CHAPTER III
CONCEPT AND THEORETICAL ISSUES: DRUGS AND DRUG ADDICTS

The present study is mainly confined to the issues pertaining to the concept of drugs, drug abuse, drug addiction, drug dependence, magnitude of drug addiction and profile of the addicts. The nature of socio-cultural have been discussed in various aspects of drug usage. What is a drug? What is drug dependence? What is drug abuse? What is drug addict? Who are habitual drug users and drug addicts? How does the relationship between the addicts and the youth?

The treatise due to some inherent limitations is limited in its scope, but a modest attempt has been made to throw light on some of the vital issues of drug abuse and drug addiction. The drug addiction no doubt is a age old problem, but in the recent decades it has emerged in the dangerous forms and has posed a great threat to the mankind. The drugs which were unknown in the recent past have now emerged in an alarming dimensions. The effects of drug abuse and drug addiction are multiple in number and the nature of impact of such drugs varies from drug to drug and individual to individual, depending upon a number of variable factors.

Drugs:

The basic pharmacological or scientific definition of a drug is 'a substance that by its chemical nature, affects the structure or function of the living organism'. The mode of action and the nature of the effects of drug is the subject matter of pharmacology.

It will take only a moment's thought to realize that this definition covers virtually everything that people ingest, inhale, inject, absorb. It
includes medicines, over the counter drugs, illegal drugs, drugs that are commonly referred to as beverages or cigarettes, food additives and preservatives, many industrial chemicals, pollutants, even food itself. An immediate reaction is certain to be that this is not a very useful definition. It is certainly not the way most people think of and respond to the term ‘drug’. From many points of view, it is so general as to be of little use, but it highlights the important fact that something more than pharmacology is necessarily involved in most current definitions of drugs. These definitions have more to do with the purposes for which substance are used than with any characteristic of the substances itself or the way in which it interacts with the living organism. These purposes vary from time to time and from place to place. Alcohol as a substance is a drug. Under the name ethyl alcohol, it appears in most pharmacological and medical texts. To label it a beverage in no way changes the way in which it interacts with the organism. It is still a central nervous system depressant (Parikh and Krishna 1992).

From a pharmacological point of view, a drug is a drug regardless of how or why it is used or what it is called. And all drugs interact with the living organism according to the same well-established principles. These are not the kinds of principles that most people assume. These principles involve effects that are probable and variable rather than certain and invariable.

There is no such thing as the effect of any drug. All drugs have multiple effects and these vary from dose level to dose level, from individual to individual, from time to time and from setting to setting in the same individual. Drug effects are a function of the interaction between the drug and the individual physiologically, psychologically and socially
defined. Individuals are complex and varied. Drug effects must, therefore, be complex and varied (Wiener 1970).

For every drug there is (a) an effective dose, (b) a toxic dose and (c) a lethal dose. Each of these dose levels is a statistical abstraction, an average. Each is the dose by which fifty percent of a given group show (a) whatever effect is sought, (b) whatever effect is defined as toxic (either physically or behaviourally), or (c) die. At low- and moderate-dose levels it is a scientifically demonstrated fact that non-drug factors such as the physiological and psychological characteristics of the individual, his current physiological and psychological state, the reasons why he takes the drug what he expects the effects will be, the physical and social setting in which he takes it are often more important in determining the effects of a given drug than any characteristic of the drug itself. One has only to think about the effect of alcohol which may make the drinker sociable, talkative, withdrawn, depressed, gay, lachrymose, sleepy, abusive, destructive, uninhibited, drunk or comatose. It all depends on who, why, where and how much.

Individuals vary in many ways, in weight, age, sex, sickness and health. They vary in the way in which they react to their perception of physiological and psychological changes in their physical and social environment. The meaning and significance of these perceptions for personal and social adjustment varies. All are influential in determining the response to any drug.

Drug is a very wider term and can be used for both medicinal and non-medicinal purposes. Drug in the context of phrases like drug problem or drug abuse is really a shorthand for socially disapproved drugs or drugs which are used in the socially disapproved ways.
The drugs obtained from a doctor and used under the auspices of medicinal treatment are seen as less dangerous and more socially acceptable than otherwise would be the case. Further, in view of the medicinal and non-medicinal use of drugs, each society develops rules and guidelines for such use. The rules cover wide ranging aspects of drug use and drug abuse, defining the uses and behaviour that are acceptable or disapproved or which drugs may be self-administered or which may be taken only on the advise of a socially or legally authorized person or the drugs which are not authorized under any circumstances. Jaffe (1972) is of the opinion that concept of acceptability is also a relative term, as what is acceptable for one individual may be forbidden to another. The acceptability of drugs also varies greatly from culture to culture, community to community and in the same community from time to time.

Helen (1975) pointed out that drug phenomenon like any other phenomenon cannot be explained or understood outside social and cultural contexts. Every issue about the drugs beginning even with the question as what is a drug, is interpreted and mediated by social and cultural factors. Even different cultures attach widely divergent and some time contradictory meanings to a given drug and expect different experience and behaviour from it. The drug for many people means simply something which a doctor prescribes for treatment of a disease or which one can buy for the same purpose from a drug store without prescription. The drugs include within their ambit substance such as heroin and morphine, which were originally and are still used medically for treatment or pain but are now also manufactured and sold illegally for pleasure producing agents.

What is a Drug? The word drug has a variety of meaning, depending upon the surrounding circumstances. Weissman (1978) has observed that drug is any substance (other than food) which by its chemical nature affects
the structure or functioning of living organism. Marin and Cohen (1971) have pointed out that drug in its broader sense may be defined as any compound that affects the functioning of the organism. Drugs may cause changes in both the bodily process and behaviour. Krivanek (1972), while defining drugs, observe that drug is a chemical, but all chemicals are not drugs. The popular definition of drugs normally excludes substances naturally present in the body, though some of these, for example, the hormones, may be used medically. The drugs, therefore, are the substances introduced into the body but such substances do not include food or necessary components of diet such as vitamins, even though these may be taken in forms and ways unrelated to ordinary eating. The chemical used to flavour, colour and preserve food are also excluded from the category of drugs.

Plicer (1988) observed that drug is a chemical which interacts with body chemistry. Sometimes it substitutes for chemicals which the body lacks such as insulin. Opiates, depressants, tranquilizers, stimulants, marijuana and hallucinogens etc; are classified as drugs. The basic pharmacological or scientific definition of drug is a substance that by its chemical nature affects the natural behaviour of those who use such drugs. The mode of action and nature of effects of drugs is the subject - matter of pharmacology and varies from individual to individual.

Drug means any chemical that modifies the function of living tissues resulting in physiological or behavioural change. In the ordinary sense drug means any substance, other than food, which is used to change the taste of an individual and has some direct or indirect impact upon the overall behaviour of such a person. The impact of such drugs may be either physiological or psychological.
The drugs liable to abuse are usually put into the two classifications of ‘narcotics’ and ‘dangerous drugs,’ and the people who abuse them are usually called ‘addicts’ and ‘users.’ The terms have been used carelessly and have gathered around them many subjective associations. Some precision is necessary if they are to be used as instruments of analysis. All drugs, even food and water, are dangerous for some individuals at some dosage level under some circumstances. Some are more dangerous at lower dosage levels for more individuals than are others. Use of any drug involves risks. But, most of what people do, if they do anything, involves some degree of risk and is done because of some perceived benefit. People still drive powerful cars despite the terrible toll of life and property, including their own. The ability of all to move quickly and would seem to be valued more than conserving the life and property of some. Who may take what risks for what benefits is a basic problem both for individuals and for societies.

**Drug Users:**

Whenever there is concern with deviant or destructive behaviour there is often an attempt to identify physical psychological, or social background factors characteristic of those engage in these behaviour on the assumption that others who share the same characteristics and background are more likely to become involved in the same deviant or destructive behaviour. Efforts to prevent, intervene, or isolate may then be concentrated on those so identified.

No such factors have as yet been clearly identified as either necessary or sufficient to serve as a basis for reasonably accurate prediction. Availability of drugs, a situation in which drug use is perceived as safe and association with friends who use drugs seem to be the only
factors can be identified as necessary for drug use. None is a sufficient factor.

Biological and medical scientists have searched for physiological, genetic or biochemical factors; behavioural scientists have searched for specific character disorders or psychopathology, for arrested stages of growth and development for influences on development of such factors as broken homes, permissive or aessez-faire parents, patterns of childrearing, social, religious and political attitudes of parents; social scientists have sought explanations in terms of deprivation, poverty, poor housing, inadequate educational and occupational opportunities, prejudice, and discrimination, as well as such factors as cultural pressures supporting drug use, advertising and content of mass media. What is found is often a function of what was sought (Risshi 1995).

On the whole, differences between users and non-users of this or that drug or of psychoactive drugs in general are small though in some cases statistically significant. They are often specific to the sample studied both in terms of socio-economic and cultural characteristics, type of drug used, and pattern of use. Just as it was necessary to distinguish among types of drug use, it is even more necessary to distinguish among types of drug user and drug used. This adds another dimension of complexity to a picture that is already very complex. This complexity presents the greatest difficulties for those who insist on simple, universal answers. Acceptance of such complexity enables one to begin to define a particular problem in a particular community and to begin to solve it.

