Care CEUs

Continuing Education for Nursing Home Administrators

Prescription Opioid Medications and Abuse

Section 1: Introduction

References: 6, 20

According to the Centers for Disease Control and Prevention (CDC), chronic pain affects an estimated 20% of the United States population. Pain can be attributed to decreased quality of life, loss of work, social isolation, and increased healthcare costs. Nurses and other healthcare professionals have the responsibility to provide adequate pain management for patients. The ongoing epidemic of opioid misuse in the United States is an adverse effect of the healthcare system's focus on adequate pain management. Overprescription of opioids, the high risk of misuse and addiction, and the lack of knowledge of non-pharmacological pain interventions all contribute to the current opioid epidemic. Because opioids have a high risk of adverse effects, it is important for nurses to have the knowledge of the adverse effects of pharmacological pain management and alternate pain management strategies.

Opioid abuse is an ongoing epidemic in the United States that can affect patients, caregivers, and healthcare professionals. According to the CDC, deaths from opioid overdose continue to rise in the United States. Healthcare professionals are also at a high risk for opioid diversion due to the accessibility and close proximity to prescription opioids. Nurses must have the knowledge to provide effective pain management while educating patients on the adverse effects of opioids and assisting patients who may be affected by opioid use disorder. In this course, participants will learn about the nursing role in pain management, the history of the opioid epidemic in the United States, signs and symptoms of opioid use disorder and opioid diversion, and different types of pain management.

Section 2: The Nursing Role in Pain Management

References: 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 20

Pain is one of the most common reasons people seek medical care. Nurses must understand what pain is and how to assess pain to be able to adequately treat patients' pain. According to the International Association for the Study of Pain, pain is defined as "an unpleasant sensory and emotional experience associated with actual or potential tissue damage". The body feels pain as a trigger for perceived danger or stress. Pain triggers the body to move away from the perceived danger.

Pain can be influenced by many different factors including biological, psychological, and social factors. Factors that influence pain include:

- Injury or trauma
- Chronic medical conditions
- Inflammation
- Stress and anxiety
- Developmental level
- Emotional state
- Culture
- Environment

The way a person perceives and expresses pain can be influenced by these factors. Developmental levels can affect how patients verbalize their pain. For example, an infant expresses pain through crying while an older child will be able to verbalize their pain. Psychological and societal factors can also play a part in pain perception. For example, different cultures may be more expressive in their pain than others, and a person who believes their pain interventions will work may report decreased pain. It is important for nurses to understand how their patients perceive pain so they can appropriately assess and treat their pain.

Classification of Pain

Pain can be classified by different factors such as severity, duration, location, and etiology. The classification of pain can help healthcare professionals determine which type of pain interventions will be most effective.

The World Health Organization (WHO) developed the analgesic ladder in 1986 to classify pain based on severity as either mild, moderate, or severe pain. The type of pain medication used is based on the severity of the pain. For example, mild pain can be treated with non-pharmacological methods or non-opioid medications, while severe pain may require opioid medications.

Pain can also be classified based on duration as acute or chronic pain. Acute pain is pain that lasts for a short amount of time and is resolved when the triggering event is treated. Acute pain can last for a few seconds or up to a few months. Symptoms of acute pain include:

- Numbness and tingling
- Sharpness
- Throbbing
- Stabbing
- Sleep disturbances
- Appetite changes
- Diaphoresis
- Vital sign changes
- Guarding
- Restlessness

Examples of acute pain include postoperative pain, burns, sprains, fractures, trauma, or headache. Treating the cause of the pain typically relieves acute pain,

but other interventions can include ice, heat, rest, physical therapy, and non-opioid medications.

Chronic pain is pain that consistently lasts longer than three months. Causes of chronic pain include chronic diseases such as arthritis or neuropathy, injury, and inflammation, or an unknown cause. Symptoms of chronic pain include:

- Muscle tension
- Decreased mobility and activities of daily living
- Appetite changes
- Mood changes such as depression, anxiety, and frustration
- Fear of reinjury

Classifying pain can help healthcare providers determine the best course of treatment. Nurses should perform a comprehensive pain assessment to determine what type and severity of pain their patient is experiencing. This is an essential part of pain management.

The Nursing Role in Pain Management

The American Nurses Association states that pain is a subjective experience and nurses must accept pain as whatever the patient says it is. Nurses have a responsibility to assess pain, provide pain interventions, and document the effectiveness of the interventions.

The nursing pain assessment involves collecting both subjective and objective data to determine the quality, type, and severity of pain. Subjective data is information obtained from the patient and helps nurses assess the cause, quality, location, and severity of the patient's pain. Pain scales such as the numeric rating scale can help collect subjective pain data. Patients can use the numeric rating scale to rate their pain severity on a scale from 0 to 10 with "0" being "no pain" and "10" being "the

worst pain imaginable". Objective data includes measurable things such as vital signs and patient behavior. Patients may show nonverbal signs of pain such as grimacing, guarding, and elevated heart rate to exhibit pain. Nurses can assess behavioral cues such as anger, agitation, and moaning to determine if a patient is in pain. Objective data can be helpful in assessing pain in patients who are unable to verbally express their pain. Patients who have difficulty communicating, are developmentally delayed, or who are unconscious may benefit from an objective pain assessment.

A thorough pain assessment can help determine what kind of pain management would be most effective. Nurses have the responsibility to assess pain in a timely manner, document their findings and any pain interventions, and reassess the patient's pain to determine if the interventions are effective. Nurses are a vital part of a patient's pain management plan.

Section 2 Personal Reflection

What subjective and objective data may a nurse observe in a patient experiencing severe pain?

Section 2 Key Words

Pain - An unpleasant sensory and emotional experience associated with actual or potential tissue damage

Acute pain - Pain that has a short duration and is from a specific cause

Chronic pain - Pain that is persistent for longer than six months but can be varying in severity

Subjective data - Information obtained from the patient and/or family members and offers important cues from their perspectives

Objective data: Information that can be measured such as vital signs, physical attributes, and behavior

Section 3: Pharmacological Pain Management

References: 5, 6, 10, 13, 21, 22

Effective pain management includes a combination of pharmacological and non-pharmacological interventions. Pharmacological therapy is the use of medication to treat a disease, illness, or medical condition and can be very effective for pain management. Certain medications, called analgesics, are specifically used to treat pain. There are three types of analgesics: opioids, non-opioids, and adjuvants. The type of medication used depends on the type, duration, and severity of the pain.

Non-opioid and Adjuvant Analgesics

Non-opioid analgesics are medications used for mild to moderate pain relief and include nonsteroidal anti-inflammatory drugs (NSAIDS), anticonvulsants, and antidepressants. Non-opioids can be used alone for mild to moderate pain or in conjunction with opioids to treat severe pain. Common non-opioid pain medications include ibuprofen, acetaminophen, naproxen, and aspirin.

Non-opioid medications can provide adequate pain relief, but have side effects to watch out for. Non-opioid medications can have higher risks in certain populations such as older adults, pregnancy, and liver, cardiac, renal, or gastrointestinal disease. NSAIDS can cause nausea and vomiting, gastrointestinal bleeding, renal failure, and an increased risk of heart attack and stroke if patients take too much or longer than directed. Acetaminophen can also cause severe liver damage if patients take too much or consume a large amount of alcohol with the medication. Patients need to be educated on the side effects of non-opioid

analgesics, but overall they have significantly less risk of adverse effects than opioid analgesics.

