

Impacts of Drug Addiction on Psychological and Emotional Health

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Abstract

Drug addiction in other words is an emotional, psychological & physical dependence on legal or illegal drugs which has become a serious issue in the world. Millions of people are using drugs due to different psychological, socio-cultural & family factor. In this regard geographical location & neurobiological circuits also acts supportive factors of addiction. As the rate of drugs has increased from era of industrialization, so now it is prevalent everywhere in rural and urban areas also in educational institutions of different countries of the world. In Pakistan only about 8 million people including men & women are suffering from drug addiction. Despite knowing it's stern effects people of each class, age and gender is addicted to drugs as they give them temporary relaxation from their problem to overcome their depression & curiosity. And in return drug addiction has bad impacts on health and cause unbearable mental as well as emotional pain for family & ultimately for society. This article mainly focuses on psychological & emotional irregularations caused by drug addiction involve depression, mood swings, psychosis, delusions, panic attacks, bipolar disorder, sleep problems, feeling of loneliness, schizophrenia, family discomfort and various criminal activities. So, support of local community base in public policy is required for strong long-term planning to prevent from drug addiction by spreading public awareness & applying laws and legislations.

Keywords: Addiction; Addiction research; Addiction therapy; Drugs; Depression; Emotional pain; Cannabis; Addictive behaviour; Neuropsychological system

Introduction

Any substance that potentially changes biological function through its synthetic activity is referred to be a drug [1]. One of the socio-psychological problems facing the modern world is addiction [2]. Addiction is an ongoing condition in which a person repeatedly uses drugs, which causes consistent changes in his or her behavior, feelings, and thinking. As a result, the person loses control and harms themselves or other people [3]. Addiction to drugs implies to psychological dependence and physiological compulsion. The physical and mental states are changed by frequent and continuous use of any drug or chemical substance without a medical prescription [4]. Drug addiction is the compulsive need to consume a substance, despite the possible negative social, psychological, and physical effects. In other words, a person may have a strong physical dependence on the substance in addition to psychological and emotional dependence. It might cause an uncomfortable physical reaction when an addict stops using drugs.

Humans have used drugs since the dawn of time, but at first, it was never seen as a social problem or a threat to society as a whole. Drug abuse became a major social issue throughout the period of industrialization and modernization since it affected so many individuals. Despite being aware of its severe effects, drug addiction is widespread throughout the world [5].

The epidemic of drug trafficking and drug addiction seems to be evident everywhere in the world today. Millions of drug addicts have miserable lives in a world where they must choose between life and death [4]. Drug addiction affects men and women, as well as people of all socioeconomic classes, education levels and employment status [6]. Most often, a drug abuser starts using drugs before turning 18 years old. Just in 2016, ten thousand female students were dependent on yaba. Drug use disorders and dependence may be more common in men than in women overall. However, if they start using drugs or alcohol, women tend to consume more alcohol, marijuana, opioids, and cocaine than men do [7].

Drug misuse might involve eating, sniffing, inhaling, or injecting

drugs into one's body. The substance may be used for legitimate or medical purposes whether it is legal or illicit. Drugs can come from natural, synthetic, and biosynthetic sources. The natural sources of drugs include medicines of a plant, animal, microbial, marine, mineral, or geographical origin. The sources of plant drugs include the entire plant, plant components, secretion, and exudate. Whole plants like datura, ergot, and ephedra are involved. Three types of methods can be used to produce drugs: those that only use plant products, those that include a semi-synthetic method, in which natural materials are partially altered by synthetic substances to produce the finished result, and those that produce consumable drugs exclusively using man-made chemicals. Opium collected from the field for personal use, narcotic or psychotropic substances produced solely in a laboratory or manufacturing facility and coca bush leaves are processed to form cocaine and opium are three examples of these three. Opium, cocaine, and cannabis were all derived by man from their respective sources: the hemp plant and the poppy plant. Initially, they were exclusively used to relieve physical and emotional discomfort as well as for medical and surgical purposes.

