



## A detailed legal study of toxicology with special reference to narcotics

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### Abstract

Toxicology refers to a scientific discipline which overlaps with the various other subjects such as chemistry, medicine, biology and pharmacology. It is the study that is related to adverse and harmful effects of any chemical substance on any living being. Narcotics is a kind of drug that has a deteriorating and a worsening effect on the body and mind of the human being. The Narcotic drugs are classified broadly into three main categories such as: Sedatives, Hallucinogens and Stimulants. This research paper is based on the doctrinal and qualitative research methodology. For this particular research the data has been collected from various sources such as scientific articles, books related to forensic sciences, bibliographic reviews, case laws, scientific journals, online research and various other secondary documents are used for a theoretical subject matter. This methodology is commonly used by researchers to arrive at conclusion by collecting qualitative data from the secondary sources such as books, journals, excerpts, articles and various other documents. The present study discusses about the legal aspects of different types of Narcotics Drugs. The paper also focuses on the drug abuse and its effects. The judicial perspective and recent trends related to toxicology with special references to narcotics has been dealt in this paper.

**Keywords:** toxicology, narcotics, crimes, drugs

### Introduction

Toxicology refers to a scientific discipline which overlaps with the various other subjects such as chemistry, medicine, biology and pharmacology. It is the study that is related to adverse and harmful effects of any chemical substance on any living being. Also, it is a practice of treating and diagnosing toxins. Study of narcotics is a part of toxicology. Narcotics is a kind of drug that has a deteriorating and a worsening effect on the body and mind of the human being. The nature of narcotics is such that the person may feel relaxed and relieved of fatigue, pain and worry but the consequence of a drug is opposite. The drug can make a person active and free from stress but it will ultimately deteriorate the functioning of body. In relation to law, Narcotics are those types of drugs whose purchase, sale, production, manufacture and consumption are totally prohibited. Narcotics are regulated and controlled by the Narcotic Drugs and Psychotropic Substances Act, 1985. The Narcotic drugs has been classified in the act in the Schedule I and Schedule II.

The Narcotic drugs are classified broadly into three main categories such as: Sedatives, Hallucinogens and Stimulants. Sedative drugs are those types of drugs which reduces the evil effects and make the insensitive to any kind of emotions, worry or pain. It leaves the depressant effects on the body. Examples of Sedatives are: Opium, Demerol, Heroine etc. Hallucinogens are those drugs which affects the mental state of mind of a human being. This drug changes the consciousness, perception and the level of understanding. Examples of Hallucinogens are: Cannabis and LSD. Stimulants are those drugs which tries on stimulating the various functions of the body. The main stimulants are amphetamines and cocaine<sup>[1]</sup>.

Drug Addiction is a that state of mind in which a person

loses his self-control because of the addiction to the particular drug. There is a high possibility that drug addicts will commit crime to satisfy their craving for a narcotic drug. The effects of the drugs on a human body and mind are deteriorative, it leads to change in the personality of individual. It includes instability, insomnia, lack of self-confidence, at the time when a person is not in influence of a drug. The mind of addict lacks the concentration level and always tries to avoid the social contact, this leads the addict on becoming physical, moral and a mental wreck on the society. Drug addiction is a type of habit of consuming the drugs which are unauthorised in nature. The main causes of drug addiction in a person is to relieve stress, reduce pain, reduce sleep, curiosity, enrich sexual experience, fashion, low education, wrong company, broken families, emotional upset, defective personality, unearned money etc. The drug addiction of an addict influences him on committing various crimes. There are several sources that provides evidentiary clues in the process of investigation of a crime. The drug addict is one of the important sources, if a drug is consumed by an addict then the contents of drugs can be observed by his blood, stomach wash, urine and etc. also, if the dug is injected in the body of an addict then marks of the needle can be noticed easily. The residence of addict is also a source, the addict in most of the cases tries to hide drug in the secret place in his own residence. Secret place of addict is most likely to be lavatory, pillows or a discarded store. Also, drug peddler is one of the sources as trade of drug has become a highly organised crime. The narcotic drugs abuse has become a worldwide problem. The crime rate is increasing because of the consumption of drugs, the effects of drugs are deteriorating and harmful in nature. The drug abusers are considered to be burden on the society.