It is much easier to address the problems posed by a group of socially and economically privileged high-school students using marijuana occasionally because they are bored, are experimenting with independence and rebellion as well as drugs, than it is to solve 'the drug problem' at a
national level. It is easier to address the problems created by economically, educationally and socially deprived 9-, 10- and 11- year-olds sniffing glue as perhaps the only / momentary escape from an almost unbearable existence available to them than it is to develop nationally a social or educational policy and addresses the problems associated with non-medical drug use (Bean 1974).

Drug users are experimenters or casual or occasional users or regular users, or they may be periodic or regular heavy users or compulsive users of an increasing array of substances. Drug using often appears to be a fairly simple phenomenon which can be defined in simple terms either one uses or one does not use. Unfortunately, use is not simple but is nevertheless often described in simple terms. To categorise all people as users or non-users of certain substances for certain reasons may serve some purpose, but it is not at all useful in understanding drug use or as a basis for modifying drug use behaviour. A majority of people in many cultures do use one or more of a wide variety of psychoactive substances. Different people use different substances in different amounts for different reasons under different circumstances. The majority of people do not use substances prescribed by their culture or for reasons unacceptable in their culture. If the majority did, it is probable that the culture would be modified to include such use of such substances. Customs, mores, and laws in general represent consensus in a given culture. Both increasing use of a new drug and its users represent a threat to that consensus (Auld 1981).

To put drug use in perspective it is necessary to make at least some gross distinctions. These are usually made on the basis of either type of substance used or of different levels of frequency of use (Bell 1970). Such levels often include:

1. experimental use, often defined as once to three times;
2. casual or occasional use, which may not be more than one or twice a month;
3. regular use, which may be weekly or several times a week, depending on the particular substance used, and;
4. heavy or compulsive use which usually implies daily use, although it may occur on a spree basis with extremely heavy use for several days on periodic basis as with the occasional or repeated alcoholic binge.

**Drug Abuse:**

The term ‘drug abuse’ is also a relative term. The concept and meaning of which can be derived in the light of prevailing moral and legal values. Marin and Cohen (1971) observed that it is difficult to define to one’s complete satisfaction the term drug abuse. The word abuse by its very nature implies wrong doing. What some members of a society may regard as abuse may well be regarded as legitimate behaviour by others. The well known Montreal psychiatrist, in a paper prepared for members of the Canadian Medical Association, explained that abuse implies value judgment which is vary contentious, particularly if the abuse is supposed to mean taking a drug without medical supervision. Many young people as a part of their challenge of values question the doctor’s right to control a substance which the user considers relatively harmless (Sethi and others 1984).

The Report of the WHO observed ‘Drug abuse is the consumption of a drug apart from medical need or in the unnecessary quantities. Its nature and significance may be considered from two viewpoints. One relating to the interaction between the drug abuse and the individual, the other to the interaction between the drug abuse and society’.

The Commission on marijuana and Drug abuse concluded early in its deliberations that the focus of inquiry should not be determined by general impressions or facile labels. Instead, formulation of a coherent social policy requires a consideration of the entire range of psychoactive drug
consumption, and a determination as to whether and under what circumstances drug-using behaviour becomes a matter of social concern. For example, does youthful experimentation with alcohol involve different social policy considerations than experimentation with marijuana? Do alcoholism and heroin dependence present similar or dissimilar social policy questions? Do the social policy implications of repeated use of barbiturates or minor tranquilizers depend solely on whether a physician has prescribed the drug or on the motivations for such use? In order to deal coherently with such questions, it is necessary to examine how a society thinks about drugs and their use.

In the medical sense, ‘misuse’ would include polypharmacy, which means unnecessary use of too many drugs, the unwarranted use or non-use of any drug, the inappropriate use of drugs and coercive use of drug. It, in the wider sense, includes inadequate use of the narcotic analgesics to avoid severe pain and therefore an attempt to preclude the development of physical dependence would amount to ‘misuse’. The long-term use of tranquilisers to control anxiety without adequate attempt to uncover and deal with causes of the problem. Beschner (1979) observed that use of any substance taken through any route or administration that alters the mood, the level of perception or brain functioning amounts to drug abuse. Such drugs include substances ranging from prescribed medications to alcohol to solvents. All these substances are capable of producing changes in one’s mood.

In the social context, drug abuse like that of drug use, is a social phenomenon. Halikas (1974) observed that in fact the very definition of ‘drug abuse’ is socially determined. The people in different social roles define drug abuse differently; as to a Law Enforcement Officer abuse means use of illegal psycho-active substance, to a medical practitioner it
means non-medical use of the psycho-active substances, whereas the user may recognise abuse when the drug use interferes with the acceptable patterns of family norms, maintenance and interaction. The drug user himself may define abuse as a pattern of use which has been associated with a number of issues ranging from problems with the law or family members.

The legal definition of ‘drug abuse’ cannot be without the influence of the surrounding circumstances or prevailing cultural, moral and social values. The legal definition also varies in accordance with changing values of the society. The definition being a relative term, it varies from society to society and in the same society from time to time. Harms (1985) is of the opinion that legal definition of drug abuse is oversimplification than that of its medical definition. Once the law has proscribed the recreational use of a drug, any use whatsoever of such drug, constitutes abuse. Anyone who use heroin, cocaine, LSD or marijuana even only once or more than once is legally defined as abuser of these substances. The United Nation’s Bulletin on Narcotics defines ‘drug abuse’ as consumption of a drug apart from medical need or in unnecessarily quantities.

The drugs are generally grouped according to their effects on the central nervous system and the drug abuse is defined accordingly. Cocaine and amphetamines are considered to be the central nervous system stimulants, because they speed up the functioning of the central nervous system. Alcohol, barbiturates, minor tranquilizers and opiates etc, because of their calming or sedative effects are classified as central nervous system depressants. The psychedelics and to lesser extent marijuana have hallucinogenic or perception altering effect on the central nervous system. The WHO Expert Committee on Drug Dependence defined drug abuse as
the persistent or sporadic excessive drug use inconsistent with or unrelated to acceptable medical practice (Wills 1974).

Drug abuse, broadly speaking, is of two types viz. instrumental and appreciative. Instrumental drug use is intended for a specific physiological effect. The long route driver who takes some local made drugs or caffeine or benzedrine to stay awake, the insomniac who take barbiturates to fall asleep, the person who takes LSD in a deliberate effort to experience hallucinations (to make a trip), the opiate who takes more opiates primarily because his body has adjusted to the presence of these drugs (developed opiate tolerance) and suffers cramps, chills and nausea (withdrawl effects) whenever most of the opiates previously injected are metabolised, all such use of drugs is instrumental, to create the specific effects by purely chemical reactions.

Appreciative drug use is done to confirm to socio-cultural expectations in a particular situation, where shared norms and values encourage it (Bean 1974). Appreciative drug use is most distinctly a group phenomenon, always liked in the group situations. It may be liked in a particular era of the history and in a particular locale with different shades of the geographic variability of cultures and sub-cultures. Both instrumental drug use and appreciative drug use lead to drug abuse.

**Drug Dependence:**

The term drug abuse, drug addition and drug dependence, in the ordinary sense, seem as if the terms refer to the same concept, but in practice their meaning and concept is different from each other. The distinction is by and large reflected by the surrounding circumstances (Uddin 1997). However, the terms are not only interrelated but are also overlapping and interdependent on each other. Drug dependency or drug
addiction implies a permanent physiological change causing an individual to persistently crave the consumption of particular substance. If the use of such a drug is withheld, the user suffers withdrawal symptoms, such as chills, pain, restlessness, respiration, twitching of muscles, nausea and diarrhea. The frequency and intensity of the symptoms depend upon the particular drug and ordinarily subside with time (Wills 1974).

Physiological dependence, in medical terms, refers to the tissue and cellular changes that take place in the process of adaptation of the substances introduced into the body by the drug while, in social terms, it means that the body must have periodic dosages of the drug for normal social functioning. In both senses (medical and social), the dependence on drugs refers to the absence of the drug upsetting the body equilibrium and resulting in malfunctioning.

The concept ‘drug dependence’ can be viewed mainly in two contexts: traditionalist and positivist. The first approach refers to the physiological and psychological effects of drug dependence while the second refers to social functioning of the user and the need and the implications of social policy. Traditionalists view drug dependence as a psychic or somatic or psychosomatic illness which manifests itself as a disorder of behaviour and characterised by the repeated and regular use of drugs. From positivists viewpoint, a ‘drug dependent’ is defined as one whose drug-taking habit interferes frequently or continuously with his social and / or economic functioning and his health, and adversely affects any of his important life adjustments and interpersonal relationships to the extent that society reacts consciously by evolving treatment programmes. The domain of positivist definition of drug dependence is wider than traditionalist definition in the sense that it encompasses the concepts of
The term ‘drug dependence’ denotes any habitual or frequent use of a drug. The ‘dependence’ can either be physical or psychological. Physical dependence occurs with the repeated use of the drug when the body has adjusted to the presence of a drug and will suffer pain, discomfort or illness if the use of the drug is discontinued. The word ‘addiction’ is generally used to describe physical dependence. Thus addiction or physical dependence is a state whereby the body requires continued administration of the drug in order to function. Body functioning is interfered with if the drug is withdrawn, and withdrawal symptoms appear in a pattern specific for the drug. The total reaction to deprivation is known clinically as an ‘abstinence syndrome’ (Claridge 1970). The symptoms that appear depend on the amount and kind of drug used. The withdrawal symptoms are usually the only dependable evidence as to whether or no physical dependence has developed and their insensitiveness is taken as an index of the severity of the physical dependence. Withdrawal symptoms disappear as the body once again adjusts to being without the drug, or if the drug is reintroduced.