The drug temporarily relaxes the addict, and occasionally people use drugs to avoid loneliness, forget sadness, relieve frustration, and reduce worry about personal issues. Many young men and women try to overcome their disappointment, stress, depression by shifting to different drugs. Parents' attitude towards drugs plays a vital role in initiating the adolescents to use drugs. Children's drug addiction is strongly correlated with that of their parents, and where parents smoke, their children are twice as likely to start smoking.

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Received: 02-Nov-2022, Manuscript No. jart-22-77397; **Editor assigned:** 04-Nov-2021, PreQC No. jart-22-77397 (PQ); **Reviewed:** 18-Nov-2022, QC No. jart-22-77397; **Revised:** 21-Nov-2022, Manuscript No. jart-22-77397 (R); **Published:** 28-Nov-2022, DOI: 10.4172/2155-6105.100498

Citation: Mustafa E, Areeba, Fatima A, Aslam M (2022) Impacts of Drug Addiction on Psychological and Emotional Health. J Addict Res Ther 13: 498.

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Nowadays, drug misuse may be found almost anywhere: in homes, on streets, in workplaces, parks, slums, markets, and even in educational facilities in both urban and rural locations. Virtually all segments of society are severely affected by this problem. It causes educational drop out, financial crisis, domestic violence and destroy family bondage, put the family at risk and lead the family to be isolated from the community [8] and increase criminal activities in the society which ultimately become a major challenge for the country. Drug misuse has a wide range of negative impacts that affect individuals, groups of friends, families, and society. The drug addict's family experienced social isolation. Due to drug purchases, the drug addict consumes the majority of the family's income. According to the observation of Hossain and Mamun, the drug users engage in a variety of social infractions, such as stealing, hijacking, pickpocketing, etc., as well as induce in unethical and immoral acts to raise money to buy drugs [8].

International agencies, particularly the United Nations (UN) and World Health Organization (WHO), are alarmed by the rise in drug addiction rates around the globe. Almost daily, news or information about drug abuse, drug trafficking, or arrested drug users, peddlers, and dealers may be found in the newspaper on both a national and international level. The illicit drug trade has expanded significantly over the past 25 years, and it now generates revenues that are close to \$300 billion annually, surpassing the value of crude oil traded globally. According to a WHO research, drug use is becoming a bigger issue in both developed and developing nations. Large-scale epidemics of amphetamine abuse also exist in Japan and Sweden in addition to the United States.

Risk factors

Young people's drug use is a silent killer that not only harms the addict but also their families, communities, and nations. The period of juvenility is full of anxieties, worries, variations, and complexities due to quick revolutionary biological as well as emotional changes, and because their mental capabilities are immature enough, they are unable to make the proper decisions in life [6] and commonly engaged in antisocial behavior, such as drug abuse, which finally paralyzed a nation's faculties because they lack the maturity to make the appropriate decisions in life [5].

Many environmental factors had the greatest effect on the tendency for drug use, followed by family factors, personal factors and social factors [9].

Many reasons can lead to illegal usage of drugs [10]. These consist of feelings of euphoria, peer pressure, boredom, life-changing experiences and stresses, and taught behaviour. The number of drug addicts in the nation is rising daily as a result of numerous sociocultural, psychological, and familial variables. Complex social and peer group influences, frustration, despair, curiosity, subcultural and psychological environments [5], easy and affordable access to narcotics, all contribute to young people abusing drugs that urge young people to take drugs. Family disorganization, parental neglect, parent-child conflict, spouse loss, turmoil, indiscipline, loneliness, lack of emotional support, rejection of love, overprotection, unemployment, repeated failure, personality, maladjustment, and easy access to drugs are major risk factors for drug usage. Some significant family factors of drug addiction include the presence of alcoholism, the quality of the family relationships, the sense of family happiness, and the family's hierarchical structure. Children rarely use drugs in warm, loving families. On the person, family, and society, drug addiction has a direct negative impact. Both one's physical and emotional wellbeing are impacted.

