



Review on: Drug Addiction

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ABSTRACT:

The misuse of drugs and alcohol represents a significant global issue, incurring an annual cost of 250 billion dollars in the United States alone. This figure arises from premature fatalities, healthcare costs, decreased productivity, lost income, and drug-related criminal activities, as estimated by the U.S. The National Institute on Alcohol Abuse and Alcoholism and the National Institute on Drug Abuse. Drug addiction is recognized as a chronic, relapsing condition marked by compulsive drug-seeking behavior, persistent use despite severe negative socioeconomic and health repercussions, and a diminished ability to control drug consumption [Cami and Farre 2003]. The World Health Organization and the American Psychiatric Association prefer the term “substance dependence” over “drug addiction.” Although both terms are often used interchangeably in academic literature, the former is less likely to be misinterpreted as physical dependence and highlights the behavioral aspects of the disorder. According to the DSM-IV [American Psychiatric Association 1994], a diagnosis of substance dependence requires the presence of three or more of the following criteria: a) tolerance symptoms, b) withdrawal symptoms, c) consumption of large quantities of the substance, d) unsuccessful attempts or a desire to regulate use, e) significant time spent procuring the substance, f) diminished social and occupational engagements due to substance abuse, g) continued use despite experiencing physical or psychological issues.

Keywords: Addiction, Drug Abuse,

Introduction

The misuse of drugs and alcohol represents a significant global issue, incurring an annual cost of 250 billion dollars in the United States alone. This figure arises from premature fatalities, healthcare costs, decreased productivity, lost income, and drug-related criminal activities, as estimated by the U.S. National Institute on Drug Abuse and the National Institute on Alcohol Abuse and Alcoholism. Drug addiction is recognized as a chronic, relapsing condition marked by compulsive drug-seeking behavior, persistent use despite severe negative socioeconomic and health repercussions, and a diminished ability to control drug consumption [Cami and Farre 2003]. The World Health Organization and the American Psychiatric Association prefer the term “substance dependence” over “drug addiction.” Although both terms are often used interchangeably in academic literature, the former is less likely to be misinterpreted as physical dependence and highlights the behavioral aspects of the disorder. According to the DSM-IV [American Psychiatric Association 1994], a diagnosis of substance dependence requires the presence of three or more of the following criteria: a) tolerance symptoms, b) withdrawal symptoms, c) consumption of large quantities of the substance, unsuccessful attempts or a desire to regulate use, e) significant time spent procuring the substance, f) diminished social and occupational engagements due to substance abuse, g) continued use despite experiencing physical or psychological issues.

Causes of Drug Addiction

Like many mental health disorders, several factors may contribute to development of drug addiction. The main factors are:

Environment. Environmental factors, including your family’s beliefs and attitudes and exposure to a peer group that encourages drug use, seem to play a role in initial drug use.

Genetics. Once you’ve started using a drug, the development into addiction may be influenced by inherited (genetic) traits, which may delay or speed up the disease progression.

Types of Drug Abuse

Not all drugs are created equal. Therefore, some drugs are more addictive than others. The highly addictive drugs that are most abused are the following:

Heroin

Heroin is a highly addictive opioid. Using heroin can cause a person to experience seizures, psychosis, and hallucinations. Heroin, when it's injected, can also spread diseases such as human immunodeficiency virus (HIV) and hepatitis. The reason why heroin causes such serious health issues when abused is that it interferes with the brain's receptors. Therefore, its users become physically dependent on the substance very quickly.

Cocaine

Cocaine, even when taken in small doses, is a very dangerous stimulant. It induces euphoria, increases blood pressure, and accelerates the heart rate. Using cocaine can even cause a person to experience fatal strokes or heart attacks. Because of how addictive cocaine is, many people that are addicted to it are willing to sacrifice any facet of their lives to get more of it. As a result, cocaine abuse can lead to financial, legal, and physical issues. Due to the severe consequences that many people that use cocaine experience, it's imperative that those that suffer from cocaine addiction receive professional addiction treatment.