With many drugs, the chronic user finds he must constantly increase the dose in order to produce the same effect as that from the initial dose. This phenomenon is called ‘tolerance’ (Chopra 1965). It represents the body’s ability to adapt to the presence of a foreign substance. However, tolerance does not develop for all drugs or in all individuals, though with certain drugs (e.g., morphine) addicts have been known to build up great tolerance very quickly. ‘Cross tolerance’ refers to the fact that tolerance development for one drug may also result in tolerance for similar drugs.
Psychological dependence occurs when an individual comes to rely on a drug for the feeling of well-being it produces. The word ‘habituation’ is sometimes used to refer to psychic or psychological dependence.

The WHO Expert Committee on Drug Dependence, state: ‘The drug dependence is a state, psychic and sometimes also physical, resulting from the interaction between a living organism and a drug characterised by behavioural and other responses that always include a compulsion to take the drug on a continuous or periodic basis in order to experience its psychic effects and some times to avoid the discomfort of its absence. Tolerance may or may not be dependent on more than one drug’.

In almost all the parts of the world, there has been an upsurge in the number of drug addicts which has now attained the dimensions of an epidemic. This concerns mainly hypnotic and some tranquilizers, antipyretic analgesic, central stimulants and now include cannabis as well. These drugs by and large create dependency and drug dependency today in most of the European countries is a serious social, economic and medical problem. Since the Second World War there has been a study increase in the cost to the nation of the medical and social care of drug dependants. These costs have been further increased due to the loss in the dependent’s productivity and due to need to incur additional expenditure on law enforcement (Wills 1974).

The drug dependence has two distinct and independent components, namely psychological and dependence and physical dependence. Glatt (1997) has pointed out that substances most frequently associated with dependence are those with pain killing potential. The pain of any kind, social, psychological, physical or which produces stress, tension or anxiety in the individual. The pain killers i.e. drugs work by suppressing pain by altering the ability to respond to pain or by reducing the tension and/or
anxiety caused by pain. Marin and Cohen (1971) also observed that drug dependence is of two types viz. physical dependence which refers to body’s need for a drug and psychological or psychic dependence, referring to the mind’s need for the drug.

The development of psychological dependence is the common denominator in the abusive use of drugs that produce effects on the central nervous system. The psychological dependence or as it is sometimes called psychic dependence which refers to craving or strong psychological need for pleasurable mental effects produced by a drug (Jain 1985). The psychic craving or compulsive abuse or what is known as psychological dependence, is a condition characterised by an emotional or mental drive to continue taking a drug, the effects of which the user feels are necessary to maintain a sense of optimal well being. The psychological dependence is related to a number of factors and varies with the individual and specific drug effects.

The drug dependence is also a relative term and depends upon a number of surrounding factors. The WHO Expert Committee on Drug Dependence identified the following general trend in drug dependence (Glatt 1997).

1. A growing incidence in young people
2. New patterns in drug dependence;
3. The rapid increase of the abuse of well known drugs in other age-groups.
4. A rising frequency of multiple dependence;
5. An increasing number of women dependents and
6. A rapidly increasing problem of alcoholism.

Drug dependence is defined by the World Health Organisation’s Expert Committee on Addiction producing drugs as ‘a state arising from repeated administration of a drug on a periodic or continuous basis’.
WHO (1973) recognizes the following as the dependence producing drugs:

1. Alcohol – barbiturate type: ethanol, barbiturates and certain other drugs with sedative effects.
2. Amphetamine type: amphetamine, dexamphetamine, methamphetamine etc
3. Cannabis type: marijuana (bhang, kef, maconha, ganja, hashish and charas)
5. Hallucinogen type: LSD etc.
6. Operative type: Operates such as morphine heroin, codeine and synthetics with morphine like effects as methadone and pathedine.
8. Volatile solvent type: acetone and carbon tetrachloride.

The drug dependence is a step ahead of drug tolerance which is a term often used in the literature on drug abuse. The tolerance, in an individual’s life means a stage, when the cells of the body develop a resistance to drugs which are used regularly. The same amount of drug previously used may become diminishingly effective, therefore progressively large doses are required to obtain the desired effects. The tolerance results in prolonged drug abuse leading eventually to the use of hard drugs. The individual is forced to focus on drugs and he may take any drug available to remain part of the peer group of drug users at the cost of other activities. Drug abuser takes anything that comes along seeking always bigger and better high dose. The user rather abuser experiences a wide range of altered states of consciousness from euphoria to withdrawal to hallucinatory trips (Gratt 1997). This behaviour consequently leads to drug addiction or drug dependence.
As per the foregoing definition of drug addiction and drug dependence, it can be said that common features of the addiction are as follows:

1. An overpowering desire to need to continue taking the drug;
2. To obtain the substance by whatever means;
3. A tendency to increase the dose after every period of time and,
4. A psychic and generally a physical dependence on the effects of a drug.

However with the development of literature on drug abuse, the choice of the term is drug dependence rather than drug addiction.

**Drug Addicts:**

The word addiction evolved from the Latin *addicere* which, in Roman law, meant the giving or binding over of a person to one thing or another, such as a judge assigning a debtor to his creditor. By the late 16th Century, ‘to addict’ had apparently assumed a broader meaning: to devote, give up or apply habitually to a practice. One writer suggests that the word was generally identified with bad habits or vices. With the emergence of public and scientific interest in the opium problem, ‘addiction’ and ‘mania’ were commonly used in the press to describe this ascendant vice (Isbell 1981).

Within the American scientific community, the terms most commonly employed during the 19th and early 20th centuries to describe the condition were ‘opium (or morphine) habit’ and ‘morphinism’. In 1903, for example, the American Pharmaceutical Association established a Committee on the Acquirement of Drug Habits. By 1920, however, the scientific community had given the term addiction its blessing, a development paralleling the popularisation of the word ‘narcotics’ and the entry of government into the field. ‘Narcotic addiction’ became a household phrase (Long 1986).
There is no settled definition of addiction. Sociologists speak of ‘assimilation into a special life style of drug taking’. Doctors speak of ‘physical dependence’ an alteration in the central nervous system that results in painful sickness when use of the drug is abruptly discontinued; of ‘psychological or psychic dependence,’ an emotional desire, craving or compulsion to obtain and experience the drug; and of ‘tolerance’, a physical adjustment to the drug that results in successive doses producing smaller effects and, therefore, in a tendency to increase doses. Statutes speak of habitual use; of loss of the power of self-control respecting the drug; and of effects detrimental to the individual or potentially harmful to the public morals, safety, health or welfare (Jain 1985).

Some drugs are addicting, and some persons are addicted, by one definition but not by another. The World Health Organisation Expert Committee on Addiction Producing Drugs has recommended that the term ‘drug dependence’, with a modifying phrase linking it to a particular type of drug, be used in place of the term ‘addiction’. But ‘addiction’ seems too deeply imbedded in the popular vocabulary to be expunged. Most frequently, it connotes physical dependence, resulting from excessive use of certain drugs. However, it should be noted that one can become physically dependent on substances, notably alcohol, that are not considered part of the drug abuse problem (Wills 1974). It should be noted also that psychic or emotional dependence can develop to any substances, not only drugs, that affect consciousness and that people use for escape, adjustment or simple pleasure.

Addiction was defined as ‘a condition developed through the affects of repeated actions of a drug such that its use becomes necessary and cessation of its action causes mental or physical disturbances.’ Addiction was further subdivided into ‘true addiction’ which involved the ‘physical
disturbances’ associated with the withdrawal syndrome, and ‘psychic addiction’ which was associated with the ‘feeling of exhilaration and euphoria [constituting ] and almost irresistible goad to its continued use’ (Mitchell 1974).

The WHO Expert Committee on Addiction Producing Drugs attempted to formulate a definition of drug addiction applicable to drugs under the international control. The committee defined drug dependence rather than drug addiction. The term addiction has come to be used in medicine less often and with a more restricted meaning. The Expert Committee also sought to differentiate addiction from habituation and provided the definition of the habituation, which, however, failed in practice to make a clear distinction (Harm 1985). The definition of addiction no doubt gained some acceptance, but confusion in the use of terms addiction and habituation and misuse of former continued. Further, the drug abuse increased in number and diversity. These difficulties have become increasingly apparent and various attempts have been made to find a term that could be applied generally to drug abuse(Uddin 1997). The component common to both appears to be dependence, whether psychic or physical or both.

**Habitual drug users and drug addicts:**

The term ‘habituation’ (Ahuja 1982) is used in the neutral sense that one can make a habit of doing or using anything; for example, smoking a cigarette after every meal, going for a morning walk, wearing a particular style of dress, taking bed-tea in the morning, watching television in the evening, and so forth. Once the habit of doing something or using or taking some substance is acquired, one comes to think that it is harder to quit it. However, if one fails to get it or do it, he doesn’t feel restless, uneasy or
agitated as he feels in ‘addiction’. Thus one comes to develop a psychological dependence on a particular thing, that is he does not physically need to satisfy that habit though he comes so used to the habit that he feels he cannot live without it. In psychological dependence on a drug (i.e. being habituated to taking a drug, ) the abuser likes the feeling of getting satisfaction from the use of drug and wants to re-experience it. He feels a definite need for the expected drug effects, a need which may be mild or intense. The drug enables him to escape from reality-from his problems, anxieties and frustrations. It is the psychological factor which causes the user to use the drug. Thus, habit is not ‘compulsive as addiction is. ‘Addiction’ to a drug means that the body becomes so dependent to the toxic effects of the drug that one just cannot do without it. We could say, addiction is the state of chronic intoxication produced by the repeated consumption of a drug and involves physical dependence and an overwhelming compulsion to continue using the drug. The characteristics of drug addiction are (Edwin 1965) : (1) an overpowering desire or need (compulsion ) to continue taking the drug and to obtain it my any means, (ii) a tendency to increase the dose, (iii) a psychological and generally a physical dependence on the effects of the drugs and (iv) an effect detrimental to the individual and to society.