Neurobiological circuits

Each chemical has slightly distinct impacts on the brain, but all addictive drugs, including alcohol, opioids, and cocaine, cause a pleasurable surge of the neurotransmitter dopamine in a part of the brain called the basal ganglia; few chemicals known as neurotransmitters are used to communicate between nerve cells. This region oversees regulating rewards and our capacity to learn based on incentives.

The brain circuits cause changes in them as substance usage grows. They reduce their dopamine sensitivity, which decreases a substance's capacity to cause pleasure or the "high" that comes from taking it. This is known as tolerance, and it shows how the brain maintains equilibrium and adapts to a "new normal"- the substance's frequent presence. But as a result, users frequently take more of the drug to get the same level of high they are accustomed to these same circuits regulate how much we enjoy common pleasures like food, sex, and social interaction, and when they are harmed by substance abuse, the rest of life may start to feel less and less enjoyable to the user even when they are not using the substance [11-15].

The basal ganglia, extended amygdala, and prefrontal cortex are three crucial networks that are directly involved in the emergence and maintenance of substance. The positive, rewarding and pleasant effects of drug usage are controlled by the basal ganglia. Stress, anxiety, and irritability that frequently follow substance withdrawal are mediated by the extended amygdala and many executive functions are performed by pre frontal cortex (i.e., the capacity to distinguish between thoughts and actions, set priorities, organize work, and make decisions).

Geographical proximity

In terms of the manufacture, cultivation, trafficking, and promotion of drug misuse worldwide, geographic closeness has been extremely important. Bangladesh is geographically located in the middle of the "Golden Triangle" (Myanmar, Laos, and Thailand) and the "Golden Crescent" (Pakistan, Afghanistan, and Iran), and as a result, Bangladesh faces a significant risk of drug use. Sixty percent (60%) of the world's methamphetamine (yaba) is only produced in three countries named as Myanmar, Laos, and Thailand (Golden Triangle and Bangladesh is utilized as a transit country for them (Observer Research Foundation) and has grown into a significant market for drug traffickers. Bangladesh has thus become victims of illicit drug trafficking despite not being a country that produces drugs. International drug traffickers prioritize Bangladesh as a crucial crossing point for smuggling yaba into the markets of Northern America, Africa, and Europe.

Drug types and countries of origin tend to influence traffic patterns. For instance, cocaine trafficking originates in the Andean region and moves north through Central America, Mexico, and the Caribbean region to final points in North America, Europe, and other locations. Southwest and Southeast Asia is the primary origins of most heroin trafficking, with final processing of consumables occurring nearby. The path of distribution may pass through numerous countries and regions, including Malaysia, Thailand, Hong Kong, and China.

Global trend & number

There has always been a global tendency toward drug addiction from the dawn of time, yet the prevalence of addiction may differ from country to country. Due to variations in sociocultural, psychological, and familial factors, the quantity and prevalence of drug addiction may vary from state to state.

According to world drug report of UNODC, nearly half of the

estimated 27 million problem drug users use injection methods (PWID). In 2013, there were approximately 1.65 million injecting drug users who had HIV. In addition to 42 million new infections of HIV each year, the global epidemic of addiction and drug usage also results in 5 million deaths [16-18].

Worldwide, alcohol consumption was linked to 50% of deaths from liver cirrhosis, 30% of deaths from oral and pharyngeal cancers, 22% of deaths from interpersonal violence, 22% of deaths from suicide, 15% of deaths from traffic injuries, 12% of deaths from tuberculosis, and 12% of deaths from liver cancer. According to the WHO, there are 2 billion drinkers, 1.3 billion smokers, and 185 million users of illicit drugs globally. Currently, low- and middle-income nations account for 80% of tobacco consumers (LMICs); moreover, it is anticipated that 80% of tobacco-related deaths to take place by 2030 in LMIC. In 2017, India had 27% of the world's tuberculosis (TB) patients, with smoking and alcohol misuse being responsible for 20% of the disease globally. In Australia, where 30 percent of fatal car wrecks include "drunk and drive" incidents, about 6,000 individuals pass away each year from alcohol-related disorders. Indirectly or directly, substance addiction which includes smoking, drinking, and using illicit drugs causes 11.8 million fatalities worldwide each year. The Global Burden of Disease study estimates that this number is greater than cancer mortality and accounts for a fifth of all global deaths [19-21].

