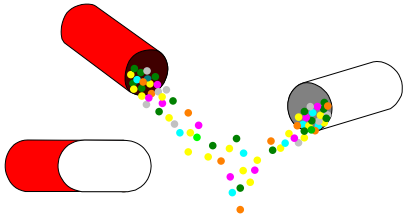
Pain Module

Substance Abuse—Key Terms and Concepts

Myth: We can turn people into addicts by giving them pain medicine.



Fact: Addiction…

- Is a primary, chronic, neurobiologic disease, with genetic, psychosocial, and environmental factors influencing its development and manifestations. You cannot "give" the disease to someone.
- Is also known as chemical dependency or substance abuse.
- Affects about 10% of the population.

Addiction—disorder of brain functioning

- 2 major neurological pathways involved in addiction.
  - mesolimbic dopamine reward pathway, which is essential for survival, can be physically altered by drug abuse to result in uncontrolled cravings. Most drugs of abuse directly or indirectly target this reward system by flooding the circuit with dopamine. Dopamine is a neurotransmitter present in regions of the brain that regulate movement, emotion, cognition, motivation, and feelings of pleasure. The overstimulation of this system, which rewards our natural behaviors, produces the euphoric effects sought by people who abuse drugs and teaches them to repeat the behavior.
  - decision-making prefrontal cortex, which suppresses inappropriate reward response, can also be altered by drug abuse. Thus, accelerated "go" signals and impaired "stop" signals result in uncontrolled use despite severe consequences.
- Persons can be **predisposed to addiction by genetic defects in reward pathway neurotransmission** and stress-related developmental brain abnormalities. Drugs capable of producing addiction do so by interacting with the biochemistry of the brain in such a way that the drug begins to seem essential – one feels a “need” for it as one does for food and water.
- Relapse to drug use can occur because of stress or cue-related reward pathway stimulation or even by a single drug dose.

Addiction is a disease characterized by these behaviors:

- Loss of control
- Craving for the substance
- Compulsive use
- Continued use despite harm

Predictive of drug abuse and addiction

- Sells prescription drugs to obtain money to buy drug of choice
- Prescription forgery
- Steals another patient's meds
- Obtains prescription drugs from non-medical sources
- Concurrent abuse of related illicit drugs
- Concerns about being able to get the next dose
- Recurrent prescription losses due to need to take more than is prescribed
- Injects oral formulations
- Tampers with PCA pump
- Demands specific drugs and IV route
- Demands that IV med not be diluted and that it be pushed fast.
- "Clock-watching"
- Repeated gross impairment or dishevelment

Pseudo addictive behaviors

- Aberrant drug-related behavior in patients with chronic pain who do not have the disease of addiction, but who are reacting to pain that is inadequately treated. *
    - Concerns about being able to get the next dose.
    - “Clock-watching”
    - Taking more than is prescribed because the prescribed drug and/or dose is ineffective for the type or severity of pain.
    - Drug hoarding during periods of reduced symptoms
    - Requesting specific drugs
    - Acquisition of similar drugs from other medical sources

- These behaviors typically diminish when pain is adequately treated.

- **While the media give the impression that the risk of addiction is inherent to the properties of opioids, experts in addiction generally recognize that it results from the interaction of the drug and various hereditary, psychological, and situational factors unique to the individual.**

*A physician in the addiction field should be consulted in order to accurately distinguish between pseudo addiction and addiction.

More terms that are often confused with addiction:

Tolerance

- The body requires more opioids in order to have the same response to the same pain problem.
- Do not mistake tolerance for a person who requires more medication because of a progression of disease, or change in pain mechanism (e.g., a shift from a nociceptive to a neuropathic mechanism (pseudo tolerance).
- Tolerance is NOT addiction and should never be labeled “addiction”

Terms…continued

Physical Dependence

Potential for withdrawal symptoms upon abrupt discontinuation of an opioid, rapid dose reduction, or administration of an antagonist such as Narcan or agonist-antagonists such as Nubain, Talwin.

Withdrawal

- The set of symptoms that occur when a medicine is abruptly stopped in a person who has developed physical dependence.
- Withdrawal symptoms can occur in anyone, not only in persons who are addicted to a substance.

Withdrawal symptoms will occur if the patient has been on an opioid and the drug is stopped abruptly.

  - Tachycardia, tachypnea
  - Nausea/vomiting, diarrhea, abdominal cramps
  - Sweating, rhinorrhea, piloerection
  - Myalgias and arthralgias
  - Anxiety, insomnia

- These sx can occur if a fentanyl patch comes off a patient for whom the patch is his/her only source of an opioid. Check periodically that patches are intact.
- Should never be labeled “addiction”

Yet another term…
The Chemical Coper

- Some individuals demonstrate inappropriate medication use but not to the level of addiction and are not likely to display a severity that rises to the level of compulsivity or loss of control. In addition, they are not likely to display behaviors indicative of drug cravings, which would convince a clinician to diagnose addiction. Simply put, chemical copers believe the answer to every problem is a pill.
- A major hallmark of chemical coping is the overly central place in the person's life that is occupied by obtaining drugs for pain and a corresponding inflexibility about nondrug components of care. The use of medications becomes central in the chemical coper's life while other interests become less important. As a result, they often fail to move forward with psychosocial goals and are usually uninterested in treating pain non-pharmacologically; that is, they do not take advantage of other treatment options provided (i.e., functional restoration), such as exploring recommendations to see psychologists or physical therapists.
- Further, they remain on the fringe of appropriate use of their medication but are able to comply with their physician's opioid agreement enough to avoid being removed from treatment. Physicians commonly see chemical copers self-escalate their medication dosage when they are faced with stress and need to have their prescriptions refilled early.

Source: ACPA Consumer Guide to Chronic Pain Medication & Treatment , 2011 Edition, American Chronic Pain Association publication.

SMH's Addiction Treatment Program—Expert Help at our Doorstep

- Waiting for the addict to "be ready" for treatment can be dangerous and detoxification alone is often ineffective.
- Treating addiction includes prevention, diagnosis, brief intervention, motivational interviewing, referral, and follow-up care.
- SMH's ATP is one of the country's longest programs in existence and provides a comprehensive approach to treatment.

Please Remember…

- The diagnosis of addiction, chemical dependency, drug abuse should be made by a specialist.
- Patients who are suspected of having a chemical dependency problem should be referred to an addiction specialist.
- Patients with the disease of addiction and who have pain as the result of surgery, an accident, or medical problem are at high risk for being under-treated. These patients require a pain or addiction specialist to insure that their pain is treated adequately.
- Everyone has the right to adequate pain assessment and management.