Addiction is thus habituation involving certain physiological qualities or a type of habituation with distinguishable properties. The qualitative difference between ‘habituation’ and ‘addiction’ can be explained in terms of the detrimental effects and the consequences of the two. Detrimental effects of addiction are on both the individual and the society while detrimental effects of habituation are primarily on the individual. The consequences of ‘drug habituation’ depend on the personality of the user while the consequences of ‘drug addiction’ depend
not only on the properties of the drug itself but also on the factors like the setting in which the drugs are taken, reliability of supply and vagaries of personal background drug user’s physical and psychological condition, the amount of drug being taken and the frequency with which the drug is being used (Love 1971).

The continued use of a substance for a purpose other than food amounts to ‘addiction’. However, every use of a substance may not amount to ‘addiction’ unless such a use is of such a type or level that it is difficult or painful for the user to withdraw or stop it. According to the traditional medical usage, addiction refers to a condition brought about by the repeated administration of any drug, whereby the continued use of such a drug is necessary to maintain normal physiological function and discontinuance of the drug results in abnormal physical and mental symptoms.

Laurie (1969) is of the opinion that “Addiction is a condition induced in certain higher mammals by chronic administration of central nervous system depressants like alcohol, barbiturates, and opiates, in which a gradual adaptation of the nervous system to the drug causes a latent hyper-excitability that becomes manifest when the drug is withdrawn and produces physiological symptoms that are interpreted as a physical need for the drug”.

This definition implies no moral or political attitude and it does not intimate anything implausibly horrible and debasing. Pharmacological tolerance is another symptom that often accompanies addiction. It is usually described as an adaptation of the nervous system to the effects of a given amount of drug that makes it necessary to keep taking more to get the same effect.
Weissman (1978) has defined addiction as the periodic or chronic abuse of drugs characterised by physical dependence and psychological dependence and tolerance. Physical dependence is altered, physiological state of body and mind is caused by repeated consumption of a drug. The drug is therefore needed to maintain normalcy and abstinence there from results in the withdrawal syndrome. This is called as addiction. The psychological dependence, sometimes also known as habituation, is a psychological state characterised by preoccupation with the drug procurement and compulsive drug use necessary to the maintenance of an acceptable well being. This is addiction. Further, tolerance a concept central to addictive process, is the phenomenon explaining the diminishing effects of a given dose of the drug upon repeated administration. If a drug precipitates user’s tolerance, the dose is to be increased gradually to achieve the desired effects. This stage of drug abuse is called as addiction.

Drug addiction is a term which cannot be defined in isolation. It, besides various other factors, also depends upon the nature of the drug used. Moreover, it has been customary to distinguish between drugs that are ‘habit forming’ and drugs that are ‘addicting’. The former group of drugs are said to induce a condition in which the user desires a drug but suffers no ill effects on its discontinuance. The drugs in tobacco, coffee, Coca Cola and other drinks are frequently termed as ‘habit forming’ but not as addicting (Helen 1975). This very distinction may, of course, seems to be logical one, but many writers do not agree with this type of classification. Ausube (1980) expressed that he has failed to perceive any value in this distinction. He observed that physical or psychological habituation, after all, best describes the condition that develops during the course of drug addiction and which is responsible for mental and physical symptoms that usually arise when the drug is discontinued. Further, many
habitual users of tobacco, coffee, alcohol and other drinks, experience profound physical and psychological discomfort when they voluntarily or otherwise forego their habit. He further maintained that it will be quite correct to use the term ‘habit-forming’ and ‘addicting’ synonymously and to refer to common habit forming drugs as addictive in nature (Delong 1972).

Marin and Choen (1971) observed that addiction although similar to physical dependence, is not synonymous to psychological dependence. He observed that it is often used in reference to narcotics. Other drugs such as barbiturates can produce physical dependence. The narcotic addiction also involves an overwhelming craving for an involvement with drug to such an extent that getting and using it pre-empts all other interests and activities. Addiction involves a totally drug-centred life style. The compulsive getting and using of narcotics completely pervades the addict’s life. Cancrini (1985) and others have attempted to define the term “drug addiction”: ‘It consists in a state of intoxication provoked by the repeated and voluntary use of natural or synthetic drugs’. This type of intoxication is characterised by the following features:

1. The compulsive need (physical or psychological) to confine use the drug;
2. The irresistible craving for the drug and consequent necessity to procure it at all costs;
3. A general loss of interest in other pursuits and other relationships;
4. The acceptance of social role of drug addict.

The definition of drug addiction given by Cancrini seems to be a scientific one. It also provides a clear distinction between ‘drug addiction’ and drug Habit, as the latter, although characterised by a state of intoxication provoked by the repeated and the voluntary use of drugs, similar to that which determines addiction, differs from addiction as in case
of ‘habit’, the drug user is capable of resisting the urge to procure the drug and continues to pursue other interests and maintain significant relationships with others, avoiding total dedication to drug use and rejecting the social role of a drug addict.

Secondly, actual addiction is characterised by the existence of an active conflict in the younger persons social environment that gives rise to a feeling of uneasiness and inadequacy, moodiness, various idiosyncrasies, reduction of activities, and demonstrative attitudes. The addicts often demonstrate that they use a drug (usually heroin) because of its hypnotic rather than euphoric effects. The young person usually shows expressions of challenge and intolerance directed primarily towards those persons who are perceived as responsible for the conflict, usually parents but often therapists and others who try to help the addicts.

Thirdly, transitional addiction is characterised by various psychological disorders that go with the onset of drug addiction. Among such disorders repeated manic states, more often in young addicts, have been reported (Ansudel 1958). Addicts report honeymoon states with sudden and wonderful effects of drugs which as per their perception control personal pain that existed before the use of a drug.

Fourthly, sociopathic addiction is characterised by psychosocial conflict. Which is expressed in the manner ‘acting out’ and by a number of personality disorders. There is usually evidence of anti-social behaviour in the past history of the addict.

The persons effected by the socio-pathic addiction are usually defiant, act with coldness and show inconsiderate behaviour to other people. They are unable to give or accept love and are unable to establish meaningful and lasting relationships. They often perceive their social environment as cold and hostile. They are usually involved in the multiple
drug abuse. The addicts of this type are characterised by marked psychological, social immaturity and troubled family life, which is often a source of disorder for the youth. Theft, prostitution and homosexual behaviour are common disorders among persons with this type of addiction. Lack of self-confidence and an accumulation of self-destructive aggression are also characteristics of majority of these individuals.

Keeping in view the different types of addiction and their varying impact upon the different individuals, Mac(1987) pointed out that addiction cannot be defined as a physical dependence or chemical dependence or as a psychological dependence. Addiction has to be defined in relation to the impact the drug has on the behaviour of a person. The relationship between the person and the substance determines how that person functions socially. She observed that addiction is a psycho-social process and defines ‘Addiction is the compulsive use of a substance with loss of control and continued use of that substance inspite of negative consequences.’

In other words, addiction means such a use of a substance which is harmful but at the same time the user feels difficult to stop or withdraw from such drug. The addicts, even though, are getting into trouble because of being drunk or high, yet they continue to use it despite all the negative effects in all areas of life.

In all concepts mentioned above, the meaning of the word, drug, often varies with the context in which it is used. From a strictly scientific point of view, a drug is any substance other than food which by its
chemical nature affects the structure or function of the living organism. From this perspective, the term includes some agricultural and industrial chemicals. The physician might define a drug as any substance used as a medicine in the treatment of physical or mental disease; when treatment of illness is the retreat, the lay public may use the word in the same sense. However, when used in the context of drug ‘abuse’ or the drug ‘problem’ the meaning of ‘drug’ becomes social rather than scientific. In its social sense, drug is not a neutral term. This point is best illustrated by the fact that ‘drug problem’ is frequently used not as a descriptive phrase, but substitute for the word, drug.

**Typology of addicts:**

Drug addicts can be classified on the basis of the frequency of drug intake per day:

1. **Chronic Addicts** - These are the people in the condition of chain intoxication.
2. **Adolescent Initiates** - This refers to those in 12 to 17 years of age and implies the initial or early exploratory use of a drug in order to form an attitude that will result either in rejection of that drug or its adoption.
3. **Intermittent User** - those who are not completely hooked to drugs and have limited supply and money to afford drugs.
4. **Relapsed Addicts** – These are the ones who are always trying to give up drugs but not quite succeeding.
5. **Ex-addicts** – These represent the brighter side of the picture. These have overcome their habit and have no intention of going back to it.

Drug abuse is one of the most complex and baffling of vices. There is no one given set of circumstances or no one combination of factors that invariably assures that someone will turn to drugs. Though we can neither
pinpoint the causes of drug abuse nor predict with accuracy who will and who will not turn to drugs; one can always suggest a number of factors that contribute to an individual’s abuse of drugs (W.H.O 1973).

