

LESSON PLAN COVER SHEET

COURSE NAME: Georgia Crisis Intervention Team (CIT) Training		UNIT CODE:
LESSON TITLE: Addictive Diseases		HOURS: 01
PREPARED BY: Patrice Harris, M.D.	DATE: 12-01-04	APPROVED BY:
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INSTRUCTIONAL METHODS: Lecture, Discussion		CLASSROOM SETTING: Academic
TERMINAL PERFORMANCE OBJECTIVE (TPO): Students should be able to achieve a basic understanding of substance abuse and dependence, the prevalence and impact of substance abuse disorders, signs and symptoms of substance use and after-effects, and the connection and differences between substance abuse and substance dependence.		
ENABLING OBJECTIVES (EO): Students should be able to: <ol style="list-style-type: none"> 1. Identify individuals who are under the influence of substances. 2. Understand the prevalence and impact of substance abuse disorders. 3. Recognize signs and symptoms of substance use. 4. Understand the connection and differences between abuse and dependence. 5. Identify the medical model of substance abuse disorders. 6. Identify common substance withdrawal and intoxication syndromes. 7. Know when to seek medical attention for life-threatening withdrawal symptoms or otherwise. 8. Understand the tasks of treatment and difficulties faced achieving abstinence. 		
TRAINING MEDIA (see Appendix A): <i>[check each that apply to your lesson plan]</i> <input type="checkbox"/> Transparencies <input type="checkbox"/> Videotape <input type="checkbox"/> Chalkboard <input type="checkbox"/> Flip chart <input type="checkbox"/> Audiotape <input type="checkbox"/> Other: <input checked="" type="checkbox"/> Slides <input type="checkbox"/> Poster		
EQUIPMENT/MATERIALS (description and quantity):		
HANDOUTS (see Appendix B): PowerPoint Presentation		
REFERENCES:		
STUDY ASSIGNMENTS:		

ADDICTIVE DISEASES

Overview

The current Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV) provides definitions of substance abuse disorders that clearly define the differences and connections between addiction and abuse. This manual has been used by the psychiatric community for diagnosis since 1994. Alcohol is the most commonly abused substance by the mentally ill, although individuals with mental health disorders are more likely than the general population to be poly-drug users.

I. The Brain (*The brain is responsible for human behavior, actions, emotions, and sensations.*)

A. Behavior: The brain responds to, processes, and initiates “all” behavior

1. normal
2. abnormal.

B. Action and Emotion (*the brain is responsible for thinking, feeling, movement, memory, and speech*)

C. Sensing (*the brain receives information from all five senses*)

II. Substance Dependence

- A.** Increasing tolerance over time which means that the individual requires more of the substance in order to achieve the same effects
- B.** Withdrawal side effects if the substance is removed suddenly or there is a decrease in the amount of use
- C.** Substance taken in larger amounts or over a longer period of time than intended
- D.** Persistent desire or unsuccessful efforts to cut down or control
- E.** Great deal of time spent obtaining, using, or recovering from effects
- F.** Important social, occupational, recreational activities given up or reduced because of substance use
- G.** Substance use continues despite knowledge of persistent or recurrent problems likely to have been caused or exacerbated by the substance

III. Substance Abuse (*maladaptive pattern of substance use leading to clinically significant impairment or distress as manifested by one (or more) of the following*):

- A. Failure to fulfill role obligations
- B. Recurrent physically hazardous substance use
- C. Recurrent legal problems
- D. Continued use despite persistent or recurrent problems caused by substances
- E. Never met criteria for Substance Dependence

Many people view drug abuse and addiction as strictly a social problem. Parents, teens, older adults, and other members of the community tend to characterize people who take drugs as morally weak or as having criminal tendencies. They believe that drug abusers and addicts should be able to stop taking drugs if they are willing to change their behavior.

