



Drug addiction: A big challenge for youth and children's

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Abstract

Drug addiction is a chronic, relapsing disorder in which compulsive drug-seeking and drug-taking behavior persists despite serious negative consequences. Theories of addiction have mainly been developed from neurobiologic evidence and data from studies of learning behavior and memory mechanisms. The World Health Organization¹ and the American Psychiatric Association use the term "substance dependence" rather than "drug addiction." The risk for developing an addiction is exceptionally high during the adolescent and young adult years, and worldwide families and communities are suffering because of addiction's widespread impact. Drug addiction causes sufferers to experience physical and psychological dependency on illicit, mind-altering including illegal intoxicants like cocaine, heroin, methamphetamine, and PCP. Many people also become addicted to misused prescription drugs, or to chemical substances not manufactured for human consumption, to party drugs hallucinogens like LSD, or to marijuana, which despite its benign reputation is the most widely abused illicit drug substances. Drug addiction is treatable and can be successfully managed. More good news is that drug use and addiction are preventable. Teachers, parents, and health care providers have crucial roles in educating young people and preventing drug use and addiction. Individuals who start using drugs and alcohol as teenagers are far more likely to develop an addiction than those who initiate use as an adult. In fact, addiction could be seen as primarily an adolescent illness as most peoples' addictions initially develop during this time period. Addiction is a brain-based disorder. For many, the disorder is present before they ever begin using substances. As the drug epidemic continues to painstakingly seep into the country's social and cultural aspects, drug abuse naturally trickles into our younger generation – a generation refusing to be left out. Making up one-fifth of the population, 15-24 year-olds carry with them India's future. The youth of our nation will eventually determine the country's moral, political, and social persuasions. Bearing the burden of a densely populated country like India is no small task. And drug abuse does nothing to lighten the load. The youth of our nation has a massive responsibility. And as India's potential rests delicately in their hands the drug epidemic continues to rage on the sidelines. Just as a single footballer's attitude and actions can hurt his whole team and cause them to lose the match, illicit drugs have the potential to thwart the success of India's future.

Keywords: drug addiction, healthcare, youth, children's, alcohol, world health organization

1. Introduction

Drug addiction is a chronic brain disease that causes powerful physical and psychological cravings for mind-altering substances, Drug addiction is a complex neurobiological disease that requires integrated treatment of the mind, body, and spirit. It is considered a brain disease because drugs change the brain — they change its structure and how it works. Without treatment, these brain changes can be long-lasting. Addiction is chronic, it is progressive, and if left untreated, it can be fatal. Addiction is a chronic disease characterized by drug seeking and use that is compulsive, or difficult to control, despite harmful consequences. The initial decision to take drugs is voluntary for most people, but repeated drug use can lead to brain changes that challenge an addicted person's self-control and interfere with their ability to resist intense urges to take drugs. Drug addiction isn't about just heroin, cocaine, or other illegal drugs. You can get addicted to alcohol, nicotine, opioid painkillers, and other legal substances. These brain changes can be persistent, which is why drug addiction is considered a "relapsing" disease—people in recovery from drug use disorders are at increased risk for returning to drug use even after years of not taking the drug. Individuals struggling with drug addiction often feel as though they cannot function normally without their drug of choice. Addiction is a disease that affects your brain and behavior. When you're addicted to drugs, you

can't resist the urge to use them, no matter how much harm the drugs may cause.

Including illegal intoxicants like cocaine, heroin, methamphetamine, and PCP. Many people also become addicted to misused prescription drugs, or to chemical substances not manufactured for human consumption, to party drugs hallucinogens like LSD, or to marijuana, which despite its benign reputation is the most widely abused illicit drug. Drug addiction, also called substance use disorder, is a disease that affects a person's brain and behavior and leads to an inability to control the use of a legal or illegal drug or medication. Substances such as alcohol, marijuana and nicotine also are considered drugs. When you're addicted, you may continue using the drug despite the harm it causes. Drug addicts suffer enormously negative life consequences as a result of their compulsive and uncontrolled drug use, but that doesn't prevent them from returning to drugs again and again. Drug addiction can start with experimental use of a recreational drug in social situations, and, for some people, the drug use becomes more frequent. For others, particularly with opioids, drug addiction begins with exposure to prescribed medications, or receiving medications from a friend or relative who has been prescribed the medication. As time passes, you may need larger doses of the drug to get high. Soon you may need the drug just to feel good. As your drug use increases, you may find that it's increasingly

difficult to go without the drug. The risk of addiction and how fast you become addicted varies by drug. Some drugs, such as opioid painkillers, have a higher risk and cause addiction more quickly than others.