Adjuvant analgesics are medications that are not classified as pain medications but have been found to have an analgesic effect along with opioids. Adjuvants include antidepressants, anticonvulsants, gabapentin, and amitriptyline. These medications can be used to treat conditions other than pain, but have also been found to help decrease pain when used in collaboration with opioid pain management.

Nurses can consider using non-opioid medications for acute pain such as sprains, minor surgeries, dental pain, or abdominal pain. Non-opioid medications have the potential to improve pain and daily function without risk for serious harm.

Opioid Analgesics

Opioid analgesics are powerful prescription medications that help reduce pain by blocking pain signals. Some opioid analgesics are naturally made from components of poppy plants. Other types of opioids are synthetic and are created in a laboratory. Synthetic opioids are often much more potent than natural opioids. Natural opioids include:

- Morphine
- Codeine

Synthetic opioids include:

- Hydromorphone (Dilaudid)
- Hydrocodone
- Hydrocodone and acetaminophen (Vicodin, Norco)
- Oxycodone (Oxycontin)
- Oxycodone and acetaminophen (Percocet)

- Fentanyl
- Tramadol
- Meperidine (Demerol)
- Heroin

Opioid medications can be very effective in treating severe pain, but also have very serious side effects. Opioid analgesics can have severe side effects including risk of addiction and overdose. Side effects of opioids include:

- Respiratory depression
- Drowsiness
- Confusion
- Constipation
- Increased pain sensitivity
- Tolerance
- Physical dependence
- Nausea and vomiting
- Itching
- Dry mouth

Respiratory depression is a serious side effect of opioids that must be monitored closely. Respiratory depression can cause serious neurological effects by depriving the brain of oxygen and even cause death. Nurses must closely monitor patients for respiratory depression and educate patients about these serious side effects.

Patients taking opioid medications must also be aware of the risk of tolerance and physical dependence. Tolerance is a condition when the body builds up resistance to a certain medication. If patients take opioids for an extended period of time, they are at risk of building up opioid tolerance which may require a higher dose to

reach the same desired pain relief. Physical dependence can also occur when a patient takes opioids for an extended period of time. Patients can experience physical symptoms of withdrawal when abruptly stopping the use of opioids. It is important for nurses to educate patients on the importance of slowly weaning off opioids to prevent physical dependence.

Healthcare providers should use caution when prescribing opioid analgesics for pain relief. The CDC recommends avoiding opioids for pain management in patients younger than 18 years old and to avoid opioids as the first choice of therapy for chronic pain. Non-opioid medications are recommended to treat chronic pain as research shows opioids should only be used short-term to prevent the side effects of tolerance and addiction. If opioids are necessary to adequately manage pain, healthcare providers should prescribe the lowest dose possible for a short period of time, provide patient education on potential side effects and risks of withdrawal and addiction. Healthcare providers should also schedule follow up appointments with patients to ensure their pain treatment plan is effective and that severe adverse effects are not present. According to the CDC, healthcare providers should only consider opioids for pain management if the expected benefits outweigh the risks.

Section 3 Personal Reflection

What education should a nurse provide to a patient who has been prescribed opioids for pain relief?

Section 3 Key Words

Pharmacological therapy - The use of medication to treat a disease, illness, or medical condition

Analgesics - Medications used to relieve pain

Non-opioid analgesics - Medications including non-steroidal anti-inflammatory drugs (NSAIDS) used for mild to moderate pain relief

Non-steroidal anti-inflammatory drugs (NSAIDS) - Medications that provide mild to moderate pain relief while also reducing fever and inflammation

Adjuvants - Medications that is not classified as an analgesic but have been found to have an analgesic effect with opioids

Opioid analgesics - Powerful prescription medications that help reduce pain by blocking pain signals

Natural opioids - Medications such as morphine and codeine made from certain varieties of poppy plants and used to treat pain

Synthetic opioids - Medications such as fentanyl that are manufactured in a laboratory setting and can be a lot more potent than natural opioids

Respiratory depression - A breathing disorder manifesting slow and irregular breaths and can lead to serious neurological effects and death

Tolerance - When the body builds up resistance to a medication

Physical dependence - When the patient experiences physical symptoms of withdrawal when stopping a medication

Section 4: Opioid Use Disorder

References: 14, 15, 16, 17, 19, 22, 25, 36, 37, 38

Opioid use disorder is an ongoing epidemic in the United States that can affect patients, caregivers, and healthcare workers. Over 3 million people in the United States suffer from opioid use disorder. Opioid use disorder is a misuse of opioids that causes significant impairment or distress. The CDC advises that healthcare

providers use the term “opioid use disorder” instead of terms such as “opioid abuse” or “opioid addiction”.

The diagnosis of opioid use disorder is based on specific criteria. A patient diagnosed with opioid use disorder must meet two or more of the criteria within one year:

- Increased opioid tolerance
- Withdrawal symptoms when decreasing opioid dose
- Expressed desire to decrease use of opioids or expressed desire to use opioids
- Use of opioids interferes with daily life activities such as work
- Expressed desire to continue use of opioids despite interference with daily life activities
- Using opioids in dangerous situations
- Isolation or reduction of activities due to opioid use
- Increased effort to obtain opioids

The time it takes to become tolerant to or dependent on opioids can vary from person to person. Patients suffering from opioid use disorder may make great effort to hide signs and symptoms. It is important for nurses to be aware of signs and symptoms to identify opioid use disorder and provide early intervention.

Signs and Symptoms of Opioid Use Disorder

Patients may exhibit physical signs of opioid use disorder, opioid overdose, and opioid withdrawal. It is important for nurses to be able to differentiate between these different conditions.

Symptoms of opioid use disorder include:

- Increased use of opioids
- Physical dependence of opioids
- Cravings of opioids
- Drowsiness
- Changes in sleep habits
- Weight loss
- Malaise
- Changes in daily activities
- Decreased libido
- Decreased personal hygiene
- Financial difficulties
- Isolation from friends and family

Opioid withdrawal are the physical symptoms that occur when the body attempts to recover from physical dependence on opioids. Withdrawal symptoms can occur at any time when long-term opioids are stopped or the dose is reduced. Opioid withdrawal symptoms include:

- Nausea and vomiting
- Diaphoresis
- Anxiety and agitation
- Insomnia
- Hot or cold flashes
- Muscle aches and cramps
- Dehydration
- Tachycardia

- Diarrhea

Opioid overdose symptoms include pinpoint pupils, unresponsiveness, and respiratory depression. Nurses must be able to identify signs of opioid use disorder and symptoms of opioid overdose to help patients receive treatment and quick interventions in serious situations. A patient experiencing an opioid overdose can have permanent neurological deficits or death if interventions are not initiated quickly. Nurses who can identify these signs and symptoms and promote early interventions can prevent many adverse patient outcomes.

Who is at Risk for Opioid Use Disorder?