Classification of the Drugs

The drugs of abuse in the recent years have increased not only in their magnitude but new and new drugs have emerged on the scene and more synthetic drugs are appearing in the market almost in every season. It is difficult to give a detailed account of all such drugs. However, the drugs have been classified in the following pattern.

1. Marijuana:

Cannabis is also known as marijuana or hashish and is famous throughout the world for its psycho-active properties. Marijuana is a tall leafy weed which grows best in hot dry climate like Central Asia, where it probably originated, but also grows wild in most parts of the world. The plant has a widespread distribution in Asia and is found growing in abundance in the territories of the South on the Caspian sea, in Siberia, in the desert of Kirghiz in Russian Turkistan, in Central and Southern Russia and along the lower slopes of Caucasus mountains. It has a wild growth in Iran and India, the plant is found growing in a state of nature throughout the Himalayan foothills and the adjoining plains, from Kashmir in north to Assam in the east. It has become acclimatized to the plains of India producing its narcotics in the area.

Marijuana is probably the oldest cultivation of non-food plant which has a valuable source of products for man’s commercial, medical religious and recreational use for thousands of years. It has been a source of fibre for rope and cloth for centuries. In the countries such as India and Nepal, the plant has been also used as a drug for hundreds, perhaps thousands of
years. In the recent years a new class of users has developed, first in the prosperous societies of the West and then, by a reverse influence, in the countries from which drug itself has traditionally come (Uddin 1997).

The earliest known written reference on Marijuana occurs in a Chinese pharmacological treatise dating from 2737 B.C. and attributed to the Emperor Shen Nung, according to tradition, was the first to teach his people the medical value of cannabis. In India the first known reference on marijuana is found in the Atharva Veda which probably dates back to the second millennium B.C. The references on marijuana are also believed to be in the Bible, Homer, Arabian Nights and Marco Polo’s writings. Marijuana was in early use in all parts of Africa and references on the drug in Germany have been found as early as 500 B.C. The first record of Marijuana in the New World dates from 1545 A.D., when the Spaniards introduced it to Chile. The plant was introduced to Virginia in 1611 and cultivated for its fiber. It was brought to New England in 1629 and until the end of civil war, it was a major crop in North America and played an important role in colonial economic policy. In 1765 George Washington was growing hemp at Mount Vernon, presumably for its fiber, though it is also believed that Washington was also interested in the medical and intoxicated qualities of his plants.

Herbal marijuana or grass is a mixture of crushed leaves, flowers and often twigs of Cannabis sativa. Its principal psychoactive ingredient, delta (THC), is the most heavily concentrated in the plant’s resin. The concentrated dark, tarry resin is called ‘hashish’ and in its usual form cannabis is consumed generally by mixing it with tobacco. A still more concentrated form of the drug, hashish oil, can be produced by a percolation process. The leafy mixture contains the smallest amount of THC, usually from 1-10 percent. The THC contained in cannabis
preparations deteriorates especially when exposed to heat and light, a given sample of marijuana or hashish may vary quite a bit in psychoactivity over a period of time. THC is no doubt the most important single cannabis ingredient, but there are more than one hundred chemicals, which play a very vital role in modifying the effects of the drug. Only a few of the other components have been studied and their complex reactions are not yet understood. Cannabis, the plant that produces hemp as well as hashish, is now known primarily as one of the leading psycho-active substance in the world. It follows tobacco and alcohol in popularity. The cannabis products are also used in the following forms.

Bang : It consists of dried leaves and flowering of fruiting shoots. It is common in the state of Jammu and Kashmir, particularly in Kashmir valley.

Ganja : It consists of flowering or fruiting tops of the female plant of the cannabis. It has a particular colour, the users wet it a little with water and rub it on the palm till it becomes soft and then smoke it in a chillam or pipe after missing it with tobacco.

Charas or Hashish : It is the concentrated resin oozed from the leaves and stems of the plants and is dark green or brown in colour. It is smoked with tobacco in a pipe or hooka and is the most potent of all these forms. This form of cannabis was commonly abused in ‘Takayas’ Kashmir produces Hashish worth crores of rupees and is smuggled to international market. It has also infected local population and is widely consumed. Marijuana has a wild growth in the Kashmir valley from which high quality of hashish is produced (Uddin 1997).
2. Lysergic Acid Diethylamide (LSD):

LSD is derived from lysergic acid, a constituent of ergot which is a parasitic fungus or rust that grows on rye and other grains. LSD was originally synthesized in 1938 by two chemists. Five years later in the spring of 1943 one of its co-discoverers (Unger 1966), inadvertently ingested some of the drug. He experienced restlessness and dizziness followed by a mild delirium in which he also experienced fantastic visions of extraordinary vividness accompanied by a kaleidoscopic play of intense colouration. It was first used medically in 1950’s and 60’s as an aid to psychotherapy particularly in those patients who had difficulty in freely communicating or associating. Further in this period LSD was widely used by those interested in mysticism and exploration consciousness and with other drugs it became a part of hippy culture of that time.

LSD effects are usually felt within an hour, when taken orally. It is considered the king psychedelics because it produces the most intense effects. The subjective experiences that LSD induces can be spectacular. Sensory perceptions are altered and intensified so that colours appear brighter and sounds become magnified. The user may experience himself as being both within and without himself or as merged with an object or another person. The majority of users have both pleasant and unpleasant reactions to the drugs, but for those whose overall reactions to the drugs have been positive, the unpleasant side effects are seen as transitory and valuable in terms of self knowledge (Wiener 1970).

3. Cocaine:

Cocaine, with its romantic history and its high cost, is regarded by drug users as the status drug. Cocaine is basically an alkaloid found in the leaves of Coca bush, Erthroxylon Coca. Cocaine falls in the family of
stimulants, but unlike other stimulants, cocaine is a naturally occurring substance and has been chewed by Indians from time immemorial. Cocaine has been used since the time of the Inca Empire which flourished for hundreds of years in the Andean Mountain region of Peru until the arrival of the White man in 1500’s. Inca priest chewed Coca leaves in order to achieve and enhance their understanding of religious rituals and experiences. Using Coca leaves was originally a mark of the aristocracy, but gradually other members of Inca male population took up the habit. The attitude of the Spanish conquerors towards Coca was decidedly mixed. On one hand their religious zeal dictated that they eliminate the persistent symbol of Incan idolatry, but on the other hand they also realised that Coca enabled the Indians to work-harder in the mines and elsewhere, making it an important economic asset and at the end, the latter consideration prevailed (Harm 1985).

Coca attracted little serious medical or scientific attention outside the territory of Spain, until the latter half of the 19th century, but at the end of the century, it gained its importance and when cocaine became available, there was an era of great medical excitement over the drug’s therapeutic potential. It was used for treating digestive disorders so called wasting disease (such as cancer), as an aphrodisiac, a general stimulant and as a local anaesthetic specially for eye surgery. The last two decades of 19th Century were the climax of the patent medicine era. Cocaine today has two main medical uses. Firstly, it is still used in nose-throat surgery because of its unique properties as an excellent local anaesthetic and as agent which contracts blood vessels, reducing bleeding at the operation site. Secondly, its present and widest use may be as an ingredient in the Brompton Cocktail. This is a combination of alcohol, heroin or morphine and cocaine which is used as a painkiller and tonic for patients with terminal cancer.
(Beschner and Friedman, 1979). However, with use of Coca and cocaine its abuse also emerged.

There are several methods of taking cocaine. The most common is by snorting it into the nostrils through a straw, a rolled paper or form a tiny coke spoon deposited on the nascal mucous membranes, the drug is rapidly and efficiently absorbed into the blood stream. Another method, favoured by some heavy users, is to inject the substance directly into the blood stream, some times following it up with a shot of heroin. Cocaine is also taken by applying it to the mucous lining of the mouth, rectum or vagina (Long 1986).

Cocaine in its normal street from cocaine hydrochloride is not effective when smoked. To make it effective, an alkali and solvent is required to convert cocaine into cocaine alkaloid, called ‘free base‘. The process involves heating either lighter fluid or a similar flammable solvent with cocaine, a potentially dangerous process that could lead to burns.

Freebase has lower vapourizing temperature than cocaine hydrochloride, therefore smoking does not destroy it, but produces a sudden and intense high that lasts for less than two minutes. It is rapidly absorbed by the lungs and carried to the brain only in a few seconds. The brief euphoria that results is quickly replaced by a feeling of restless irritability. In order to maintain the high, users often continue smoking until they either run out of cocaine or until they are completely exhausted. The cocaine abuse has spread to almost all the segments of the society and has been used even in the soft drugs, for instance coca extracts are used in Coca cola. Cocaine directly effects the central nervous system, causing a definite stimulative sensation. The effects include the universally acknowledged euphoria and a general feeling of well being. The high reduced tiredness, diminished appetite and in a small minority of users and sexual stimulation.
The most obvious physiological effects of cocaine and other stimulants which mainly include increase in heart rate and blood pressure.

4. Opium:

Opium is the dried milky exudates obtained from the unripe seed pods of poppy plant which grows extensively in Turkey, India, Pakistan, Iran, Nepal, Yugoslavia and Bulgaria. Opium is the coagulated dried latex juice obtained by incision of the unripe capsules of white poppy. It is made by air drying the juice (Uddin 1997).