## Research Objectives

The objectives of this particular research paper are as follows

- To develop a deeper understanding of toxicology in relation to narcotics.
- To determine various kinds of narcotic drugs.
- To focus on the judicial pronouncements dealing with narcotics.
- To identify the root causes of consumption of a drug.
- To study the drug problems and to find out the reasons for increasing rate of crime in India.

## Research Questions

1. What are the various classifications of Narcotics that are dealt under toxicology?
2. What are the legal aspects of different types of Narcotics?
3. What are the different kinds of forensic problems in relation to Narcotics?
4. What is the role of toxicology in crimes, with reference to Narcotics?
5. What are the various judicial pronouncements dealing with Narcotics?

## Research Methodology

The method of research conducted for this particular paper can be categorised as the basic research. This research paper is based on the doctrinal and qualitative research methodology. For this particular research the data has been collected from various sources such as scientific articles, books related to forensic sciences, bibliographic reviews, case laws, scientific journals, online research and various other secondary documents are used for a theoretical subject matter. The research exclusively and solely focuses on toxicology with special reference to narcotic drugs. The research has also been done in relation to forensic toxicology and different kinds of narcotics. The theoretical research has been carried out for this particular research paper. The information for this particular research paper has been taken from existing materials and information has been gathered and collected from the various other textbooks. The research conducted is analytical and descriptive in nature. The type of research is contextual in nature as it is the analysis of already existing sources and information. The methodology that this research follows falls under doctrinal and qualitative study. This methodology is commonly used by researchers to arrive at conclusion by collecting qualitative data from the secondary sources such as books, journals, excerpts, articles and various other documents.

## Classifications of narcotic Drugs

The Narcotic drugs are further classified into three main categories:

### 1. Sedatives

Sedative drugs are those types of drugs which reduce the evil effects and make the insensitive to any kind of emotions, worry or pain. It leaves the depressant effects on the body. Examples of Sedatives are: Opium, Methadone, Demerol, Heroin etc. The opium is a kind of a drug which depresses the certain parts of the human body and in neurophysiological sense, it can be said that it further stimulates the parts of the nervous system. The effects or symptoms of consumption of an opiate is that metabolic rate

of an individual is reduced, the nervous system of a person is badly affected, the respiration of a person is slowed down, the blood pressure also falls down, the capacity of eating is reduced, the hunger level of a person is reduced. It can also be noticed that the addict of opium often loses weight very rapidly. Sexual activity or desire of both females and males is likely to be reduced because of the consumption of an opiate. The person who has a stable personality often finds the experience of drug intake or consumption nauseating. There are individuals who are also allergic with the intake of opium. The result of intake of opiate by an allergic person usually results in illness or death of the person. There are following elements that are created by the opiates, it is a kind of a drug dependence.

1. **Psychological Dependence:** The drug addict of an opiate develops a dependence psychologically. The addict further craves for the drug after certain interval of time repeatedly. The addict feels totally dependent and thinks about the drug all the time, as it gives the relieve to the addict.
2. **Tolerance:** The human body of an addict becomes tolerant to the drug and demands for the more intake or consumption of the drug. To have an equivalent effect, it is required to have an increasing dose of the drug. This phenomenon is known as 'Drug Tolerance'.
3. **Physical Dependence:** The addict of an opiate totally becomes dependent on the drug physically. Human body requires the drug to function properly in terms of physiology. The body requires the drug otherwise it leads to certain major problems such as withdrawal syndrome and also the addict is not able to think, behave and act normally.

