# **3.1 EXTENT OF THE PROBLEM**

Extent of Drug and Tobacco Addiction and Alcoholism in India, Myths Associated with Them, Health Hazards Associated with them and How they have become silent killers

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# **3.1.0 Objectives**

Addiction to drugs and alcohol is today a worldwide crisis. The demand for and supply of pharmaceuticals made in laboratories and naturally are both rising. The number of addicts is rising and affecting nations all over the world, including India. As a result, the nation's productivity has decreased. The majority of the countries are now starting to take the issue seriously and acting to reduce it. The issue of alcoholism and drug addiction is covered in this unit. After studying this lesson, you will be able to:

- Give an overview of the situation of drug and alcohol abuse and addiction in India;
- Describe the types of drugs and the causes as well as process of addiction; and
- Discuss the relationship between drugs addiction and alcoholism with health hazards and crime

## **3.1.1 Introduction**

Alcoholism and drug addiction are a worldwide menace at present. This is widespread among adolescents, young adults and others. This substance abuse, like an epidemic, has taken thousands of lives and threatens millions of lives worldwide. Besides, this also leads to various biological and psychological problems for the individual indulging in their use. This worldwide phenomenon has affected several nations, including India. National production has suffered as a result all over the world. Most countries are now beginning to take the issue seriously and are taking action to lessen it.

The Report of United Nations Office on Drugs and Crimes find that around 275 million people were drug users worldwide in 2020, while over 36 million people suffered from drug use disorders. A recent report (2022) suggests that around 284 million people aged between 15-64 use drugs worldwide, which is a 26 per cent increase over the previous decade. The same report makes an observation that the rate of substance use is phenomenally high among the young aged between 18 and 25. In Africa and Latin America, people aged under 35 represent the majority of people being treated for drug use disorders. This substance abuse, like an epidemic, has taken thousands of lives and threatens millions of lives worldwide. Besides, this also leads to various biological and psychological problems for the individual indulging in substance abuse. This worldwide phenomenon has affected several nations, including India. As a result, national production has suffered all over the world. Women abusers in South Asian countries are on the increase. They account for 17 percent of lifetime abusers. Reports show that a substantial percentage of women drug addicts are divorced, separated, and widowed (India and Sri Lanka).

The drug market today is the most profitable market attracting an increasing number of customers. It is a supply-driven market that makes people, particularly the young, fall an easy prey to substance use. Unknowingly, thousands of teenagers, adolescents and youth are becoming victims of substance use today. Most countries are now beginning to take the issue seriously and taking action to resolve it.

#### **3.1.2 Definition and Important Concepts**

In the following subsections, we will discuss the definitions of some of the important concepts related to alcoholism and drug addictions such as drug use and abuse, addiction, tolerance, dependence, alcoholism and so on.

# 3.1.2.1 What is Drug?

Drug is a chemical substance which is given to people in order to treat an illness or disease or to prevent illness or disease. Drugs are chemicals that, when ingested by humans, can alter both their physiological and cognitive functions. A doctor may recommend these chemicals as medicine to treat minor illnesses or difficulties, such as difficulty in sleeping, headaches, tension, etc. Most of the time, using these medicines is lawful. When drug are used for non-medical purposes, it is an abuse.

Drugs may occasionally have non-medical purposes. Their usage is prohibited, as with heroin and brown sugar. Alcohol use is permitted, although it might be dangerous if consumed frequently or in large amounts. Other substances that fall under the category of socially acceptable legal drugs include cigarettes, coffee, tea, and others. But they are not thought to be hazardous. Some drugs, including alcohol, brown sugar, etc., can be addictive and deadly. It is these drugs that will be discussed in the next subsection.

#### 3.1.2.2 Drug Abuse

Drug "usage" can refer to the use of drugs to treat, prevent illness, or improve health. Drug abuse is defined as the use of drugs (medical or non-medical) in a quantity, strength, frequency, or way that impairs an individual's physical or mental functioning. This indicates that even using medications in excess, too frequently, over an extended period of time, for the incorrect reasons, or in the incorrect combination constitutes drug abuse.

In other words, 'Drug Abuse' is defined as self-administration of a drug for non-medical reasons, in quantities and frequencies, which may impair an individual's ability to function effectively and result in social, physical or emotional harm. Such drugs produce psychological

and physiological dependence. That is to say that the individual feels a false sense of well-being and cannot function mentally and physically when they take drugs.

# Do you know?

There are over 190 million drug users around the world. These users are now identified as drug abusers. Drug abuse is a mounting problem showing an alarming increase rate. This is a growing syndrome among young adults under 30. Drug abuse damages the body. Drug addicts often use needles to inject drugs. They risk contracting HIV and hepatitis B and C infections. Drugs of abuse are usually psychoactive drugs that are used by people for various reasons, which include:

- Curiosity and peer pressure, especially among school children and young adults
- The use of prescription drugs that were originally intended to cause pain relief often turns into recreational use.
- Addictive chemicals are taking the place of traditional alcohols and are used as part of religious practices or rituals for recreational purposes.

# 3.1.2.3 Alcoholism

One of the first substances used by humans was alcohol. It has long been a staple of international cuisines and a common element of events ranging from weddings to funerals. However, there have always been some who could not control their alcohol consumption and as a result, experienced terrible repercussions. In layman's terms, these people are frequently referred to as "alcoholics." This is related to the term "alcoholism," which refers to a behavioral disease characterized by recurrent and unchecked excessive alcohol consumption. Alcoholism is best understood in relation to the concept of "addiction." The body of the drinker suffers functional and structural harm as a result of this addiction or habit. There are many types of alcohol. Only one can be consumed, viz. ethyl alcohol (which is used in beer, wine, *toddy*, whisky, brandy, rum and arrack or locally prepared liquor).

# **3.1.2.4.** Drug Addiction and facts related to Narcotic drugs

Drug 'abuse' leads to addiction, i.e. inability to lead a regular life in the absence of the drug/alcohol. The term addiction usually conjures up images of alcoholics and other drug addicts

who manifest physical and/or psychological need for chemical substances. Such individuals rely on substances to function or feel good (psychological dependence). When their bodies reach a state of biological adjustment to the chronic presence of a chemical substance (physical dependence), they require increasing amounts to achieve the desired effect (tolerance). When denied access to their chemical elixirs, their bodies experience adverse effects (withdrawal), typically the opposite bodily effects as those sought.

Drugs first alter feelings, thoughts, or behavior as a result of chemical changes in the brain. In that regard, alcohol is similarly a drug. Drugs can be ingested, smoked, inhaled, sniffed, drank, or administered intravenously. Aside from alcohol, drugs can be categorized as stimulants- which increase brain activity, depressants- which decrease brain activity, hallucinogens- which alter perceptions of sight, sound, and touch; cannabis- which includes drugs like *ganja* and *bhang* made from hemp, and opiates- which are substances derived from opium or synthetic alternatives that have effects similar to those of opium. Three of the most common opiate kinds include morphine, heroin, and opium. The most harmful and widely used laboratory derivative of morphine is heroin. Heroin purest is pricey. As a result, its unprocessed form, often known as "brown sugar," "smack," etc. had gained a lot of popularity. It is currently the substance that is most abused in India.

# **3.1.3** The Process of Addiction

It is generally recognized today that addiction is a disease and not simply a sign of moral weakness or of a lack of will power. In this section, the process of addiction to alcohol and drugs are examined separately, though the general path is similar.

#### **3.1.3.1. Addiction to Alcohol**

Alcoholism has been described as a disease by itself and not just a symptom of a psychological problem. The disease itself causes psychological and physical problems, which can be handled, only if the alcoholism itself is treated. It is a progressive disease, i.e. in the absence of treatment, it worsens.

As a progressive disease, it goes through three different phases. In the **Early Phase**, addict preoccupied with the drinks as well as needs for more alcohol for the same effects and prone to forgetting all that one did under the influence of alcohol.

In the **Middle Phase** alcohol addict experience loss of control over the quantity, time and place of consumption. Giving excuses for one's drinking to others and self. Behave aggressively

through words and action. Temporarily give up drink and change the type, the time/place of drinking, etc. At times, the alcoholic may seek help for alcoholism at this stage.

Finally, in the **Chronic Phase** the alcohol addict experience decreased tolerance i.e. now get 'drunk' even with a very small quantity, physical complaints, need continuous drinking for days together, shows criminal behavior to get alcohol and unable to live up to social values, experience paranoia or suspicious feelings that everybody is against him/her, encounter lack of motor coordination and hallucinations. If alcohol is discontinued, severe physical discomfort and pain follows. Either death or mental illness, mark the final stage.

#### **Do you Know?**

- Alcohol consumption contributes to 3 million deaths each year.
- While 28% of these deaths are due to injuries from traffic crashes, self-harm and violence, 21% are due to digestive disorders, 19% due to cardiovascular diseases .
- Overall, the harmful use of alcohol is responsible for 5.1% of the global burden of disease.
- Alcohol kills around 6,000 people every day across the world.
- Alcohol kills 2.6 lakh Indians every year either by causing liver cirrhosis, cancer, or leading to road accidents caused by drunk driving.
- Odisha has the dubious distinction of being the second Indian state for alcohol induced accident deaths. There were 735 and 900 accident deaths in 2017 and 2018 respectively due to drunk driving.

# **3.1.3.2.** Addiction to Drugs

Addiction to drugs is similar to alcohol addiction, in terms of its characteristics. The addiction to drugs is also identical and experienced by the addict in three phases. In the **Early Phase**, the addict increases the amount of drug and the number of times. The person begins to spend more time and money on drugs and less on other activities in life. Thoughts about drugs and the need to have them become important. In the **Middle Phase**, the person needs the drug in larger quantity than before to feel well; experiences loss of control over drug use in spite of repeated efforts and decisions to stop or reduce the taking of drug; begins to hide drug supplies.;

encounters problems in all areas of life, e.g. educational, work, family, neglect of personal hygiene, staying away from friends and earlier interests and change in personality, etc.

Finally, in the **Chronic Phase**, the addict experiences total loss of control over drug use and almost constantly remains under the influence of drugs needs help of other people to attend to own needs, e.g. eating and remains only with other drug taking persons. There is every possibility of early death of an addict. Drug addiction thus leads to changes and deteriorations in behavior, social life, and mental faculties like judgment, thinking and emotions.

# **3.1.4.** Causes of Alcoholism and Drugs Addiction

Research shows that the complex phenomena of addiction is more likely to result from a combination of causes than from a single one. Previously, it was thought that particular types of people—namely, deviants—were more susceptible to develop addictions. There is no one personality type that is predisposed to addiction. While others may make it more difficult to stop using, some elements may produce an environment conducive to addiction development. These are looked at in the following sub-sections.

#### **3.1.4.1.** Physiological Causes

It has been discovered that a child has a higher risk of getting addiction if both parents are addicts. While this does not imply that all addicts' offspring will develop addictions, it does raise the likelihood. The tendency for alcoholism in particular to run in families raises the possibility that being predisposed to addiction may be inherited. The amount and frequency of drug use, the route of intake (injected drugs are more addictive), the availability, access, and cost of the drug, as well as other environmental influences outside of the family, may all have an impact on the problem's growth. Other physiological elements, such as alcoholism, nutritional deficiencies, and dysfunction of various body systems, such as the endocrine system, are thought to play a role in the development of addiction. But none of these has received definite proof.

#### **3.1.4.2. Individual or Psychological Causes**

Addiction has long been considered a psychiatric disorder brought on by personal issues. According to studies, addicts are insecure people. Many addicts report experiencing minor to severe mental disturbances as their symptoms. However, it is unclear if addiction creates mental disorders or whether mental problems induce addiction. Whatever the connection, there is enough proof to show that addicts struggle with severe personality disorders, feelings of inadequacy, dependency, powerlessness, isolation, and low self-respect. Addicts have been shown to have problems related to their childhood as well as current stresses prior to the onset of addiction. Addiction is seen to be the outcome of learning, as well. Initial drug use results in a pleasurable sensation or experience. This serves as a reward and could cause the intake to keep rising. Thus, even a positive initial encounter could result in addiction. But the widely accepted idea holds that certain personalities are more predisposed to addiction than others.

# 3.1.4.3. Sociocultural and Environmental Causes

There are several views out there today that say addiction has social roots. People are more prone to consume drugs and/or alcohol heavily in communities where doing so is seen as acceptable and when drugs are readily and affordably available. Alcohol use is a feature of religious events and rituals in several indigenous tribes. Some people may develop an addiction as a result of such frequent intake. This does not imply that addiction is exclusively encouraged by availability and acceptability. Some persons who experience normlessness turn to drugs or alcohol in societies where this intake is not recognised. Teenagers frequently use drugs to rebel against the standards and ideals of adults. According to the cultural defiance theory, these emotional and social links to an unconventional group contribute to the development of drug addiction.

The fact that alcohol and other less-addictive drugs are socially acceptable in some spheres of society is another element that contributes to this. On some religious and social occasions, including as weddings, funerals, and festivities, custom in India has long permitted the use of wine, *bhang*, and marijuana. This is especially true among several sociocultural groups. In today's society, drinking is seen as a symbol of social standing and is increasingly consumed socially across all sociocultural groups. In several Western nations, drinking alcohol is considered socially acceptable, and taking medications to ease pain or enhance performance is a common practice.

Another crucial aspect of determining the prevalence of addiction is the substance's legal standing. It is also thought that the degree of addiction in a culture is closely tied to whether drug use is sanctioned or penalized in that society. Therefore, it is thought that legalization of drugs as well as cultural acceptance of them both raise the rate of addiction. The number of people addicted to "hard" drugs will decrease if milder types of narcotics are legalized. Such people believe that grouping all drugs into one broad category has hurt efforts to avoid addiction.

Since ability to tolerate alcohol is equated with one's manhood, boys often begin to consume alcohol and at times drugs at a young age, due to peer pressure. Persons in jobs that create stress-physical and/or mental are known to become addicted. Those prone to addiction thus include persons in conservancy jobs, morticians and morgue workers and rag pickers, etc. Even those performing excessively exhausting, monotonous, laborious work e.g. load-carriers and porters, drivers, etc. are prone to alcoholism. Young boys imitate if the family has an adult addict. Besides aggravating of stress by the family at periods of transition, e.g. adolescence, the absence of reasonable parental control, and a disunited and dysfunctional family.

Sociological theorists offer other explanations as well. The theory of strain holds that people turn to drugs and alcohol because social conditions in their environment do not provide them adequate opportunity for achievement. This is particularly so for lower socio-economic groups and other socially disadvantaged groups.

It is also believed that people, because of their consumption of alcohol and other drugs and life-style become labeled as "deviants", tend to become dependent on drugs and/or alcohol, as these become the most important aspects of their lives.

Therefore, it is evident that a number of sociocultural, psychological, and physical factors, including curiosity, stressful environments, early drinking, mental health issues, drinking while taking medication, genetic issues, a lack of family supervision, large and dysfunctional families, wealth and weakening of parent-child ties, disregard for social values and a common human goal, changing socio-cultural norms and values, lack of community control, absence of interpersonal relationships, and others, contribute to this epidemic.

## 3.1.5 Extent of Drug and Tobacco Addiction and Alcoholism in India

In the above section we have deliberated upon various conceptual aspect of drug and alcohol additions. In the subsequent paragraphs we will discuss the extant of the drug and alcohol addiction in India at the present time.

Although the use of various psychoactive substances such as alcohol, cannabis and opioids has been observed in India for centuries, the current dimension of the extent and pattern of psychoactive substance use and the problems associated with their use are not well documented.

According to data on the global situation, the three most commonly misused substances are alcohol, opium, and cannabis. More men than women are addicted to them. Particularly in recent years, heroin addiction has seen a sharp increase. By injecting drugs, a person runs a significant danger of contracting additional diseases and health issues, such as AIDS (Acquired Immune Deficiency Syndrome), as well as death from some of these issues and from taking an overdose.

Earlier, addiction was simply a problem for a select few people, but today's users come in all shapes and sizes. In reality, it is becoming more common to use multiple drugs at once, such as mixing alcohol and narcotics. Alcohol and other substances are being experimented with at younger ages than in the past. Due to rising prosperity, contemporary life's stressors, widening economic and social disparities, and a growing sense of discontentment with one's life, the issue is slowly getting worse in India, affecting both urban and rural communities.

## **3.1.5.1.** Extent of substance abuse in India

Recently published report "*Magnitude of Substance Use in India 2019*" presents the major findings of the National Survey on Extent and Pattern of Substance Use in India commissioned by the Ministry of Social Justice and Empowerment, Government of India in collaboration with the National Drug Dependence Treatment Centre (NDDTC), All India Institute of Medical Sciences, (AIIMS), New Delhi, in terms of proportion of Indian population affected by substance use.

The survey finds that there is widespread substance use among all demographic categories in India, although adult men are disproportionately affected by substance use problems. This survey also shows that there are significant differences in the extent and prevalence of use across states and among different substances.

Indians most frequently use alcohol as a psychedelic substance (among those included in this survey). Between 10 and 75 years old, 14.6% of the population nationwide uses alcohol. In terms of absolute numbers, the country has roughly 16 crore alcohol consumers. Men use alcohol at a rate that is significantly greater than women (27.3%). (1.6 percent). There are 17 alcohol-using men for every woman who drinks alcohol. Spirits or Indian Made Foreign Liquor (approximately 30 percent) and country liquor, sometimes known as "desi sharab," are the most popular alcoholic beverages among drinkers. The states with the highest rates of alcohol use include Goa, Punjab, Arunachal Pradesh, Tripura, and Chhattisgarh.



