Fear of addiction is a major cause for the under-treatment of pain. Tolerance, physical dependence, and addiction are frequently misunderstood by both patients and providers. Staff need to understand the difference in these terms in order to provide adequate patient education and to reduce fear that may prevent patients and families from seeking appropriate pain management.

**Tolerance**

**Definition:** A process characterized by decreasing effects of a drug at its previous dose, or the need for a higher dose of drug to maintain an effect.

**Practice implications:**
- Do not assume tolerance exists until causes of decreased pain control, such as new pathology, disease progression, or lack of adherence to the pain management plan have been ruled out.
- Tolerance exists when patients require progressively larger doses of opioids to maintain the same level of analgesia with no change in physical condition.
- Opioid tolerant patients will generally require higher doses of opioids compared to opioid naïve patients after similar injuries or procedures.

**Patient education:**
- Tolerance does not equal addiction.
- Tolerance is a normal response to chronic use of a medication and is common in patients receiving chronic opioid treatment.
- “Over time, your body gets used to the effects of the medication and will need higher doses to do the same job”.

**Physical Dependence**

**Definition:** Potential for withdrawal symptoms if an opioid is abruptly stopped or an antagonist such as naloxone is administered.

**Practice implications:**
- Physical dependence is not unique to opioids. Other medications and substances such as benzodiazepines, beta blockers, antidepressants, corticosteroids, caffeine, nicotine, and alcohol produce physical dependence.
- Abrupt discontinuation can produce a withdrawal syndrome.
- Patients maintained on chronic opioid therapy should receive their baseline dose of opioid unless medically contraindicated. If unable to take PO, an alternate opioid should be given by IV route to prevent withdrawal.
- Onset of withdrawal symptoms depends on the half-life of the opioid and can range from 6-12 hours for oxycodone and hydrocodone to several days for methadone.

**Patient education:**
- Physical dependence does not equal addiction
- Physical dependence is an expected result of opioid treatment.
- “If you have been taking opioids for greater than 1-2 weeks, you should taper the dose and not stop cold turkey.”
- Signs of opioid withdrawal include: irritability, difficulty sleeping, drooling, runny nose, watery eyes, nausea, vomiting, diarrhea, abdominal cramping, joint and muscle pain, chills alternating with hot flashes.
Addiction

Definition: A chronic neurologic and biologic disease characterized by behaviors that include one or more of the following: impaired control over drug use, compulsive use, continued use despite harm, and craving.

Practice implications:
♦ The diagnosis of addiction is not based on a single event but is based on a pattern of behavior over time.
♦ Not all pain behaviors indicate addiction. Behaviors that are commonly mistaken as indicators of addiction include: frequent visits to the Emergency Department, manipulative behaviors, complaining aggressively for more medication, requesting specific medications, and self-titration of opioid medication. While these behaviors are aberrant, they warrant further investigation for the possibility of pseudoadddiction. When a patient’s pain is not well controlled, they may resort to aberrant drug-seeking behaviors in an effort to obtain adequate pain relief. What differentiates pseudoaddiction from addiction is the behaviors stop when pain is adequately controlled.

Patient education:
♦ In laymen’s terms, addiction is use of a medication or substance for effects other than it’s intended effect. Opioid addiction is use of opioids for reasons other than pain relief.
♦ The likelihood of developing addiction when used appropriately to treat pain is low.

References and additional suggested reading:
