

Understanding of Drug Addiction Drug Abuse and Popular Drug Slang: A Narrative Review

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Abstract

Drug addiction has significantly increased in the whole world, especially in the South Asian countries like Bangladesh. In this country, this agent of human devastation has spread its tentacles to every nook and corner. International organizations like the United Nations and World Health Organization (WHO) are alarmed by the present proportion of addicts. Including information on drug usage, it is much more a time honored issue to understand or acquire new concept about drug abuse. Many people don't understand why or how other people become addicted to drugs. They may mistakenly think that those who use drugs lack moral principles or willpower and that they could stop their drug use simply by choosing to. In reality, drug addiction is a complex disease, and quitting usually takes more than good intentions or a strong will. Drugs change the brain in ways that make quitting hard, even for those who want to. Fortunately, researchers know more than ever about how drugs affect the brain and have found treatments that can help people recover from drug addiction and lead productive lives. [*Journal of National Institute of Neurosciences Bangladesh, January 2022;8(1): 84-89*]

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Introduction

The terminology used in discussing drug dependence, abuse, and addiction has long been confusing. Confusion stems from the fact that repeated use of certain prescribed medications can produce neuroplastic changes resulting in two distinctly abnormal states. The first is dependence, sometimes called “physical” dependence, produced when there is progressive pharmacological adaptation to the drug resulting in tolerance. In the tolerant state, repeating the same dose of drug produces a smaller effect¹.

The second abnormal state that can be produced by repeated drug use occurs in only a minority of those who initiate drug use. It leads progressively to compulsive,

out of control drug use. Unfortunately, in 1987 the American Psychiatric Association (APA) chose to use the word “dependence” when defining the state of uncontrolled drug use more commonly known as addiction. The word “addiction” was at that time considered pejorative and thus to be avoided. The result, over the last two decades, is that confusion has developed between dependence as a normal response and dependence as addiction.

The difference between addiction and dependence can be difficult to understand. Some organizations have different definitions, use the words interchangeably or even abandon both terms altogether. (“Substance use disorder” is a preferred term in the scientific

community.) Because of this lack of consistency, some ground rules can help differentiate between the two terms. When people use the term “dependence,” they are usually referring to a physical dependence on a substance. Dependence is characterized by the symptoms of tolerance and withdrawal. While it is possible to have a physical dependence without being addicted, addiction is usually right around the corner².

Addiction is marked by a change in behavior caused by the biochemical changes in the brain after continued substance abuse. Substance use becomes the main priority of the addict, regardless of the harm they may cause to themselves or others. An addiction causes people to act irrationally when they don't have the substance they are addicted to in their system².

Epidemiology

Though it is not possible to find out the exact number of the drug users in the country, on the basis of different data and statistics, it is estimated that the number of addicts in Bangladesh is more than six million who spend over Tk 70 million every day on illegal narcotics, say studies and intelligence reports. According to a WHO survey, most drug users are young, their age ranging from 18 to 30 years³. According to intelligence sources at the Department of Narcotics Control (DNC), heroin is the deadliest of drugs in Bangladesh. In recent times, Yaba has gained popularity and has become a "fashionable" drug. Cough syrup Phensedyl remains the most popular among the masses because of its low price and easy availability.

What is drug addiction?

Drug addiction is a chronic disease characterized by drug seeking and use that is compulsive, or difficult to control, despite harmful consequences. 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.

Mechanism of developing addiction

Most drugs affect the brain's reward circuit by flooding it with the chemical messenger dopamine. This overstimulation of the reward circuit causes the intensely pleasurable "high" that leads people to take a drug again and again⁴. 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 high⁴. 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 high⁴.

Origins of Substance Dependence

The chronic, relapsing nature of addiction fulfills criteria for a chronic disease⁵ but because of the voluntary component at initiation, the disease concept is controversial. Most of those who initiate drug use do not progress to become addicts. Many variables operate simultaneously to influence the likelihood that a beginning drug user will lose control and develop an addiction⁵. These variables can be organized into three categories agent (drug), host (user), and environment (Table 1).

Drugs vary in their capacity to produce immediate good feelings in the user. Drugs that reliably produce intensely pleasant feelings (euphoria) are more likely to be taken repeatedly. Reinforcement refers to the capacity of drugs to produce effects that make the user wish to take them again. The more strongly reinforcing a drug is, the greater is the likelihood that the drug will be abused.

Drug Slang⁶

To avoid getting in trouble with the law, at school and at home, teens often use slang or street names to talk about drugs in secret. If you hear your teen using any of these slang terms, it may indicate they're using. It's important you take action now before their drug abuse turns into an addiction. Loved ones of a teen often find themselves playing detective, trying to crack the code to teen emotions or texting terms. If you suspect your teen is using drugs, the detective work only gets harder because teens are purposefully covering their tracks. What looks like a soda can may actually be a hiding place for marijuana. When they talk about getting some "brown sugar," do they mean the baking supply or heroin? Drug slang allows teens to talk about drugs in plain sight without raising any red flags at school or at home.