These myths have not only stereotyped those with drug-related problems, but also their families, their communities, and the health care professionals who work with them. Drug abuse and addiction compromise a public health problem that affects many people and has wide-ranging social consequences. Addiction is a chronic, relapsing, and treatable disease.

Not all addicted persons are homeless or living in a “crack” house; some addicts appear to be functional, but with a closer look at the substances they are still a problem.

IV. Addiction (*a brain disease, a primary, progressive, fatal illness, a chronic disorder requiring multiple strategies and multiple episodes of intervention*)

1. **Begins with drug abuse** (*an individual makes a conscious choice to use drugs,*)
2. **Not just “a lot of drug use”**
 - a) interfere with normal brain functioning creating powerful feelings of pleasure,
 - b) but they also have long-term effects on brain metabolism and activity

C. The Four Stages of Addiction

1. Experimenting – The individuals begin using the substances in an experimental manner. In many cases, this will graduate to the social/recreational use by the consumer.
2. Seeking a Mood Swing – This stage is based on the individual’s need to use the substance to relieve the side-effects or symptoms that he or she has when he or she is withdrawing from the effects of the substance. This in turn frequently leads to compulsive use of the substance and consequent denial of the effects that the substance is having on the individual’s life.
3. Preoccupation – The person may feel preoccupied in figuring out where and how the next "fix" will be obtained, coupled with an overall feeling of guilt.
4. Powerlessness/Addiction – Individuals attempt to control their addiction unsuccessfully, demonstrating self-centered behavior, and tend to medicate withdrawal symptoms by increasing or continued use of the substance. Dominated by impaired thinking, the addiction demonstrates a loss of tolerance, which repeats this cycle over and over again.

Once the abuse has progressed to **alcohol and drug addiction** all activities and responsibilities have gone completely out the window. Their life completely revolves around drugs, alcohol, legal trouble, job problems, depression, and hopelessness.

Another definition of **Addiction** is the “chronic neglect of self in favor of something or someone else”. –Stephanie Covington

(Note: By Stage 4, they can no longer deny that they have a problem.)

D. The Four “Cs” of Addiction

1. Loss of consistent **Control** over use,
2. **Compulsivity** or **Craving**,
3. **Constantly** thinking about the addictive substance or process, and
4. **Continued** use in the face of adverse consequences.

Loss of **Control** refers to the individual’s repeated attempts to control their drinking and the consequent loss of ability to do so.

Compulsivity or **Craving** refers to the individual’s compulsive desire to drink alcohol or use

other drugs even when the use of those substances has caused a problem for the individual.

Constantly thinking about the substance is just what it says; the individual can not stop thinking about his or her substance or drug of choice. It occupies his or her life and all other responsibilities are neglected.

Continued use in the face of adverse consequences simply means that no matter what problems or issues the individual is having, the addiction comes first!

Addiction is not what most people think, because drug use and behavior are reinforcing or rewarding; the reward pathway is permanently altered. Addiction causes a person to engage in compulsive behavior even when there are negative consequences. There is a loss of control in limiting the intake and the craving becomes conscious and unconscious.

People take drugs mainly because drugs and alcohol change the brain. The effects of drug use may include the reinforcement or “feel good” qualities of the drug as well as pleasure, the avoidance of negative feelings, and the need to stop the withdrawal symptoms that the individual may feel when he/she stops using the drug. The individual may be constantly trying to restore normal brain functioning, combatting effects of usage.

E. The Cognitive Deficits

1. impaired attention
2. memory problems (mostly short-term loss)
3. impaired abstraction
4. reduced problem-solving abilities
5. loss of impulse control

(Note: These deficits in an addict are very similar to people who suffer from brain damage.)

F. Common Characteristics of Addicts

1. Unemployment
2. Multiple criminal justice contacts
3. Difficulty coping with stress or anger
4. Highly influenced by social peer groups

5. Difficulty handling high-risk relapse situations
6. Emotional and psychological immaturity
7. Difficulty relating to family
8. Difficulty sustaining long-term relationships
9. Educational and vocational deficits

Example: *The life of a person who is developing an addiction*

At first, their life focuses around work, community, school, sports, home, money management, future goals, church, eating, friends, laundry, hobbies, family, and significant others.

