

Chapter 9

Prescription Drugs, Over-The-Counter Drugs, and Dietary Supplements

Prescription Drug Abuse: Introduction

- Prescription drug abuse began with the introduction of "Dover's Powder" in 1709.
- Dover's Powder contained 1 oz. each of opium, ipecac (creeping plant), licorice, saltpepper, tartar, wine. Remained one of the most widely used opium medicines for 2 decades. Prescription drug abuse did not become a social issue until the 1940's and 1950's.
- Morphine was discovered in 1804, was first sold in 1817, and was first marketed commercially by Merck in 1827.
- Morphine is the most abundant opiate found in opium. It is made from the dried latex from unripe seedpods of the opium poppy.

Where Morphine Comes From:

Drug Abuse in Decades:

- 1950's: Morphine, Heroin
- 1960's: Marijuana, Amphetamines (Black Beauties), LSD
- 1970's: Quaaludes, Barbiturates (gorilla pills) and PCP.
- 1980's and 1990's: Crack and Cocaine
- 2000's: Vicodin, OxyContin (hillbilly heroin) and Xanax (footballs)

Different Forms of Morphine, Conversions:

- 10 mg of hydrocodone = 10 mg of morphine = 6.667 mg of oxycodone = 5 mg of heroin = 66.67 mg of codeine = 2.5 mg of hydromorphone = 3.333 mg of oxymorphone = 100 mg of Demerol (pethidine aka meperidine).

Heroin is not Synthetic:

- Oxycodone, hydrocodone, and heroin (diacetylmorphine) are all semi-synthetic opioids. It is not uncommon to hear a person call oxycodone "synthetic heroin" however it simply is not true.
- Heroin is not completely natural, nor are hydrocodone or oxycodone. They are synthesized from morphine.

Morphine vs. Heroin

- The closest drug to heroin is morphine. Actually heroin has no effects, it is simply a highly efficient transport into the brain where heroin rapidly turns into morphine which is what provides the euphoria and analgesia. So the actions of heroin are in the morphine.

Prescription Drug Abuse as a Social Issue:

- During the 1980's and much of the 1990's, little research could be done on prescription drug abuse because more people were turning to crack and cocaine as opposed to prescription drugs.
- The occurrence of HIV/AIDS among injection drug users and crack users became a priority for researchers.
- The abuse of many prescription drugs has been escalating since the early 1990's.
- The numbers of new non-medical users of prescription opioids (mostly products containing codeine, hydrocodone, and oxycodone) increased from 600,000 in 1990 to over 2.4 million in 2004.
- Most new users of any other drug in 2004.

OxyContin:

- Invented in 1996.
- Hailed as a breakthrough, time release allows patients to take it and experience long term relief.
- Not long before we realized it is very addictive.
- Abuse began in Maine, quickly spread through the east coast, Ohio, rural Appalachia. Communities in Western Virginia, Eastern Kentucky, West Virginia and Southern Ohio were especially hard hit.

Why Maine and Appalachia?

- Aspects of the culture are different than other parts of the country.

What is Different?

- Many communities are small and isolated, often within the mountains and "hollers" (small, crevice like mountain dens and valleys), a large distance from towns and highways. Many inhabitants are poor, do not own a vehicle.
- Many of the usual street drugs are not available.
- Inhabitants learn to make do with what they already have: prescription drugs.
- Their isolation limits option for entertainment, they begin using drugs out of simple boredom.
- Many adults in these areas tend to suffer from chronic illnesses, due to lives of manual labor in coal mining, logging, fishing. These jobs often result in debilitating illnesses and injuries.
- A disproportionately high segment of the population uses strong painkillers.
- Use of painkillers evolves into a coping mechanism, and it becomes a culturally accepted way of life.

An Epidemic is Born:

- The Bangor Daily News in Maine began to run several features on OxyContin abuse, including how to compromise its time release mechanism, the tactics of diversion that people were using (including Medicaid fraud), the concerns of the medical profession about the abuse of the drug.
- The Boston Globe became the first major newspaper to focus on OxyContin.
- After that, OxyContin was a focus of the national media, even though its use was centered in Appalachia and Maine.

Continuing and Growing Abuse:

- The problem of the perceived increase in use can be explained by:
 - The number and variety of prescription drugs have increased over the years.
 - Availability creates demand for drugs with a high potential for abuse.
 - Prescription drugs are popular with abusers, they are considered more acceptable, less dangerous, easier to rationalize, and have less legal consequences than do illicit drugs.

Diversion: Where do the Drugs Come From?

- Diversion involves the unlawful channeling of prescription drugs from legal sources (like pharmacies, hospitals) to the illegal marketplace.
- Can occur at any point in the drug delivery process: factory, distributor, physician's office, pharmacy or patient.
- Federal law enforcement maintains that "doctor shoppers" are mostly responsible for the prescription drugs in the illegal marketplace. Also, inappropriate prescribing practices by doctors, "script docs" (who write scripts for a fee) and improper dispensing by pharmacists.
- In reality, massive amounts of prescriptions (1.4 million OxyContin tablets between Jan. 2000 to June 2003 alone) are being stolen prior to being prescribed.
- Residential and manufacturing, pharmacy burglaries
- Script doctors
- Illegal sales in small pharmacies
- Acquaintances who sell their own medication
- Sex workers clients
- Disability patients
- Medicaid recipients
- Personal prescriptions intended for one thing (drug dependence, mental health treatment) but used for another.
- Doctor Shoppers