Anyone can develop an addiction to opioids, but some people are at higher risk than others. Patients at a higher risk of developing opioid use disorder include:

- Previous history or family history of alcohol or substance abuse
- Previous history of sexual abuse or negative childhood experiences
- Mental health conditions such as depression or bipolar disorder
- Previous history of opioid use disorder or resuming use of opioids after abstinence
- Regular use of opioids
- Using high doses of opioids or more frequently than prescribed
- Using opioids along with alcohol or benzodiazepines

It can sometimes be difficult identifying patients struggling with opioid use disorder. Individuals often go to great lengths to hide signs of opioid use disorder due to shame, guilt, or denial. Identifying patients at risk of opioid use disorder can help initiate early interventions. Nurses can be a resource to patients who are struggling to come to terms with their opioid use disorder and to families who are struggling to get their loved one the help that they need. Providing an objective

assessment of patient symptoms and risk factors can be a vital part of treating opioid use disorder.

Treatment for Opioid Use Disorder

Acute treatment for opioid use disorder involves helping patients reduce use of opioids while managing their withdrawal symptoms. Treatment can include a combination of medications and support from professionals and loved ones.

Common medications used to treat opioid withdrawal include methadone, buprenorphine, and naloxone. Methadone is used to treat withdrawal symptoms and can be used as a long-term treatment to manage opioid dependence. Methadone is an opioid agonist and can help decrease the intensity of withdrawal symptoms which can help patients reduce their desire to return to using opioids. Methadone is individually dosed specific to each patient and must be administered under supervision. Over time, the dose of methadone can be decreased as patients have decreased withdrawal symptoms and urges to use opioids. Patients should be educated about the side effects of methadone as some can have serious health consequences. Side effects of methadone include:

- Nausea and vomiting
- Itching
- Diaphoresis
- Agitation
- Constipation
- Respiratory depression
- Dizziness and syncope
- Tachycardia
- Hallucinations

Because methadone is individually dosed and can have serious adverse effects, only certified opioid treatment programs can prescribe and distribute methadone for opioid use disorder. Methadone also requires a gradual tapering of dosage to prevent withdrawal symptoms. The limited prescribers and long-term use can complicate access for patients. It is important for nurses to be aware of accessible resources for patients who seek methadone as a treatment for opioid use disorder.

Buprenorphine is a partial opioid agonist that can help treat opioid use disorder. Buprenorphine does not have as strong effects as methadone, but can still be effective in treating opioid use disorder. Buprenorphine can be prescribed by any physician which can make it more easily accessible than methadone. Similar to methadone, buprenorphine can be used long-term and have decreased dosage and frequency as patients have decreased withdrawal symptoms and urges to use opioids. Buprenorphine can also have serious side effects which include:

- Respiratory depression
- Overdose
- Adrenal insufficiency
- Dependence
- Adverse interactions with benzodiazepines

Because of the risk of dependency and overdose, naloxone is often prescribed with buprenorphine to decrease the risk of misuse.

Naloxone is an opioid antagonist and can quickly reverse the effects of opioids. Naloxone is the gold standard reversal agent for opioid overdose. Naloxone can assist in treatment for opioid use disorder, but has a short-term effect. Naloxone can have adverse effects including:

- Allergic reaction

- Opioid withdrawal symptoms including agitation, muscle aches, nausea and vomiting, diaphoresis, and dizziness

Naloxone can be beneficial for any patient at risk for an opioid overdose. These patients can include anyone taking opioids for long-term pain management, recently experiencing opioid use disorder, or recently stopping opioid use.

Aside from medications, long-term treatment for opioid use disorder can include counseling, support groups, and outpatient treatment plans. Organizations such as Narcotics Anonymous, SMART Recovery, and the SAMHSA Center for Substance Abuse Treatment can help patients find the right treatment plan. Narcotics Anonymous is a community-based organization that focuses on support groups for those who suffer from addiction to narcotic medications. Narcotics are another term for any pain relief medication that is highly addictive, including opioids. Narcotics Anonymous was founded in 1953 and provides services such as group meetings, mentoring, guidance, and community for those suffering with addiction. The organization provides support in over 100 countries and has an extensive network for patients to find community and support when seeking help with opioid use disorder. SMART Recovery helps patients struggling with narcotic addiction by focusing on evidence based behavior therapy treatment programs. The SMART Recovery program strives to help patients manage their own behaviors and develop skills and tools to improve their lives. The SAMHSA Center for Substance Abuse Treatment is a department within the US Department of Health and Human Services that focuses on public health interventions in the United States to help treat and prevent opioid use disorder and addiction. SAMHSA helps promote federal and local legislation as well as public education in fighting the opioid epidemic. These organizations are just a few of the resources available to patients seeking treatment for opioid use disorder. Every patient should work with their healthcare provider to create an individualized and comprehensive treatment plan.

Section 4 Personal Reflection

What are some barriers patients may face when seeking treatment for opioid use disorder? How can nurses assist patients in overcoming these barriers?

Section 4 Key Words

Opioid use disorder - A problematic pattern of opioid use that causes significant impairment or distress

Cravings - The overwhelming urges to use opioids despite understanding of the potential consequences

Opioid withdrawal - The physical symptoms that occur when the body attempts to recover from physical dependence on opioids

Overdose - Poisoning of the body when a drug is taken in excessive amount which can be fatal or nonfatal

Respiratory depression - A breathing disorder manifesting slow and irregular breaths and can lead to serious neurological effects and death

Methadone - An opioid agonist that helps decrease the intensity of opioid withdrawal symptoms

Buprenorphine - A partial opioid agonist that can helps decrease the intensity of opioid withdrawal symptoms

Benzodiazepines - Sedative medications used for anxiety, insomnia, and other conditions and can increase risk of overdose when combined with opioids

Naloxone - An opioid antagonist that quickly reverses the effects of opioids

Narcotics - Another term for any pain relief medication that is highly addictive, including opioids

Section 5: Opioid Diversion

References: 15, 18, 19, 26, 27, 28

Diversion is a major problem in healthcare facilities that often goes undetected and unreported. Diversion is when medications are illegally moved from their intended location to another for personal use or distribution to others. Opioids, depressants, stimulants, and hallucinogens are all common medications abused by healthcare professionals, but opioids are the most common medications diverted in healthcare settings. According to the National Council of State Boards of Nursing, 15% of healthcare professionals become dependent on these medications during their careers. The ease of access to opioids drastically increases the likelihood of dependence and diversion.

Opioid diversion can lead to harm of patients, healthcare professionals, healthcare facilities, and public health risks. Adverse effects on patients include:

- Unrelieved pain
- Risk of infection from contaminated syringes or vials
- Decreased level of care due to impaired healthcare professionals
- Theft of medications

Adverse effects on healthcare professionals include:

- Opioid use disorder, overdose, and death
- Loss of job and professional license
- Criminal prosecution
- Medical malpractice lawsuits

Adverse effects on healthcare facilities include:

- Loss of eligibility for Medicare and Medicaid reimbursement

- Medical malpractice lawsuits
- Fines
- Decreased public trust

Adverse effects on public health include:

- Outbreaks of infectious diseases such as hepatitis C
- Increased rates of opioid use disorder
- Increased rates of hospitalizations and deaths relating to opioid use

Signs of Opioid Diversion

Opioid diversion can have lasting negative effects and nurses must be aware of methods to prevent diversion. Recognition of signs of opioid diversion is the first step to prevention. Different methods of opioid diversion can occur at any point in the medication distribution and administration process. This can include the intake, storage, distribution, administration, or wasting of medications. According to the American Nurse Journal, the most common time for opioid diversion to occur is during the wasting of medications. Wasting of medications is required for any controlled substance that remains in a single use vial or pre-filled containers, and any unused controlled substances. Controlled substances include medications with a high risk of misuse or dependence and significant adverse effects when given in large doses. Controlled substances require a physician prescription and have many safeguards in place during administration in healthcare facilities.