Raw opium comes in a solid mass of varying shape weighing from one-half to five pounds. It is processed in several ways. Though now rarely used, granulated opium is a medically approved drug for treating diarrhoea. Powdered opium is more effective than granulated variety and is used in the manufacture of few prescription drugs. It is processed in several ways. Dissolved in water, filtered, then boiled down into sticky paste, the substance becomes preparation used by opium smokers. Dissolved in alcohol, the substance becomes the tincture of opium used in making the laudanum and paregoric. Broken down chemically into its alkaloids, the substance fields morphine and codeine (Long 1980).

Opium as a drug of pleasure was originally eaten or drunk as an infusion. Later on smoking of opium also found its way along with tobacco in the countries of South-East Asia for smoking purposes (Kuruvilla 1987). There is evidence that opium has been used since prehistoric times. The opium poppy is thought to have originated in Asia and was first used medically in Egypt where from it spread to Greece. Arab traders carried opium to India and China, where it was used to control dysentery and for its euphoric and sedative effects. Chinese emigrants carried the habit of opium smoking to the United States and elsewhere. In Europe laudanum
was used to relieve pain and control dysentery, as a cough suppressant and sedative. It became a standard drug until the end of the 19th century when its use began to decline. During the major part of the 19th century, opiates, in the form of patient medicines, were widely used in Europe, England and United States (MaCoy 1972). These medicines were given to children to quiet them, taken by ladies who felt embarrassed to drink alcohol, and used by alcoholics who were trying to give up strong liquor habits. Opium and pure drug morphine were used regularly by a large number of people. Ausube (1980) is of the opinion that opium is one of the common drugs selected by suiciders. Unhappy women are known to have taken opium either to frighten their relatives or escape from their worries.

5. Morphine:

The principal alkaloid of opium is known as ‘morphine’. It is a pure drug giving opium its characteristic action. Morphine constitutes by weight about 10 percent of opium, the coagulated exudates of the poppy plant, papaver somniferum, which also contains codeine and about 20 other alkaloids. Since pure morphine is slightly soluble in water, morphine sulphate is the foremost commonly used both medically and recreationally. It appears as odourless white crystals or white powder. It loses water on exposure to air and light. Morphine hydrochloride is also occasionally used in injections (Imlah 1980).

Morphine was introduced to the medical profession as a powerful analgesic effective in the relief of all kinds of pain. It was also regarded as a cure for opium addiction. Opium which no doubt was regarded as a popular remedy for every imaginable ailment and some imaginary ones also. Morphine quickly replaced opium in many applications, though it did not cure opium addiction. It has been also used for suspension of cough,
reduction of movements of intestine and induction of a state of indifference to threatening situations. The undesired effects include nausea and vomiting, the development of tolerance, physical dependence and depression of breathing. Typical adverse effects also include nausea, vomiting and sweating. Further, yawning, lowered body temperature, flushing of the skin, a heavy feeling in the limbs and itchiness around the face and nose are also usually present. On injecting morphine intravenously, users experience an organism rush beginning in the upper abdomen and spreading to other parts of the body. In overdose, the effects described above are magnified. The respiratory depression can be severe enough to cause coma and death.

6. Heroin:

Heroin is a synthetic alkaloid derived from morphine, which was once used as a medicine for suppressing cough. Even at that time, for years together physicians were unaware of its potential for addiction. Heroin (diacetylo-morphine or dia-morphine), which is prepared from morphine, was first marketed in 1989, when it was claimed to be the heroic cure for morphinism, providing a safe and effect cure with no danger of dependence. This claim was soon proved to be false and heroin steadily replaced opium and morphine on the street. An international black market with underground laboratories and well organised smuggling operations grew rapidly. Two main factors namely, the comparatively simple equipment needed to convert morphine to heroin, and the reduced bulk of heroin, compared to morphine, made the operation very simple (Pearson 1987).

The process by which heroin is manufactured, although very simple in theory but requires a considerable skill and a quality of equipment in
practice. Heroin is a white crystalline powder with a better taste and is very easy to carry from one place to other place. Heroin passes down the distribution chain. Therefore, it is progressively diluted with a variety of substances including sugar starch powdered milk and quinine. Heroin, which is usually in two forms viz, Brown sugar and smack is available in every part of the world. Until recent years, most of the heroin smuggled into the United States was supplied from South East Asian opium sources and was converted to heroin in clandestine laboratories in the area of Marseilles and France. After this supply was curtailed, production of the drug increased in Mexico which remained the major source for several years.

Heroin depresses the central nervous system in a way similar to alcohol and barbiturates, but unlike those drugs, it also relieves pain. The alcohol and barbiturates abuse increases belligerent behaviour by removing inhibitions, but heroin acts to depress aggression as well as appetite and sexual drive. Other effects include constipation and suppression of coughing relief. After a ‘fix’ a sense of well being replaces feelings of depression or low self-esteem and this followed by sleep ‘going on the nod’.

Heroin is either taken orally or administered by intravenous or subcutaneous injection. The common way of taking it at present is called chasing the dragon, in which powder on a piece of paper is heated by a flame and the resultant fumes are inhaled. It is also taken by intravenous injection (main lining) which delivers all of the available drug right into the blood stream, injection while providing the addict with a kick (rush or high) associated with a number of serious complications. This type of drug is commonly used in USA, UK, Soviet and Bosvanian countries, Japan, China, Afghanistan, Pakistan and Indi (Ishwar 1997).
7. Barbiturates:

Barbiturates are hypnotic and sedative derivative of barbituric acid which depresses the central nervous system. The barbiturate fall within the family of depressant drugs and the first barbiturate was synthesized in 1864 from barbituric acid (malouylureal). It was first manufactured and used in medicine in 1882 as barbiturate and released in the year 1903 under the trade name, veronal. Initially, barbiturates were used to induce sleep, replacing such kids as alcohol, bromides and opiates. Since the appearance of luminal in 1921, several thousand barbituric acid derivatives have been synthesised (Singh 1979).

Barbiturate until recently were the most widely used drugs in Britain and many other countries, and were mainly used under the cover ‘sleeping pills’. The fact that these drugs were obtainable legitimately on a doctor’s prescription made them to be regarded as an acceptable and relatively harmless medicine, compared with known addictive drugs like heroin which were not available in the same way. Barbiturate are extremely dangerous drugs when the prescribed dose is exceeded and particularly when combined with alcohol. A lethal dose need not be much more than double the prescribed dose in some cases. As drugs which depress the central nervous system and slow down vital functions such as breathing and heart rate, barbiturates are potentiated by alcohol, which is also a central nervous system depressant. The combined effect is considerably more powerful than that of same amount of the drug or alcohol taken separately (Gold 1991).

Barbiturate users often take other drugs as well. A common abuse pattern is to take ‘amphetamines’ to wake up and offset the morning-after barbiturate hangover. With the passage of time more barbiturate are needed to fall asleep and as the dose increases so does the need for more
amphetamines until vicious circle develops. Other drugs which interact with barbiturate are tranquilizers, antihistamines, and opiates which also depress the brain’s control over breathing and increases the risk of respiratory failure.

This study I have briefly classified of drug of abuse. Now I will discuss some of the main drug which the Thai youth have been taking, from time to time and continue to be abuse at present.

1. Heroin
2. Morphine
3. Opium
4. Marijuana
5. Amphetamine
6. Substance smelling (volatile solvent type)

**Drugs and The Youth:**

Apart from marihuana and alcohol, there does not appear to have been a significant increase in experimental and recreational drug use among adults. The data presented earlier indicate that these behaviour patterns have been confined primarily to secondary school and college populations. Although unfamiliar drug using patterns have appeared first among youth in many societies, we are nonetheless led to probe the forces which fostered this initiation of youthful drug use at this time in American society (Gold 1991).

The American socialisation and educational processes, both formal and informal, often emphasize, independence of thought, experimentation, and the empirical method. Innovation and creativity are prized in individuals and organisations and whole industries prosper on the development of new models or designs for every imaginable commodity.
from convenience food packaging to clothing, television sets, telephone equipment and automobiles. New fads spring up almost overnight and are promoted by massive advertising campaigns. However, individual enthusiasm for experimentation may become indiscriminate and include certain socially disapproved or potentially harmful activities, such as high risk operation of motor vehicles and careless use of firearms (Long 1986).

Against this backdrop, experimentation with drugs is not at complete odds with the socialisation process. Youthful experimentation with forbidden drugs, such as alcohol and tobacco, is a well-recognised part of growing up. And the educational efforts expended to discourage the potentially harmful and risk-laden experimentation with these drugs generally have no succeeded. The important question, then, is not why there is drug experimentation, but why experimentation with these other drugs now?

One reason is simply that the other drugs are, perhaps for the first time, widely available.

The variety of drugs, both social and medicinal, consumed throughout the world is burgeoning. Advanced technology is in part responsible for the increase in diversity of drugs used. During the past thirty years many potent new psychoactive agents have been developed. LSD is a dramatic example of powerful new synthetic chemical that has recently entered the illicit drug taking scene. Tranquilisers and mood elevators are but two of many types of drugs now medically available. Still an additional dimension results from modern transportation that has made it possible to obtain drugs which were formerly inaccessible. Until recently, hashish and cocaine could be procured only where they were geographically indigenous or in certain circumscribed urban centres. Now
in many parts of the world, these two drugs are widely available through illegal channels.

Second, the need is there. Young people as well as their elders use drugs because they satisfy a need or at least satisfy it better than anything else they have tried. We know that these drugs alter the ways in which individuals experience reality, and we assume, on the basis of considerable information, that this change of experience is perceived by those who use drugs as rewarding. When something has happened to an individual that makes the experience of reality extraordinarily painful, when the individual is sick or injured, society approves the use of drugs to alter this experience. In other circumstances, however, use is disapproved because it does not deal with an exceptionally harsh reality, but, instead, serves to transcend what we think of as ordinary reality. It is this transcendent use of drugs that our society discourages, for it threatens to disable the user from dealing with reality, to the detriment of his own welfare, and more remotely to the welfare of the community (Imlah 1980).

