemented when making referrals because these group-specific programs are often very successful in identifying the distinct needs of particular populations.

For general practitioners or among those who prescribe controlled substances only rarely, it is important to consult with a specialist who has experience prescribing controlled substances and who specializes in the specific medical or psychological condition the patient is suffering. For instance, when working with a patient who seeks opioids for chronic pain, a consultation with a pain specialist is warranted if the prescribing provider has little experience with regulating pain medications and opioids for the particular condition. In these cases, the specialist may take over the prescribing of the medications for the patient, but this should be determined ahead of time to ensure that only one practitioner is still writing prescriptions.

Shapiro, *et al.*, in an article published in *American Family Physician*, listed several resources for general practitioners to make referrals to patients who appear to be misusing controlled substances and who may need more help beyond initial care. Mutual help meetings and group therapy such as Narcotics Anonymous or SMART Recovery are peer-led resources that are widely available. These groups are often most successful when used in conjunction with other counseling or treatment, at least in the beginning

stages of recovery. Outpatient or inpatient management of acute drug intoxication for assistance with withdrawal may be available in hospitals and treatment centers that provide mental health services, as well as in residential treatment centers that are also designed to provide long-term, inpatient treatment of drug abuse.

Finally, residential treatment involves the patient staying at a treatment center for 24 hours a day to receive counseling and care while undergoing treatment for drug addiction. This type of treatment center is available and is often necessary when the patient is clearly struggling with addiction or has relapsed back into abusing drugs with the currently controlled substance if there is already a history of substance abuse.³⁵

Referrals and consultations are typically required for specialized care in cases where a general practitioner or a healthcare provider with little experience with substance abuse can help the patient to receive extended support. The provider who prescribes controlled substances should be aware of available resources for patient treatment of substance abuse and may want to initiate a connection with one or more organizations prior to making any referrals; then, if encountering a patient who has need of more targeted treatment for substance abuse, the provider will have easy access to the most appropriate establishments in which to make a referral. For example, it may be helpful to know and become familiar with treatment centers that specialize in substance abuse and co-occurring psychiatric illnesses. By becoming familiar with and developing relationships with local treatment centers, the prescribing provider can better determine the appropriate level of care the patient needs and know where and how to make a referral.

Controlled substances, by their very nature, must remain tightly controlled and well managed to keep all patients who use these drugs safe and to protect the prescribing provider. Unfortunately, despite regulations and policies in place regarding specific constraints of using these drugs, injury and death from drug overdose has reached epidemic proportions. Those who prescribe controlled substances must continue to educate themselves about the safest methods of writing prescriptions and must understand how to accurately assess and evaluate each patient, having the referrals and agreements in place as needed to monitor the utilization of these drugs among their patients. Understanding the prevalence of drug abuse and the risks of misuse and mishandling of controlled substances will more likely foster safer prescribing practices that can better reduce the risk of problems and can safeguard the use of controlled substances.

Summary

Because of the nature of drugs that are classified as controlled substances, people use them beyond an intended medical purpose and have various methods of obtaining prescription drugs. With the rise of prescription drugs as sources of drug abuse and addiction it has become evident that people who misuse have found new ways of accessing controlled substances. When it comes to preventing misuse of controlled substances and the risk of a substance use and addiction disorder, prescribing providers can follow several clinical practices and prescribing practices that can minimize or prevent these consequences.

It is essential for providers prescribing drugs to understand drug Schedules and to know which drugs are classified according to the Schedules of Controlled Substances. The provider should also be familiar with the laws and guidelines surrounding prescription of substances within each Schedule.

The Schedules of controlled substances are categories that organize drugs according to their purposes and risk for a substance use and addiction disorder. As the numbers describing each category increase, the drugs listed within each category decrease in their potential to cause a substance use or addiction disorder. Controlled substances, by their very description, are drugs that must be controlled to support the safety of the population who uses them. Control of these special medications is done through appropriate prescribing by healthcare providers, monitoring of use and utilization of the drugs, and understanding the signs or symptoms that may indicate a substance use and addiction disorder.

Please take time to help NurseCe4Less.com course planners evaluate the nursing knowledge needs met by completing the self-assessment of Knowledge Questions after reading the article, and providing feedback in the online course evaluation.

Completing the study questions is optional and is NOT a course requirement.