The other type of sedative which is commonly used is Barbiturates. Barbiturates is generally used as medicine to deal with emotional upsets, nervous breakdown, menstrual irregularities, asthma and insomnia. This medicine works as complimentary to other medicines. If taken in a proper medicinal dose, there is no ill effect or side effect that can be noticed. But if the barbiturates are taken excessively then it may produce intoxication which will often lead to the withdrawal syndrome. This type of drugs is often taken by an individual for getting intoxicated, when the person is unable to find alcohol or opiate then person consumes or intakes barbiturates. Intake of this drug often leads to enhancement or modification of the effects of drug such as: in case where the emotional tension of the individual is increased as effect of the consumption of amphetamine or cocaine then by intake of barbiturates, it may be controlled but at the same time in the case of intoxication of alcohol, the intake of barbiturates will result in enhances and prolongs the time. The features of addiction of Barbiturates are as follows:

1. The intake of such drug has a tendency in a way of increasing the dose of the drug.
2. It often leads to the syndrome of withdrawal when the individual is not intoxicated. Withdrawal syndrome further includes tremors in fingers and hands, anxiety, giddiness, vomiting, delirium, twitching of muscles, nausea, blood pressure reduces and insomnia. The symptoms of withdrawal syndrome can be noticed within three days after the intake of the drug of barbiturates. They can be clearly noticed or subside within ten days.

3. It leads to the psychological, physiological dependence on the drug. It arises the desire in the mind of addict to taken the drug repeatedly or after a certain interval of time.

## 2. Stimulants

Stimulants are those drugs which tries on stimulating the various functions of the body. The main stimulants are amphetamines and cocaine. The stimulants are usually used for the purpose of counteracting the effects of the drugs that are taken as sedatives. It helps the individual in staying awake as it prolongs the capacity of staying awake, it is usually used by a person during exams or for long drives. This drug is also used by the other celebrities as it helps in pepping up and making the celebrity ready to face the world after a long tiring day or after a sleepless night. Like any other drug, the consumption stimulants also follow the general pattern. The intake of stimulant is noticed because of curiosity or at the time of necessity which further leads to experimentation with the stimulants. The desire or frequency to take the drug increases with the time and it keeps on enhancing until an individual becomes an addict. Amphetamines and Cocaine affects directly the central nervous system of the body, reduces inhibitions and makes a drug addict incapable of doing any act. The addict develops the feeling of happiness and intense excitement, heightening of alertness amongst the individual, increase in the self-confidence and initiative etc.

## 3. Hallucinogens

Hallucinogens are those drugs which affects the mental state of mind of a human being. This drug changes the consciousness, perception and the level of understanding. They are also known as psychotomimetic and psychedelic drug. Examples of Hallucinogens are: Cannabis and LSD. These types of drugs are taken from the ancient times. The origin of these drugs can be noticed from earlier times, it was consumed by the recluse and the mystics for the purpose of detaching themselves from the world and establishing a union which will help them in the attainment of divine power.

The Hallucinogens are originated from the plants such as charas is usually extracted from the cannabis that is bhang, the small cactus (Peyote) has the substance of mescaline. For the making of the drug LSD, the lysergic acid is obtained from the fungus which is usually grown on the grains of rye. LSD can also be obtained from the synthetic sources. Use of synthetic sources for the purpose of obtaining hallucinogens replaces all the original sources for the procurement of hallucinogens. N-di methyl tryptamine and Phencyclidine such as Rocket fuel or angel dust are the synthetic compounds and is alike as that of LSD in its effects and properties. The important alkaloid of peyote that is mescaline can be prepared by the synthetical process.

The nature of the drug of Hallucinogens if of such that they are non-addictive. They do not have an symptoms of withdrawal syndrome or drug tolerance or drug dependence. But they do have certain kind of personality change and those are of such nature that it very dangerous and drastic than any normal addictive drug. These drugs are usually used for the purpose of research and for exploring such a world which is hidden. These drugs can be used for the purpose of dealing with the mental ailments disorder.