The need for transcendent use of the drugs, as reflected by use patterns themselves, subsumes two partially distinguishable phenomena. One is a need for some coping device; the need to transcend ordinary life because one’s life is distressing. The second need is for a searching device: the need to transcend ordinary life because it is meaningless, or on a more mundane level, boring. Among youth, the new wave of drug experimentation seems primarily related to this search for meaning.

There are certain staples in the picture regardless of age group or any of the other items mentioned above. One is that among those who progressively turn into serious or problem drug users there seems to be a common preliminary tendency to be much too open to the blandishments of ‘trying something new and different’. This would appear to be an
elaboration or distortion of the normal ‘exploratory’ or ‘curiosity’ urge or
need, described by Harm (1985). For some reason, perhaps the general
‘identity explosion’ which occurs in adolescence a hypertrophy of this
sense of exploratory fearlessness and immediacy, seems to develop in
many adolescents. My own guess would that a combination of availability,
peer-group enticement, the palling of socially acceptable directions, and
often an intensive urge for discovering and extending the limits of
individual sensitivity and possibilities initiates many youngsters into early
drug experiences.

Ansudel (1958) supported, after reviewing the many theories and
factors in the development of adolescent addicts, seems to conclude also
that nonspecificity rather than specificity regarding psychological structure
seems to characterise the current state of knowledge about the development
of addiction:

The question of whether there is a pre disposing personality pattern
that makes for liability to addiction has stimulated papers which reflect a
maximum of vigour regarding viewpoint and a minimum of experimental
vigour. Linked with this is the intriguing question of whether the
potentiality for drug addiction exists in all of us, as has been cited for
mental illness (Chatterjee 1985).

What is perhaps more important than the particular personality
variables are the initial exposure experiences of drugs and people. For
instance, in examining the situation of glue - sniffing in Chicago, it was
striking that, according to informants, this was a “bag” or tendency (old
habit) of Mexican - American and Causasians rather than Negroes. This
impression was statistically supported by a similar study in Los Angeles.
Although not specifically noted. In that study of 89 juveniles, only seven
were Negroes, the rest almost evenly divided between Caucasians, 45, and
Mexican-Americans, 37. It was also of interest that in Chicago, according to informants, wine or whisky was more likely to be used by the adolescent Negro youth, although certainly not exclusively.

**Theoretical Issues:**

Theories help practitioners to describe, explain, predict and control phenomena. Theories are made up of concepts and propositions. Concepts are abstract properties of the phenomena that are being studied.

Theories of addiction reflect prevailing attitudes, practice and knowledge. For the sake of description, addiction theories are organization broadly here according to these attributes. Contemporary theories of addiction include biological, psychological, sociocultural, and transcendental/spiritual theories.

Addiction theories provide frames of reference that help practitioners understand the etiology, expression, and course of addiction. Practitioners use theories to guide treatment, promote prevention, conduct research, and develop policy. Each addiction practitioner typically grounds his or her practice in dominant theory. To utilize theory effectively, a practitioner must understand its origins, examine its characteristics, critique its adequacy (strengths and limitations), and determine its clinical and social relevance. What assumptions support the theory? What is knowledge base? What practice skills are associated with the theory?

**Contemporary Theories**

**Biological Theories:**

Recent research has demonstrated neurobiological, neurobehavioural, and genetic bases for addictive disorders. Neurobiological theory focuses on neuroadaptice processes and the role they play in the etiology of substance use disorders. Genetic predisposition
plays a large role in this theory. Neurobehavioral theory attributes alcohol and other drug used disorders to a link between certain behavioural disturbances and neural system dysfunction, interpreted within a neuropsychological framework. Genetic predisposition also plays a large role in neurobehavioral theory.

**Genetic theory**

Genetic theory emphasizes the role of heredity in the development of addictive disorders. The apparent vulnerability of some people to addictions has prompted researches to search for factors that may contribute to heightened susceptibility. Genograms often reveal the history of alcoholism in families. Among certain ethnic groups, genetic factors are theorized to increase individual’s likelihood of becoming a alcohol dependent. Individuals within other ethnic groups appear to have protectice genetic factors that make it doubtful they will ever abuse alcohol. Molecular biology techniques have isolated and identified genes that may confer vulnerability for alcohol dependence and other addictive processes. It is possible that the enzymes monoamine oxidase and adenylate cyclase are biochemical markers to predisposition to alcoholism. Genetic factors alone, however, do not account for the development of alcohol abuse. A host environmental factors shape individuals’ thinking about alcohol and affect use, including family dynamics, peer influences, everyday stresses, and cultural values. Drinking, let alone drinking to states of abuse or dependence, represents a complex interplay between genetic and environmental factors.

Alcohol and other drugs produce brain changes. As the research examined in the 1998 public television series Moyers on Addiction: Close to Home emphasizes, addiction a chronic and relapsing brain disease. A sight or a smell can trigger brain circuits altered by drug abuse and spur a
relapse. Yale school of Medicine scientists have found that the protein delta-fosB stimulates mice brain genes that intensify the craving for cocaine. If a similar process occurs in humans, this could help explain why cocaine addiction is so difficult to arrest. Brain changes have also been identified in individuals with pathological gambling, compulsive shopping, sex addiction, and eating disorders. Some of these changes compromise the individual’s decision-making ability, including the capacity to make rational choices about substance use and its consequences. Addicts experience dysphoria and craving; craving is relieved with another drink, drug, or behaviour.

Brain reward helps explain why a drug or addictive behaviour is self-administered. The effects are pleasant. The individual experiences a feeling of well being or reduced anxiety. Researchers have identified a D2 dopamine receptor for alcoholism in mice. Alcohol and other drug use and addictive behaviours such as gambling, shopping, sex or eating increase pleasure and/or reduce pain. Heroin addicts often report they use ‘just to feel normal’. Neuroscience theory helps clinicians and clients understand that the intense drug seeking, profound denial, and extreme manipulation that characterize addictive behaviour may in part be caused by drug-induced brain changes. Biological research is trying to discover the precise neurotransmitters and processes associated with specific substance use. Related research seeks to develop medications to treat withdrawal, reduce craving, and prevent relapse.

**Psychological Theories:**

For many years, psychologists considered alcoholism and other drug problems as symptoms of mental illness, not as diseases or disorders in themselves. Today, both the American Psychiatric Association and the
Americal Psychological Association recognize addiction as a disease. Many psychological theories extend our understanding of addiction and expand treatment skills.

**Conditioning theory:**

Conditioning theory addresses the relevance and implications of classical conditioning with respect to preferences for the aversion to alcohol, other drugs, and addictive behaviours. Conditioning theory helps clinicians and clients to understand tolerance, craving and withdrawal. Operant conditioning underscores the significant role reinforcement plays in the development and maintenance of addiction. Substance abuse and dependence, as well as other addictive behaviours, are primarily learned behaviours.

**Psychodynamic theory:**

Psychodynamic theory helps explain addiction. First, addiction develops when individuals use alcohol, drugs, or behaviours to experience pleasure or escape pain. Second conflicts among the id, ego, and superego can lead to use and abuse of substances to relieve anxiety. Other psychodynamic manifestations of addictive disorders include impulsivity, self-centeredness, self-destructiveness, irresponsibility poor judgment, regression, irritability, and labile mood. Denial helps clinicians understand how clients can persist in such self-defeating behaviours. Clients also employ other defense mechanisms, especially rationalization, projection, and minimization, to reject diagnoses of addictive disorders and resist treatment. In addition, infantile narcissism (self-pathology) typifies addiction. What Alcoholics Anonymous call ‘character defects,’ psychodynamic theory view as infantile narcissism. A.A. suggest replacing the ‘big ego’ with a more humble self. Even the ‘twelve tradition’ of A.A. emphasize avoiding the egocentric pitfalls of
Stress-management theory:

Stress-management theory recognizes the need for people to reduce the tension and anxiety that is often associated with stress. People with addictive disorders report high stress levels and may, in fact, be more vulnerable to stress than other individuals. Alcohol and other drugs (or gambling, shopping, eating, or sex) reduce tension and stress for many people. Individuals can address the sources of their stress—the difficult job, the dysfunctional marriage, a delinquent child—but it is usually quite difficult and time-consuming to do so. Most people with stress-related tension and manage stress. Even relaxation exercises, meditations, and other nonpharmacological techniques take longer to provide relief than a drug. In the United States, the pharmaceutical industry aggressively markets products that promise quick relief for tension-related problems. Fortunately, clinicians and clients are beginning to use more nonpharmacological therapies to prevent and manage stress.

Social learning theory:

Social learning theory is a self-efficacy paradigm that posits personal factors, environment, and behaviour as interlocking determinants of one another. The principles of learning, cognition, and reinforcement are important. Substance use and other addictive behaviours are socially learned, purposeful behaviours resulting from an interplay between socio-environmental factors and personal perceptions. What is the individual’s social learning history? What is his or her cognitive set, such as expectations or beliefs about the effects of use or behaviour? What are the physical and social settings in which use or behaviour occurs?
individual leader Psychodynamic clinicians recognize that psychopathology can precede the development of addiction or predispose the individual to addiction. They were some of the first mental health professional to treat clients with dual disorders. Psychopathology can coexist with or follow addiction.