- 1. The following act of Congress is part of the Comprehensive Drug Abuse Prevention and Control Act passed in 1970:**
 - a. Narcotic Control Act
 - b. Controlled Substance Act
 - c. Opioid Control Act
 - d. Cannabis Control Act

- 2. The following organization(s) enforces the CSA.**
 - a. Federal Food and Drug Administration (FDA)
 - b. Occupational Safety and Health Administration (OSHA)
 - c. Drug Enforcement Agency
 - d. Both a and b above.

- 3. _____ drugs have the highest potential for abuse.**
 - a. Schedule I
 - b. Schedule II
 - c. Schedule IIa
 - d. Schedule III

- 4. Schedule IIN drugs are often prescribed as _____.**
 - a. Narcotics
 - b. stimulants
 - c. hypnotics
 - d. psychotropics

- 5. True or False. A controlled substance is a narcotic medication.**
 - a. True
 - b. False

- 6. An example of a schedule V drug is:**
 - a. Lyrica
 - b. Fentanyl
 - c. Adderall
 - d. Xanax

7. _____ describes the process of transferring prescription drugs, whether by theft or by sale, to another person for whom they were not intended or prescribed.
- a. Drug trafficking
 - b. Diversion
 - c. Flame cooking
 - d. None of the above.
8. Doctor shopping involves seeing several healthcare providers to get prescriptions for controlled substances and to ultimately acquire large amounts of medication.
- a. True
 - b. False
9. Prescription drug abuse is more likely to develop among:
- a. individuals already using opiates
 - b. opiate naïve individuals
 - c. men
 - d. individuals of European descent.
10. Among Schedule I drugs, _____ is becoming increasingly popular and is a serious cause of addiction among some population groups.
- a. cocaine
 - b. crack
 - c. heroin
 - d. cannabis
11. According to the Center for Lawful Access and Abuse Deterrence (CLAAD), in 2012, an estimated _____ people over age 12 used a prescription drug for non-medical purposes for the first time.
- a. 493,000
 - b. 125,000
 - c. 650,000
 - d. 250,000

- 12. Academic doping places individuals at _____ risk of moving into more extreme forms of drug abuse and involves _____ of controlled substances.**
- a. moderate/misuse
 - b. higher/misuse
 - c. extreme/addiction
 - d. low/misuse
- 13. Risk factors for developing addiction to controlled substances may vary depending on a person's**
- a. age.
 - b. life circumstances.
 - c. medical history and physical health.
 - d. All of the above.
- 14. True or False. Abuse of a controlled substance is misuse of a controlled substance and differs slightly in definition from abuse.**
- a. True.
 - b. False.
- 15. According to the Substance Abuse and Mental Health Services Administration, heroin use rose by _____ percent between 2007 and 2011.**
- a. 25
 - b. 75
 - c. 38
 - d. 60
- 16. The NIDA Quick Screening Tool asks basic questions that clarify whether the patient has used _____ within the past year and how much.**
- a. alcohol
 - b. illicit or prescription drugs
 - c. tobacco.
 - d. All of the above.

17. Prescription drug monitoring programs have been developed in the majority of states within the U.S. to track the _____ of controlled substances.

- a. prescribing
- b. prevalence of use
- c. risk
- d. quality review

18. Several guidelines to adhere to when prescribing controlled substances when there is a history of substance abuse, include all EXCEPT:

- a. ensuring only one clinician is responsible to write prescriptions
- b. two pharmacists dispense medications
- c. one pharmacist dispenses medications
- d. Both a and c above.

19. True or False. Prescribing controlled substances to be used "prn" or "as needed" is recommended practice to avoid prescription drug abuse.

- a. True
- b. False

20. An _____ is an effective method of managing opioid analgesics that are controlled substances while controlling the situation to reduce the risk of drug misuse.

- a. opioid trial
- b. opioid titration
- c. opioid adjunctive
- d. opioid taper

CORRECT ANSWERS:

1. The following act of Congress is part of the Comprehensive Drug Abuse Prevention and Control Act passed in 1970:

b. Controlled Substance Act

[p. 4. "Congress enacted the Controlled Substance Act as part of the Comprehensive Drug Abuse Prevention and Control Act, which was passed in 1970."]

2. The following organization(s) enforces the CSA.

c. Drug Enforcement Agency

[p. 6. "The Drug Enforcement Administration (DEA), whose job is to implement and carry out controlled substance laws and regulations, enforces the CSA."]

3. _____ drugs have the highest potential for abuse.

a. Schedule I

[p. 7. "Schedule I drugs are those that have the highest potential for abuse."]

4. Schedule IIN drugs are often prescribed as _____.

b. stimulants

[p. 8. "Schedule IIN drugs ... are often prescribed as stimulants, to control anxiety, for control of ADHD, or to induce sleep."]

