# Drug and Alcohol Abuse

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TODAY, we are living in altogether a different world where one can reach for drugs of all sorts, drugs to wake you up, drugs to lull you to sleep, drugs that take you to dreamland and drugs that deaden the sense of reality. The world is faced with a drug epidemic as the drug abuse problem is becoming progressively worse and the number of addicts is increasing phenomenally. The poly drug use of pattern has begun especially among the younger generation. They seek a chemical solution to psychosocial or an adaptational problem. The drug abuse refers to all drug use which is not indicated as generally accepted medical grounds. The World Health Organization has recommended the term drug dependence which refers to a state psychic and sometimes physical resulting from the interaction between living organism and a drug—characterised by a compulsion to take a drug on a continuous or periodic basis in order to experience its psychic effects and sometimes to avoid the discomforts of its absence.

Alcoholism has been defined as a chronic behavioural disorder manifested by the repeated drinking of alcoholic beverages in excess of the dietary and social uses of the community and which interferes with the drunkard's health or his social and economic functioning.

WHO has defined alcoholics as "Excessive drunkers whose dependance upon alcohol has attained such a degree that it results in noticeable mental disturbance or in an interference with their bodily and mental health and their inter-personal relations and their smooth social and economic functioning or those who show the prodromal signs of such developments".

**Incidence**

The incidence of alcoholism appears to be higher on middle and upper socio-economic levels. The average age for alcoholics is about 45 but alcoholism may occur during any life period from early childhood through old age. The life span of alcoholics is about 12 years shorter than average. Alcoholism ranks as the third most serious public health problem.

In India, 25% of the students and non-student youth abuse alcohol and about 10-12% abuse other drugs. About 87.6% drug addicts are between the ages of 14 and 25 years. In Punjab, two drugs that are commonly used are alcohol and opium. In rural Punjab, 5.8% of adult males consume opium atleast for a part of the year. Only a few take opium for pleasure or curiosity whereas alcohol users begin taking it for recreation or for pleasure.

In Punjab, there are 26,969 excessive alcohol users. Use of country liquor was significantly greater in rural groups of North India in the married and in lower occupational categories and that of English liquor among the professionals and semi-professionals.

There are 60,000 known drug addicts mainly using heroin, some 700,000 young people with drug related problems and many more who remain unregistered and unknown or who are in the experimental stages. Heroin is one of the most potent pain relieving as well as addicting substances known to the medical science. The most widely abused opiate heroin is a simple derivation of morphine, synthesized in 1890. Heroin became commercially available in 1898.

Dependence on heroin ranks among the most malignant forms of drug dependence. Heroin dependence is now on the increase in atleast in the metropolitan cities of India. The percentage of heroin dependence out of total patients has increased from zero to about 25% in these four years (1981-1984) which is the highest for any single drug, excluding alcohol. Quantity consumed is less than one gram per day. Route—smoking in cigarettes. Heroin addiction is spreading like wild fire in India. Heroin users are educated young males between 20 to 30 years of age—majority of them unmarried, unemployed or involved in some business, generally hotel, restaurant or travel agencies.

In Delhi alone the estimated number of heroin addicts is well over 90,000. There are opium smokers den in Bombay, Calcutta, Goa and Manali where addicts can go and enjoy the vicious white powder. Heroin is now available for only Rs. 40 against Rs. 250 three years ago. Opium addiction is crippling the economy of thousands of families in the country, besides causing irreparable damage to the youth power.

**Causes**

The precise causes of alcoholism remain moot but the biological and physical factors have long been sought as clues to the causes of alcoholism. The use of drugs such as opium, cannabis, coca, alcohol or tobacco is an integral part of the daily life of

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certain communities. Example, "Kat" may be used by a shepherd to help maintain his vigilance at work, opium and coca help the rural peasant to tolerate the privations of hard environment. In some festivals in India, for example Holi, young adults are socially expected to consume cannnabis products. In certain parts of India, opium is given to young children so that they sleep and mothers can go to work. Opium is used by rural labourers in punjab especially in the harvesting season which involves a good deal of physical hard work.

Addicts report that heroin makes trouble roll off their mind, makes them more sure of themselves. Religion and caste seem to have no influence on the formation of the habit. Lack of parental supervision and economic dependence are responsible for higher prevalence of the drug habit among the hostel-mates. Awareness of the ill-effects of the drug habit is noticed by the consumer but the reason given for continuation of the habit are group acceptance, feeling or relaxation, need for concentration in activities, enjoyment for better performance, freedom from depression and inability to break the habit.