## Legal aspects of different types of narcotic drugs

### ▪ Sedatives

#### 1. Opium

The opium was used from the old civilization, opium was used for the intoxication, religious and medicinal purpose. Opium is formed by mixing 35 alkaloids and the morphine out of them is the most important alkaloid. There is 10 percent of morphine content in the opium. The other alkaloids which are mixed are thebaine, codeine, Narcotine, papaverine etc. the intake of opium has been noticed in the whole world including countries like Syria, Persia, Egypt, America, Europe and etc. The government of all these countries have made an effort to limit its use for the purpose of medicines only. Opium is that form of drug which is eaten, smoked and drunk. There is desire in the addict to take the drug again and again, it creates the sensation in the body and addict develops tolerance for such drug and requires more dose. It also leads to development of dependency on such drug. If the particular drug is not taken then there is a chance of getting withdrawal syndrome. The intake of opium is such that it reduces all sorts of physical activity, makes the person depressed and totally dependent on the drug. Also, opium destroys the central nervous system in human body. It has effects such as it reduces the appetite, metabolism, respiration and blood pressure. The desire of sex is reduced because of the secretion of the reproductive system. The distinguishing characteristics of opium is that it can easily identified by the chemical tests, smell and chromatography.

#### 2. Morphine

Morphine is one of the important alkaloids of the opium, it is also individually taken as a drug. It works as pain killer and a narcotic drug. The intake of morphine is such that it has reduced the intake of opium, the morphine is more effective and is better for the medicinal purposes than opium. Morphine can be used as morphine sulphate which is a salt.

The intake of morphine is usually in the form of injection, it can also be directly taken through mouth. The normal dose of morphine for the purpose of medicine is about 10-15 mg. the fatal dose is about 75 mg. It was noticed that the average consumption of morphine by the addicts is four to five shots daily with intake of 30- 150 mg. To counteract the medicinal effect the atropine is combined with the morphine to curb depressant effect. There is physiological effect of morphine such as it can create excitement which will lead to soporific effect, coma and narcosis. The traces of morphine can be figured out from the urine, about 55 percent of morphine is further eliminated in 8 hours and around 90 percent in a day <sup>[2]</sup>. The traces can be observed after 48 hours also. The drug contains a quality which makes the person addictive as it a strong drug and should be used in a proper dose for the medicinal purpose. The drug can be easily identified with the help of Marquis test, Ammonium-molybdate test, potassium calcium iodide and etc.

The government of India has made an effort to limit and control the use of drugs by making legal provisions which regulates and controls the processing, production and sale of the drug. The strict provisions are laid down in Narcotics Drugs and Psychotropic Substances Act, 1985 and also provision is there in its rules, chapter- iii of NDPS Act, 1985 deals with the such stringent provisions. The sections which deals with the opium drug are section 8 to 14 of NDPS Act,

1985 and Rules 5 to 30 of NDPS Rules, 1985. The main features of the acts and rules are that the cultivation of opium will only be for the use of central government and not for any other purpose. The collection of opium and its cultivation will be under the supervision. All the opium that has been produced should be given to the central government and its authorities. The price will also be regulated, paid and fixed by the central government. The classification of the opium for the purpose of payment is also done by the central government. Sale, export and import is managed by the central government only.

#### ▪ **Stimulants**

##### **1. Cocaine**

The cocaine is produced from the Cocoa bush. It is alkaloid which is volatile and white crystalline in nature. The melting point of such alkaloid is 95 degrees to 98 degree Celsius. Cocoa plantation is mainly seen in South America and on the mountain slopes. The ideal condition for the growth of the cocoa is rich soil and humid climate, temperature should be up to 20 to 30 degrees Celsius. There are lot of process involved for transforming coca bush or leaves into cocaine which is a hydrochloric salt and is solid and purely and narcotic in nature. The cocaine is used for as local anaesthesia and is only used in the emergency situation. The cocaine is a drug which is volatile in nature and evaporates easily. The cocaine is usually sold in the rock-solid form, flake form, powder form.