(Source: Ambekar A, et.al, Magnitude of Substance Use in India. New, 2019)

Cannabis and opioids are the second most popular drugs in India after alcohol. A total of 3.1 crore people, or about 2.8 percent of the population, report using cannabis products in the 12 months prior. The authorized form of cannabis (*bhang*) and other illicit cannabis products were further distinguished in terms of cannabis consumption (*ganja* and *charas*). About 2.2 crore people (or about 2 percent) were found to use *bhang*, and about 1.3 crore people (or about 1.2 percent) were found to use illegal cannabis products like *ganja* and *charas*. Uttar Pradesh, Punjab, Sikkim, Chhattisgarh, and Delhi are the states with the highest rates of cannabis consumption.



# (Source: Ambekar A, et.al, Magnitude of Substance Use in India. New, 2019)

Opioids, such as Opium (or its derivatives such poppy husk known as doda/phukki), Heroin (or its impure form, smack or brown sugar), and a range of pharmaceutical opioids, are used by about 2.1 percent of the population of the country (2.26 crore people). Heroin (1.14%), prescription opioids (0.96%), and opium are the most often used opioids in the country (0.52 percent ). With regard to overall opioid use, Sikkim, Arunachal Pradesh, Nagaland, Manipur, and Mizoram have the highest rates (more than 10 percent ).



(Source: Ambekar A, et.al, Magnitude of Substance Use in India. New, 2019)

According to the report, a sizable percentage of people take sedatives and inhalants. Approximately 1.18 crore Indians aged 10 to 75 (or 1.08 percent) currently take sedatives (nonmedical, non-prescription use). The highest rates of contemporary sedative use are seen in the states of Sikkim, Nagaland, Manipur, and Mizoram. However, the top five states with the highest sedative use rates are Uttar Pradesh, Maharashtra, Punjab, Andhra Pradesh, and Gujarat.



## (Source: Ambekar A, et.al, Magnitude of Substance Use in India. New, 2019)

Inhalants (overall prevalence 0.7%) are the only category of substances for which the prevalence of current use among children and adolescents is higher (1.17%) than adults (0.58%). Other categories of drugs such as, Cocaine (0.10%) Amphetamine Type Stimulants (0.18%) and Hallucinogens (0.12%) are used by a small proportion of country's population.

Every year on **June 26th**, the International Day Against Drug Misuse and Illicit Trafficking is commemorated with the goal of raising awareness about the problem of drug abuse and addiction, as well as its consequences, among individuals and communities.

# **Drug Abuse Figures of India**

- In India, 19 metropolitan cities are at a high risk of drug abuse. Mumbai reported the highest number of cases under the Narcotic Drugs and Psychotropic Substances (NDPS) Act.
- Among states, Uttar Pradesh reports the highest number of drug addicts, the number being 10,852. Uttar Pradesh is followed by Punjab and Tamil Nadu in terms of the number of drug abusers, the cases being 6,909 and 5,403 respectively.
- Kerala reported 4,968 cases and took the fourth place while Maharashtra filed 4,714 cases and came in the fifth place.
- Mumbai reported 3,509 cases under the NDPS Act.
- Bengaluru records a total number of 2,766 cases and Indore, 998 cases.
- Punjab recorded 6,909 cases and Tamil Nadu, 5,403 cases.

# **3.1.5.2. Harmful and Dependent Use**

A small percentage of most drugs and substances users reach the threshold for "harmful use" and "dependence." But the percentage of risky or dependent users varied according on the substance (indicating the differential propensity of various substances to develop problem use). For the health and social welfare sectors, the total of the estimates of harmful and dependent use represents the "quantum of work" (i.e., the percentage of the population that requires assistance).

At the national level, as many as 19% of current users of alcohol consume alcohol in a dependent pattern. According to estimates, 2.7 percent, or 2.9 crore people, of the general population (10-75 years old), consume alcohol in a dependent manner. A further 2.7 crore people (or 2.5 percent of the population) in the nation engage in problematic alcohol use. In other words, more than 5.7 crore people, or around 5.2 percent of the population, are impacted by hazardous or dependent alcohol consumption and require assistance. One in five drinkers have alcohol dependence and require immediate treatment. The following states have high rates of

alcohol use disorders (greater than 10% prevalence): Tripura, Andhra Pradesh, Punjab, Chhattisgarh, and Arunachal Pradesh.



(Source: Ambekar A, et.al, Magnitude of Substance Use in India. New, 2019)

The percentage of people who use cannabis problematically (i.e., in a hazardous or dependent manner) is rather low. One in eleven cannabis users (or 0.25 percent) in the country has a cannabis dependence problem. But when it comes to dependent use, bhang and ganja/charas differ significantly. While just roughly one in sixteen bhang users were cannabis dependent, this number was one in seven for ganja/charas users.



(Source: Ambekar A, et.al, Magnitude of Substance Use in India. New, 2019)

When compared to consumers of other opioids like opium and pharmaceutical opioids, heroin users are much more likely to be addicted to opioids. According to estimates, 77 lakh Indians, or around 0.70 percent of the population, struggle with opiate consumption. Only a few states—Uttar Pradesh, Punjab, Haryana, Delhi, Maharashtra, Rajasthan, Andhra Pradesh, and Gujarat—contribute more than half of the country's estimated 77 lakh individuals with opioid use disorders (harmful or dependent pattern). The top states in the nation, however, in terms of the

percentage of the population afflicted, are those in the north-east (Mizoram, Nagaland, Arunachal Pradesh, Sikkim, Manipur), along with Punjab, Haryana, and Delhi.