5. True or False. A controlled substance is a narcotic medication.

b. False

[p. 4. "While many controlled substances are referred to as "narcotics", not all drugs listed in the Schedules can be classified as such."]

6. An example of a schedule V drug is:

a. Lyrica

[p. 11. "Examples of drugs that are classified as Schedule V medications include Robitussin AC, atropine/diphenoxylate (Lomotil®), pregabalin (Lyrica®), and ezogabine."]

7. _____ describes the process of transferring prescription drugs, whether by theft or by sale, to another person for whom they were not intended or prescribed.

b. Diversion

[p. 11. "Diversion describes the process of transferring prescription drugs, whether by theft or by sale, to another person for whom they were not intended or prescribed."]

8. Doctor shopping involves seeing several healthcare providers to get prescriptions for controlled substances and to ultimately acquire large amounts of medication.

a. True

[p. 12. "*doctor shopping*, which involves seeing several healthcare providers to get prescriptions for controlled substances and to ultimately acquire large amounts of medication."]

9. Prescription drug abuse is more likely to develop among:

a. individuals already using opiates

[p. 16. Prescription drug abuse is more likely to develop among certain groups of people and those with certain backgrounds. The practice is more commonly seen among those who already use opiates ..."]

10. Among Schedule I drugs, _____ is becoming increasingly popular and is a serious cause of addiction among some population groups.

c. heroin

[p. 16. "Among Schedule I drugs, heroin is becoming increasingly popular and is a serious cause of addiction among some population groups."]

11. According to the Center for Lawful Access and Abuse Deterrence (CLAAD), in 2012, an estimated _____ people over age 12 used a prescription drug for non-medical purposes for the first time.

a. 493,000

[p. 17. "According to the Center for Lawful Access and Abuse Deterrence (CLAAD), in 2012, an estimated 493,000 people over age 12 used a prescription drug for non-medical purposes for the first time..."]

12. Academic doping places individuals at _____ risk of moving into more extreme forms of drug abuse and involves _____ of controlled substances.

b. higher/misuse

[p. 19. "Unfortunately, those who practice academic doping are at higher risk of moving into more extreme forms of drug abuse. While academic doping involves misuse of controlled substances, it does not necessarily lead to addiction in all cases."]

13. Risk factors for developing addiction to controlled substances may vary depending on a person's

d. All of the above.

[p. 17. "The risk factors for developing addiction to controlled substances may vary depending on the age of the patient, life circumstances, medical history, and physical health."]

14. True or False. Abuse of a controlled substance is misuse of a controlled substance with no difference in definition.

b. False.

[p. 13. "Misuse of a controlled substance differs slightly in definition from abuse."]

15. According to the Substance Abuse and Mental Health Services Administration, heroin use rose by _____ percent between 2007 and 2011.

b. 75

[p. 16. "According to the Substance Abuse and Mental Health Services Administration, heroin use rose by 75 percent between 2007 and 2011."]

16. The NIDA Quick Screening Tool asks basic questions that clarify whether the patient has used _____ within the past year and how much.

d. All of the above.

[p. 23-24. "The NIDA Quick Screening Tool asks basic questions that clarify whether the patient has used alcohol, illicit or prescription drugs, or tobacco within the last year, as well as how much of each."]

17. Prescription drug monitoring programs have been developed in the majority of states within the U.S. to track the _____ of controlled substances.

a. prescribing

[p. 21. "Prescription drug monitoring programs have been developed in the majority of states within the U.S. to track the prescribing of controlled substances."]

18. Several guidelines to adhere to when prescribing controlled substances when there is a history of substance abuse, include all EXCEPT:

b. two pharmacists dispense medications

[p. 26. "... several guidelines to adhere to when prescribing controlled substances when there is a history of substance abuse, which include ensuring that only one clinician is responsible for writing prescriptions and only one pharmacist dispenses medications to avoid overlapping or "shopping" between prescribing providers."]

19. True or False. Prescribing controlled substances to be used "prn" or "as needed" is recommended practice to avoid prescription drug abuse.

b. False

[p. 38. "Avoid prescribing controlled substances to be used "prn" or "as needed," if possible."]

20. An _____ is an effective method of managing opioid analgesics that are controlled substances while controlling the situation to reduce the risk of drug misuse.

a. opioid trial

[p. 39. "An opioid trial is an effective method of managing opioid analgesics that are controlled substances while controlling the situation to reduce the risk of drug misuse."]