The intake of cocaine is done by mixing it in food, drink or is taken in the form of capsules, it can also be taken by keeping it below the tongue or by injecting in a body. The inhaling is the method that is usually seen for the purpose of taking cocaine but the most satisfactory method for the addict is by taking it through injection. It can also be sprayed in nose, can be inhaled with the nostril, snorting, can be mixed with Vaseline, through straw etc. the effect that can be seen by the intake of cocaine is intense pleasure and a feeling of euphoria. The person becomes hyperactive and also there is a stimulation in central nervous system. It also reduces inhibitions, there is also a possibility that addict can get involve in anti-social activities. The physiological effect that can be observed are: it causes constipation, sore noses because of snorting, may cause infection, reduces sleep, reduces appetite, increases respiration, blood pressure and pulse rate. It also causes thirst, causes nausea, headache, delirium, cramps and unconsciousness in a human body. The cocaine can be identified through the urine that has been excreted. The cocaine can be identified through gold chloride, cobalt thiocyanate solution, UV spectrophotometer, NMR and etc. Punishment with the contravention to any manufactured drugs is dealt under Section 21 of NDPS Act.

##### **2. Amphetamine**

Amphetamine is a drug which is prepared through a synthetic process from a phenethylamine. It can be administered by oral taking, inhaling, rubbing on a body and through injection. Amphetamine stimulates or affects the central nervous system directly; the alertness and sensation of pleasure is created through intake of such a drug. The drug reduces fatigue and prevents sleep. It also reduces appetite and is taken to reduce obesity<sup>[3]</sup>. Mental health and psychomotor is affected very badly. The drug is further characterised by its psychological dependency, development of tolerance level, absence of physical dependency and a desire to take amphetamine repeatedly. For the

determination of addiction of amphetamine, the urine of a person should be taken into account, it can be detected easily within three days or after a week. Amphetamine can be identified through its characteristic feature such as gas chromatograms and thin layer or by marquis test or IR and UV spectra.

#### ▪ **Hallucinogens**

##### **1. Cannabis**

The cannabis, bhang or marijuana are the synonyms of each other originated from Cannabis Sativa, which is a shrub. It is up to 3 to 5 meters tall. The main ingredient of cannabis is Dronabinol which is created after synthesizing THC and charas. The narcotic resin which is used as a drug are obtained from the flowers. Cannabis used is various forms such as bhang, it is kind of the crudest, and is in the form of leaves. The most concentrated form of the plant is charas which includes resin of the plant. The flowering tops of the plant is used as ganja as stated in the single convention on narcotic<sup>[4]</sup>. The main ingredients of charas are cannabidiol, tetrahydrocannabinol, cannabinol, cannabidiolic acid. The cannabis is often smoked up by the people in the pipes, cigarettes, hookahs. It is also mixed in the soft drinks, sweat meats. Also, used for medicinal purposes. The major effects of cannabis are removes inhibition, creates confusion, instability, excites hunger, relieves fatigue, suffers from fantasises, hallucination, people enjoy music, dance and art better with the influence of cannabis. The properties of cannabis are such that it is not addictive in nature as compared to other drugs such as heroin, opium etc. There is a feeling of taking the drug repeatedly with the perception that it will increase persons capabilities, no tolerance is developed, there is a development of psychological dependency and it doesn't have any withdrawal syndrome. The elimination of such drug from the body is slow can be taken out in the form of urine, it takes a period of week for the excretion of the drug from the body. These drugs can be identified easily through the characteristic feature of its leaves and seeds. Under Section 2 of NDPS Act, cannabis includes charas, ganja and any mixture in form of cannabis. Under Section 20 of the act, all the punishment related to the contravention of cannabis are dealt with. The maximum punishment is up to the rigorous imprisonment of 10 years and fine up to 1 lakh rupees. The production and sale of flowering tops and resins was banned but production of leaves which is bhang was regulated by the rules<sup>[5]</sup>. Cannabis can be cultivated in India for the medicinal and industrial purposes.

##### **2. Lysergic Acid Diethylamide**

LSD is formed by the method of synthesizing lysergic acid which is mostly taken from the growth of fungus on rye grain. The nature of drug is such that it is white in colour, odourless and tasteless. It can be administered through injection, oral in the form of blotter papers and sugar cubes. It is the drug which affects the metabolism of whole body and is considered to be the psychotic drug amongst all the other drugs. The person starts hallucinating colour, sounds and visuals. Sense of cause and effect, time and space, right and wrong is completely destroyed. The effect of the drug is very fast and can be noticed in an hour. It creates the permanent personality disorder to the addict. The intake of this drug is highly destructive in nature and should be limited and controlled against its abuse. It can be identified through Sulphuric acid gives grey colour, formaldehyde, ammonium molybdate gives green colour, ammonium

vanadate gives brown colour. It has features of GLC and TLC chromatograms.