Nurses should be aware of signs of opioid diversion while working in healthcare facilities especially when wasting medications. Behaviors that may indicate medications are being diverted during wasting include:

- Failure to document wasted medications
- Frequently wasting medications

- Asking coworkers to document wasted medications that they did not witness
- Wasting medication doses that do not require a waste
- Frequent discrepancies or overridden medications in the medication dispensing unit records
- Offering to waste medications for coworkers or other patients

Opioid diversion can also occur during medication administration. Behaviors that may indicate medications are being diverted during administration include:

- Frequent medication errors
- Missing medication documentation
- Removing medications without orders
- Removing medications for patients who have been discharged
- Documenting medications without administration
- Continued patient complaints of pain despite medications being documented
- Offering to administer medications for coworkers or other patients
- Stealing syringes or medication vials
- Storing controlled substances in their pockets
- Unnecessarily diluting medications
- Administering incomplete medication doses to patients
- Falsifying verbal medication orders
- Repeatedly removing PRN medications
- Asking healthcare providers for more pain medication orders

Nurses should pay attention to individual behaviors that could indicate medications are being diverted. Abnormal behaviors that may indicate a healthcare professional is diverting medications include:

- Drowsiness
- Forgetfulness
- Unreliability at work
- Anxiety and depression
- Paranoia
- Slurred speech
- Recurrent accidents or injuries
- Frequent mistakes while at work
- Blaming others for medication or documentation errors
- Isolation from others
- Poor personal or professional relationships
- Recurrent unexplained absences from work
- Repeatedly arriving late to work
- Refusing drug testing at work
- Taking multiple breaks during their shift
- Volunteering for extra shifts or to stay extra hours
- Wearing long sleeves even in warm weather
- Physical signs such as diaphoresis, constricted pupils, decreased appetite, itching, nausea, vomiting, and diarrhea

Opioid Diversion Prevention

In healthcare facilities, preventing diversion must be a team effort with collaboration between all healthcare specialties. Healthcare facilities must have systems in place to monitor and prevent opioid diversion. Healthcare facilities must also have a culture that encourages nurses to speak up if they believe someone is diverting medications. Nurses may be afraid to speak up out of fear of negative consequences or a lack of education on the importance of identifying signs of diversion.

Having systems in place such as surveillance and safeguards on medication wasting and administration can help healthcare facilities prevent diversion. Surveillance should focus on patterns of diversion behaviors. Healthcare facilities can install video monitoring of high traffic areas, such as the medication room and medication dispensing units. Tracking data from the pharmacy and medication dispensing units can help identify discrepancies and nurses who are exhibiting diversion behaviors when accessing and wasting medications.

Nurses can help prevent opioid diversion by ensuring they are applying the best practices to medication wasting and administration and reporting any barriers. Barriers to medication wasting and administration include:

- Frequent interruptions while using the medication dispensing unit, dosing medications, and documenting medication waste
- Lack of medication administration supplies
- Inability to find a coworker to witness medication waste in a timely manner
- Lack of education on the signs of opioid diversion and prevention strategies

Nurses should ensure they are always wasting medications at the medication dispensing units and using appropriate controlled substance waste areas when wasting medications. An appropriate controlled substance waste area binds the medications and makes it difficult for someone to illegally access the medication.

Nurses should always witness in person the medication they are asked to waste and ensure they log out of the medication dispensing units after use.

Collaboration with pharmacists can help prevent opioid diversion. Only providing small doses or pre-filled syringes can decrease the need for nurses to waste medications. Pharmacists can also help detect signs of diversion through audits of medication dispensing units and nursing administration reports. Preventing opioid diversion is a collaborative effort that must be taken seriously in every healthcare facility. Nurses must be educated on the best practice for wasting and administering controlled substances and the signs of opioid diversion.

Section 5 Personal Reflection

What are some strategies you can implement in your workplace to help prevent opioid diversion?

Section 5 Key Words

Diversion - When medications are illegally moved from their intended location to another for personal use or distribution to others

Controlled substances - Medications with a high risk of misuse or dependence and significant adverse effects when given in large doses and require a physician prescription and safeguards during administration in healthcare facilities

Wasting of medications - A process required for any controlled substance that remains in a single use vial or prefilled containers and any unused controlled substances

Medication dispensing unit - A device used in healthcare facilities to house medications and provide safeguards and reports when nurses access and waste medications

Controlled substance waste area - Designated area that binds the controlled substances and makes it difficult for someone to illegally access the medication

Section 6: The Opioid Epidemic

References: 14, 15, 16, 19, 29, 30, 32

The United States is currently in an opioid epidemic. Opioid use disorder can be traced back to the overprescribing of opioids in the 1990s. In the 1990s, prescribing opioids increased in an attempt to adequately treat patients' pain. Healthcare providers began to think of pain as "the fifth vital sign" and put an intense focus on eliminating patients' pain. Thinking of pain as a vital sign forced healthcare professionals to frequently assess pain with the goal of doing everything possible to eliminate pain. With the focus on treating pain, the potential risk for opioid misuse and addiction was often downplayed, especially in opioid marketing campaigns.

According to the CDC, there are three waves of the opioid epidemic. In the 1990s, opioid overdoses and deaths were due to the misuse of prescription opioids. Healthcare providers overprescribed opioids in hopes of adequately treating pain which caused many patients to develop tolerance and opioid use disorder. The second wave of the opioid epidemic occurred in the 2000s when many opioid overdoses and deaths involved heroin use. Heroin is an illegal opioid made from morphine and can be extremely addictive. Between 2002 and 2011, research shows that 25 million people in the United States used opioids for nonmedical use.

The third wave of the epidemic started in 2013 when many opioid overdoses and deaths involved synthetic opioids such as fentanyl. Natural opioids, such as morphine and codeine, are made from certain varieties of poppy plants. Synthetic opioids are medications that are manufactured in a laboratory setting and can be a lot more potent than natural opioids. Fentanyl is a common synthetic opioid and

is often illegally mixed into counterfeit pills to increase the potency. Many opioid overdose deaths include other drugs.

According to the CDC in 2021, opioid overdose deaths had increased more than six times the number of deaths in 1999. In 2021, 220 people died of an opioid overdose each day. As of 2017, the United States declared opioid overdose a national emergency. The opioid epidemic can adversely affect patients, families, healthcare facilities, and public health resources.