Marijuana

The most prevalent forms of drug abuse tend to be those that are readily available. This accessibility contributes significantly to marijuana being the most frequently abused illegal substance in contemporary society. Additionally, a widespread perception exists that marijuana is not addictive, leading many individuals to use it irresponsibly.

Crack

Crack is a powerful variant of cocaine that individuals smoke to experience a brief yet intense feeling of euphoria. Due to its low cost, the prevalence of crack abuse is significant.

Regrettably, the misuse of crack frequently results in rapid addiction.

Alcohol

Alcohol represents a prevalent form of substance abuse, largely due to its widespread availability. The misuse of alcohol can lead to a range of psychological, physical, and social issues. Furthermore, it has the potential to severely damage personal relationships, including friendships and marriages. Many individuals who abuse alcohol consume it in such excessive quantities that their bodies cannot cope, often necessitating hospitalization for alcohol poisoning. Long-term alcohol abuse can result in irreversible damage to vital organs such as the heart and liver. Additionally, it may lead to legal troubles, including arrests for public intoxication, driving under the influence, or other related offenses.

Effect of Drug Addiction

The physical consequences of drug misuse are significant. Psychoactive substances are chemical agents that influence both mental and physical states.

The consumption of various drugs can lead to:

- Alterations in coordination
- Variations in blood pressure and heart rate
- Shifts in alertness, resulting in increased wakefulness or drowsiness
- Enhanced sociability
- Relief from pain
- Modifications in an individual's physical appearance

Prolonged use of these substances can result in enduring changes to both the brain and body, stemming from the initial short-term physical effects.

Short-term physical effects

The consumption of any drug can lead to various short-term physical effects. Below are examples of commonly used substances, their associated short-term physical effects, and potential health risks linked to substance use disorders (SUD).

Alcohol

- Impaired coordination
- Accelerated heartbeat
- Flushing of the skin or face
- Dizziness
- Nausea and vomiting

- Risk of hypothermia
- Possibility of coma

Damaging effects of Alcoholism



Methamphetamines

- Heightened wakefulness and physical activity
- Reduced appetite
- Increased respiratory rate
- Elevated or irregular heart rate
- Raised blood pressure
- Increased body temperature

Benzodiazepines

- Slurred speech
- Dizziness
- Impaired motor function
- Decreased respiratory rate
- Lowered blood pressure

Heroin and other opioids

- Dry mouth
- Itching sensations
- Nausea

- Vomiting
- Slowed respiratory and heart rates

Tobacco and nicotine

- Elevated blood pressure
 - Increased respiratory rate
 - Accelerated heart rate
 - Significantly heightened risk of cancer, particularly lung cancer from smoking or oral cancer from chewing
 - Chronic bronchitis
 - Emphysema
 - Heart disease
- Leukemia
 - Cataracts
 - Pneumonia

Long-term Physical Consequences

Prolonged use of substances can lead to significant health issues over time. The extent of these enduring effects is influenced by various factors, including the type of substance, the quantity consumed, and the duration of use.

Commonly used drugs and their associated long-term physical effects related to substance use disorder (SUD) include:

Alcohol:

- Heart disease
- Stroke
- Liver disease and inflammation (alcoholic liver disease)
- Pancreatitis
- Digestive issues
- Cancers of the breast, mouth, throat, esophagus, larynx, liver, colon, and rectum

Methamphetamines:

- Severe dental issues
- Significant weight loss
- Intense itching resulting in skin sores
- Increased risk of HIV, hepatitis, and other infections from needle sharing

Cocaine and Heroin (when snorted):