Numerous other drug users, including those who use sedatives and inhalants, also require support. About 0.20 percent of Indians in general need assistance with their sedative usage issues. According to estimates, 4.6 lakh children and 18 lakh adults in the country require assistance due to their dangerous usage or dependence of inhalants. The states with the highest percentage of kids seeking assistance for inhalant usage in terms of absolute numbers are Uttar Pradesh, Madhya Pradesh, Maharashtra, Delhi, and Haryana. Compared to the size of the country's population, the number of cocaine, stimulant, and hallucinogen users is incredibly low.



(Source: Ambekar A, et.al, Magnitude of Substance Use in India. New, 2019)

Around 8.5 lakh drug injectors are thought to be present nationwide. The opioid family of medicines is primarily injected by People Who Inject Drugs PWID (heroin – 46 percent and pharmaceutical opioids – 46 percent). Many PWID report using dangerous injection techniques. According to estimates, the states of Uttar Pradesh, Punjab, Delhi, Andhra Pradesh, Telangana, Haryana, Karnataka, Maharashtra, Manipur, and Nagaland have high PWID rates.

The majority of those suffering from substance use problems do not have access to treatment programmes. Only one in thirty-eight alcohol-dependent individuals report receiving any kind of treatment or assistance for their drinking issues. One in four people who use illegal substances and are addicted to them have ever sought therapy. Even fewer people with alcohol and drug issues seek hospitalization or inpatient treatment. About one in 180 people who struggle with alcoholism and one in 20 people who struggle with illicit drug addiction report receiving inpatient care.

The prevalence of alcohol usage appears to have remained consistent with previous studies of a similar nature, however a sizable percentage of Indians (more than 5%) experience

alcohol use disorders. While cannabis usage is less common than the global average, opioid use is three times more common in India than it is elsewhere, according to statistics on illegal drug use. Opium was the most common opioid used by men in India in 2004. According to this survey, not only is total opioid use higher than it was in 2004, but heroin use has surpassed opium use as the most popular opioid.

#### **3.1.5.3 The Way Forward**

India requires significant investments to improve the treatment options due to the country's large treatment gap (difference between demand and availability of treatment services). This report referred above demonstrates that a significant portion of the Indian population suffers from substance use disorders and requires immediate assistance. The governmental programmes for the treatment of substance use disorders, however, fall woefully short in terms of their reach.

Protecting the youth of the nation is of paramount importance. Very often, drug use prevention is seen (erroneously) as synonymous with spreading awareness about dangers of drug use among young people. Evidence for effectiveness of awareness generations as the predominant preventive strategy, is very weak. Prevention programmes must address the risk and protective factors aimed at not just preventing substance use but ensuring that young people grow and stay healthy into adulthood, enabling them to realize their potential and become productive members of their community and society.

Findings indicate that despite the existence of strict drug control laws and a multitude of agencies working towards drug supply control, a wide variety of the controlled drugs are being used and a sizeable number of Indians suffer from addiction to these drugs. Results also indicate a shift in demand for psychoactive substances, from traditional, low-potency, plant-based products (e.g. opium) to more potent and processed products (e.g. heroin). Thus, there may be elements of drug supply control which influence the pattern of demand. The non-medical, recreational use of controlled pharmaceutical products remains a concern. There needs to be an efficient coordination between the drug supply control sector as well as the entities involved in drug demand reduction and harm reduction.

Besides, proper regulation for production and distribution control of drugs and alcohol is necessary in order to combat the issue. Along with regulations proper preventive education programmes, public awareness programmes by both governmental and non-governmental agencies for prevention of addiction is highly required. Alcohol continues to be a major incomeearner for many countries. Alcoholism affects a larger section of society than drug addiction and affects all socio-economic sections. Today there is a strong demand to view alcoholism as a serious social problem along with drug addiction.

## **3.1.6.** Myths related to Drugs and Alcohol Usage

Myths are what is popularly believed but in fact are false. The general public has not properly understood drugs and their effects. Many people become addicts due to false notions related to drugs. Let us discuss some of those myths prevalent in Indian society here:

*Only weak individuals become addicts*: In actuality, the opposite is true: Addicts develop into frail people. Nobody uses drugs with the intention of becoming addicted. As we just observed, there are various reasons why people start abusing drugs. Even at that point, a drug addict has a strong will to obtain their drug supply. An addict will do anything to keep using drugs. Aside from that, motivation affects how strong a person's will is. Priority affects motivation. Chemicals are the addict's top priority since they offer him a quick fix for all of his issues. As a result, the addict selects to obtain the chemicals over any other form of gratification.

**Drugs give mental and physical strength**: Drugs can alter a person's capacity for reasoning. As a result, he will be prepared to perform tasks that he was previously unable to complete because of drug use. Second, gaining strength is simply a temporary solution. Drugs can also make someone appear brave by assisting them in overcoming inhibitions and fears.

*Recreational use of drugs is not harmful*: All illegal drugs are harmful. They cause physical and psychological changes in the user. Prolonged drug use leads to addiction. Besides all drugs are expensive. They make the user poor physically and financially. It also encourages drug trafficking.

*Everybody is taking drugs*: The truth is that persons who take drugs often use this defence to justify their actions. Despite the fact that there are many drug users, the majority of individuals do not use drugs. It is challenging to deal with peer pressure, and it takes more fortitude and stamina to defend the moral high ground and to abstain from drugs. Drug use is not widespread.

*Drugs help to forget failures and painful events of life*: The truth is that it merely aids in forgetting for the one to three hours that the chemical's effect lasts. It only functions in the short term. Burying issues alive is akin to a ghost that will one day return to haunt you.

*Drugs help to keep peer group status*: The fact is that the peer group has no status all those who drink are drinking because they cannot stop drinking. They want to stop but cannot. The status the peer group pretends to have is unreal and unhealthy.

