

3.2. Socio-Economic Impact of Drug Abuse

3.2 Objective

3.2.1 Introduction

3.2.2 Definition and important concepts

3.2.2.1 What is Socio-economic impact of drug?

3.2.2.2 What is Tobacco Addiction?

3.2.2.3 What is alcoholism?

3.2.3 Social Impact of drug

3.2.3.1 Impact of drug on family and community

3.2.3.2 Impact of drug on health

3.2.3.3 Impact of drug on Education

3.2.3.4 Impact of drug on crime

3.2.3.5 Impact of drug on work

3.2.3.6 Impact of drug on environment

3.2.4 Economic Impact of Drug

3.2.4.1. Impact of drug on Public safety

3.2.4.2 Impact of drug on Governance

3.2.5 Impact of drug and tobacco addiction and alcoholism

3.2.5.1 Loss of physical and mental strength

3.2.5.2 Loss of character

3.2.5.3 Loss of family ties and relationship

3.2.5.4 Loss of earning and livelihood potential

3.2.5.5 Loss of societal respect and dignity

3.2.6. Let us Sum Up

3.2.7. Key words

3.2.8. Check Your Learning

3.2.9 Suggested Reading

3.2 Objectives

Drug abuse is one of the major socio-economic problems affecting the physical and mental life of individuals and society. Substance Abuse or Drug Abuse means an over indulgence in a drug or other chemical substances. Addiction and use of drugs is increasing in the society day by day. This leads to a disease prone society and affects all aspects of human life. So, one has to understand how drugs are affecting the social harmony of the nation, society, individual and the world at large. This chapter will make you

- Understand about the socio-economic impact of drug abuse
- Appreciate how drug addiction affects the social and individual life
- Enable you to identify the economic loss due to drug abuse

3.2.1 Introduction

Drug abuse is a major social issue. Today there is no part of the world which is free from drug abuse. India is also caught in this vicious problem of drug abuse. Drug addiction causes a huge cost on human resources as well as it promotes illegal production and distribution of drugs. Drug abuse has a direct impact on social and economic aspect of the nation. The impact of drug is realized in workplace, family and the society. It results in violence at home and gang wars in cities, increase crimes and even stresses the public health system and we find young mass addicted to drugs. It leads to unsafe life. Drug addiction not only breaks the family harmony but also puts high economic burden on the society. The economic impact due to Drug abuse is immeasurable. The use, production and marketing of drugs, emergence of a class of drug consumers is a huge challenge for mankind. It ultimately leads to unemployment, weak human resources, weak brain power, unhealthy society and increasing crime at large. The socio-economic impact is associated with the expenditure incurred. We need to design a policy to prevent drug abuse. We must develop a prevention strategy and we need to educate the youth and protect the human resources. The impact is felt in various domains of life such as: family, industries, workplace and economy of the country.

According to UNDCP report, the economic effects of drug abuse can be measured in two forms, i.e. cost of government drug enforcement polices and the lost human productivity such as lost wages and decreased production that results from illness and premature deaths related to drug abuse. There are many hidden costs relating to disturbance in social life, wastage of young energy and increased crimes.

Here are five facts about drug abuse in India:

1) When the Punjab state government commissioned a [drug abuse study in 2015](#), it found that 230,000 people in the state were drug users. That translated to 836 drug users per 100,000 people in the state. The All India number is 250 per 100,000 (for 2012), according to the Ministry of Social Justice and Empowerment. Even the figure of 250 drug abusers per 100,000 is very high when compared to [other countries](#).

2) In India, cannabis, heroin and opium are the most commonly used drugs. But there is an increasing prevalence of methamphetamine too. The number of users who inject drugs has also gone up substantially. There are [one million heroin users](#) registered in India according to a UN report. But unofficial estimates suggest 5 million is a truer figure.

3) According to the [National Survey on Extent and Pattern of Substance Use in India](#) in 2019, about 2.1% of the country's population (2.26 crore individuals) uses opioids which include opium (or its variants like poppy husk known as doda/phukki), heroin, and pharmaceutical opioids.

4) The [national survey of 2019](#) also showed that about 2.8% of Indians aged 10-75 years (3.1 crore individuals) were using cannabis as bhang, ganja and charas.

5) But what is alarming is the number of suicides due to drug abuse and alcohol addiction has more than doubled in the last decade in India. In the year 2010, [3,343 cases of suicides](#) were reported, and the number increased to 7,860 suicides in 2019.

Major findings of Survey by AIIMS at National and State level:

A. Alcohol :

- i. At the national level, about 14.6% of people (among 10-75 year old) are current users of alcohol, i.e. about 16 Crore people. Prevalence is 17 times higher among men than women.
- ii. Among people consuming alcohol in India, Country liquor ('desi') (about 30%) and spirits (IMFL – Indian Made Foreign Liquor) (about 30%) are the predominantly consumed beverages.
- iii. About 5.2% of Indians (more than 5.7 crore people) are estimated to be affected by harmful or dependent alcohol use. In other words, every third alcohol user in India needs help for alcohol related problems.
- iv. States with the high prevalence of alcohol use are Chhattisgarh, Tripura, Punjab, Arunachal Pradesh and Goa.
- v. States with high prevalence (more than 10%) of alcohol use disorders are: Tripura, Andhra Pradesh, Punjab, Chhattisgarh, and Arunachal Pradesh.