Addiction vs. Abuse

Drug abuse is when you use legal or illegal substances in ways you shouldn't. You might take more than the regular dose of pills or use someone else's prescription. You may abuse drugs to feel good, ease stress, or avoid reality. But usually, you're able to change your unhealthy habits or stop using altogether. Addiction is when you can't stop. Not when it puts your health in danger. Not when it causes financial, emotional, and other problems for you or your loved ones. That urge to get and use drugs can fill up every minute of the day, even if you want to quit.

Type of drug Addiction

Drugs which is Used in Addiction

Commonly Used Illegal Drugs

Drugs are classified in a number of ways. Many are potentially addictive and harmful. Examples of illegal drugs include:

- Prescription medication (painkillers, stimulants, anti-anxiety pills)
- Methamphetamines
- Cocaine
- Opiates
- Marijuana
- Hallucinogens
- Bath Salts
- Benzodiazepines
- Crystal Meth
- Ecstasy
- Heroin
- Over the Counter Drugs
- Methadone
- Marijuana
- LSD
- Mushrooms
- PCP

Commonly Used Prescription Drugs

Prescription drugs which can be obtained legally are also used by all age groups for non-medical reasons, often in combination with alcohol. The risks of drug interaction or accidental overdose can be deadly. Commonly used and misused prescription drugs include:

- Opioid painkillers
- Benzodiazepines
- Stimulants, such as those used to treat ADHD
- Antidepressants
- Anti-obsessive agents
- Mood stabilizers

Signs, Symptoms and Diagnosis of Drug Addiction

While opioids are especially dangerous, a drug addict can overdose on any drug. Clear signs of drug overdose include:

- Breathing difficulties
- Bluish tint to the skin
- Agitation, restlessness
- Loss of equilibrium
- Dizziness
- Confusion, disorientation

- Strange speech or behavior
- Elevated body temperature
- Nausea and vomiting
- Aggression, hostility
- Signs of internal bleeding
- Loss of consciousness
- Feeling that you have to use the drug regularly — daily or even several times a day
- Having intense urges for the drug that block out any other thoughts
- Over time, needing more of the drug to get the same effect
- Taking larger amounts of the drug over a longer period of time than you intended
- Making certain that you maintain a supply of the drug
- Decreased coordination
- Difficulty concentrating or remembering
- Slowed reaction time
- Anxiety or paranoid thinking
- Cannabis odor on clothes or yellow fingertips
- Exaggerated cravings for certain foods at unusual times
- Long-term (chronic) use is often associated with:
- Decreased mental sharpness
- Poor performance at school or at work
- Reduced number of friends and interests
- You take more drugs than you want to, and for longer than you thought you would.
- You always have the drug with you, and you buy it even if you can't afford it.
- You keep using drugs even if it causes you trouble at work or makes you lash out at family and friends.
- You spend more time alone.
- Spending significant time finding drugs, using them, and/or recovering from their effects
- Physical and psychological cravings so powerful they become an obsession
- Continued consumption of drugs despite associated difficulties in meeting work, school, financial, or family/personal obligations
- Substance abuse that continues even though it causes painful interpersonal conflicts
- Neglect of meaningful social and/or recreational activities because of the drug use
- Frequent and excessive use of drugs in potentially hazardous situations, or hazardous behavioral traceable to drug abuse
- You don't take care of yourself or care how
- You lie, or do dangerous things like driving while high or have unsafe sex.
- You spend most of your time getting, using, or recovering from the effects of the drug.
- You feel sick when you try to quit.
- Drug addiction symptoms or behaviors include, among others:
 - A sense of euphoria or feeling "high"
 - A heightened sense of visual, auditory and taste perception
 - Increased blood pressure and heart rate
 - Red eyes
 - Dry mouth
 - Spending money on the drug, even though you can't afford it
 - Not meeting obligations and work responsibilities, or cutting back on social or recreational activities because of drug use