**Drugs improve your concentration:** Drugs can improve mental function, but they can damage brain cells over time. Drugs are used by students and anyone who need longer periods to work or study. However, many people become addicted to drugs, and over time, they die early. Brilliant poet Byron passed away in his 20s due to alcoholism. As a result, it's important to respond carefully to any conversations that are had about using drugs.

*Consuming alcohol is normal, common, healthy and very responsible*: Supporter of Alcohol presents "regular" drinkers as outgoing people at the center of a thriving social life. They claim that drinking alcohol is linked to good health, fortune, prosperity, tradition, and manners. Alcohol is almost usually associated with good health, sports, physical attractiveness, romance, friendships, and leisure activities in advertisements. Contrary to these myths, the reality is that regular drinkers contribute significantly to social costs of alcohol harm, consume more than the "recommended" number of units, and are linked to a variety of negative outcomes such as unemployment, productivity loss, violence, suicide, child abuse, NCDs, poverty, and other drug use.

*Darker drinks are healthier*: There is a misconception that alcohol with deeper hues is healthier. However, the truth is that while dark alcoholic beverages like bourbon and whiskey may have more compounds that are healthy for the body, they also include more harmful substances that worsen hangovers. Since flavonoids have a strong anti-inflammatory effect on the body, dark beers actually contain more of them than light beer. Red wine contains higher polyphenols than white wine; these compounds function as blood antioxidants in preventing heart disease, cancer, and other potential ailments. However, darker liquids also contain larger concentrations of congeners, harmful substances produced by fermentation. Although they are not fatal, they might worsen a hangover, so you might feel like you're going to die. In fact, a study compared the reported symptoms of hangover in individuals who drank the same amounts of dark bourbon and vodka. Bourbon drinkers complained of more severe hangover symptoms.

Drinking is a Good Way to Take the Edge Off Chronic Pain: Alcohol is occasionally used by people with long-term (chronic) pain to lessen their suffering. There are a number of reasons why this might not be the best option. Painkillers and alcohol should not be combined. The chance of developing liver issues, stomach bleeding, or other issues may rise when alcohol is consumed alongside painkillers. It makes alcoholism more likely to develop. Most people require more than a moderate amount of alcohol to feel better. Additionally, as one builds up a tolerance to alcohol, they will need to consume more to have the same level of pain alleviation. Drinking that much raises the possibility of developing alcohol use disorders. Chronic (longterm) alcohol use can make pain worse. Alcoholics experiencing alcohol withdrawal symptoms may experience increased sensitivity to pain. Additionally, prolonged heavy drinking might really result in a specific sort of nerve discomfort.

*Alcohol Gives You Warmth*: Alcohol can make you feel warm, but it doesn't actually warm your body up. Your blood vessels may widen as a result of drinking, boosting the blood flow. More blood starts to flow to your skin as a result, giving you the sensation of a warm hug. However, when you drink, your body actually loses heat more quickly, making you feel cooler. Alcohol is also a diuretic. As a result, your body will lose more water, which could make you feel dehydrated. Therefore, exercise caution when drinking outside in the cold and refrain from mistaking a glass of whisky for a warm blanket.

*Beer is good for your hair*: Have you noticed the countless banners hawking beer shampoos and other hair care items that claim to have more alcohol than your drinks? Do you find it surprising that there is no proof, according to science, that beer makes hair better? While beer is a great beverage to enjoy with friends while sharing stories and conversations, it should not be used as a shampoo or self-care product. Applying or ingesting it has no clinical benefit for your skin and hair.

God and sages used to drink so we can drink: Some people say in the Vedic times, gods used to drink Soma drink which was an intoxicating drink. Hence, there is no problem with drinking alcohol. It is a fact that there are references in ancient literature regarding consumption of liquor. But at the same time, they also speak against the alcohol consumption. Drinking the spirituous liquor called *Sura* is considered as a mortal sin (mahapataka)". There are many other scriptures like Brahmanas and Sutras that condemn the consumption of liquor as well as allow on some occasions. The Chandogya Upanishad clearly states that drinking alcohol is one of the five biggest sins. Therefore, we can say that consumption of alcohol is prohibited in Hinduism. Whatever it may be we are living in modern scientific age. We understand the medical problem associated with alcohol. Hence, it is necessary to debunk traditional myths and protect our own health.

As drug use has spread throughout the world, myths have grown and facts have been distorted and subjected to ridicule. Wrong information about drugs as well as alcohols and their effects is common among the public. Governments, scientists, experts, and others have only limited success communicating accurate information. Individuals often begin taking drugs as an experiment, with the belief that the substances are not dangerous. If the drug gives the effect that the individual is seeking then the user's lack of knowledge about the health consequences

permits continued use. By the time the dangers are fully realized, it is too late for that person to stop taking drugs or to reverse the damage.

#### **3.1.7 Health Hazards Associated with them and how they have become silent killers**

Abusing substances harms a person's physical, psychological, and emotional health. His or her social connections deteriorate and their financial situation deteriorates. A individual starts using drugs to try to overcome his issues. They don't decrease; they just keep becoming bigger. Drugs harm the body's essential organs, including the liver, brain, heart, kidneys, etc. In this state, he cannot support himself and requires a large sum of money to keep getting narcotics. Addiction to drugs and alcohol has major health consequences in addition to social and economic risks.

#### **3.1.7.1 Health Consequences of Drug Abuse**

Alcohol and drug consumption has been identified as an important risk factor for illness, disability, and mortality. They are health damaging. The extent, degree and the type of health damage related to alcohol and drug use depend upon the drug type, period of use, route of use, amount of consumption, adulterants in street samples, and other high risk behaviors.