If you notice your teen using drugs think your teenager may be using drugs, staying educated on the latest slang is essential to catch the substance abuse problem early. And if it does turn out your teen has an addiction to drugs or alcohol, this early detection will play a key part in getting them the help they need fast.

Other names or Slang or Street names for various drugs⁶.

Table 1: Multiple Simultaneous Variables Affecting Onset and Continuation of Drug Abuse and Addiction⁵

Agent (Drug)
<ul style="list-style-type: none"> • Availability • Cost • Purity/potency • Mode of administration • Chewing (absorption via oral mucous membranes) • Gastrointestinal • Intranasal • Subcutaneous and intramuscular • Intravenous • Inhalation • Speed of onset and termination of effects (pharmacokinetics: combination of agent and host)
Host (user)
<ul style="list-style-type: none"> • Heredity • Innate tolerance • Speed of developing acquired tolerance • Likelihood of experiencing intoxication as pleasure • Metabolism of the drug (nicotine and alcohol data already available) • Psychiatric symptoms • Prior experiences/expectations • Propensity for risk-taking behavior
Environment
<ul style="list-style-type: none"> • Social setting • Community attitudes • Peer influence, role models • Availability of other reinforcers (sources of pleasure or recreation) • Employment or educational opportunities • Conditioned stimuli: environmental cues become associated with drugs after repeated use in the same environment

Adderall

Intended to help kids with attention disorders, Adderall is now the poster child of prescription drug abuse among teens. Adderall is also among the most popular study aid drugs, which teens seek out to increase their focus and energy levels on exam days and for all-night study sessions. In recent years, it’s also been growing in popularity at parties. Other names for Adderall include Addys, Uppers, Beans, Black Beauties, Pep Pills, Speed, Dexies, Zing, Study Buddies and Smart Pills.

Bath Salt

Marketed as “bath salts” or cleaning chemicals to circumvent drug laws, these are synthetic over-the-counter powders with a powerful amphetamine-like stimulating effect. Bath salts have become popular through word of mouth amongst teens and are also available in gas stations and convenience stores. It didn’t take long for them to become a national

issue, as they sent thousands of young people to the hospital with scary and sometimes irreversible side effects - although treatment options for this dangerous substance are available. In 2013 alone, nearly 23,000 ER visits in the U.S. were related to bath salts abuse. Other Names for Bath Salts are often variants of different brand names, which include Cloud 9, Vanilla Sky, White Lightning, Bloom, Scarface, Bliss, Drone, Energy-1, Meow Meow, Pure Ivory, Blue Silk, Stardust, Lunar Wave and Wicked X.

Cocaine

One of the most notorious illicit drugs, cocaine is a white powder that causes a short burst of energy and euphoria when snorted, smoked or injected. Cocaine highs fade quickly and leave users craving another hit, often turning casual teen cocaine abuse into a lasting addiction. Almost 5.0% of 12th graders in the U.S. have tried cocaine at least once. Your teen may also be more likely to try cocaine if they’re struggling in

school 35.0% of “F” (In the United States, the F visas are a type of non-immigrant student visa that allows foreigners to pursue education academic studies and/or language training programs) in the United States) students have used it at least once, and 13% have used it more than 40 times. Cocaine causes thousands of deaths each year and is the most addictive drug behind heroin nearly 17.0% of teens who try it become dependent on the drug. Cocaine street names includes Coke, Blow, Rock, Crack, Yayo, Snow, Sniff, Sneeze, White, Nose Candy, Bernice, Toot, Line, Dust and Flake.

Cough Medicine

Teens have taken to “robotripping,” a woozy type of high caused by drinking cough syrup. The active ingredient in several major cough syrups, dextromethorphan (or DXM), is responsible for the intoxicating effects and even a chemical dependency in some cases. Codeine cough syrups, which are even more potent, were recently taken off the shelves because of how dangerous they are - but teens can still get them from somebody with a prescription. More than 4% of high school seniors report misuse of cough medicine whether in syrup, pill, powder or capsule form which leads to ER visits and even death in some cases. Cough syrup and DXM Street names includes Dexies, Drex, Robo, Rojo, Red Devils, Poor Man’s Ecstasy, Orange Crush, Tussin, Velvet, Triple C and Drank, Purple Drank or Sizzurp combining cough syrup with soda.