(b) Cannabis :

- i. About 2.8% of Indians (3.1 Crore individuals) report having used any cannabis product within past 12 months (Bhang – 2% or 2.2 crore people; Ganja/Charas – 1.2% or 1.3 Crore people).
- ii. About 0.66% of Indian (or approximately 72 lakh individuals) need help for their cannabis use problems.
- iii. Though bhang use is more common than ganja/charas, prevalence of harmful/dependent use is proportionately higher for ganja/charas users.
- iv. States with the higher than national prevalence of cannabis use are Uttar Pradesh, Punjab, Sikkim, Chhattisgarh and Delhi.
- v. In some states the prevalence of cannabis use disorders is considerably higher (more than thrice) than the national average (e.g. Sikkim, Punjab).

(c) Opioids :

- i. At the national level, the most common opioid used is Heroin, (current use 1.14%) followed by Pharmaceutical opioids (current use 0.96%) and then Opium (current use 0.52%).
- ii. Prevalence of current use of opioids, overall is 2.06% and about 0.55% of Indians are estimated to need help for their opioid use problems (harmful use and dependence). More people are dependent upon Heroin than Opium and Pharmaceutical Opioids.
- iii. Of the total estimated approximately 60 lakh people with opioid use disorders (harmful or dependent pattern) in the country, more than half are contributed by just a few states: Uttar Pradesh, Punjab, Haryana, Delhi, Maharashtra, Rajasthan, Andhra Pradesh and Gujarat.
- iv. In terms of percentage of population affected, the top states in the country are those in the north east (Mizoram, Nagaland, Arunachal Pradesh, Sikkim, Manipur) along with Punjab, Haryana and Delhi.

(d) Sedatives and Inhalants :

- i. About 1.08% of 10-75 year old Indians (approximately 1.18 crore people) are current users of sedatives (non-medical, non-prescription use).
- ii. States with the highest prevalence of current Sedative use are Sikkim, Nagaland, Manipur and Mizoram. However, Uttar Pradesh, Maharashtra, Punjab, Andhra Pradesh and Gujarat are the top five states which house the largest populations of people using sedatives.
- iii. Inhalants 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%).
- iv. At the national level, an estimated 4.6 lakh children and 18 lakh adults need help for their inhalant use (harmful use / dependence).
- v. In terms of absolute numbers, states with high population of children needing help for inhalant use are: Uttar Pradesh, Madhya Pradesh, Maharashtra, Delhi and Haryana.

(e) Cocaine (0.10%) Amphetamine Type Stimulants (0.18%) and Hallucinogens (0.12%) are the categories with lowest prevalence of current use in India.

(f) Nationally, it is estimated that there are about 8.5 Lakh People Who Inject Drugs (PWID). High numbers of PWID are estimated in Uttar Pradesh, Punjab, Delhi, Andhra Pradesh, Telangana, Haryana, Karnataka, Maharashtra, Manipur and Nagaland. Opioid group of drugs are predominantly injected by PWID (heroin – 46% and pharmaceutical opioids – 46%). A substantial proportion of PWID report risky injecting practices.

Access to treatment Services: In general, access to treatment services for people affected by substance use disorders is grossly inadequate. Just about one in 38 people with alcohol dependence report getting *any* treatment. Only about one in 180 people with alcohol dependence report getting inpatient treatment / hospitalization for help with alcohol problems. Among people suffering from dependence on illicit drugs, one among 20 people has ever received inpatient treatment/ hospitalization for help with drug problems.

Key Take home Facts

- **No single factor can be identified as a contributor to substance use in society.**
- **Multipliable factors interplay with each other to bring substance use among individuals.**
- **Adolescents are more prone to substance use.**
- **Genetic factors, mental health issues, and environmental issues contribute significantly to making one prey to substance use.**
- **Family discords, community acceptance, failures in life and academics, peer pressure, and ganging are some of the prime reasons which propel individuals to resort to substance use.**
- **However, it needs to be kept in mind that substance use is a reflection of poor personality and strong willpower can enable an individual to get out of its grip.**
- **Adolescents need to realise that “It is not substances that can make them their servants, but it is individuals’ strong self-confidence and determination that can help them to fight against substances.**

3.2.2 Definition and important concepts

3.2.2.1. What is Socio-economic impact of Drug?

In simple terms socio-economic impact of drug abuse means undesirable or negative changes in the social fabric due to drug abuse; it also includes negative economic impact on individual, society and Government. It has many aspects. Use of drug by common people leads to many social consequences such as – Instability in family relationship, Domestic Violence, Crime prone life, Reduction of sense of belongingness to the family and the society. There is also lack of social harmony and happiness within the family. On the other hand, family plays an important role in the life of an individual. Family members have a strong bond with each other, they support each other, face crisis together and affect the behavior and attitude of each other. Once any member becomes a drug addict the entire family is negatively affected. The family can play a major role in preventing drug addiction within the family. Further even if unfortunately a member becomes a drug addict, de-addiction is impossible without the support of the family. Doctors alone cannot cure a drug addict without the support of the family. Use of drugs by any family member particularly the parents and the elders negatively affect the young ones. Weak family link also reduces its influence for preventing drug abuse. It has been found that use of drugs by elders leads to use by youngsters. Use of drugs by a family member creates a vicious circle of drug users and it leads to a drug prone society.