Stigmatization of the Opioid Epidemic

Many stigmas surround the opioid epidemic and those that suffer from opioid use disorder. The World Health Organization defines a stigma as disapproval or discrimination of a person or group of people that results from ignorance, judgment, or false information. Stigmas can result in people being excluded from certain aspects of society. Isolating language and biased media coverage can contribute to stigmas of opioid use disorder. Many times, the media focuses on the individuals who suffer from opioid use disorder as the contributors to the opioid epidemic. There is often not a lot of media coverage on the responsibilities of the healthcare system and pharmaceutical companies in the opioid epidemic. People who suffer from opioid use disorder are often portrayed as problematic and incapable of maintaining a responsible lifestyle. The use of fentanyl and intravenous medications for nonmedical use are highly stigmatized. Because of these negative stigmas, individuals suffering from opioid use disorder may be less likely to seek out treatment. Individuals may be fearful of social isolation, discrimination, and even criminalization when struggling with opioid use disorder.

Communities can be stigmatized as well. The opioid epidemic especially impacts communities with high levels of poverty and lack of access to education and healthcare. These communities often are the ones who need the most help and resources to fight the opioid epidemic, but are often ignored due to negative bias. Stigmas can lead to lack of funding and support for opioid treatment programs

and prevention education. Identifying inclusive language for legislation and increasing federal and local government support can help improve access to education and treatment programs. Communities should focus on involving people with real experience with opioid use disorder in legislation and prevention strategies, as well as promoting opioid use disorder prevention education to healthcare providers and the public.

Efforts to Fight the Opioid Epidemic

Many efforts have been made to fight the opioid epidemic on a local and national level. Many federal organizations have implemented initiatives to provide resources for preventing and treating opioid use disorder including the United States Department of Health and Human Services, the CDC, the Food and Drug Administration, and the Agency for Healthcare Research and Quality. Federal legislation has also been passed to help healthcare professionals fight the opioid epidemic. The Mainstreaming Addiction Treatment (MAT) Act expanded the ability for all healthcare providers to prescribe medications to treat opioid use disorder. The Comprehensive Addiction and Recovery Act (CARA) in 2016 helped decriminalize low offense drug crimes and expanded programs for opioid use disorder treatment referrals and access to naloxone. The Substance Use Disorder Prevention that Promotes Opioid Recovery and Treatment (SUPPORT) for Patients and Communities Act in 2018 allowed all healthcare providers to prescribe buprenorphine for treating opioid use disorder. These legislations are just a few of the important interventions in fighting the opioid epidemic.

The CDC helps fund the Overdose Data to Action (OD2A) which helps public health departments nationwide monitor opioid misuse and implement prevention strategies. Prevention strategies include data collection of opioid overdoses and related deaths, improving access to opioid use disorder treatment options, monitoring the prescription of opioids, and partnering with first responders to improve overdose treatment and prevention.

The CDC has also published extensive recommendations for prescribing opioids for pain management and decreasing opioid use disorder rates. CDC recommendations for using opioids for pain management include:

- Only considering opioids for pain relief when the benefits outweigh the risks
- Prescribing the lowest dose for the shortest amount of time
- Ongoing monitoring of patients using opioids for pain management
- Following up with patients one to four weeks after initiation of opioids and every three months while continuing opioid pain management
- Deterring concurrent prescriptions of opioids and benzodiazepines to prevent adverse interactions
- Treatment recommendations for patients with opioid use disorder

CDC recommendations for decreasing opioids use disorder rates and preventing adverse effects include:

- Increasing public awareness of opioid use disorder and treatment options
- Monitoring local and national data of opioid use disorder to better understand the opioid epidemic and its effects
- Promoting research in opioid use disorder, prevention, and treatment
- Partnering with local and national organizations to help fight the opioid epidemic and spread public awareness
- Increasing local and federal resources for opioid use disorder prevention and treatment
- Supporting healthcare facilities and healthcare professionals in preventing and treating opioid use disorder, overdose, and hospitalizations

The awareness of national and local prevention efforts help healthcare professionals and communities prevent opioid overdoses and decrease opioid related deaths. Nurses have a responsibility to be informed of the latest legislation and treatment options in their own communities, especially those at high risk of opioid misuse.

The Use of Naloxone in the Opioid Epidemic

Naloxone has been shown to be an essential part in fighting the opioid epidemic. Naloxone is the gold standard for opioid reversal agents and can reverse adverse effects such as respiratory depression. Naloxone can be used as a nasal spray or an injection. Naloxone is very safe to use and can save the life of someone who has overdosed on opioids. It is important for the public to understand that naloxone cannot cause harm to a patient who has overdosed on opioids. The best practice is to always administer naloxone if opioid overdose symptoms are present.

Naloxone is becoming more accessible and prevalent in the United States. Research shows that providing access to naloxone to communities can reduce opioid related deaths. According to the CDC, 40% of opioid overdose deaths occur with another person present. Increasing access and education of naloxone can decrease the number of opioid related deaths.

Nurses can play an important role in the accessibility of naloxone by educating the public on how and when to use naloxone and the signs of an opioid overdose. Education for cardiopulmonary resuscitation (CPR) can also help prevent opioid related deaths. Naloxone can now be found in every US state at many pharmacies, healthcare facilities, and community programs designed to prevent opioid overdoses. Anyone can seek out education on the administration of naloxone and obtain doses without a patient specific prescription. First responders such as police officers and paramedics now carry naloxone with them in case they respond to a patient who has overdosed on opioids. Healthcare providers should

also consider offering naloxone to patients who exhibit risk factors of opioid use disorder.

Section 6 Personal Reflection

What are some ways you can get involved in your community to educate people about the opioid epidemic and prevention strategies for opioid overdose?

Section 6 Key Words

Opioid epidemic - The national public health crisis due to the increase of the prescribing of opioids and the use of opioids for nonmedical use

Nonmedical use - Using prescription medications without healthcare provider supervision and not in the way that the medication is intended for use

Heroin - An illegal opioid made from morphine and can be extremely addictive

Natural opioids - Medications such as morphine and codeine made from certain varieties of poppy plants and used to treat pain

Synthetic opioids - Medications such as fentanyl that are manufactured in a laboratory setting and can be a lot more potent than natural opioids

Fentanyl - A synthetic opioid used for treating severe pain and is 50 to 100 times more powerful than morphine

Stigma - The disapproval or discrimination of a person or group of people that results from ignorance, judgment, or false information and can result in people being excluded from certain aspects of society

Naloxone - An opioid antagonist that quickly reverses the effects of opioids

Section 7: Non-pharmacological Pain Management

References: 6, 10, 11, 23, 24, 31, 33, 34, 35

Non-pharmacological therapies can be a great alternative to using opioid analgesics for pain management. Non-pharmacological therapy is any intervention that helps reduce pain without using medication. Examples of non-pharmacological therapy include:

- Relaxation techniques
- Hot or cold therapy
- Immobilization and rest
- Music
- Massage
- Breathing exercises
- Meditation
- Distraction
- Cognitive behavior therapy
- Physical therapy and exercise
- Guided imagery

Non-pharmacological therapy can be used with or without pharmacological therapy to treat pain. Many times, non-pharmacological therapy can be effective pain management for mild acute pain. Even when opioid analgesics may be required for more severe pain, non-pharmacological therapy can be a supplemental treatment and help reduce the need for opioid medications.