According to the 2021 world drug report, which was currently released by UNODC, over 36 million people experienced drug use disorders globally in the past year (UNODC World Drug Report 2021: pandemic effects ramp up drug risks, as youth underestimate cannabis dangers, 2021).

According to a United Nations Drug Control Program (UNDCP)-sponsored survey, the Kashmir division alone is home to 70000 drug users, including 4000 women.

In Bangladesh, 77.26% of all drug addicts are between the ages of 16 and 35, according to the 2018 Annual Drug Report. Drug addicts spend about TK 50,000 crore annually. Drug abusers comprise 7.5 million persons in the nation, with teens making approximately 80% of this population. 50 percent of these young people are involved in various criminal activities [5]. The percentage of women who are drug addicts is only 20.06 percent in Dhaka city.

The East Mediterranean Region, which encompasses Afghanistan, Bahrain, and Egypt, has the lowest prevalence of alcohol use disorder (7.5%) and the highest prevalence in Europe. According to reports, 75% of high school students in the US, which has the greatest national economy in the world, have used illegal substances, drank alcohol, or smoked tobacco, over a million people took heroin in 2016 and in 2017, 70,000 people died from drug overdoses.

The main cause of Pakistan's worrisome rise in drug use is that those in positions of power, wealth, and authority provide them constant support. And yet another factor is that it is widely and inexpensively available in our country. Pakistan has started importing and exporting drugs. In Pakistan, about 44 tons of heroin are consumed annually. The US has a ratio that is two to three times greater. Pakistan is regarded as a hub for heroin consumption and one of the main marketplaces for heroin smugglers and dealers

Approximately 25 to 44 percent of Pakistani students use illegal drugs. In Pakistan, 97% of the population is Muslim, and the other 3%, predominantly Christians, can purchase illegal goods with a legal authorization. Non-Muslims are only permitted to purchase a monthly

maximum of five or 100 beer bottles. But the text and spirit of these restrictions were not followed. Foreigners who are not Muslims may order alcohol from hotels with licenses and may even request a legal license. In Pakistan, 125,000 people inject drugs, and 500,000 people use heroin. In only four of Pakistan's largest cities, there are 40,000 street kids who take drugs. In Pakistan, there are 7.6 million drug addicts, of whom 78 percent are men and 22 percent are women. This number rises by 40,000 each year. Impact of different drugs on human health:

Since the introduction of heroin and other related drugs, drug usage is increasingly becoming a global problem. While substance addiction can involve compounds other than drugs, such as gasoline, cleaning solutions, Glue, and other chemicals, the term "drug" is typically used to refer to "medicine". There is a widespread misunderstanding that illegal drugs like cocaine, marijuana, and heroin, as well as the smuggling of prescription medicines, are the main causes of drug misuse. There are numerous drug types that can be abused. For instance, aspirin and chloroquine are two medicines that are frequently abused and have the potential to be lethal. Sometimes girls will use chloroquine to induce abortions. Some individuals are rumored to mix aspirin with alcohol to make a stronger beverage. Additionally, youngsters misuse things like glue, cleaning products, and other chemicals. In light of this, not all misused substances are drugs.

According to a Times of India report, substance abuse affects kids as early as nine. The discovery of Indian students abusing substances like shoe polish, whitener fluids, and nail polish as drugs is quite astounding. The despicable thing is that they also utilize the soiled water from their socks as a medication.