Definition of Social impact

Social impact can be both positive and negative.

Social impact is defined as

- “Any significant or positive changes that solve or at least address social injustice and challenges”
- Social impacts have been continuously bringing changes in many parts of our lives
- Social impacts can be derived from many sources such as business, science and technology, politics and climate changes etc. Say, use of mobile phone has brought many social changes. *A student can write 500 words on impact of mobile phones on the society.*

Drug abuse directly affects the society and destroys the family life. Thus, young men should protect the family life by creating awareness and preventing drug addiction.

3.2.2.2 What is Tobacco Addiction?

The term Tobacco addiction means when a tobacco consumer has been using it for a long period of time and cannot give up such use. Tobacco contains nicotine which is poisonous. Nicotine creates dependence. Nicotine produces pleasing effects in the brain. Though it is temporary in nature but an addicted person is tempted to consume it again for that pleasing effect. This addiction cannot be easily given up. In fact, it creates dependence.

Tobacco is the common name for tobacco product from several plants. They are known as “Genus Nicotiana”. More than 70 species of tobacco are available in nature. The chief commercial crop is *N. tabacum*. It is generally used in dried form especially in cigarettes and cigars. There are many Indian variants like *bidi*, *sutta*, *nasa* or snuff etc. It contains highly addictive stimulant which makes the person to consume it time and again. Tobacco use is highly risky for human body. It directly damages lungs, heart, liver and also leads to cancer. Nicotine dependence affects our body. Which include:

- Lung cancer
- Variety of cancers
- Heart and circulatory problems
- Diabetics
- Eye problem
- Infertility and impotence
- Complications during pregnancy
- Cold, flu and other illness
- Infections
- Hearing loss
- Chronic respiratory problem
- Osteoporosis
- Dental problems
- Irregular periods of women

The tobacco smoker also negatively affects the health of other people. People living with the smokers are periodically exposed to them and are known as passive smokers. In fact, even though they are not smokers they are forced to inhale the toxic smoke and as such can suffer from all the above health problems. Smokers create group of smokers. They in fact create peer pressure on their friends and force them to smoke. Social smokers become addicts in course of time. Tobacco consumption leads to pre-mature death. The society has the sacred responsibility of promoting a tobacco free society.

In Odisha and many other parts in India people consume *paan*. It contains many harmful substances like tobacco and beetle nut. This is also quite harmful. In addition people spit out the liquid and negatively affect cleanliness. Other tobacco product includes *gutka* which is very dangerous.

3.2.2.3. What is alcoholism?

The word “alcoholism” means addiction to the consumption of alcoholic drink. In other words, it is alcohol dependence. An addicted alcoholic is forced to drink by habit. Alcohol addiction has a direct impact over the society. Such a person starts stealing to pay for it. He becomes a habitual liar. He hides alcohol. He loses his sense and has no control over his behavior. He even has very little control over his motor action (say walking). He suffers from frequent irritation. He suffers from increased heart rate, nausea and vomiting. Alcoholism or alcohol addiction leads to many unhealthy behaviors and also health problems. There are physical, mental and social problems faced by the alcohol addicts. The following problems are faced by alcohol addicts.

- The inability to control alcohol intake
- Obsession with alcohol
- Their behavior is unacceptable to the society
- They socialize with other alcohol addict
- Getting drunk in workplace and home
- Having frequent blackouts
- Drinking daily
- Negative drunken behaviors
- Inability to imagine their life without alcohol
- Using alcohol as the reward of life

These are the common behavioral problems of the alcohol addicts. Therefore, one should seek professional help when trying to quit their drinking habit. Depression, anxiety, low self-esteem and enjoyment lead to drinking. None of these is justified. In fact, drinks will not help to reduce depression and low self-esteem. It does more harm than good. The enjoyment part is also not true. In fact, the so called enjoyment is only a kick for a short time. This outbalances the enjoyment. There are social smokers and drinkers. Who in course of time become habitual drinkers and smokers?

3.2.3. Social Impact of drug

3.2.3.1 Impact of drug on family and community

Family is the basic unit of the society. The harmony of the family depends on the family members. When one member of family becomes drug abuser then he disturbs the entire family harmony. Every family member suffers due to a single drug abuser. It affects the life style, behavior, personality formation of the children and also financial condition of the family. The money spent on drugs can be put to better use. Amongst the poor the spending on drugs deprives others from food. The nation also pay heavy price in terms of workforce and from economic point of view relating to absenteeism, lack of performance and accidents at work place are the common problems created by the drug abusers. The drug abusers show criminal attitude in family. It ultimately breaks down the family bondage.