Distraction is a common form of non-pharmacological pain management and is often used for children experiencing pain. Distraction is any method that moves the attention away from the pain. Methods of distraction can include music,

videos, games, conversation, and breathing exercises. Distraction can be helpful in reducing pain in pediatric patients. Interactive activities such as blowing bubbles, watching videos, toys with bright lights and sounds, and playing games can help reduce anxiety and distract patients from painful procedures. Music can be another very effective tool for pain management. Music can be used before, during, and after surgery to help relax patients and distract from postoperative pain. Research has found that listening to music before, during, and after surgery can help reduce anxiety and pain.

Meditation and guided imagery can be a helpful form of non-pharmacological pain management. Meditation is a practice of focusing the mind to reduce pain, stress, or anxiety. Meditation can be done alone or with the guidance of a professional and involves consistent practice and repetition. Patients can use meditation to perform a body scan to help acknowledge and manage pain. The body scan technique involves being in a comfortable position and focusing on breathing. Then, focus on each body part and the sensations that accompany it. If pain is noticed, acknowledge the pain while focusing on breathing. This exercise can help the body relax and decrease pain.

Guided imagery is a relaxation technique that uses images to invoke relaxing and positive feelings. The goal of guided imagery is to stimulate natural responses of relaxation such as lowering the blood pressure and the heart rate, slowing the respiratory rate, and decreasing stress and pain. Guided imagery focuses on choosing a comfortable and quiet place without any distractions. Patients can close their eyes to help focus on whatever image brings upon relaxation. It is important to instruct patients to engage all senses and to visualize the scene in detail for as long as needed. Guided imagery is something nurses can help patients practice at any point when experiencing pain. Patients can use this practice in any environment and often find this a comforting pain management technique at home.

Cognitive behavior therapy can be beneficial in managing chronic pain. Cognitive behavior therapy is a form of psychological treatment that involves a professional helping patients recognize negative thought patterns and develop skills to cope with daily challenges. Cognitive behavior therapy is unique to each patient and can help patients self-manage their pain. Patients can learn to adjust their perception and mindset of their pain and treatment options. Cognitive behavior therapy can also help patients suffering from chronic pain increase participation in activities that improve their overall quality of life.

Massage, exercise, and physical therapy are all forms of physical interventions for managing pain. Massage is a form of therapeutic touch where a trained professional uses touch and pressure to loosen tight muscles. Touch and pressure can help block pain signals and can promote relaxation by improving the blood flow to muscles. Exercise can involve all forms including walking, swimming, stretching, and yoga. Consistent moderate exercise can help patients reduce stress and improve mobility. While pain can often restrict patients ability to exercise, certain types may help patients improve their pain. It is important to educate patients to discuss with their healthcare team to determine what type of exercise would be beneficial in their pain management. Physical therapy involves working with a trained professional to use exercise and movement to improve strength and flexibility. Research shows that improving strength and flexibility can help chronic painful conditions such as arthritis, nerve pain, and fibromyalgia. Physical therapy and exercise can promote relaxation and stress reduction while improving patients' overall quality of life.

Nurses should always advocate for non-pharmacological strategies in pain management, with or without including medications. Non-pharmacological interventions are often underused in pain management due to lack of awareness and education. Many non-pharmacological interventions require patients to understand how to maintain the therapies on their own. It is important to advocate for support and collaboration with the healthcare team to develop the best pain management plan possible.

Section 7 Personal Reflection

Which non-pharmacological intervention would you personally use to decrease pain? Which intervention do you think would be difficult to maintain?

Section 7 Key Words

Non-pharmacological therapy - Any intervention that helps reduce pain without using medication

Distraction - A form of non-pharmacological therapy that moves the attention away from the pain and can include music, videos, games, conversation, and breathing exercises

Meditation - A practice of focusing the mind to reduce pain, stress, or anxiety

Guided imagery - A relaxation technique that uses images to invoke relaxing and positive feelings and to stimulate natural responses of relaxation such as lowering the blood pressure and the heart rate, slowing the respiratory rate, and decreasing stress and pain

Cognitive behavior therapy - A form of psychological treatment that involves a professional helping patients recognize negative thought patterns and develop skills to cope with daily challenges

Massage - A form of therapeutic touch where a trained professional uses touch and pressure to loosen tight muscles

Physical therapy - A form of therapy with a trained professional to use exercise and movement to improve strength and flexibility

Section 8: Case Study #1

The nurse is caring for a 16-year-old patient who has arrived in the emergency department after a football injury. The nurse observes that the patient is grimacing and holding their lower back while sitting on the stretcher. The nurse asks the patient to rate their pain on a scale of 0 to 10 with “10” being the worst possible pain. The patient responds that their pain is a “10” and is “the worst pain they have ever felt”. The nurse inspects the patient’s lower back and observes redness and bruising. The patient cries out when the nurse palpates their lower back.

1. In this situation, what additional information would the nurse want to obtain during the pain assessment?
2. What type of pain do you think the patient is experiencing?

Section 9: Case Study #1 Review

This section will review the case studies that were previously presented in each section. Responses will guide the clinician through a discussion of potential answers as well as encourage reflection.

1. In this situation, what additional information would the nurse want to obtain during the pain assessment?

   The nurse would want to identify the cause, quality, location, and severity of the patient’s pain. The patient has identified the severity based on the numeric rating scale and the location. The nurse should ask the patient follow up questions to determine what quality of pain the patient is experiencing. The nurse should also observe objective data such as vital signs changes and nonverbal behaviors. The nurse knows that obtaining a comprehensive pain assessment will help in ensuring the patient’s pain management strategy is adequate. After a comprehensive pain assessment

is completed, the nurse can work with the patient and the healthcare team in determining what type of pain interventions will be most effective.

2. What type of pain do you think the patient is experiencing?

   The patient's pain appears to be acute pain as it is a sudden onset and caused by a specific event, in this case a football injury. Because the patient rates their pain as a "10" on a 0 to 10 scale, their pain would qualify as severe. The patient's pain may be resolved if the football injury is treated, but because the pain is severe the patient may require pharmacological medication to immediately treat the pain. Because the patient is under 18 years of age, opioid analgesics should be cautioned against according to CDC recommendations.

Section 10: Case Study #2

A nurse working in a pain clinic is performing an initial assessment on a patient who has arrived for a follow up appointment after their surgery. The patient had back surgery one week ago and has been prescribed opioid medications for postoperative pain management.

The patient reports that their pain has been manageable while taking the prescribed opioids. However, the patient states that they have not had a bowel movement in several days and have felt nauseous the past few days. The patient states that they read about the risks of taking opioids and are worried about becoming addicted to the medication. The patient states they had an uncle who died from an opioid overdose a few years ago. The patient states that they want to stop taking the medication right away and have not taken any pain medications today.

1. What risks of opioid medications do you think the patient is worried about?

2. What education can the nurse provide to the patient regarding taking opioid medications for postoperative pain relief?

Section 11: Case Study #2 Review

This section will review the case studies that were previously presented in each section. Responses will guide the clinician through a discussion of potential answers as well as encourage reflection.