According to World Drug Report, 2021 published by the United Nation Office on Drugs and Crime (UNODC) in 2019 approximately half a million (5,00,000) deaths occur worldwide due to drug abuse. Further the report reveals that in 2019, 18 million healthy life were lost owing to drug use disorders. More than half of the deaths were due to liver cancer, cirrhosis and other chronic liver diseases resulting from hepatitis C, but the increase reflects, in part, the rise in overdose deaths attributed to use of opioids such as fentanyl. Deaths related to drug use disorders have nearly doubled over the past decade, far outstripping any increase in the number of users, suggesting that drug use has become more harmful. The official rates quoted are much lower. Most of the countries do not have adequate reporting facilities for reporting damages caused by drug abuse.

Drugs like heroin can cause death due to overdose. Alcohol overdose does not lead to death. Long-term period of drug use is a health hazard. Most of the addicts who use narcotics and stimulants die prematurely. Alcohol and cannabis users take a long time to get addicted, so health problems occur late in life. Drugs that are orally taken have less chance of leading to overdose. In case of an overdose, the person vomits, and thus the toxic reaction is slowed down. Adulteration of drugs has caused severe health problems. Often drugs are adulterated with very

poisonous substance to increase their quantity and potency. Rat poison, DDT and other poisonous ingredients are reported to be found in the drugs sold in the street.

Abuse of drugs encourages dangerous behavior. A person who uses hallucinogens may experience a misleading sense of time, space, and sound. The usage of hallucinogens results in a lot of accidents. It is a proven fact that drug usage lowers one's resistance to illness. The ability to fight infectious diseases, such as bacterial, viral, or parasite infections, can be lowered by drinking and medication usage. The following facts have been discovered after extensive study in the fields of immunity and drug abuse for many years: Drug misuse decreases the body's resistance to disease, decreases the creation of antibodies that fight disease, slows the immune system's response time, and decreases the body's capacity to successfully fight disease.

# **3.1.7.2. Health Hazards Related to Alcohol Consumption**

More than 30 conditions listed in the WHO's International Classification of Diseases, 10th Edition (ICD–10) (WHO 2007) include the term "alcohol" in their name or definition, indicating that alcohol consumption is a necessary cause underlying these conditions. This group's most important disease conditions are alcohol use disorders (AUDs), which include alcohol dependence and harmful use or alcohol abuse. Disease and injury conditions for which alcohol consumption is a component cause contribute more to the global burden of disease than do alcohol specific conditions. Overall, the following are the main disease and injury categories impacted by alcohol consumption (listed in the order of their ICD–10 codes).

**Infectious Diseases:** Alcohol consumption has a detrimental impact on key infectious diseases such as tuberculosis, infection with the human immune-deficiency virus (HIV) and pneumonia.

**Cancer:** The Monograph Working Group of the International Agency for Research on Cancer concluded that there was sufficient evidence for the alcoholic beverages as carcinogenic to humans. Now it an established fact chronic alcohol consumption is a strong risk factor for cancer in the oral cavity, pharynx, hypo pharynx, larynx and esophagus and is also a major etiological factor in hepato carcinogenesis. Alcohol also increases the risk for cancer of the colorectal and the breast.

**Diabetes:** Higher consumption of alcohol is associated with an increased risk of diabetes. Detrimental effect of diabetes has been found starting at about four standard drinks (50 to 60 grams of pure alcohol) per day. **Neuropsychiatric Disorders**: With respect to neuropsychiatric disorders, alcohol consumption has by far the greatest impact on risk for alcohol dependence. However, alcohol also has been associated with basically all mental disorders. The relationship between alcohol and epilepsy is much clearer. There is substantial evidence that alcohol consumption can cause unprovoked seizures. Most of the relevant studies found that a high percentage of heavy alcohol users with epilepsy meet the criteria of alcohol dependence.

**Cardiovascular Disease:** The overall effect of alcohol consumption on the global cardiovascular disease burden is detrimental. The effects of alcohol on the cardiovascular system are well documented and range from the protective effects of light drinking for ischemic stroke and coronary disease through to the increased risk from heavy drinking for hemorrhagic stroke, cardiomyopathy, hypertension and cardiac arrhythmias. Alcohol consumption mainly has harmful effects on the risk for hemorrhagic stroke, which are mediated at least in part by alcohol's impact on hypertension.

**Diseases of the Liver and Pancreas**: Alcohol consumption has marked and specific effects on the liver and pancreas, as evidenced by the existence of disease categories such as alcoholic liver disease, alcoholic liver cirrhosis, and alcohol induced acute or chronic pancreatitis. Worldwide alcohol is one of the most important reasons for an end-stage liver disorder. Alcoholic fatty liver is generally asymptomatic and may produce no changes in liver function tests other than those related to the direct effect of the alcohol on liver function in the early stages. It may, however, present with right abdominal pain, nausea and vomiting, which resolve on abstinence. Alcoholic hepatitis and cirrhosis result from chronic alcohol abuse. Alcoholic hepatitis produces liver cell necrosis and inflammation. Cirrhosis involves a permanent loss of liver cells, which are replaced by fibrosis with loss of the normal liver architecture. The clinical presentation is with jaundice, pyrexia, right abdominal pain, ascites and possible encephalopathy. In patients with poor liver function and a prothrombin time prolonged to a degree which precludes liver biopsy, the prognosis is poor, with a third of patients dying in the acute episode. Acute and chronic pancreatitis and gastritis and peptic ulcer are other gastrointestinal consequences of alcohol abuse.

**Unintentional Injuries**: The link between alcohol and almost all kinds of unintentional injuries has long been established. The acute effects of alcohol consumption on injury risk are mediated by how regularly the individual drinks. People who drink less frequently are more likely to be injured or to injure others. There also is a clear link between alcohol consumption and aggression, including, but not limited to, homicides.

**Reproductive disorders:** In premenopausal female alcoholics, there is an increase in the frequency of menstrual disturbances, abortions and miscarriages and infertility. Regular consumption of alcohol during pregnancy may affect the foetus. The abnormalities range from growth retardation to Fetal Alcohol Syndrome (FAS). Children with FAS have reduced body weight and height, are hyperactive and have subnormal intelligence. Their faces may be recognized by short palpebral fissures, short upturned noses, mid facial hypoplasia, low nasal bridge and a thin upper lip. Studies of male alcoholics have reported that alcohol consumption may affect spermatogenesis and spermatogenesis and cause reduced sperm counts.