Parents of young drug abuser suffer a lot. Parents cannot face the child who is taking drugs and behaves abnormally. When the younger ones observe the elders using drugs, they wrongly assume that drug abuse is an accepted behavior. The family members ultimately accept this with anger, fear, shame and embarrassment. Drug abuser in family generally shows socially unacceptable behaviors, violence, aggression, irresponsibility and selfishness. Many addicts also indulge in gambling. Drug addicts in the family affect children negatively. They create fear amongst children. When the children grow up many of them take drugs. The negative attention of the society also spoils child's life. This vicious circle of parent children becoming drug addicts must be broken. The drug addicts and their children suffer from loss of identity, depression and low self- esteem. Only a healthy family creates a healthy society.

Domestic Violence

- **Men who commit domestic violence also have problems with substance misuse**
- **Research indicates that up to 75% of individuals who suffer from substance use disorder are engaged in physical assault, mugging, using a weapon to attack their wives at home, and committing other violent crimes when prevented to take substances**
- **Alcohol caused approximately 90,000 domestic violence deaths worldwide**
- **Alcohol or drug use is involved in 40-60% of domestic abuse situations. More than 30 percent of men are drunk at the time they commit a domestic assault, and 90 percent abuse substances on the same day, with alcohol**
- **More than half of the individuals who abuse their elder parents (age 60 or older) are dependent on alcohol or drugs**
- **Each year, about 300,000 victims of violent assaults report that their attackers were under the influence of alcohol**

Substance abuse has serious impacts on a family

- **Parent's substance abuse problem, affects child's development. This is especially serious in single-parent households where the children have no one else to turn to. Parents become divorced from their core responsibilities toward their children and the children's needs become unmet. Many children fail to enjoy their childhood rights with substance-using parents. They miss out on education, health care, and nutritional support due to financial misery and the lack of parental attention. This affects their mental and emotional development. Deprivation and disadvantages mar their future lives. There develops a strong correlation between addiction and an increased risk of child abuse. Research has revealed that children with substance disorder parents have a higher chance of getting into substance use and addiction later in life.**
- **Family lives on trust. When a substance abuser emerges in a family this trust is lost and this proves dysfunctional for the family. This brings broken marriages and broken and disordered family ties between parents and children, spouses and siblings.**
- **Family stress remains very high when there are substance users in a family. The focus is lost and the family fails to discharge its normal and vital functions for the individual inmates and the society at large.**
- **Substance abuse is responsible for bringing financial instability and challenges to families. Addiction drains out the resources from the family. Additionally, the substance abuse problem is likely going to cause the individual to lose their job due to poor performance or attendance. This brings a financial crunch for the families. The family fails to satisfy the basic needs of its members. Many times, they get into debt traps.**
- **Substance abusers are likely to put everyone around them on edge. They indulge in physical and emotional abuse. They become the perpetrators of abuse and they themselves become vulnerable to violence as victims. Child substance abusers get into criminal activities.**

Key Learning Outcomes

Substance use disorders have heavy consequences for communities.

- **They affect community solidarity.**
- **They increase crimes which is a negation to community safety. Thus, substance uses on a mass and massive scale generates risky communities.**
- **Substance use leads to school dropouts and poor learning outcomes.**
- **They affect community health by having a repercussion on individual health.**
- **Heavy alcoholism and drug addiction bring violence against women.**
- **They create burdens on the community exchequer by demanding more police service with personnel and jails.**

They bring issues like unemployment, poverty, and hunger

3.2.3.2 Impact of Drug abuse on Health

Health is an important indicator of healthy family and society. Health is wealth. It is wisely said that the closest friend of a person is his body. We require a body, a healthy body. Hence every one of us has to take care of our body and mind. Healthy body and healthy mind makes a person wealthy and wise. Drug abusers suffer from physical and mental illness. The drug abusers behavior and food habits are not acceptable. Their immunity condition or ability to fight diseases are low. The continuous use of any drug destroys brain cells and leads to other physical problems. The physical effect of drugs varies as per the chemical property. All types of drugs have side effects. In fact, drug abuse leads to ill health. The damage to health depends on the followings factors:

- Drug intake quantity
- Drug type
- Period of drug use
- Amount of drug consumption
- Channel of drug use
- Alternant use in drug
- High risk chemicals in the drug

The survey report by Fischer in 1994 revealed that every year approximately 2, 00,000 deaths occur all over the world as a result of drug abuse. Over dose and long use of drugs leads to risky and abnormal behavior. Adulteration and use of chemicals in drugs cause severe health problem. In fact, the body system weakened with the impact of drugs. Abstain from drug use, the drug abuser behaves madly and creates disturbances. So, it is evident that the drug has direct effect over the health and body system. The drug makes the person feel better, confident, free from anxiety, stress and worries. Subsequently after continuous use a stage will come it will not give any pleasure to the body and the drug abuser is not able to stop taking the drug rather addicted. The drug abuser requires it on regular basis. It directly affects the central nervous system of the body and results in weak cognitive functioning of the brain. It results in untimely death of the abuser.

3.2.3.3 Impact of Drug on Education

Drug abusers are irregular in attending college and university. They lose concentration and learning ability. Drugs negatively affect their performance in examination. Yet education is the only medium through which the society can be developed and enriched. It is generally believed that education and awareness is an important tool of intervention for prevention of drug abuse. To prevent the negative impact of drug abuse, preventative education should be provided at every level of educational system. Preventative education is a slow process which will produce positive results. There is no shortcut solution to the problem.