Once *alcohol and drug use* come into play, the focus of the individual is now on partying, drinking, and drug use. All other activities and responsibilities become second priority. Legal problems and trouble also become involved.

Mainstream life as it has been known up to this particular point weathers subtle yet drastic modifications that generally prove detrimental, thus initiating the downfall.

Recognition of an impending problem goes unrecognized for often long periods of time, creating the liberal and false acknowledgements of everyday life.

There are numerous beliefs that guide people's perception of substance abuse and may get in the way of the individual receiving the appropriate treatment. Some of these misconceptions include that drugs are the real problem and that the addiction is a sinful or moral issue, a learned behavior, a stress response, or a symptom of an underlying psychological problem. There is also the misconception that the person is weak and lacks willpower, but weakness and willpower are not the cause of the illness. Many addicts do not consume alcohol or use drugs for extended periods of time. They also do a good job of hiding their problem until the final stages of addiction.

F. Psychoactive Drug

1. Changes the functioning of the brain, thinking, behavior, emotions, and sensation
2. Classification
 - a) Stimulants – Cocaine, amphetamine, methamphetamine, caffeine, Nicotine

- b) Psychotherapeutics – Prozac, Haldol, lithium
- c) Opiates – morphine, codeine, heroin, methadone
- d) Depressants – alcohol, barbiturates, inhalants, sleeping pills

G. Psychotherapeutic drugs were

1. Developed in the 1950s with the intent to restore persons suffering from mental illnesses and help them resume their normal lives. Some of these medications have been found to be

Addictive Psychtherapeutic Drugs

- a) Valium
- b) Xanax
- c) Seconal
- d) Soma.

(Note: Most psychotherapeutic drugs, however, are non-addicting, such as antidepressants like Prozac, Zoloft, Paxil, Celexa, Effexor, antipsychotics, such as Risperdal, Seroquel, Zyprexa and Haldol, and anticonvulsants, such as Depakote, Tegretol, Trileptal and Topomax.)

- V. Alcoholism** *(a primary, chronic disease with genetic, psychosocial, and environmental factors influencing its development and manifestations.)* The disease is often progressive and fatal.

A. Characteristics of Alcoholism

1. Continuous or periodic: impaired control over drinking
2. preoccupation with the use of alcohol despite adverse consequences
3. distortions in thinking
4. denial

Currently, 14million adults have an alcohol use disorder *(11 million had disorders in the past or are in recovery)*. 1.8 million are receiving treatment. Greater than 50% of adults have an immediate family member with an alcohol use disorder. *(Picture/Graph-refer to slide 34)*

B. Addicting Drugs

1. Nicotine
2. Alcohol
3. Cannabis

4. Cocaine
5. Hallucinogens
6. Inhalants
7. Opioids
8. Amphetamines
9. Sedative-hypnotics and
10. Anxiolytics, and
11. PCP

Cocaine and Brain Cell Growth

Chronic cocaine use induces dendritic changes in the nucleus accumbens and the prefrontal cortex. This is bad news for the individual because you want the drug (*nucleus accumbens, which is involved in motivation*) and you lack the ability to judge the consequences of continued drug use (*prefrontal cortex, involved in judgment*). These changes persist for months after the last use.

The parts of the brain that react to cocaine cues are the limbic structures, specifically the amygdale, anterior cingulate, insula, ventral striatum (*nucleus accumbens*), orbitofrontal cortex, DLPFC, cerebellum. (*Picture – refer to slide 36*)

Brain images: Normal brain, cocaine abuser (*after 10 days*), cocaine abuser (*after 100 days*). (*Picture – refer to slide 37*)

Graph: Laboratory rats will self-administer cocaine until they die. (*Picture – refer to slide 38*)

VI. Treatment

(Note: 13 to 16 million Americans need treatment for alcohol and/or drug abuse in any year but only 3 million receive care.)