References Section

The reference section of in-text citations include published works intended as helpful material for further reading. Unpublished works and personal communications are not included in this section, although may appear within the study text.

1. Tadros, A., et al. (2016). Emergency department visits by pediatric patients for poisoning by prescription opioids. *Am J Drug Alcohol Abuse*. Retrieved online from Pub Med at <http://www.ncbi.nlm.nih.gov/pubmed/27398815>.
2. Hazard Vallerand, A., Sanoski, C., Hopfer Deglin, J. (2017). *Davis's drug guide for nurses* (15th ed.). Philadelphia, PA: F.A. Davis
3. Mosby. (2017). *Mosby's dictionary of medicine, nursing & health professions*. St. Louis, MO: Elsevier
4. United States Drug Enforcement Administration. (n.d.). *Drug scheduling*. Retrieved from <https://www.dea.gov/druginfo/ds.shtml>
5. Leavitt, S. (2012, Jun.). "Narcotics" vs. "opioids" – *Language matters*. Retrieved from <http://updates.pain-topics.org/2012/06/narcotics-vs-opioids-language-matters.html>
6. American College of Preventive Medicine. (2011). *Use, abuse, misuse & disposal of prescription pain medication clinical reference*. Retrieved from <http://www.acpm.org/?UseAbuseRxClinRef>
7. Medical Board of California. (2014, Nov.). *Guidelines for prescribing controlled substances for pain*. Retrieved from http://www.mbc.ca.gov/licensees/prescribing/pain_guidelines.pdf
8. Wright, M. (2014, Jun.). *Assessment of drug dependence*. Retrieved from <http://patient.info/doctor/assessment-of-drug-dependence>
9. National Institute for Drug Abuse. (n.d.). *NIDA Quick Screen V1.0*. Retrieved from

- https://www.drugabuse.gov/sites/default/files/files/QuickScreen_Updated_2013%281%29.pdf
10. O'Brien, C. (2014, Mar.). Managing patients with a history of substance abuse. *Can Fam Physician*. 60(3): 248-250. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3952760/>
 11. Perrone, J., Nelson, L. (2012, Jun.). Medication reconciliation for controlled substances – an “ideal” prescription drug monitoring program. *N Engl J Med* 2012; 366: 2341-2343. Retrieved from <http://www.nejm.org/doi/full/10.1056/nejmp1204493#t=article>
 12. Centers for Medicare and Medicaid Services (CMS) (2014). *What is a prescriber's role in preventing the diversion of prescription drugs?* Retrieved from <https://www.cms.gov/medicare-medicaid-coordination/fraud-prevention/medicaid-integrity-education/provider-education-toolkits/downloads/prescriber-role-drugdiversion.pdf>
 13. National Institute of Drug Abuse. (2003, Oct.). *What are risk factors and protective factors?* Retrieved from <https://www.drugabuse.gov/publications/preventing-drug-abuse-among-children-adolescents/chapter-1-risk-factors-protective-factors/what-are-risk-factors>
 14. Canadian Agency for Drugs and Technologies in Health. (2012, Jun.). *Opioid trial periods for management of chronic non-cancer pain: A review of clinical effectiveness, guidelines and recommendations*. Retrieved from <https://www.cadth.ca/media/pdf/htis/may-2013/RC0354%20Opioid%20Trial%20Period%20Final.pdf>
 15. The Royal College of Anaesthetists Faculty of Pain Medicine. (2016). *The opioid trial*. Retrieved from <https://www.fpm.ac.uk/faculty-of-pain-medicine/opioids-aware/structured-approach-to-prescribing/opioid-trial>
 16. Logan, J., Liu, Y., Paulozzi, L., Zhang, K., Jones, C. (2013, Aug.). Opioid prescribing in emergency departments: The prevalence of