### **The Effects of Drug Abuse**

Drug Abuse is also referred as Substance Abuse. Drug Abuse refers to a situation wherein a person gets addicted to take narcotics and other drugs which have drastic and harmful consequences on the body of the person taking it.

The problem of Drug Abuse is not confined to one jurisdiction, rather it is an international problem as the cases of Drug Abuse are growing globally. Some of the reasons for taking drugs are: to feel good, to feel better, to do better, curiosity and societal pressures.

A drug addicted person is prone to brain disorder and other medical problems at later stages of life. Moreover, there is an increase in the crime rate as addicts' resorts to crime to pay for their drugs, another side effect being that drugs remove inhibition and impair judgement egging one to commit offences this has resulted in an increase in offences of eve-teasing, group clashes, assault, impulsive murders, thefts, etc. In India Cannabis products has gained religious sanctity owing to the fact that it is associated with some Hindu deities. The effects of drug abuse were very prominently forecasted in a recent movie Uda Punjab which depicts the actual situation of drug addicts in Punjab.

In India there are no sensitisation programmes against drug abuse or substance abuse in schools or for children out of school. Also, India does not have a drug abuse policy. Also, there are lack of proper health care centres to deal with the menace of drug abuse. These factors have also led to an increase in the number of drug addicted children and person in India.

Another issue is lenient dealing with the Drug Peddlers, Drug Traffickers or Drug Smugglers by the court of law in India. But, the Hon'ble Supreme Court of India in the case of Union of India v. Kuldeep Singh has categorically held that while awarding sentence to a drug peddler consideration like family problem of the peddle or economic situation of the peddler is irrelevant and they should be punished with the maximum permissible punishment as prescribed by law. The court further went ahead by stating that social impact of the crime must not be lost sight of while imposing punishment in respect of offences pertaining to Narcotic drugs or psychotropic substances.

In these circumstances it would be appropriate to say that proper orientations must be conducted across the schools in India to make the children aware about the harmful effects of drug abuse and establishment of proper de-addiction centres across India. Moreover, helpline numbers for drug abuse must be released by each and every state to solve this problem. And last but not the least, the public at large must be motivated to curb the menace of drug abuse by co-operating with the concerned officials and helping then which the cases pertaining to drug abuse.

### **Forensic Problems**

The drug addiction is such a problem which affects the whole society and is a serious international problem. The forensic laboratory also faces certain problems when it comes to the drugs. The main problems that are faced by the forensic laboratory are such as:

The drug that has been recovered as matter of evidence is or possess any narcotic properties or not. The problem that is faced in each and every laboratory of the country is the

identification of those drugs. It is very difficult to classify such drugs. The characteristics of the drugs are not clear sometimes it is mixed with other type of contents, it is very hard to figure out the nature of such drugs.

When the person consumes or intakes any drug in that case the nature of such drug is important. The properties of narcotic drug in such a case can be recognised or examined by taking a blood test, urine test and by stomach wash. It is required that the members of the laboratory should have the basic idea of the quantity that has been taken. The main requirement for the analysis of the drug in human body can be noticed by the quantity and nature of the drug. Though it is a difficult task to identify nature of a narcotic drug, according to the classification. The requirement for the determination of such drugs can be for the other purposes also. When the insurance company needs to issue insurance coverage in that case, it will be taken into consideration whether the individual was the drug addict or not, if non-addict is found with the consumption of any drug and has committed an offence in the influence of such drug and in the same case when the person further claims that he is not responsible for any of the acts as the acts were committed by him under the influence, in such a case the life insurance company will make check to know the nature of the drug and to check whether the offender is a drug addict or not. In case it was contested that will that has been made was further formed in the influence of the consumption of the drug, for that purpose it is required to check whether the person is a drug addict or not and for the same the laboratory has the responsibility to take required medical tests. Also, in various cases of sudden deaths and suicide it has been noticed that the cause of death was the overdose of drugs which requires the determination of drug in human body.