Drug and alcohol abuse are important problems which affects the education of young mass. Many educators realized that drug and alcohol abuse amongst students are significant barriers to the achievement of educational objectives. The fact is that school and colleges don't have the power to stop smoking, alcohol drinking and sex or other abuse. They can only create awareness, educate the students about the prevention process and also try to control students' activities. One must think about the role of teachers, parents and mentors to prevent

drug addiction among the students or young mass. The young generation should be trained and motivated to lead a healthy life and create a healthy society, free from drug abuses.

The health problem of the drug abusers initially affects the individuals, himself, then it affect the family and finally the society in general. The cost of the drug is high and it involves a heavy price. Most of the times the user is not able to pay for it. And as such it becomes a strain on individual and family finances. De-addiction treatment will also involve a cost. Generally the addict develops other health issues discussed earlier which involves an expensive treatment. The public health system in India is already suffering from resource crunch. This additional cost is a strain on public health system. It is like a vicious circle. Needle sharing by drug users leads to AIDS and other diseases. The young mass who are addicts must understand the ill impact of drug on health and seek consultation with doctors to save their own life.

3.2.3.4 Impact of Drug on Crime

Crime and drug are like two sides of a single coin and are related. Illegal production, distribution, possession, procurement and consumption of illicit drug result in criminal offences. Drug related crime includes trafficking of drugs, violent conflicts, murder, robbery and violent competition among rivals for manufacturing and marketing drugs. Data from 1975 to 1989 proves that drug related crimes are the fastest growing crimes. The drug abusers are generally involved in criminal activities. These are four kinds of crime related to drug abuse

- Crime committed by drug abuser to obtain drugs
- Crime committed by drug peddlers/suppliers
- Crime by drug business owners to protect their business
- Financial crimes like money laundering, robbery, and murder for money
- Crime is the illegal manufacture and trade of drugs

Drug and crimes go together. A total drug free nation can be thought off, if the young mass will create a movement of not touching drugs. There is a global concern to prevent drug consumption. Every nation has started working on this front. The process begins with educating the young and spreading awareness about the ill effect of drugs. Prohibition laws and rules are the legal tools to protect the society but this is not enough. Freedom from drug will be a dream until we create awareness and a movement against the drugs. The young must realize that their life is the most valuable gift of God and meant for good of the society, nation and mankind. Let us work together to prevent drugs and promote a crime free society.

3.2.3.5 Impact of Drug on Employment and Productivity

Drug abuse has a tremendous impact on workforce. Young people normally pick up the bad habit of drug consumption between the age group of 15 to 35. Sometimes unemployment leads to drug abuse. Frustrated young and even older people who lose their job become addicts. The reverse is also true. Those who become drug addicts lose their job and remain unemployed. It is evident that there is a strong relation between unemployment and drug taking habits. As per British Crime Survey Report 1992 the life time prevalence of drug abuse among the unemployed was 60% higher than among the employed. The recent survey by International Labor Organization (ILO) and the Europeans Commission finds drug

and alcohol abuse in the workplace negatively affects productivity. The organizations were forced to dismiss the addicted employees. The effect of drug is also reflected in the performance of workforce. Drug abuses in the workforce impose heavy costs in different service sectors. They are reducing the competitiveness and performance of the organization. The drug abusers suffering from ill-health and being in disciplined have low performance. They are less productive and add to the cost of production. Unable to perform well they create additional pressure on their colleagues. In this process everyone suffers.

3.2.3.6. Impact of Drug on Environment

Drug production impacts environment. The environmental damage found in any country will depend on the specific role of that country in producing illicit drugs. Opium poppy cultivation takes place in forest areas. The traditional slash and burn system is used by the hill tribes to cultivate poppy plants. This results in clearing of large forest areas. The reduction of forest area is a environmental threat. Production of opium and other drugs from these plant ingredients creates toxic waste. These wastes are not scientifically disposed. Mostly untreated toxic waste is released into the environment. The studies conducted by USA Government find that “Cocaine processors in the Andean region each year dump into the water, some 10 million liters of Sulfuric Acid, 16 million liters of Ethyl Ether, 8 million liters of Acetone and from 40 to 70 million liters of Kerosene. These chemical wastes lead to acute poisoning of water. These reduce the oxygen level in water and also reduce fertility of soil. The fishes and other aquatic animals become poisonous. Consumption of fish from such water causes health problems. The major concern is restoring forests and stopping the illicit drug cultivation and protection of water resources.

Do you Know?