1. What risks of opioid medications do you think the patient is worried about?

   The patient may be concerned about the side effects of tolerance and physical dependence when taking opioid medications. Patients should be made aware of the adverse effects of opioids, including the risk of misuse and addiction. Overuse of opioids can cause the patient to build up tolerance, requiring an increased dose of opioids to adequately manage pain. The patient may be concerned about the risk of opioid overdose due to their uncle passing away from an opioid overdose a few years ago. Having a close personal experience to an opioid overdose can make the patient more cautious when using the medications themselves. The patient may also be concerned about the reported side effects of constipation and nausea that are common with opioid medications.

2. What education can the nurse provide to the patient regarding taking opioid medications for postoperative pain relief?

   The nurse should acknowledge the patient's concerns about opioid misuse and addiction. The nurse can help the patient continue to manage their pain while preventing adverse effects from the opioid medications. The nurse should educate the patient on the side effects of tolerance and physical dependence. The patient should have a reduced need for opioids as their body heals from surgery, but it is important that patients are informed of the potential adverse effects. The nurse should educate the

patient on the importance of slowly weaning off the opioids so as not to experience symptoms of withdrawal. This is especially important as the patient has expressed the desire to stop using the medications. Abruptly stopping the opioid use even after one week could cause the patient to experience adverse effects. The nurse should also educate the patient that constipation and nausea are common side effects of opioids. The nurse should provide education on interventions to improve the patient's constipation and nausea while tapering off the opioid medications. The nurse could also provide education about non-opioid analgesics and non-pharmacological pain interventions while decreasing the use of opioid analgesics.

Section 12: Case Study #3

A nurse is caring for a newly admitted patient with complaints of abdominal pain. The patient consistently rates their pain as a "10" on a 0 to 10 scale. The patient has morphine ordered PRN and has requested the nurse bring in the medication as soon as it can be administered. Upon admission, the nurse notes the patient appears to have poor personal hygiene, diaphoresis, and tachycardia. The patient appears anxious and agitated and is complaining of nausea in addition to their severe pain.

After the nurse has administered two repeated doses of morphine, the patient continues to appear anxious and agitated. The patient states that the medication is not helping and asks the nurse if the medication dose can be increased. The nurse understands that the patient is exhibiting signs of opioid use disorder and asks the patient if they have ever used opioids in the past. The patient states they have used several different kinds of opioids for chronic back pain and recently had an unsuccessful attempt to wean off of their home pain medications.

1. What signs of opioid use disorder is the patient experiencing?

2. What education can the nurse provide to the patient regarding treatment options for opioid use disorder?
3. What medication may be the best option for the patient to use for opioid use disorder treatment?

Section 13: Case Study #3 Review

This section will review the case studies that were previously presented in each section. Responses will guide the clinician through a discussion of potential answers as well as encourage reflection.

1. What signs of opioid use disorder is the patient experiencing?

   The patient is experiencing several signs of opioid use disorder. The patient has a history of chronic opioid use, which puts them at risk for opioid use disorder. The patient appears anxious and agitated and continues to complain of unrelieved pain despite opioid interventions. Poor personal hygiene, diaphoresis, and tachycardia are also all signs of opioid use disorder. The patient asks for the morphine to be administered as soon as possible and asks if the dose can be increased after several administrations without decreasing pain. This can indicate that the patient is experiencing tolerance and dependence on opioid medications. The nurse should advocate for a more in-depth assessment of opioid use disorder to ensure the patient meets at least two or more of the criteria within one year for diagnosis. A diagnosis of opioid use disorder can help identify the best treatment plan for the patient's abdominal pain and prevention of opioid use disorder and addiction.

2. What education can the nurse provide to the patient regarding treatment options for opioid use disorder?

The nurse should educate the patient on treatment options for opioid use disorder and alternate treatment options for their abdominal pain. Treatment of opioid use disorder should include a combination of medications and counseling and should be individualized for each patient. Medications such as methadone, buprenorphine, and naloxone can help decrease withdrawal symptoms and the urge to use opioids. Patients should be educated on the potential side effects of these medications including respiratory depression, dependence, and adverse reactions with other medications. Patients should know that these medications require a prescription and must be monitored closely by a healthcare provider. Counseling, support groups, or an inpatient treatment facility can also help treat opioid use disorder. The nurse can offer alternative pain management strategies such as non-opioid analgesics and non-pharmacological interventions. The patient may benefit from a combination of pain medications and non-pharmacological interventions such as relaxation strategies, heat or cold therapy, or distraction. It is important that the nurse inform the patient of all their options and discuss potential treatment plans with their provider.

3. What medications may be good options for the patient to use for opioid use disorder treatment?

   The patient may benefit from methadone, buprenorphine, or naloxone. Methadone can help decrease withdrawal symptoms and the urge to use opioids. Methadone can be used as a long-term treatment option, but does have a lot of side effects that patients should be aware of. Methadone can only be administered by certified opioid treatment programs and requires close monitoring and gradual tapering of dosage to prevent withdrawal symptoms. Buprenorphine can also be used to decrease withdrawal symptoms and can be prescribed by any healthcare provider which can increase access. Buprenorphine can also have serious side effects including dependency and overdose. Naloxone is often prescribed with

buprenorphine to decrease the risk of misuse. Naloxone can quickly reverse the effects of opioids and is the gold standard reversal agent for opioid overdose. Naloxone can be good for the patient to assist in treatment for opioid use disorder and in case the patient experiences an opioid overdose.

Section 14: Case Study #4

A nurse is working in an intensive care unit with a coworker who they believe may be diverting opioid medications. The nurse has noticed their coworker offering to waste medications for other patients and storing controlled substances in their pockets. The nurse has also noticed that the coworker's patients report having unrelieved pain even with interventions. The coworker has recently had multiple unexplained absences and appears forgetful while at work. The nurse is unsure what to do, but is concerned about patient safety.

1. What adverse effects can opioid diversion have on healthcare professionals and healthcare facilities? What adverse effects can opioid diversion have on patient safety and public health risks?
2. What kind of policies should healthcare facilities have in place to prevent opioid diversion?
3. What interventions can the nurse do to ensure that they are doing their part in preventing opioid diversion?

Section 15: Case Study #4 Review

This section will review the case studies that were previously presented in each section. Responses will guide the clinician through a discussion of potential answers as well as encourage reflection.

1. What adverse effects can opioid diversion have on healthcare professionals and healthcare facilities? What adverse effects can opioid diversion have on patient safety and public health risks?

   Adverse effects of opioid diversion on healthcare professionals include opioid use disorder, overdose, or death. Healthcare professionals can lose their job and license, face criminal prosecution and medical malpractice lawsuits if caught diverting medications. Adverse effects on healthcare facilities include loss of eligibility for Medicare and Medicaid reimbursement, medical malpractice lawsuits, fines, and decreased public trust. Adverse effects on patients include unrelieved pain, risk of infection from contaminated syringes or vials, decreased levels of care due to impaired healthcare professionals, and theft of medications. Public health risks can include outbreaks of infections such as hepatitis C, increased rates of opioid use disorder, and hospitalizations and deaths relating to opioid use.