The problem by forensic laboratory also includes the determination of drugs whether they are licit and lawful or illicit and unlawful in nature. For that purpose, the quantity in which the drug is consumed is required. It can be decided only by the certainty of the circumstances. It is also required to know the origin of such drugs. The place of origin can further help the people of the laboratory to determine whether the drug was smuggled from outside or locally it has been smuggled. It will further help in knowing the origin of the country of such drug. It keeps the checks that which drugs are being smuggled in the country. If a witness in the criminal case has consumed drugs, in that case it is responsibility of the forensic laboratory to determine whether such person is addict or not. If he has consumed the drug then it affects his creditability of the evidence.

All these are the cases where the forensic laboratory plays a major role in determining the nature of the drug, to establish whether the person is an addict or not, forensic laboratory in certain cases works on the direction of the court. It is hard for the laboratory to classify drugs and identify the when such drugs are mixed and the quantity of the intake of drug is unknown.

### **Narcotic Drugs and Crime**

#### ▪ Non- Violent Crimes in India

Drug addiction leads to a various criminal activity which affects the society at large. The drug addict because of addiction usually becomes the criminal and he is to indulge and continue all other criminal activities as these activities of criminal nature along with the drug becomes the

addiction of that person. The drug addict gets involve in the criminal activities for obtaining or for the procurement of the drug. The need of the money to buy drugs the person usually commits crime, also in need of the drug an individual smuggles the drugs, all these activities done by the addict is of criminal nature and is an offence. The habit of consuming drug separates him from his own family, the addict loses his job because of the addiction, also it badly affects the character and health of the person. If the person has no proper legitimate source of obtaining drugs, then the addict commits criminal activities for the procurement of drug. Such criminal activity or acts are as follows: stealing money, embezzles money, smuggles drugs, becomes drug peddler, joins crimes syndicates, acts as pimps or prostitutes, induces others to take drugs, becomes informer of the police, manufactures illicit drugs by various methods, blackmails and commits the crime of extortion, kidnapping and robbery <sup>[6]</sup>.

#### ▪ Violent Crimes in India

Usually the drug intake in most of the situations does not result in criminality but there are few drugs which generally act as the dis-inhibitors. These types of drugs act in such a manner that it brings the criminal nature of individual which is of dormant nature because of the societal pressure and education. Some drugs are of such nature that it opens up the person such as cannabis and alcohol. Hallucinogens which affect the mental state in the human mind usually leads to the commitment of violent crimes. An addict without even thinking of values, time and space commits the crime under the influence of drug without understanding the consequences of his act. The stimulants such as amphetamines and cocaine which affects the central nervous system of an individual also affects the physiological activities of the addict. The intake of these drugs leads to the commitment of violent crime and increases the criminality in person who possess such bad character. All the barbiturates and opiates help in decreasing the violent crime if it is taken complimentary to other drugs, as sedatives often modify and reduces the symptoms of other drugs. The advent of the criminality in person because of drugs depends on other factors such as character, values, surroundings, personality, frequency of intake ad nature of the drug are essential elements to notice criminality in the person.

#### Judicial Pronouncements and Recent Trends

Whether the bhang is narcotic drug or not is broadly discussed in the case of *Arjun Singh v. State of Haryana* <sup>[7]</sup>, in this case the appellant was recovered with the possession of 15 and half kgs of hemp or bhang while he was travelling in the train. Under the trail court, the appellant was tried for the offence under Section 20 B of THE NDPS Act, 1985. The contention was raised by the counsel for the appellant stating that bhang is neither a psychotic or a narcotic drug according to its definition and therefore the possession of the bhang is not a punishable offence. Under the definition of cannabis, the bhang has not been included, it is the leaves of the plants, whereas the flowering tops are included but not the hemp. The possession of the hemp is not punishable only its cultivation leads to a punishable offence under Section 8 of NDPS Act. Under the Punjab Excise Act, Section 3(13), the possession of hemp is also considered as punishable as it falls under the category of intoxicating drugs. It was held in this case that the conviction of the appellant should be set aside and appeal should be allowed.