In Bangladesh, cannabis is the substance that is most readily available, followed by pentyl, alcohol, yaba, and heroine. Addicts from lower-income families tend to use cannabis, while those from higher-status families tend to prefer yaba.

The majority of drug addicts obtain their drugs through stealing from their families and engaging in criminal activity. Cannabis is still grown in the inaccessible hills of the Chittagong Hill Tract region despite severe government restrictions, and it appears to be increasing.

Popular substances include cannabis (marijuana), yaba (methamphetamine 30%, caffeine 70%), and phensedyl (codine, pseudoephedrine, and chlorpheniramine) among those who are addicted to drugs in the country. People from lower socioeconomic levels typically use cannabis and other inexpensive drugs, whereas those from higher socioeconomic classes mostly use yaba and phensedyl.

In 2008, 1.1 million Indians aged 12 and older who had taken crack at least once in the year before the poll and 5.3 million who had consumed cocaine in any form. More than 3 million people worldwide die each year from smoking-related causes, according to estimates from the WHO.

Impacts on Psychological health

The health, family, and society of drug users are all negatively impacted. It disrupts society and leads family members to experience excruciating mental suffering and indescribable emotional sorrow. Adolescents' physical, psychological, moral, and intellectual development is completely destroyed. It leads to "educational failure, unemployment, economic hardship, psychiatric illnesses, marital discord, domestic abuse, criminal activity, and many other societal consequences".

Alcohol, ecstasy, heroin, and other psychoactive substances can all have an impact on our mood. Drugs alter the molecules in our brains, which affects the messages those chemicals are attempting to transmit. While addicts use them and after they stop using them, all psychoactive substances have the potential to cause mental health issues (withdrawal). Anxiety, mood swings, sadness, difficulty sleeping, and psychosis are just a few of these issues. Depression, schizophrenia, bipolar illness, anxiety disorders, and attention-deficit hyperactivity disorder are among the psychological conditions that are linked to addiction (ADHD). Patients may experience bouts of extremely intense anxiety, an increase in heart rate, sweating, shortness of breath, and a feeling of losing control during their panic attacks. Addicts may have a sense of strangeness and unreality in their surroundings or a loss of self-awareness and reality. Delusions, which are beliefs that aren't true, and hallucinations, which include seeing or hearing things that aren't there, can both be brought on by psychoactive medications. They may experience manic episodes, which include high mood, delusions, impulsive conduct, racing thoughts, and are characterized by sadness, restlessness, irritability, exhaustion, and loss of pleasure. Drugs like cocaine, amphetamines, heroin, and methadone, as well as others, may be the cause of this mood disorder.

Lasser et al. has been found that 44% of smokers of cigarettes suffer from a mental illness or drug misuse problem. Solowij examined cannabis's long-term effects on the central neurological system. Results showed that chronic cannabis usage (daily or nearly daily use for at least ten years) was linked to a reduction in the ability to pay attention to details. Fergusson et al. evaluated the immediate effects of early cannabis consumption. They discovered that children who admitted to using cannabis as a young child had early tendencies toward criminality, poor mental health, and low academic achievement. They include more ties to immoral or drug-using peers and more family problems. Warner et al. revealed that males abuse and become dependent on drugs more frequently than women; the sex ratio for drug abuse is more similar to that of alcoholism. Weller et al. supervised a study on cannabis consumption and psychiatric disorders. They found cannabis use to be co-morbid with both antisocial personality disorder in adults and conduct disorder in children and adolescents. Dube and Handa shown that compared to people who use other drugs, alcohol users have much lower rates of mental illness. Results indicated that psychotic people use drugs more frequently than neurotic and normal people.

Ecstasy is a drug that causes mild pleasure and hallucinations, and it has grown particularly popular in clubs and "raves" in many cities, as well as on college campuses.

The nucleus accumbens may temporarily lose 20% of its dopamine receptors after chronic use of amphetamines (and cocaine), at least for four months after the last exposure.