Crystal Meth

Methamphetamine, or crystal meth, is a stimulant that’s nearly three times as powerful as cocaine with a high that lasts for hours followed by a debilitating comedown (or “crash”) and, for those looking to get clean, a difficult drug detox. Meth addiction is not uncommon even after the first use, and a laundry list of other serious health problems are related to crystal meth. According to a recent survey, one in 33 teens in the U.S. are experimenting with the drug starting at an average age of 12. A quarter of teens say it would be easy to score meth, and 10% say they’ve been offered it at least once. Crystal meth street names includes Crystal, Meth, Cristy, Tina, Crank, Crissy, Tweak, Glass, Ice, Shards, Go, Whizz and Chalk.

Heroin

Heroin goes by many names. This intensely addictive drug is typically used by injection with a needle. Once

it enters the body, heroin blocks the pain receptors in the brain, inducing a numb, euphoric state for a period of hours. Only around 1% of high school seniors have tried heroin, but each teen who experiments with the drug is at risk for the drug’s many serious side effects. Between 2002 and 2013, heroin use in the U.S. jumped 63%. In 2009, 21,000 Americans sought treatment for teen heroin addiction. Heroin street names includes H, Smack, Dope, China White, Horse, Skag, Junk, Black Tar, Big H, Brown Sugar, Mud, Dragon, Boy, Mexican Brown, Thunder, Skunk and Scag.

Inhalants

Inhalant abuse is defined as recreational exposure to chemical vapors, such as nitrates, ketones, and aliphatic and aromatic hydrocarbons. These substances are present in a variety of household and industrial products that are inhaled by “sniffing,” “huffing,” or “bagging.” Sniffing refers to inhalation from an open container, huffing to the soaking of a cloth in the volatile substance before inhalation, and bagging to breathing in and out of a paper or plastic bag filled with fumes. It is common for novices to start with sniffing and progress to huffing and bagging as addiction develops. Inhalant abuse is particularly prevalent in children and young adults. The exact mechanism of action of most volatile substances remains unknown. Altered function of ionotropic receptors and ion channels throughout the central nervous system has been demonstrated for a few. Nitrous oxide, for example, binds to NMDA receptors and fuel additives enhance GABAA receptor function. Most inhalants produce euphoria; increased excitability of the VTA has been documented for toluene and may underlie its addiction risk. Other substances, such as amyl nitrite (“poppers”), primarily produce smooth muscle relaxation and enhance erection, but are not addictive³. When a teen uses an inhalant, they will often empty some of the contents onto a rag or into a plastic bag, and then hold it to their face and breathe in, called huffing. Nearly 6.0% of U.S. high school seniors admit trying inhalants in their lifetime, and 2% have used them in the last month. Depending on the chemical they use, huffing will usually cause lightheadedness and a very brief feeling of euphoria. But inhalants can also do serious damage to the brain, and regular use can lead to heart damage and other major health problems¹. Inhalant street names include Huff, Poppers, Whippets, Nitrous, Laughing Gas, Moon Gas, Snappers, Bold, Rush, Air Blast, Glad, Hippie Crack, Oz, Discorama, Whiteout and Poor Man’s Pot.

Ketamine

Designed as a veterinary anesthetic, ketamine has become an increasingly popular drug with teens. This colorless liquid or white powder has a tranquilizing effect, and causes both breathing and heart rate to slow down. This sends users into a “K-hole,” where it becomes difficult to move. Teens use ketamine for a detached, out-of-body experience, and it’s become a common date rape drug for the same reason. In the past year, nearly 3.0% of 12th graders in U.S. have used ketamine, and people aged 12 to 25 account for 74.0% of ER visits related to ketamine abuse. Ketamine street names include K, Ket, Special K, Vitamin K, Green K, Super C, Super Acid, Special La Coke, Jet, Purple, Kit Kat, Cat Valium and Honey Oil.

Lysergic acid diethylamide (LSD)

This infamous psychedelic drug known for its 12-hour “trip” full of hallucinations has been popular with teens since the 1960s and the Flower Generation. It’s typically sold on small squares of paper similar to postage stamps or absorbed into sugar cubes, which are then ingested. In its most basic form, LSD is a clear, odorless liquid. Last year, nearly 3% of high schoolers took acid, and approximately 5 million Americans aged 12–25 have experimented with LSD in their lifetimes. Tripping on acid is an unpredictable, often overwhelming journey. Users can lose control, becoming a threat to themselves or others, and have mental and/or emotional breakdowns following the experience. Ripping on acid is an unpredictable, often overwhelming journey. Users can lose control, becoming a threat to themselves or others, and have mental and/or emotional breakdowns following the experience. LSD street names include Acid, L, Lucy, Lucy in the Sky with Diamonds, Cid, Tabs, Doses, Blotter, California Sunshine, Yellow Sunshine, Window Pane, Battery Acid, Dots, Looney Toons and Superman.