#### **3.1.7.3.** Alcohol, Drug Use and HIV/AIDS

Alcohol dependency is a common phenomenon. In India we do not have reliable statistics about the relationship between drug abuse and HIV/ AIDS. Yet the injecting drug users report that drug and alcohol use precipitates risk behavior that leads to HIV transmission. It is true that alcohol and drug use do not cause infection with HIV. Mood altering drugs may, however, be co-factor. The biggest concerns that relate alcohol and drug use to HIV infection and the development of AIDS are listed below:

1) People drunk or taking drugs are likely to engage in risky behavior that leads to HIV infection.

2) Persons with lowered immunity due to their previous alcohol and drug use may be more likely to become infected with HIV when exposed.

3) Persons already infected with HIV may continue to destroy their immune system through drug and alcohol use.

4) Persons using alcohol or drugs may be more likely to participate in unsafe sexual behavior, increasing the risk that they will be exposed to HIV-or if they are already exposed, that they will increase the risk of transmitting HIV to others or becoming re-infected themselves.

Drug users share needles to push drugs. If one of the persons in the group is infected the others in the group are sure to be infected by the needle they share. Some of the drug users are likely to experiment with risky sexual behaviors with the same sex as well as the opposite sex. This increases the risk of infection.

Addiction is the only disease that tells you that you don't have a disease." Jason Z. W. Powers

Alcohol and drugs are silent killer. Their consumption slowly damages internal organs of human body without any apparent major signs or symptoms for early detection. Drugs and alcohol can affect every organ of the human body; however, some organs such as liver, heart, pancreas and brain are more prone to severe damage. Hence, it is important not to ignore the warning signs of alcoholism and drug abuse before it is too late to reverse the health condition.

Even when the ill-effects of alcoholism and consumption of deadly tobacco products are very well evident in our society, citizens continue to reel under the menace of these silent killers. Commercialism, it seems, has overtaken health interests. The lackadaisical attitude of the people and the society in particular leaves no doubt that we are not serious about this menace which will hit us in the long run if steps are not taken now. We are seeing more of the young addicted to alcohol, drugs and tobacco. Usually, tobacco use is combined with alcoholism or recreational drug abuse. Prevention is better than cure." The need of the hour is to see that all the concerned people should work together and be determined to get rid of these social evils, forever.

#### **3.1.8.** Let us sum up

This unit began with definitions and explanations of different concepts related to alcoholism and drug abuse, such as the meaning of the term's drugs, alcohol, drug abuse, and the concept and causes of alcoholism and addiction. Then a brief description of the extant of the menace of alcoholism and drugs abuse in India has been presented. Some myths favoring drugs abuse and alcohol consumption as prevailing in the society are dealt with and debunked. The unit ended with a discussion on health hazards associated with drugs and alcoholism and drug abuse are becoming a silent killer in human society. We have learnt that alcoholism and drug abuse are complex social problems. It is a problem of society, family and the individual, and, therefore, it requires joint efforts of the government institutions, which includes health education and social welfare, voluntary organizations, legislative and political bodies, community at large, and the affected families to find solutions to this problem.

# 3.1.9. Key Words

- Addiction: Inability to lead a regular life in the absence to use of the chemical substance; is defined as a disease.
- Alcohol : A drug that is addictive and affects the way the body and mind works.
- Alcoholism : A chronic illness involving excessive and repeated drinking beyond customary use, such that it interferes with work, family, social and economic life of person.
- Cannabis: Drugs produced from different parts of hemp plant.

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- Dependence : The body cannot perform its normal functions without taking the drug (physical). One constantly thinks about the drug, its use, how to get the drug and one is unable to emotionally lead a normal life without taking the drug (psychological)
- Depressants : Drugs that slow down the activity of the brain.
- **Drug**: Any chemical substance which when put into the body affects the way the body works and the mind thinks due to chemical reactions in the brain.
- **Drug Abuse**: The use of chemical substances (medicinal and non-medicinal) in an amount, strength, frequency or manner that damage the physical or mental functioning.

Hallucinogens: Drugs that change the way we see, hear and feel.

- **Opiates** : Drugs obtained from opium or artificial substitutes that have opium-like effects.
- Stimulants : Drugs that give a feeling of excitement as they increase the activity of the brain.
- **Tolerance**: The need for more quantity of the drug and frequent use of the drug to produce the same effect from the drug, as earlier.
- **Withdrawal Symptoms**: Painful physical reactions ranging from physical discomfort to severe vomiting and cramps, when the drug consumption is suddenly stopped, in the case of an addict.

# 3.1.10. Check Your Learning

# Q.1. Definitional Type

- a) Addiction
- b) Drug Abuse
- c) Alcoholism
- d) Drug Trafficking
- e) Depressants
- f) Drugs Tolerance
- g) Tolerance

# Q.2. Analytical Type

- a) Define drug addiction as a disease.
- b) What are the different types of drugs? Discuss with example.
- c) What is denial? How does it promote addiction?
- d) Discuss the socio-cultural and environmental causes responsible for addictions.
- e) In what way Individual or Psychological Causes leads to addiction?

# Q.3. Essay type

- a) Discuss the different stages of drugs addiction and alcoholism.
- b) Define drug addiction and alcoholism. Discuss the causes responsible for addiction of drugs and alcohol.
- c) Examine and debunked the myths associated with drug addiction and alcoholism in India.
- d) Discuss the health consequences of drugs and alcohols on human body and mind.
- e) "Addiction is the only disease that tells you that you don't have a disease" elaborate the phrase with the idea that addiction of drugs and alcohol as a silent killer in human society.

# **3.1.11. Suggested Readings**

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