- potentially inappropriate prescribing and misuse. *Medical Care* 51(8): 646-653.
17. Van, C. (2014, May). *Academic doping: The rise of the study drug*. Retrieved from <http://www.kolotv.com/home/headlines/Academic-Doping-The-Rise-of-the-Study-Drug-258459701.html>
 18. American Academy of Family Physicians. (2010). *Controlled substance refill program: Patient agreement form*. Retrieved from <http://www.aafp.org/fpm/2010/1100/fpm20101100p22-rt1.pdf>
 19. Jamison, R., Serrailier, J., Michna, E. (2011, Oct.). Assessment and treatment of abuse risk in opioid prescribing for chronic pain. *Pain Res Treat*. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3200070/>
 20. Reilly, C. (2016, May). *Women face increased risk of prescription opioid misuse*. Retrieved from <http://www.pewtrusts.org/en/research-and-analysis/analysis/2016/05/12/women-face-increased-risk-of-prescription-opioid-misuse>
 21. Kounang, N., Goldschmidt, D. (2016, Aug.). *DEA declines to loosen restrictions on medical marijuana*. Retrieved from <http://www.cnn.com/2016/08/11/health/dea-marijuana-schedule-l/>
 22. Harris, S. (2013, Mar.). Legal updates: As opioids for pain treatment come under greater scrutiny, controlled substance agreements matter more. *The Rheumatologist*. Retrieved from <http://www.the-rheumatologist.org/article/legal-updates-as-opioids-for-pain-treatment-come-under-greater-scrutiny-controlled-substance-agreements-matter-more/>
 23. National Institute on Drug Abuse. (2012, Dec.). *Medical consequences of drug abuse*. Retrieved from <https://www.drugabuse.gov/related-topics/medical-consequences-drug-abuse>

24. American College of Emergency Physicians Opioid Guideline Writing Panel. (2012, Oct.). Clinical policy: Critical issues in the prescribing of opioids for adult patients in the emergency department. *Annals of Emergency Medicine* 60(4): 499-525.
25. U.S. Department of Justice Office of Diversion Control. (n.d.). *Prescriptions: Questions and answers*. Retrieved from <http://www.deadiversion.usdoj.gov/faq/prescriptions.htm>
26. Center for Lawful Access and Abuse Deterrence (CLAAD). (2016). *Prescription drug abuse statistics*. Retrieved from <http://claad.org/rx-drug-abuse-stats/>
27. Centers for Disease Control and Prevention Office for State, Tribal, Local and Territorial Support. (2015, Jan.). *Prescription drug physical examination requirements*. Retrieved from <http://www.cdc.gov/phlp/docs/pdpe-requirements.pdf>
28. Anxiety and Depression Association of America. (2016, Aug.). *Facts and statistics: Did you know?* Retrieved from <https://www.adaa.org/about-adaa/press-room/facts-statistics>
29. Kirsh, K., Passik, S. (2014). *Assessing patients with pain and using evaluation tools*. Retrieved from <http://www.prescriberesponsibly.com/articles/patient-pain-assessment>
30. Oliver, J., et al. (2012, Sep.). American Society for Pain Management Nursing position statement: Pain management in patients with substance use disorders. *Pain Manag Nurs.* 13(3): 169-183. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3741053/>
31. U.S. Department of Justice Office of Diversion Control. (2016, Jun.). *State prescription drug monitoring programs: Questions and answers*. Retrieved from http://www.deadiversion.usdoj.gov/faq/rx_monitor.htm
32. Bohnert, A., Bonar, E., Cunningham, R., Greenwald, M., Thomas, L., Chermack, S., Blow, F., Walton, M. (2016, Mar.). A pilot randomized

- clinical trial of an intervention to reduce overdose risk behaviors among emergency department patients at risk for prescription opioid overdose. *Drug Alcohol Depend.* (2016), <http://dx.doi.org/10.1016/j.drugalcdep.2016.03.018>
33. National Institute of Justice. (n.d.). *Motivational interviewing for substance abuse*. Retrieved from <https://www.crimesolutions.gov/PracticeDetails.aspx?ID=31>
 34. Washington State Department of Labor and Industries. (n.d.). *Sample opioid treatment agreement*. Retrieved from <http://www.lni.wa.gov/ClaimsIns/Files/OMD/agreement.pdf>
 35. Shapiro, B., Coffa, D., McCance-Katz, E. (2013, Jul.). A primary care approach to substance misuse. *Am Fam Physician.* 88(2): 113-121. Retrieved from <http://www.aafp.org/afp/2013/0715/p113.html#sec-5>

The information presented in this course is intended solely for the use of healthcare professionals taking this course, for credit, from NurseCe4Less.com. The information is designed to assist healthcare professionals, including nurses, in addressing issues associated with healthcare.

The information provided in this course is general in nature, and is not designed to address any specific situation. This publication in no way absolves facilities of their responsibility for the appropriate orientation of healthcare professionals.

Hospitals or other organizations using this publication as a part of their own orientation processes should review the contents of this publication to ensure accuracy and compliance before using this publication.

Hospitals and facilities that use this publication agree to defend and indemnify, and shall hold NurseCe4Less.com, including its parent(s), subsidiaries, affiliates, officers/directors, and employees from liability resulting from the use of this publication.

The contents of this publication may not be reproduced without written permission from NurseCe4Less.com.