Marijuana

Exogenous cannabinoids like in marijuana, the green, pungent leaves of the cannabis plant known as “marijuana,” “weed” and a host of other names maintain a stronghold as the most popular illicit drug among U.S. teens. When smoked, marijuana releases THC, a potent psychoactive chemical. This makes the user feel relaxed, heightens their senses and has a mild hallucinogenic effect. It also causes paranoia and impaired motor function and is highly addictive. Marijuana is commonly referred to as a “gateway

drug,” because teens who use the drug often develop additional substance problems later in life. More than a third of 12th graders and 12% of 8th graders reported using it in the last year. The earlier they start using, the bigger the drug’s impact on their brain’s development. Kids smoking weed typically do poorer in school and historically have lower-paying jobs following graduation. Slang for marijuana includes Weed, Pot, Hashish, Hash, Green, Bud, Grass, Trees, Reefer, Herb, Mary Jane, Ganja, Hemp, Dope, Chronic, Kush, Sinsemilla and Purple Haze.

Mushrooms

Psychedelic mushrooms can closely resemble mushrooms used in cooking, and are grown in a similar way. Unlike mushrooms for cooking, however, these nearly 200 species of mushrooms contain psilocybin, a mind-altering chemical. Teens may trip on psilocybin mushrooms much like they would on LSD eating them can lead to an altered sense of space and time, hallucinations and euphoria along with nausea and panic attacks. While under the influence of hallucinogenic mushrooms, teens can forget where they are and act out in ways they normally wouldn’t. Over the years, several teens have died from incidents occurring during mushroom-induced stupors. Street names for mushrooms include Magic Mushrooms, Shrooms, Boomers, Caps, Mushies, Buttons, Magics, Blue Meanies, Liberty Caps, Cubes and Liberties.

Non-Addictive Drugs of Abuse

Some drugs of abuse do not lead to addiction. This is the case for substances that alter perception without causing sensations of reward and euphoria, such as the hallucinogens and the dissociative anesthetics. Unlike addictive drugs, which primarily target the mesolimbic dopamine system, these agents primarily target cortical and thalamic circuits. Lysergic acid diethylamide (LSD), for example, activates the serotonin 5-HT_{2A} receptor in the prefrontal cortex, enhancing glutamatergic transmission onto pyramidal neurons. These excitatory afferents mainly come from the thalamus and carry sensory information of varied modalities, which may constitute a link to enhanced perception. Phencyclidine (PCP) and ketamine produce a feeling of separation of mind and body (which is why they are called dissociative anesthetics) and, at higher doses, stupor and coma. The principal mechanism of action is a use-dependent inhibition of glutamate receptors of the NMDA type⁷.

Designer Drug

The term “designer drugs” refers to drugs that are created in a laboratory (typically, an “underground,” or secret, illegal lab). A designer drug is created by changing the properties of a drug that comes from a plant such as cocaine, morphine, or marijuana-using the tools of chemistry. The resulting “designer” drugs typically have a new, different effect on the brain or behavior⁸. Designer drug synthesized to have properties similar to a known hallucinogen or narcotic but having slightly altered chemical structure, usually in order to evade restrictions against illegal substances. An illicitly produced drug of abuse. Designer drugs include methamphetamine, fentanyl and its analogues, and phencyclidine hydrochloride (PCP). They have serious side effects or are addictive; deaths and injury from overdose are common⁹.

This unhappily chosen term means molecular modifications produced in secret for profit by skilled and criminally minded chemists to produce drugs which are structurally and pharmacologically very similar to controlled substance but are not themselves controlled substances¹⁰. In 1976 a too - clever 23-year old addict seeking to manufacture his own pethidine ‘took a synthetic shortcut and injected himself with what was later with his help proved to be two closely related byproducts; one was MPTP (methylphenyltetrahydropyridine)^{11,12}. Three days later he developed a severe parkinsonian syndrome that responded to levodopa. MPTP selectively destroys melanin containing cells in substantia nigra. Further such cases have occurred from use of supposed synthetic heroin. MPTP has since been used in experimental research on parkinsonism. What the future holds for individuals and for society in this area can only be imagined¹³⁻¹⁴.

Conclusion

If you notice signs of addiction, and you hear your teen and their friends use some of this slang, they may have a drug abuse or drug addiction problem. We understand this realization can be jarring - many parents feel shocked, confused, embarrassed, or downplay the problem, calling it “normal.” It’s ok to be afraid and uncertain what to do - social stigma of drug addiction social stigma of drug addiction makes us view addicts as hopeless, bad people - but it’s crucial you spring to action once you discover your teen’s problem. The sooner you accept that your child is sick with the disease of addiction, the sooner you can get

them the professional help they need. Recognizing the difference between an addiction and substance dependence can help to better understand the nature of addiction. Knowing as much as possible about addiction and dependence can also be a valuable tool in achieving recovery. It is also important to realize that while a dependence may be present without addiction, substance dependencies frequently lead to addiction². Addiction is a more serious issue than drug abuse, because the person using the drugs cannot physically stop.

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