- Continuing to use the drug, even though you know it's causing problems in your life or causing you physical or psychological harm
- Doing things to get the drug that you normally wouldn't do, such as stealing
- Driving or doing other risky activities when you're under the influence of the drug
- Drug addiction symptoms or behaviors include, among others:
 - Spending money on the drug, even though you can't afford it
 - Not meeting obligations and work responsibilities, or cutting back on social or recreational activities because of drug use
 - Continuing to use the drug, even though you know it's causing problems in your life or causing you physical or psychological harm
 - Doing things to get the drug that you normally wouldn't do, such as stealing
 - Driving or doing other risky activities when you're under the influence of the drug
 - Spending a good deal of time getting the drug, using the drug or recovering from the effects of the drug
 - Failing in your attempts to stop using the drug
 - Experiencing withdrawal symptoms when you attempt to stop taking the drug

Causes of Addiction

No one factor can predict if a person will become addicted to drugs. A combination of factors influences risk for addiction. Changes in the brain that support physical and psychological dependency on mind-altering substances are the direct cause of addiction, but those changes do not occur at random. For example:

Biology: The genes that people are born with account for about half of a person's risk for addiction. Gender, ethnicity, and the presence of other mental disorders may also influence risk for drug use and addiction.

Family history: Your genes are responsible for about half of your odds. If your parents or siblings have problems with alcohol or drugs, you're more likely as well. Women and men are equally likely to become addicted. Studies have determined that genetic factors are about 50 percent responsible for the development of drug addiction, and one of the surest identifiers of genetic risk is having parents or siblings who've suffered from drug or alcohol dependency.

Environment: A person's environment includes many different influences, from family and friends to economic status and general quality of life. Factors such as peer pressure, physical and sexual abuse, early exposure to drugs, stress, and parental guidance can greatly affect a person's likelihood of drug use and addiction.

Problems at school or work: Frequently missing school or work, a sudden disinterest in school activities or work, or a drop in grades or work performance

Mental disorders. If you're depressed, have trouble paying attention, or worry constantly, you have a higher chance of addiction. You may turn to drugs as a way to try to feel better. Many people with mental health issues turn to drugs and

alcohol to help them cope with frightening and disabling symptoms: studies indicate that four out of 10 drug addicts have at least one co-occurring mental health disorder.

Development: Genetic and environmental factors interact with critical developmental stages in a person's life to affect addiction risk. Although taking drugs at any age can lead to addiction, the earlier that drug use begins, the more likely it will progress to addiction. This is particularly problematic for teens. Because areas in their brains that control decision-making, judgment, and self-control are still developing, teens may be especially prone to risky behaviors, including trying drugs.

Money issues: sudden requests for money without a reasonable explanation; or your discovery that money is missing or has been stolen or that items have disappeared from your home, indicating maybe they're being sold to support drug use

Early age of initial usage: The earlier a person starts using drugs and alcohol the more likely they are to become addicted to any type of drug.

Peer pressure: The influence of peers, especially during adolescence, is often the decisive factor in the onset of addiction (most drug addicts begin consuming during their teen years).

Early drug use: Children's brains are still growing, and drug use can change that. So taking drugs at an early age may make you more likely to get addicted when you get older.

Troubled relationships: If you grew up with family troubles and aren't close to your parents or siblings, it may raise your chances of addiction.

Physical health issues: lack of energy and motivation, weight loss or gain, or red eyes

Neglected appearance: lack of interest in clothing, grooming or looks

Changes in behavior: exaggerated efforts to bar family members from entering his or her room or being secretive about where he or she goes with friends; or drastic changes in behavior and in relationships with family and friends

Disadvantage of Addiction

Drug Addiction Affects Every Organ in the Body Aside from overdose, there are many adverse medical effects of drug addiction. These include:

- Most drugs affect the brain's "reward circuit," causing euphoria as well as flooding it with the chemical messenger dopamine. A properly functioning reward system motivates a person to repeat behaviors needed to thrive, such as eating and spending time with loved ones. Surges of dopamine in the reward circuit cause the reinforcement of pleasurable but unhealthy behaviors like taking drugs, leading people to repeat the behavior again and again.
- Cardiovascular disease
- Contraction of HIV, hepatitis and other illnesses
- Heart rate irregularities, heart attack

