

## Chapter 14 – Substance-Related and Impulse-Control Disorders

- Substance related disorders: involve chronic difficulties in resisting the desire to drink alcohol or take drugs
- Impulse control disorders: set of disorders involving inability to resist other drives: to gamble, to shoplift, to set fires, to explode in rage, and even to pull out one's hair
- Substance: any natural or synthesized product that has psychoactive effects – it changes perceptions, thoughts, emotions, and behaviors

### Defining Substance Related Disorders

- Abused substances fit into 5 categories
  - 1. CNS depressants: alcohol, barbiturates, benzodiazepines, and inhalants
  - 2. CNS stimulants: cocaine, amphetamines, nicotine, and caffeine
  - 3. Opioids, including heroin and morphine
  - 4. Hallucinogens and phencyclidine (PCP)
  - 5. Cannabis
- **Substance intoxication:** set of behavioral and psychological changes that occur as a result of the physiological effects of a substance on the CNS
  - Specific symptoms depend on what substance is taken, how much of it and when, the user's tolerance, and the context
  - People's expectations of the effects can also influence the types of symptoms shown, also the setting can effect symptoms
  - Diagnosis given only when the behavioral and psychological changes the person experiences are significantly maladaptive
- **Substance withdrawal:** A set of physiological and behavioral symptoms that result when people who have been using substances heavily for prolonged periods of time stop or greatly reduce their use
  - Symptoms are opposite of those of intoxication
- **Criteria for substance abuse**
  - One or more of the following occurs during a 12 month period, leading to significant impairment of distress
    - 1. Failure of fulfillment of important obligations at work, home or school as a result of substance use
    - 2. Repeated use of the substance in situations in which it is physically hazardous to do so
    - 3. Repeated legal problems as a result of substance use
    - 4. Continued use of the substance despite repeated social or legal problems as a result of the use
- **Substance dependence:** what people often refer to as drug addiction
- **Tolerance:** present when a person experiences less effect from the same dose of a substance and needs more and more of it to achieve intoxication
- **Criteria for Diagnosing Substance Dependence**
  - Often involves evidence of physiological dependence plus repeated problems due to the use of the substance
  - Maladaptive pattern of substance use, leading to 3 or more of the following
    - 1. Tolerance, as defined by either

- The need for markedly increased amounts of the substance to achieve intoxication or desired effect
    - Markedly diminished effect with continued use of the same amount of the substance
  - 2. Withdrawal, as manifested by either
    - The characteristic withdrawal syndrome for the substance
    - The same or a closely related substance is taken to relieve or avoid withdrawal symptoms
  - 3. The substance is often taken in larger amounts or over a longer period than was intended
  - 4. There is a persistent desire or unsuccessful effort to cut down or control substance use
  - 5. A great deal of time is spent in activities necessary to obtain the substance, use the substance, or recover from its effect
  - 6. Important social, occupational, or recreational activities are given up or reduced because of substance use
  - 7. The substance use is continued despite knowledge of having a persistent or recurrent physical or psychological problem caused by or exacerbated by the substance
- The diagnosis of substance dependence takes the place of (preempts) the diagnosis of substance abuse
- The way a substance is administered can help determine how rapidly a person will become intoxicated and whether the substance will produce withdrawal symptoms or lead to abuse or dependence
  - Rapid and efficient absorption of the substance into the bloodstream, through injection, smoking, or snorting, leads to more intense intoxication and a greater likelihood of dependence
    - Cocaine and heroine act more rapidly on the CNS
  - Also, more likely to overdose
  - Substances whose effects wear off quickly also are more likely to lead to dependence or abuse than are substances with longer-lasting effects

**1, Depressants** → Slow the CNS; in moderate doses they make people relaxed and reduce concentration and impair thinking skills, in heavy doses they can induce stupor or even death

### ▪ 1. Alcohol

- Low doses – people feel more confident, more relaxed, and perhaps slightly euphoric, less inhibited
- In heavy doses – induces symptoms of depression, including fatigue, lethargy, decreased motivation, sleep disturbances, depressed mood, and confusion
- People in countries where alcohol is usually consumed with meals, show lower rates of alcohol related substance disorders
- About 1/3 of alcohol related deaths result from respiratory paralysis
- Alcohol abuse and Dependence
  - Alcohol dependence: have all the problems of an alcohol abuser and may show physiological tolerance to alcohol

- Spend a great deal of time intoxicated or withdrawing from alcohol, organize their lives around drinking, or continue to drink despite having significant social, occupational, medical, or legal problems as a result
  - Binge drinking: defined as consuming 5 or more drinks within a couple of hours
  - Subtypes of alcohol dependence
    - Alcohol-dependent people with antisocial personalities – aggressive and violate social norms
      - Have more severe symptoms of alcohol dependency, remain alcohol dependent longer and have poorer social functioning, more marital failures, and heavier drug involvement
      - Likely to come from families with alcoholism and begun drinking earlier in life and to have children with behavior problems
    - Negative-affect alcohol disorders
      - Tend to show symptoms of depression and anxiety in childhood and adolescence and begun severe alcohol use and abuse only in adulthood
      - More common in women than men
- Alcohol withdrawal
  - First symptoms: begin within a few hours after drinking – tremulous (shakes), weakness and profuse perspiration, anxiety (jitters), headache, nausea, and abdominal cramps and may retch and vomit
    - Flushed, restless, and easily started but alert
    - EEG pattern mildly abnormal
    - May begin to see or hear things
  - Second stage: convulsive seizures which may begin as soon as 12 hours after drinking stops, more often appear during second or third day
  - Third stage: delirium tremens (DTs)
    - Auditory, visual, and tactile hallucinations occur
    - May develop bizarre, terrifying delusions, such as the belief that monsters are attacking
    - May sleep little and may become agitated and disoriented
    - Fever, profuse perspiration, and an irregular heartbeat may develop
    - Fatal in approx. 10% of cases
    - Death may occur from hyperthermia (extremely high body temperature) or the collapse of the peripheral vascular system
- Long-term effects of alcohol misuse
  - Toxic effects on stomach, esophagus, pancreas, and liver
  - Most common medical conditions – low-grade hypertension, increased risk for heart disease, chronic thiamin deficiency – which can lead to severe disorders of the CNS, including numbness and pain in the extremities, deterioration in the muscles, and the loss of visual acuity for both near and far objects
  - **Alcohol induced persisting amnesic disorder:** permanent cognitive disorder caused by damage to the CNS, consists of 2 syndromes
    - **Wernicke's encephalopathy:** brings mental confusion and disorientation and, in severe states coma