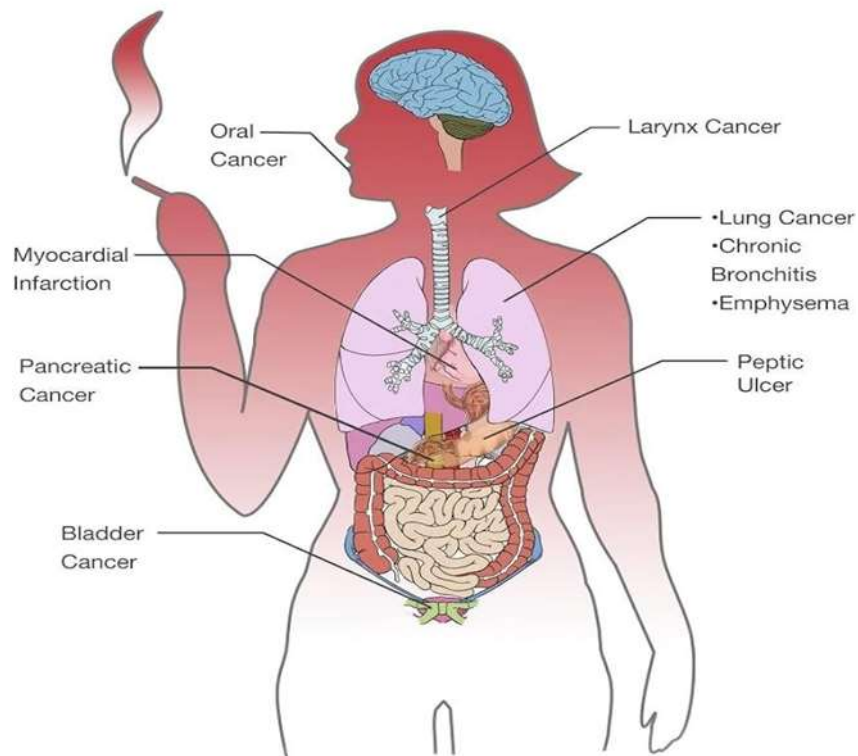
- Loss of sense of smell
- Frequent nosebleeds
- Nasal damage and difficulty swallowing
- Other complications include:
 - Infection and necrosis of bowel tissue due to reduced blood flow
 - Poor nutrition and weight loss
 - Collapsed veins
 - Abscesses
 - Infection of the heart's lining and valves

- Constipation and abdominal cramps
- Liver or kidney disease
- Pneumonia
- Risk of fatal overdose

Tobacco or Nicotine:

- Significantly heightened risk of cancer, including lung cancer from smoking or oral cancer from chewing

The Effects of Tobacco Smoking



- Chronic bronchitis
- Emphysema
- Heart disease
- Leukemia

Prevention of drug addiction

It is essential to educate oneself regarding the prescribed analgesics, including their possible side effects and the associated risk of developing dependence.

Consult with your physician to establish limits on the duration and dosage of opioid analgesics, particularly for acute conditions, whenever feasible.

Generally, short-term usage is advisable to mitigate the risk of dependency. Ensure the proper disposal of any unused medication to avert accidental or intentional misuse by yourself or others.

Additionally, consider exploring non-pharmacological methods for pain management, such as physical therapy or acupuncture.

Treatment for Drug addiction

Following detoxification, you may proceed with a treatment plan that includes:

- Therapy
- Medication

Treatment for substance use disorder is tailored to the individual. You may require various forms of treatment at different stages of your recovery. A range of treatment environments is available, including inpatient and outpatient facilities, as well as both short-term and long-term therapeutic communities.

Therapies for substance use disorder

Some effective therapies for adults with substance use disorders include:

1. **Assertive Community Treatment (ACT):** This approach delivers mental health services within a community context rather than in a residential or hospital environment. ACT is highly personalized, focusing on your strengths, needs, and future aspirations.
2. **Cognitive Behavioral Therapy (CBT):** CBT aids in recognizing detrimental behavior and thought patterns. You will establish goals aimed at discovering healthier coping mechanisms.
3. **Contingency Management:** This therapeutic method motivates you to set personal objectives, rewarding you upon achieving these goals.
4. **Motivational Enhancement Therapy:** This therapy encourages you to establish realistic goals, with a mental health professional supporting you in taking steps to achieve them.
5. **Therapeutic Communities (TCs):** A TC represents a long-term residential treatment option that emphasizes the development of new, healthier values and behavior.

Conclusion

If young individuals are informed about the detrimental consequences of drug abuse, they are likely to refrain from engaging in such behavior from the outset. Therefore, the implementation of effective drug abuse prevention programs in schools and colleges could serve as the most successful strategy for mitigating this iwhat- is-addiction.

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