- **The carbon emissions caused by growing a single ounce of cannabis indoors have the same environmental impact as burning 7 to 16 gallons of gas. They require powerful lights, temperature control, humidity control, and other energy-consuming care. Wherever greater temperature control is necessary, greenhouse gas emissions are higher. For instance, drastic temperature increases are necessary for growing cannabis in Alaska or the Midwest. Similarly, within a single year, approximately 15 million metric tons of carbon dioxide are emitted in the United States as the result of indoor cannabis production, equivalent to the annual emissions of 3 million cars.**
- **Water depletion due to heavy use is another major environmental impact of cannabis cultivation. Cannabis crops require a lot of water. It ranges between 8-10 gallons per plant, per day. This amount is almost double as much as a grape or tomato plant needs. In 2012, over three billion gallons of water were used to cultivate cannabis in California alone. When water stress is on the rise, the cultivation of such plants becomes detrimental to water resources and humanity.**
- **Drug traffickers clear the forest space necessary for drug plantations. They use them for coca and palm production. The greatest threat opium processing poses is illegal logging and widespread deforestation to clear the land required for the cultivation. And wherever a critical mass of forest gets removed, the surrounding areas become more susceptible to drought, erosion, landslides and flooding. In other words, the land becomes uninhabitable to humans and a wide variety of animals, too. They also go for deforestation for transporting, storing, and processing drugs. This becomes a strong contributor to climate change. Unregulated forest clearing for illicit substances is a major issue with long-term implications. In Colombia, coca growers clear remote sections of the nation's rainforest for plantations and the production of cocaine. It is estimated that per year, carbon emissions from forests cleared for coca could be as much as two million tons.**
- **Illegal drug production leads to the disposal of waste. The fertilizers, rodenticides, pesticides, and chemical compounds used by the producers to have a bumper crop This issue is commonly noted in South America, the Netherlands, and Belgium. The open disposal of the chemicals used in drug industries wreaks havoc on local wildlife.**
- **Finally, drug production has affected biodiversity in multiple ways in the countries where they are produced.**

3.2.3. Economic Impact of Drug

3.2.4.1 Impact of Drug on Public Safety

Drug abuse has direct effect on public health and safety. It hampers the peaceful development and smooth functioning of the society. The safety of the society is negatively affected as drug abuse leads to crimes (as explained earlier). Even road safety is compromised due to addiction. Most of the road accidents occur due to consumption of alcohol and drugs. Drug consumers as drivers are a threat on the roads. Pedestrian drug consumers are also victims of accidents. In work place (i.e. factories, offices and hospitals etc.) drug abuse leads to accidents and other unfortunate incidents. Even in home an intoxicated person may cause fire and their action leads to accidents. All these involve a high cost for the individual, family, society and the State.

The maintenance of safety measures costs heavily to the government. And understanding of the economic costs of drug abuse is required to develop policies, rules and regulations. An estimation of costs for implementation of policies to prevent drug supply to market, development of safety protocols and controlling the drug peddlers is highly essential. Lot of public resources are wasted in containing drug abuse. This money could be diverted to economic development provided there is no drug abuse. It is a challenge for everyone to ensure public safety and smooth functioning of the society by containing drug abuse.

3.2.4.2. Impact of Drug on Governance

All over the world the Governments find it difficult to implement the rules and laws relating to drug abuses. Corrupt officials at all levels of law enforcement throughout the world make it difficult to implement laws. Political patronage and muscle power of drug mafia hampers implementation of laws. In some countries the drug mafia are so strong even politicians are not able to govern the country. Illegal cultivation, drug trafficking and such other activities are not easily controlled by governments. The financial implication is a burden on the government. In nutshell the government incurs lot of expenditure on the following heads:

- Regulating the drug consumption
- Drug abusers treatment
- Rehabilitation centers
- Absenteeism at work place
- Poor and unhealthy work force
- Training centers for professionals
- Substance abuse data base preparation
- Protecting the public
- Deployment of human resources for the public safety
- Operating counseling centers

The economic impact of drug abuses can be reduced by the following steps:

- Increasing tax on drugs
- Preventative measures and strict policies
- Controlling the numbers of sale outlets in specific areas
- Time restriction on opening and closing of the shop

- Strict policy for the specific age group
- Accountability of the drug seller
- Provision for treatment of drug abusers
- Massive awareness programs among the students and in alcohol prone areas

These are the preventive steps which will reduce the cost of expenditure of the government.

Key Learning Outcomes

Substance use disorders have heavy consequences for the economy

- **It entails the loss of productivity of the working population**
- **They become economically burdensome for the organisations they work**
- **It leads to suspension from jobs and unemployment and poverty rise become the necessary consequences of substance abuse**
- **It increases the dependency ratio in society**
- **Fighting against drug abuse is a burden on the state exchequer.**
- **The gain in income for the drug traffickers does not help the country's economy to grow**

3.2.5 Impact of Drug and Tobacco addiction and Alcoholism

3.2.5.1 Loss of Physical and mental strength

Drug abusers generally face physical and mental problems. The effect of drugs on the body depends on the types of drug used, types of chemical compounds used in the drug and quantity consumed by the abuser. If the drug abuser uses the drug on everyday basis then it also affects the person's brain and body. The specific physical effects of drug use may vary from individual to individual. The physical effects are of two types: 1) Long term physical effect 2) Short term physical effect

1. The long term physical effect of drugs are
 - Changes in body part coordination
 - Blood pressure and heart rate changes
 - Heart stroke, liver disease and pancreatitis
 - Pain relief and relaxation
 - Feeling either sleepy or over excited
 - Changes in the appearance of a person's body
 - Drug dependency at a particular time
 - Weakened immune system
 - Various kinds of cancer
 - Digestive problem

2. The short term physical effects of drugs are

The drug use causes short term physical effects.