- Respiratory problems such as lung cancer, emphysema, and breathing problems
- Abdominal pain, vomiting, constipation, diarrhea
- Kidney and liver damage
- Seizures, stroke, brain damage
- As a person continues to use drugs, the brain adapts by reducing the ability of cells in the reward circuit to respond to it. This reduces the high that the person feels compared to the high they felt when first taking the drug—an effect known as tolerance. They might take more of the drug to try and achieve the same high. These brain adaptations often lead to the person becoming less and less able to derive pleasure from other things they once enjoyed, like food, sex, or social activities.
- Changes in appetite, body temperature, and sleeping patterns
- Stroke
- Pancreatitis
- Gastrointestinal problems
- Malnutrition
- Insomnia and sleep disorders

Long-term use also causes changes in other brain chemical systems and circuits as well, affecting functions that include:

- Learning
- Judgment
- Decision-making
- Stress
- Memory
- Behavior

Your brain is wired to make you want to repeat experiences that make you feel good. So you're motivated to do them again and again.

Facts and Statistics of Addiction

- The last National Survey on the extent, pattern and trend of drug abuse was sponsored by Ministry of Social Justice and Empowerment and conducted by the United Nations Office on Drugs and Crime in the year 2000-2001. The report was published in 2004. The Survey estimated that about 7.32 Crore persons in India were users of alcohol and drugs. Of these 87 lakh used Cannabis, 20 lakh used opiates and 6.25 Crore were users of Alcohol. The survey covered 40,697 individuals. Only males within the age group of 12-60 years were part of the Survey.
- Drug addiction statistics reveal a story of immense suffering, rampant abuse, and great public danger. In 2016:
 - About 2.9 million people aged 12 and older were addicted to prescription drugs, which were either misused or obtained illegally (painkillers, sedatives, or tranquilizers).
 - Approximately 2.2 million drug addicts were addicted to cocaine, heroin, or methamphetamine, the most frequently abused "hard" drugs.
 - On average, 28.6 million people aged 12 and older (10.6 percent of the population) used an illicit drug at least once during any one-month period.
 - In the 2014 National Survey on Drug Use and Health (NSDUH), 20.2 million American adults reported a past-year substance use disorder, and out of this group 7.9 million (39.1 percent) also suffered from a co-occurring mental health disorder. The range of co-occurring disorders known to coincide with drug addiction is broad and includes virtually every type of mental illness recognized by the American Psychiatric Association.

- 20.1 million people aged 12 and over suffered from a substance use disorder, including 7.4 million (2.7 percent of the population) who exhibited symptoms consistent with a drug use disorder.
- Among the 7.4 million suffering from a drug use disorder, approximately four million were addicted to marijuana.
- Among those in the drug-using group, 24 million were current marijuana users and 3.3 million had misused prescription drugs (painkillers, tranquilizers, or sedatives).
- 11.8 million people misused opioid painkillers during the year, and another 948,000 used the most well-known illegal opioid, heroin.
- While the overall rate of drug addiction was 2.7 percent among those 12 and over, 3.2 percent of adolescents (12-17) and seven percent of young adults (18-25) suffered from drug use disorders.
- The harmful use of alcohol results in 3.3 million deaths each year.
- On average every person in the world aged 15 years or older drinks 6.2 litres of pure alcohol per year.
- Less than half the population (38.3%) actually drinks alcohol, this means that those who do drink consume on average 17 litres of pure alcohol annually.
- Some 31 million persons have drug use disorders.
- Almost 11 million people inject drugs, of which 1.3 million are living with HIV, 5.5 million with hepatitis C, and 1 million with both HIV and hepatitis C.

Treatment of Addiction (Drug Addiction Withdrawal and Detox)

As with most other chronic diseases, such as diabetes, asthma, or heart disease, treatment for drug addiction generally isn't a cure. However, addiction is treatable and can be successfully managed. People who are recovering from an addiction will be at risk for relapse for years and possibly for their whole lives. If left untreated drug addiction will inevitably worsen over time, leaving a trail of heartbreak and tragedy in its wake. But when addicts do seek treatment for their drug abuse symptoms (plus any co-occurring mental health disorders), if they are truly committed to their recovery programs they have real hope of finding lasting sobriety. Research shows that combining addiction treatment medicines with behavioral therapy ensures the best chance of success for most patients. Treatment approaches tailored to each patient's drug use patterns and any co-occurring medical, mental, and social problems can lead to continued recovery. Addicts develop a strong physical and emotional reliance on their drugs of choice. Consequently, any attempt to stop using drugs will leave drug abusers vulnerable to powerful symptoms of withdrawal, which can put their recovery and their health in jeopardy. A severe drug use disorder means at least six of these symptoms have been reported, although a mild drug use disorder can be diagnosed if only two of these symptoms are experienced.