Similarly, it was also held in the case of *Samid v. State of Uttar Pradesh* <sup>[8]</sup>, *Gurdial Singh v. State of Punjab* <sup>[9]</sup> and *Manjee v. State of Rajasthan* <sup>[10]</sup> that hemp which is bhang that doesn't fall in the category of cannabis as defined by the NDPS Act under Section 2(iii). Thus, the possession of bhang is not a punishable offence under the NDPS Act, 1985.

In the case of *Sami Ullah v. Superintend Narcotic Central Bureau* <sup>[11]</sup>, in this case the contraband of 2kgs was recovered from the bags of Zahid Hussain and Abdula Musaf, while they were travelling in the bus. It was observed by the investigating officer in this case, the contraband which was recovered from the appellants contain heroin and thus bail should not be granted to the appellants. It was contended by the appellants that they were forced to carry the contraband but on investigation it was found that they were taking for their personal use, then next contention was if the material is sent to one laboratory should not be transferred to any other lab but this contention was also rejected as it was stated by the court that the investigation officer has the authority to send the sample from one lab to another lab for the report analysis. It was therefore found from the chemical examination that material received by the appellant was heroin. The appellant is thus therefore liable under Section 37 of the NDPS Act, for imprisonment up to ten years and fine of one lakh rupees. Thus, court held that bail cannot be granted to the appellant in the above-mentioned case. It was observed in the case of *Ouseph Thankachan v. State of Kerala* <sup>[12]</sup> describes meaning of small quantity of contraband and how it can be determined whether the drug is of small quantity or is for the personal consumption. The small quantity of contraband has been mentioned by central government in its gazette dated 23-7-1996. Small quantity is any quantity as of one gram. It was also held in the case of *Harjit Singh v. State of Punjab* that morphine content which is presented in the opium is an immaterial ground while sentencing any punishment. Only determination of opium is required, it is relevant to consider the morphine content in the opium. In the case *Trivakiram Rana v. State of Tamil Nadu* <sup>[13]</sup>, it was held that the appellant was excessively using the drug and causing harm to the society by trafficking of drug which is ruining life of young generations, the amount of cocaine that was received from the appellant was not in a small quantity but was excessive. The appeal of the petitioner was rejected on the ground that use of drug was for the personal consumption and trafficking which is against the law.

#### Conclusion

It can be concluded from the above study that narcotic drug can be obtained through various natural as well as synthetic methods. The Narcotic Drugs and Psychotropic Substances Act, 1985 and its rules covers all the legal aspects related to narcotics, all the definitions and offences are covered under the act. The central government has also all the power and can delegate the power for sale, production and cultivation of a drug. The individual can't consume the drug for the personal use, only for the medicinal dosage and should also be in small quantity. The excessive of narcotic drugs develops tolerance, requirement of dose repeatedly, psychological dependence, uncontrollable cravings, physical dependence, imbalance in the body can also be noticed. It also leaves the depressant effect on a human mind. The consumption of drugs often leads to violent and non-violent

crimes in India. The main causes of the intake and consumption of the drug that was found by the study was to relieve stress, reduce pain, reduce sleep, curiosity, enrich sexual experience, fashion, low education, wrong company, broken families, emotional upset, defective personality, unearned money etc. The drug addiction of an addict influences him on committing various crimes. There are several sources that provides evidentiary clues in the process of investigation of a crime. The drug addict is one of the important sources, if a drug is consumed by an addict then the contents of drugs can be observed by his blood, stomach wash, urine and etc. also, if the drug is injected in the body of an addict then marks of the needle can be noticed easily. Also, it can be concluded by the way of present study that bhang is not a narcotic drug or possession of bhang is punishable under NDPS Act. Commercial and small quantity of contraband has been decided by the judicial pronouncements and it is also decided by the central government through official gazettes. Morphine content in the opium should not be looked at while sentencing. NDPS Act thus provides for various deterrent punishments for trafficking of drug. Also, Central government is provided with the power to take the necessary measures related to the prevention and abuse of the drugs.

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