Consumption of alcohol	Consumption of methamphetamines	Consumption of Cocaine	Consumption of Tobacco and Nicotine	Consumption of Heroin
Lack of coordination of body movement	Increased body movement and physical activity	Increased body temperature	Increased blood pressure	Dry Mouth
High rate of heart beat	Decreased appetite	Increased heart rate	Increased breathing	Itching
Changes of the skin and face	Increased rate of breathing	Headache	Increased Heart Rate	Nausea
Dizziness	Irregular heart rate	Abdominal pain and nausea		Vomiting
Nausea and vomiting	Increased blood pressure	Erratic and Violent behavior		Slow breathing rate
Partial comma stage	Increased body temperature	Heart Attack and Stroke		
Lack of coordination of body movement	Increased body movement and physical activity			

These are the short term physical effect of drug on the body. If the consumption of the drugs continues by the drug abuser then the life of the consumer will be at risk and ultimately leading to death.

Mental effects of drug abuse

Alcohol, Cannabis and various stimulants are psychoactive drugs. They have direct impact on individual's brain function and structure. The effects on the mind of the drug abuser vary from person to person and depend on the type of drug used by the abuser and duration of use. Mental illness is the major disorder caused due to drug consumption.

The common mental illness due to drug consumption is:

- ✓ The short term mental effects of drugs are:
 1. Consumption of alcohol-
 - Anxiety
 - Irritability
 2. Consumption of Cannabis-
 - Feeling of relaxation
 - Anxiety
 - Irritability
 3. Consumption of Heroin-
 - Euphoria
 - Restlessness

- ✓ The Long term mental effects of drugs are:
1. Consumption of alcohol-
 - Depression
 - Anxiety
 - Learning and memory problem
 - Social problem
 - Abnormal behavior
 - Attitudinal change
 2. Consumption of methamphetamines-
 - Anxiety
 - Confusion
 - Insomnia
 - Mood swings
 - Violent behavior
 - Hallucinations
 3. Consumption of Tobacco and Nicotine-
 - Irritability , attention and sleep problems
 - Depression
 4. Consumption of Cannabis-
 - Mental health problems
 - Irritability
 - Lack of sleep
 - Anxiety

The body is affected by the drugs in different ways. It varies from person to person. The short term and long term effects of drug directly affects the body system and weakens the mental strength. Once the body gets addicted with any of the drug substance then the drug controls your mind, thought and actions. Drug dependence immediately affects the psychological and physical health. It is very important to note that there is no safe use of drug. It affects the body's central nervous system and it controls how you think, feel and behave etc. Subsequently the body is not at all in a condition to prevent any disease. So, the drug abusers will lose the mental and physical strength to fight any disease.

3.5.2.2 Loss of Character

Every individual is identified and recognized for his behavior, personality, attitude and character. If the addiction affects his life then the person will lose his identity in the society. The addiction affects life in many ways. It damages health, professional and personal relationship, career and personal finances. Prolonged addiction destroys the image of the individual because during the addiction stage his mind and body will be under the control of drugs. Your valuable time will be spent only at drinking or using drugs. This will damage your social relationship, happiness of the family and slowly you will lose your identity as a person. You will only be identified as a drunkard or drug addict. People around you will never accept you and they will also remain away from you. In this way you are no more identified as a social person or an accepted person of the society.

3.2.5.3 Loss of Family ties and Relationship

The drug abusers are slowly detached from their fellow members. Due to addiction the drunkard parents neglect their children and don't care for them. As a result the children feel emotionally and physically neglected and unsafe. Children also become mentally unstable and they lose their trust on their parents. They feel very guilty and ashamed of their parents behavior. The effects of drug are so harmful that it destroys the peaceful and loving relationship between the family members. Conflict becomes a regular issue. There will be no trust between the family members. It is assessed that one child out of five have one parent addicted to alcohol or some other drug. Children who grow up in such a family are likely to become drug addicts themselves. They also become afraid of their addicted parent. The bonding of the parents with children slowly breaks up. It also leads to an isolated life for the drug abuser. The addicted person becomes alone and there is no attachment with children, wife and other relatives of the family. Addiction results in broken relationship, conflict, isolated life and loneliness.

3.2.5.4 Loss of Earning and Livelihood Potentials

The family depends on the earning of the head of the family. The income which comes in terms of salary, wage or remuneration is used to fulfill the needs of the family members. If the head of the family will be a drug addict then a major portion of income will be spent on the purchase of drugs. A drug abuser never thinks about the need of the children, future of the children, educational expenses, health expenses of the children and also never takes care of the spouse. He cannot even save the money for future requirement i.e. marriage of the children, settlement during retirement life etc. In this way he loses the livelihood earning ability. His potential for earning slowly decreases and he can't control his spending on alcohols/drugs. Ultimately he loses his earning and livelihood potential.

Interesting Observation

A study, carried out by the international labour organisation (ILO) and the European Commission, on the effects of drug abuse and alcohol abuse in the workplace in European countries, found that performance impairments and absences from work are the common results of drug and alcohol abuse among employees. In approximately two out of five cases, organizations were forced to dismiss employees for drug and alcohol-related reasons.