In addition to the threat of addiction, heavy drug users are at grave risk of overdose, which can lead to hospitalization and ultimately to death. And thanks to the growing epidemic of opioid painkiller abuse, overdose deaths have been expanding dramatically. Withdrawal can begin soon after the cessation of drug use and will likely peak in intensity in the first 24 to 48 hours. If severe withdrawal is left unchecked, in some instances it can be fatal. Anyone experiencing the symptoms of withdrawal should be under a doctor's care, and

for drug addicts entering treatment medical detox is often required before therapy for addiction can begin.

Medical detox in an addiction treatment center takes place in a fully-staffed medical facility where patients are monitored around the clock, and treatment for the side effects of withdrawal is provided as needed. Medications to reduce the intensity of withdrawal symptoms may be administered, and patients will not be released from detox until they are symptom-free and physically and mentally well enough to handle the daily routine of an addiction treatment regimen.

- Using drugs compulsively, for longer periods or in larger amounts than originally intended
- Multiple failures to stop or reduce drug use
- Continued use of drugs despite their role in exacerbating other physical or psychological health problems
- Progressive build-up of drug tolerance, which means users must consume more drugs to experience the same effects
- Powerful, painful, debilitating, and dangerous withdrawal symptoms that develop within a few hours of an attempt to stop using a particular drug

As recently as 1980, less than 10,000 people were dying of drug overdoses in the United States each year. But in 2016 that number rose to an astonishing 64,000, and about two-thirds of those deaths were related to opioid abuse (this category includes opioid painkillers, heroin, and synthetic opioid drugs). There is no cure for addiction. But inpatient treatment programs that include detox (if necessary), psychotherapy (individual, group, and family), medication management, life skills training, and holistic healing practices can make a significant impact in the lives of men and women diagnosed with substance use disorders.

The risk of relapse in drug addiction recovery is substantial, and that makes outpatient aftercare programs vitally important for newly-sober individuals, as well as for those working to maintain their recovery. Regular therapy sessions and 12-step (or alternative) peer group meetings can provide much-needed guidance and moral support to people in the midst of making major lifestyle changes, and family participation in ongoing relapse prevention programs can boost their effectiveness even further. While aftercare programs don't guarantee permanent wellness, they can significantly decrease the likelihood of relapse and make it easier for recovering addicts to get back on track if and when they slip. Drug addiction recovery is a long-term process, and those who attempt to overcome their drug problems must be prepared for a challenging struggle. In the end, persistence and determination will make all the difference, and if people recovering from substance use disorders are strong enough to stay the course, a happy, healthy, drug-free future will be within their grasp.

Conclusion

Drug addiction is a chronic disease characterized by drug seeking and use that is compulsive, or difficult to control, despite harmful consequences. Drug addiction causes sufferers to experience physical and psychological dependency on illicit, mind-altering substances. Brain changes that occur over time with drug use challenge an addicted person's self-control and interfere with their ability to resist intense urges to take drugs. This is why drug addiction is also a relapsing disease. Relapse is the return to drug use after an attempt to stop. Relapse indicates the need for more or different treatment.

Most drugs affect the brain's reward circuit by flooding it with the chemical messenger dopamine. Surges of dopamine in the reward circuit cause the reinforcement of pleasurable but unhealthy activities, leading people to repeat the behavior again and again. Over time, the brain adjusts to the excess dopamine, which reduces the high that the person feels compared to the high they felt when first taking the drug—an effect known as tolerance. They might take more of the drug, trying to achieve the same dopamine high. Habitual drug use causes changes in the structure and operation of the brain that deepen and reinforce drug addiction, to the point where a desire to stop using drugs is not enough to make it happen. No single factor can predict whether a person will become addicted to drugs. A combination of genetic, environmental, and developmental factors influences risk for addiction. The more risk factors a person has, the greater the chance that taking drugs can lead to addiction. Drug addiction is a destroyer of hopes, dreams, and lives, but with inpatient treatment plus a comprehensive aftercare program drug addicts can find lasting relief from the ravages of chemical dependency, regardless of how long they've been addicted. Drug addiction is treatable and can be successfully managed. More good news is that drug use and addiction are preventable. Teachers, parents, and health care providers have crucial roles in educating young people and preventing drug use and addiction.

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