National Institute on Drug Abuse (NIDA) has 13 principals for effective treatment, they are:

1. No single treatment is appropriate for all individuals.
2. Treatment needs to be readily available.
3. Effective treatment attends to multiple needs of the individual, not just the drug

use.

4. An individual's treatment and service plan must be assessed continually and modified as necessary to ensure that the plan meets the person's needs.
5. Remaining in treatment for an adequate period of time is critical for treatment effectiveness.
6. Counseling and other behavioral therapies are critical components of effective treatment.
7. Medications are an important element of treatment for many patients, especially when combined with counseling or behavioral therapies.

8. Addicted or drug-abusing individuals with co-existing mental disorders should have both disorders treated in an integrated way.
9. Medical detoxification is only the first stage of addiction treatment and by itself does little to change long-term drug use.
10. Treatment does not need to be voluntary to be effective.
11. Possible drug use during treatment must be monitored continuously.
12. Treatment programs should provide assessment for HIV/AIDS, Hepatitis B&C and other infectious diseases.
13. Recovery from drug addiction can be a long-term process and frequently requires multiple episodes of treatment.

A. Medical Detoxification

1. safely manages the physical symptoms of withdrawal
2. only the first stage of addiction treatment
3. alone does little to change long-term drug use

B. Medications Used for Drug Addiction

1. are alcohol and benzodiazepines
2. such as Librium,
3. Ativan, and
4. Phenobarbital (*withdrawal is potentially fatal if left untreated*)
5. Buprenorphine,
6. Methadone,
7. LAAM
8. Naltrexone (*withdrawal is uncomfortable, not life-threatening*).
9. Nicotine patches, gum, bupropion, and behavior modification

Effective treatment need not be voluntary; sanctions/enticements (e.g., family, employer,

criminal justice system) can increase treatment entry/retention. Treatment outcomes are similar for those who enter treatment under legal pressure versus voluntary.

The overall goal of treatment is to return to productive functioning. If that goal can not be reached there are many other ways to determine the effectiveness of treatment. If drug use has been reduced by 40-60%, if crime is reduced by 40-60%, and if employment prospects are increased by 40% effective treatment has been achieved. Drug treatment can be as successful as treatment of diabetes, asthma, and hypertension.

C. Commonly Used Drug Treatment Models are 12-Step (AA, NA) Programs and Smart Recovery. Most treatment programs encourage self-help participation during and after treatment. These programs compliment and extend treatment efforts.

1. Alcoholics Anonymous (AA)
2. Narcotics Anonymous (NA)
3. Crystal Meth Anonymous
4. Gambling Anonymous
5. Al-Anon
6. Adult Children of Alcoholics (ACOA)
7. Double Trouble (dual-diagnosis)

D. Exponential Cost-Effectiveness of Drug Treatment.

1. Treatment is less expensive than not treating or incarceration (1 year methadone maintenance = \$4,700 vs. \$18,400 for imprisonment)
2. Every \$1 invested in treatment yields up to \$7 in reduced crime-related costs
3. Savings can exceed costs by 12:1 when health care costs are included
4. Reduced interpersonal conflicts
5. Improved workplace productivity
6. Fewer drug-related accidents

Wrap Up and Review

As a result of your participation in this lesson you should now have a basic understanding of substance abuse and dependence, the prevalence and impact of substance abuse disorders, signs and symptoms of substance use and after-effects, and the connection and differences between substance abuse and substance dependence. Ultimately, when faced with an individual who is a substance abuser should be able to apply knowledge acquired from this lesson to assure a safe resolution for all concerned parties.

“If you treat an individual as he is he will stay as he is, but if you treat him as if he were what he ought to be and could be, he will become what he ought to be and could be.

- Johann Wolfgang von Goethe