Impacts on emotional health

Poor emotional regulation skills lead to a susceptibility to take drugs and eventually develop an addictive condition, which is a well-recognized feature of drug addiction. Khantzian was the first to suggest that people turn to drugs as a way to lessen unpleasant emotional states and to augment beneficial consequences.

Drug dependence is linked to structural, cognitive, and emotional system abnormalities in the brain. By causing emotional processing to be biased toward drug-related stimuli rather than those connected to natural rewards, disturbances in these systems help to maintain addicted behavior by enhancing drug craving. Sensation-seeking is one of the emotional characteristics that puts people at risk for using

drugs, and persistent drug use can worsen emotional dysregulation by impacting the reward, motivation, and stress systems.

Negative feelings like anxiety, loneliness, despair, and even hostility frequently coexist with addiction. People who are battling addiction or alcoholism frequently abuse substances to numb the bad emotions they experience. They must use more as withdrawal progresses because their feelings become worse, and they need to feel normal.

People frequently have more trouble controlling their emotions during the entire course of drinking and addiction, not just during withdrawal. The basic mechanics of addiction, cravings, and impulsivity are connected to brain changes that only get worse as the addiction progresses.

Addicts may experience more intense emotions of melancholy, worry, worthlessness, and fury. Existing mental health issues, such as anxiety, might get worse if addiction is active. By using the same neural pathways that support addiction, the identical processes that support drug usage in parts of the brain like the amygdala can also support anxiety issues.

Different drugs have varying effects on the brain and emotions. Chronic cocaine withdrawal that is sudden or provoked, amphetamine, opioids, cannabinoids, nicotine, and ethanol leads to higher reward thresholds during acute abstinence, some of which can lead to long-term addiction last for as long as a week.

Different emotional changes are brought on by prescription medications, such as opiates. For instance, opiates are a class of pharmaceutical medicines that can cause pronounced emotional shifts. The blood flow between the two hemispheres of the brain was observed to change with long-term opiate use, with one hemisphere receiving somewhat more blood than the other. These blood flow abnormalities brought on by opiate misuse are connected to more depressive moods in patients who have higher blood flow in the right hemisphere of the brain.

Alexithymia is a complex concept with emotional and cognitive elements. These elements include difficulties with emotion recognition and expression, the inability to distinguish between bodily sensations and emotions, a lack of fantasy, and an externally oriented cognitive style.

Taken together, these traits reveal a deficit in the cognitive processing of emotions. Increased drug use in teenagers is also associated with difficulties in identifying and expressing emotions, and among young substance abusers, alexithymia prevalence is reported to vary from 30 to 43.9 percent in those aged 15 to 24 - observed at higher levels than in the general population.

Conclusion

Drug addiction & scourge of drug trafficking is common in almost every part of the world. People of every class, age & gender are addicted to drugs. Addicted people seem to be everywhere: in streets, parks, rural & urban areas & even in educational institutions. The geographical location is very important for the transportation of drugs in different parts of world. Drug addiction is responsible for millions of deaths of drug addicts in the world every year. People abuse to drugs due to various family problems, unemployment, and isolation, failure in love & easy access to drugs & may be to overcome their depression & disappointment. And as a resultant, family society & ultimately country is affected due to changes in one's neurological & emotional system. So physical & mental health of drug addict is affected. It causes poor

educational performance, job problems, financial crisis, psychiatric & personality disorders, family disharmony & social crimes like domestic violence. Psychological problems may include; stress or depression, schizophrenia or bipolar disorder, anxiety problems & attention-deficit hyperactivity disorder (ADHD). In emotional problems people mainly face problems in controlling their emotions especially in case of alcoholism & addiction. People may face feelings of sadness, isolation, anxiety, anger & worthlessness. Prevention from drug abuse depends on different factors. Long term planning & different supportive factors are required to reduce the rate of drug addiction. Basic public policy & support of local community may be effective to eliminate drug abuse.

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