3.2.5.5 Loss of Societal Respect and Dignity

Society is a platform where every individual leads a life with respect and dignity. He gets his identity and leads a life with self-esteem. Society doesn't give respect to drug abusers and drunkards. They are never welcome to a group and its activities. The drug abuser becomes alone and maintains a detached life. When there is no friend circle, no social interactions and no social gatherings the drug abuser becomes alone and he becomes friend of drugs or other drug abusers. In this way he loses his position in society. Nobody cares about his presence or respects him. Drug abuse affects the social life, physical, mental, financial and professional life as a whole.

3.2.6 Let us Sum up

- Objectives
 - Understand the socio-economic impact of drug abuse
 - Appreciate how drug addiction affects the social and individual life
 - Enable you to identify the economic loss due to drug abuse
- Drug abuse has become major social issue in India and the world. Drug abuse negatively impacts physical and mental health, economy and society. It affects individual, family, society, state and mankind
- Economic impact of drug abuse included
 - Loss of income and impoverishment of the individual and his failure to take care of his family
 - Heavy expenditure on the part of the Society, State for control of drug production and distribution. It also leads to spending on Public Health, Education and Awareness Program to contain the use of drugs
- Social impact of drug abuse is immeasurable. Drug abusers destroy family bond, social fabric and peace and prosperity of the society
- Drug abuse results in loss of wealth and health
- Drug abuse is directly and indirectly connected with physical and mental health. Illness connected with drug includes various kinds of cancer, respiratory problems, complexity in pregnancy. Loss of hearing, low fertility, osteoporosis and dental problems etc. Drugs reduces the immunity and abusers are easily infected.
- Drug abuse leads to problems of mental health like loss of concentration, increased anxiety, hyper activism, depression, hallucination, irritation, low self-esteem, psycho-social isolation, insomnia, mood swings and violent behavior
- Education alone can create awareness and promote a prevention strategy
- States and international bodies need to developed a drug free strategy. All country must come together to prevent illegal production and distribution of drugs, built a robust health care infrastructure to rehabilitate drug abusers, create and manage a strong police system to prevent drug related crime. States should also take affirmative action to prevent drug abuse
- The drug abuser loses social respect, dignity and ability to take care of his family. He loses his livelihood. The NGOs and social activism can tackle this problem.
- Drug production, distribution and abuse endanger life and property of citizens. Gang wars are common in mega cities for control of drug business. There are examples of drug mafia controlling cities and even countries. This can be tackled only by honest officers, judiciary and politicians.
- Drug production also pollutes the environment

- In a nutshell the following points are our concern
 - ✓ Impact of drugs on social life
 - ✓ Problems faced by family
 - ✓ Professional difficulties due to drug addiction
 - ✓ Conceptual knowledge on drug and tobacco addiction
 - ✓ Meaning of alcoholism
 - ✓ Types of effects due to drug consumption
 - ✓ Personal and professional loss due to drug addiction

- ✓ Economic impact of drugs in society and business
- ✓ Family suffering due to drug consumption

3.2.7 Key words

- Drug Abuser- The illegal use of drugs by a person
- Drug Addiction- It means a chronic disorder characterized by compulsive drug seeking
- Social Impact- As any significant or positive changes that solve or at least address social injustice and challenges
- Economic Impact- A financial effect that something happen due to new products, new changes in policy on any situation
- Tobacco- A preparation of the Nicotine – rich leaves of plants used for smoking and chewing.
- Socio – Economic Impact- It refers to the factors such as income, education, employment social support and community satisfy will significantly affect day to day life.
- Mental health- It refers to the emotional , psychological and social wellbeing

3.2.8 Check your learning

Q.1. Answer in two or three sentences

- a) Drug
- b) Drug addiction
- c) Socio economic impact
- d) Impact of drug on health
- e) Impact of drug on family
- f) Tobacco addiction
- g) Alcoholism
- h) Drug peddlers
- i) Impact of drug on profession
- j) Drug abuser

Q.2. Answer in 50 words

- a) What is drug addiction and how it affects the health?
- b) Differentiate between tobacco addiction and alcoholism.
- c) Outline the behavioral characteristics of drug abuser.
- d) Mention the physical difficulties due to drug addiction.
- e) What is the long term effect of drug on health?
- f) Explain the causes of drug addiction.
- g) What are the effects of cocaine on health?
- h) How drug addiction affects the workplace enrollment?

- i) Differentiate between social and economic impact of drug.
- j) What are symptoms of drug abuser?

Q.3. Answer in 250 words

- a) Define drug abuse and discussed the social impact of drug.
- b) What is tobacco addiction and how it impact on health?
- c) Explain about the economic impact of drug.
- d) What are the types of drug and discussed in impact on health?

3.2.9 Suggested Reading

- *“The social impact of drug abuse” UNDCP, a position paper for world summit for social development, Number 2, Copenhagen, 6-12 march , 1995*
- *“Drugs and Social Context” by Springer*
- *Anil Agarwal, Narcotic Drugs, National Book Trust, New Delhi, 1995*
- *UNDCP Regional office for South Asia, Drug Demand Reduction Report, New Delhi 1999*
- *Singh Gumeet, “ Alcoholism in India”, in Asia and D.A. Desouza(ed) Psychiatry in India, Bhalani Book Depot, Bombay, PP- 240-251,1984*