**Trait theory:**

Trait theory suggests that there are certain personality traits that predispose individuals to addiction. There is no evidence of preaddiction personality structure per se; experimental studies have been unable to distinguish the personality traits of addicts from those of the general population. The phrase addictive personality is often used to describe an individual who is immature, dependent, impulsive, and easily frustrated.

Cognitive-behavioural factors such as self-awareness, expectancy, and attribution help clinicians and clients to understand addiction. Self-awareness theory examines the effects of psychoactive substances on self-awareness, especially cognitive processes. Contrary to popular belief among many teens, smoking marijuana actually impairs short-term memory, decreases attention span, and alters cognition, motivation, sensory perception, and sense of time span, and alters cognition, motivation, sensory perception, and sense of time. Expectancy theory describes the anticipation of a relationship between substance use and personal behaviour and social functioning. Expectancy theory helps explain initial use (especially by teens), continued use, and relapse. Attribution theory is concerned with the way in which individuals interpret the causes of their own addictive behaviour. The individual looks to a variety of internal and external sources of information. Attribution may be positive (e.g., accepting responsibility for one’s addiction) or negative (e.g., blaming other people, places, and things).
Sociocultural Theories

Drug use is not a physiological, a psychological and a medical problem but it is also an important social problem. As a medical problem, it is to be dealt with through the doctor-patient relationship, while as a social problem, it is not only a matter for criminal procession but a matter of understanding as to what type of social and cultural forces generate tendencies toward its use.

This study focus on drug addicts and anthropology. The main challenges for three theories of ‘Sociocultural’ (Sandra 2000):

1. Family theory
2. System theory
3. Anthropology theory

The analysis of drug problem in this study is primarily the analysis of social cultural aspects of the drug use problem. In order to attempt an answer to the following questions:

1. What is the role of the family, environment, culture and other socio-economic factors in the development and expression of addiction?
2. What kind of the youth use drugs?
3. Why do the youth take drug?
4. Why don’t the youth take drug?
5. What are their sources of getting drugs?
6. How does their drug use come about?
7. What are the consequences of using drugs?
8. What efforts do they make to withdraw from drug?
9. How can we control or prevent drug use among youth?
10. What alternative approach exist?
11. The socio-cultural and economic factors affecting the drug addict youth?
The current status of family theory, system theory, and anthropology theory deals with Sociocultural theoretical approach to taking drugs. The selection by Sandra. Therefore, this study was considered related to theoretical as follows:

**Family Theory**

Family theory, challenges the premise that addiction is an individual problem or disease. This theory examines how the family contributes to the addiction, how the problem affects each family member and the impact of the addiction on the family as a whole. Addiction is one way a family attempts to adapt to life’s needs and challenges. Addiction is a coping mechanism. Enabling behaviour on the part of the family sustains the addiction. Over time, family "rituals" and "rules" develop that determine behaviour and define roles for all family members vis-à-vis the addiction. Ineffective communication and limited expression of feelings characterize families with addiction. Parental interactions and expectations are inconsistent and vicarious behaviour by children is common. Negativity, denial, and anger are high and self-medication is common.

Codependence develops. As addiction progresses, codependence becomes rampant. Family responses become more out of control. And the need to control increases. Stress and dysfunction within the family escalate. For example, Helen M., the wife of an alcoholic, believes that everything inside her and around her is out of control, so she take charge and tries to control her husband and his drinking behaviour. This enabling often alternates between rescue and blame. Helen calls in sick for her drunken husband and then lashes out at him for "being a drunken bum". Codependence perpetuates addiction and family dysfunction. In early recovery it contributes to relapse. Children in family systems with
addiction may be forced into dysfunctional family roles of hero, scapegoat, list child, or mascot. There is an extensive body of literature on family theory and treatment of addiction.

The purpose of family theory of investigation is to test one of the hypothesis set up at the time the study was initiated for second stage, namely, that drug usage is influenced by the quality of ‘affectionate relationships.’

Two things were considered important in this type of analysis: first, to devise an instrument for measurement of affectional relationship within the family; and second, to determine the extent to which affectional family relationship influence the drug addicts. These two factors could not be adequately used to explain relationship between family environment and usage in the following:

1. The use of drugs arises out of the family problems.
2. The use of drugs causes family problems

**Systems theory:**

Systems theory posits systems and their environments, Organisation, interaction, interdependence and integration of parts and elements characterize systems theory. According to Bertalanffy (1968), all living organisms are open with its environment. The open system becomes more differentiated, complex, and ordered. A closed systems theory views people as primarily social beings rather than as biological or psychological entities. The interaction between individual and environment is critical. For example, detoxification of a homeless addict is poor treatment if the client is discharged back to the street.

Systems theory is applied to the ‘addicted family. It becomes clear that substance abuse of other addictive behaviour serves some purpose.
albeit a dysfunctional or pathological one, within the family system. Addiction signals family dysfunction. The family is a system and as such it plays a critical role in the onset, development and treatment of addiction. Individuals within the family represent interactive, component subsystems of the whole. How does the client’s addiction? How can the family aid in treatment and recovery? What treatment does the family need? Removing the addiction, however, creates a major void in the family system. Systems theory holds that if this functional void is not filled risk for relapse is high family dysfunction heightens. Recovery requires new roles and responsibilities for all family members.

The purpose of System theory to explain the environment, economic, social and political condition factors affecting the drug use, and these factors could be adequately used to explain relationship with drug addict youth in the following:

1. The social and economic factors affecting the drug addict youth.
2. The social and economic factors have influenced for withdrawing the drug addict youth.

**Anthropological Study**:

Anthropological Study emphasizes the values, attitudes, beliefs and norms that a population holds with respect to substance use and other addictive behaviour. Primitive societies know and use many kinds of drugs, yet addiction is rare. Cross-cultural research suggests that the primary function of the alcohol in all societies is tension reduction, which is often related to social instability, dysfunction or change.

**Gateway theory**:

Gateway theory suggests that the use of certain drugs, whether licit or illicit, opens the way to more serious drug use. Many studies, particularly among adolescents, have found that the use of tobacco, and
then alcohol, tends to precede the use of and dependence on other drugs. The order of progression is from tobacco to alcohol, then marijuana, then other pills, and finally ‘hard drugs’.

**Availability theory**:

Availability theory maintains that the greater the access to substances (or gambling, shopping, or sex), the greater the prevalence and severity of addiction. Despite the prevailing belief that the 18th Amendment was a mistake and a national joke, prohibition did reduce the overall rate of alcohol consumption in the group most vulnerable to the devastating effects of drinking: the working class. Data from that period show declines in the incidence of tuberculosis, admissions to state mental hospitals for alcoholic psychosis, and death rates from cirrhosis. Arrests for drunkenness and disorderly conduct decreased. Welfare agencies reported dramatic reductions in alcohol-related family problems. Today, taxes help to reduce the total consumption of alcohol and tobacco products. Massachusetts, for example, credits a drop in adult smoking in part to an increase in the tax on cigarettes of 25 cents per pack 1992 and another 25 cent increase in 1996. Raising the age at which it is legal for individuals to buy tobacco products or alcohol, or to gamble, has helped to control use and behaviour. The law setting 21 as the minimum age for drinking has reduced teenage alcohol consumption and saved thousands of lives.

**Economic theories**:

Economic theories of addiction are concerned with the social costs of excessive addiction and the economic dimensions of government policies aimed at changing consumption habits. Economic theorists study the factors that influence substance consumption/addictive behaviour and how addiction-related problems are linked to consumption levels. Modelling of
consumption and linking consumption with abuse, dependence, and addiction are two key elements of economic models.

In general cultural attitudes, predominantly ritual or abstinent, seem to be associated with a form of taking drugs integrated with other cultural characteristics and consistent throughout a given culture. Utilitarian attitudes, on the other hand, seem to be found mainly in modern, complex societies in which both attitudes and drinking behaviour are pluralistic and at times inconsistent. Convivial attitudes manifest themselves in a wide range of forms. In some cases, they seem to be predominantly integrative and associated with a low rate of taking drugs. But where convivial attitudes also have utilitarian aspects, as in Thailand, there is generally a higher rate of taking drugs together with a diversity of drinking behaviour which is not wholly integrated. Probably it is not simply the case that pluralism of attitude and drinking behaviour is linked with a high rate of alcoholism, but rather that the ambivalence, the uncertainty generated in the individual about what is permitted behaviour, allows more deviant behaviour to occur. In Thai rural societies, the wide variety of drinking norms among different social groups no doubt contributes to the ambivalence in attitudes, and affecting to taking drugs.

The way in which the term ‘cultural attitude’ is used needs clarifying that the cultural attitude influence an individual’s taking drug pattern because the individual holds that attitude himself, and a cultural attitude is an attitude which is held by many members of the cultural group and therefore influences the behavioural norms of the group; thus the individual member’s taking patterns are determined, in part at least, by the social expectations for taking drugs behaviour which constitute the group norms.
The purpose of Anthropological theory to explain the relationship drug addict youth in the following:

1. The value, attitudes and belief influences an individual's taking drugs pattern because the individual hold that value attitude and belief himself.
2. The value, attitudes and beliefs of groups influences to taking drugs.

The family, environment, and culture can play helpful and vital role in correcting and rehabilitating their drug addict member. But at the same time, It has also been alleged that those factors can as well play a negative role and can push normal family member in to drug addiction.