2. What kind of policies should healthcare facilities have in place to prevent opioid diversion?

   Healthcare facilities must have a culture that encourages nurses to speak up if they believe someone is diverting medications. Nurses may be afraid to speak up out of fear of negative consequences or a lack of education on the importance of identifying signs of diversion. Having systems in place such as surveillance and safeguards on medication wasting and administration can help healthcare facilities prevent diversion. Surveillance should focus on patterns of diversion behaviors. Healthcare facilities can install video monitoring of high traffic areas, such as the medication room and medication dispensing units. Tracking data from the pharmacy and medication dispensing units can help identify discrepancies and nurses who are exhibiting diversion behaviors when accessing and wasting medications. Collaboration with pharmacists can also help prevent opioid diversion. Only

providing small doses or pre-filled syringes can decrease the need for nurses to waste medications. Pharmacists can also help detect signs of diversion through audits of medication dispensing units and nursing administration reports.

3. What interventions can the nurse do to ensure that they are doing their part in preventing opioid diversion?

   Nurses can help prevent opioid diversion by ensuring they are applying the best practices to medication wasting and administration and reporting any barriers. Nurses should ensure they are always wasting medications at the medication dispensing units and using appropriate controlled substance waste areas when wasting medications. An appropriate controlled substance waste area binds the medications and makes it difficult for someone to illegally access the medication. Nurses should always witness in person the medication they are asked to waste and ensure they log out of the medication dispensing units after use. Nurses should report any suspicions of opioid diversion to the appropriate leadership right away and always speak up to ensure patient safety.

Section 16: Case Study #5

A nurse working in a community health clinic has noticed an increase in patients suffering from opioid use disorder and wants to help improve access to opioid misuse treatment options and education. The nurse knows that their community has a high rate of opioid use disorder and opioid related deaths. They express their concerns to the clinic director, but are told that the clinic does not have any funding to use towards opioid misuse prevention. The director states “I do not know why you want to help those people anyway. Anyone who uses drugs is a bad person.” The nurse is still determined to improve treatment options and seeks out a meeting with their local government officials.

1. What are some common barriers to access to opioid use disorder treatment and education?
2. What are some other interventions the nurse can advocate for to improve access to treatment options and education?
3. What legislation and initiatives can the nurse use to help bring awareness and education to their community regarding the opioid epidemic?

Section 17: Case Study #5 Review

This section will review the case studies that were previously presented in each section. Responses will guide the clinician through a discussion of potential answers as well as encourage reflection.

1. What are some common barriers to access to opioid use disorder treatment and education?

   The nurse is facing several barriers in helping improve access to opioid misuse treatment options and education. Stigmatization of opioid use disorder and the opioid epidemic can cause barriers to treatment access and prevention. People who suffer from opioid use disorder are often isolated and treated as less worthy of receiving medical care. The director clearly has a negative perception of opioid use disorder by stating “I do not know why you want to help those people anyway. Anyone who uses drugs is a bad person.” Communities with high levels of poverty and lack of access to treatment options can be ignored due to negative bias. The lack of federal and local legislation, education, and funding can severely impact community access to opioid misuse treatment options and education.

2. What are some interventions the nurse can advocate for to improve access to treatment options and education?

The nurse can advocate for the use of naloxone in preventing opioid overdose deaths. Research shows that providing access to naloxone to communities can reduce opioid related deaths. Nurses can play an important role in the accessibility of naloxone by educating the public on how and when to use naloxone and the signs of an opioid overdose. Education for cardiopulmonary resuscitation (CPR) can also help prevent opioid related deaths. Naloxone can now be found at many pharmacies, healthcare facilities, and community programs designed to prevent opioid overdoses. Anyone can seek out education on the administration of naloxone and obtain doses without a patient specific prescription. First responders such as police officers and paramedics now carry naloxone with them in case they respond to a patient who has overdosed on opioids. Healthcare providers should also consider offering naloxone to patients who exhibit risk factors of opioid use disorder. Education on opioid use disorder, the signs of opioid overdose, and at risk populations can be helpful in decreasing the stigma around opioid use disorder. The nurse can advocate for more education for healthcare providers and the public.

3. What legislation and initiatives can the nurse use to help bring awareness and education to their community regarding the opioid epidemic?

   Many federal organizations have implemented initiatives to provide resources for preventing and treating opioid use disorder including the United States Department of Health and Human Services, the CDC, the Food and Drug Administration, and the Agency for Healthcare Research and Quality. Federal legislation has also been passed to help healthcare professionals fight the opioid epidemic. The Mainstreaming Addiction Treatment (MAT) Act expanded the ability for all healthcare providers to prescribe medications to treat opioid use disorder. The Comprehensive Addiction and Recovery Act (CARA) in 2016 helped decriminalize low offense drug crimes and expanded programs for opioid use disorder treatment referrals and access to naloxone. The Substance Use Disorder

Prevention that Promotes Opioid Recovery and Treatment (SUPPORT) for Patients and Communities Act in 2018 allowed all healthcare providers to prescribe buprenorphine for treating opioid use disorder. The CDC has also published extensive recommendations for prescribing opioids for pain and decreasing opioid use disorder rates. Organizations such as Narcotics Anonymous, SMART Recovery, and the SAMHSA Center for Substance Abuse Treatment can help patients find the right treatment plan.

Section 18: Case Study #6

The nurse is caring for an elderly patient with a history of arthritis who is complaining of chronic joint pain in their knees. The patient states they have tried many different pain medications with little relief and expresses frustration in their pain management plan. The patient states they have great difficulty using their stairs at home and cannot play with their grandchildren. The nurse knows that non-pharmacological therapies can help the patient decrease their chronic pain. After suggesting non-pharmacological therapy, the patient states they do not have much knowledge of pain management strategies besides pain medications.

1. What non-pharmacological interventions could the nurse recommend for this patient?
2. What barriers may the patient face when implementing non-pharmacological interventions into their pain management plan?

Section 19: Case Study #6 Review

This section will review the case studies that were previously presented in each section. Responses will guide the clinician through a discussion of potential answers as well as encourage reflection.

1. What non-pharmacological interventions could the nurse recommend for this patient?

   The nurse could suggest meditation, guided imagery, cognitive behavior therapy, physical therapy, exercise, and massage for the patient's pain. Meditation can help the patient understand their pain and decrease their stress through breathwork and body scans. Guided imagery can also help reduce stress and promote relaxation. The patient can practice meditation and guided imagery on their own and in any environment. Cognitive behavior therapy can help the patient cope with the daily challenges of their chronic pain. Cognitive behavior therapy can help the patient work through their frustrations with their pain management plan and improve their overall quality of life. Physical therapy and exercise can help improve the patient's mobility. The patient is complaining of difficulty using their stairs and being unable to play with their grandchildren. Physical therapy and exercise could help the patient regain strength and mobility needed to complete these tasks. Massage can also help improve mobility and promote relaxation.

2. What barriers may the patient face when implementing non-pharmacological interventions into their pain management plan?

   The patient may face barriers in using meditation and guided imagery. These practices require consistent practice and repetition to be effective. If the patient is not consistent with meditation and guided imagery, they may not see adequate results and stop the practices. Physical therapy, massage, and cognitive behavior therapy all require a trained professional to work with the patient. The nurse should be mindful of the patient's financial situation and accessibility to these professionals when offering those interventions. Cognitive behavior therapy also requires consistent practice and can take time to yield results. The patient may become frustrated if they do not have realistic expectations for these treatments. The nurse

should ensure they are educating the patient on realistic expectations and that many non-pharmacological pain interventions require consistency and time to decrease pain.

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