Imitativeness or suggestibility are their prominent characteristics. The sports heroes and matinee idols take drugs which has been an initiating factor in the drug habit of the college youth. Familarity of the drugs, the pro drug attitude are important adjuncts to the experimentation with drugs.

**Drugs commonly abused**

1. Tranquilisers—psychotropic drugs or antipsychotic drugs.
2. Barbiturates and non-barbiturates.
3. Narcotics—"Hard stuff."
4. Opiates.
5. Anti-depressants—mood elevators, psychostimulants.
6. Hallucinogens—psychedelics or psychomimetics.
7. Solvents.
8. Analgesics.
9. Depressants.
10. Alcohols.
11. Stimulants.
12. Amphatamines.

1. Tranquilisers: Major/Minor

*Major*: Neuroleptics
Largactil. Chlorpromazine.
Haloperidol—Haldol Serenace.
Mellaril—Thioridazine.
Eskazinc—Trifluoperazine.
Stemetil—Prochlorperazine.

*Minor*: Anxioletics
Valium—Diazepam.
Oxazepam—Serax.
Librium—Chloridiazepoxide,

2. Barbiturates:
Amobarbital—Amytal
Pento barbital—Nembutol
Secobarbital—Seconal
Phenobarbital—Luminal

Non-barbiturates:
Methaqualone
Meprobamate
Benzodiazepines
Phencyclidine

3. Narcotics:

Memperidine—Demerol
Morphine
Methadone—Dolophine

4. Opiates

| *Natutral* | *Semi-naturral* | *Synthetic* |
|---|---|---|
| Morphine | Heroine-Diacetyle | Pethedine |
| Codine | morphine | Methadone |
| | | Pentazocene |

5. Anti-depressants—Mood elevators or psychostimulants:

Imipramine
Desipramine
Amitriptyline

6. Hallucinogens or psychedelics or psychomimetics:

Cannabis—Tetrahydrocannabinone
L S D—Lysergic acid diethylamide
Mescalyne
Psilocybin

7. Solvents:

Fumes of certain drugs or substances are inhaled
Glue
Gasoline—Petroleum
Paint thinner
Lighter fluid

8. Stimulants:

Cocaine
Tea, Coffee, Nicotine and Caffine
Cola drinks and cocoa

9. Analgesics:

Ultragin
Metacine
Analgin

10. Amphatamines:

Dextroamphatamines and amytal
Dextroamphetamines
Methamphetamine

In India, different forms of cannabis has been used in the form of intoxicating drinks or inhaled through smoking or *concocted* in various other ways. Such as:

*Charas*— small forms of pills which are inserted into cigarettes.

*Bhang*— in the form of beverage or in the form of sweets.

*Ganja*— smoked in *chillum*.

**Effects**

Drug addicts turn mental and physical wrecks and invite an early end to their lives. What starts as a kind of escapist pleasure results in erratic behaviour, loss of memory and distortion of time and spatial perceptions. The tragic truth in regard to all

types of addiction—be it *beedis* or cigarettes, alcohol or drugs—is that the victims are dreadfully aware of the consequences of each puff, peg and trip yet they are prepared to take the plunge all the same.

Abuse of alcohol and drugs results in absenteeism work accidents, lower productive capacity, decreased quality of work, higher personnel turnover, thefts and difficulty in making relationships.

**Treatment and management**

1. Detoxification
2. Drug Withdrawal
3. Multiple Treatment approach
4. Psychotherapy
5. Medication—Disulfiram (Antabuse) & Psychotropic Drugs

   Antianxiety Medication
   Anti depressants Medication
   Sedation
   } Psychotropic Drugs
6. Self Help—Alcoholic Anonymous
   Alanon
   Alateen
   Narcotic anonymous
7. Halfway House
8. Behaviour Therapy
9. Prevention

**Self-help groups**

An advance, whatever little success in areas of therapy, is in "self-help" group and therapeutic communities which attempt a complete life style change with abstinence as a goal.

*Alcohol anonymous* is a programme of recovery from the illness of alcoholism. It is non-professional self-supporting, non denominational, multiracial and apolitical. There are no age or educational requirements. Membership is open to any alcoholic who wants to do something about his or her drinking problem. This voluntary fellowship is existing in big cities of India.

*Alanon* is an organisation for the spouses of alcoholics that is organised along the same lines as Alcoholic anonymous. The major thrust of Alanon is to assist through group support, the efforts of the spouses to regain self esteem, give up the feeling of responsibility for their spouses drinking and develop a rewarding life for themselves and their families.

*Alateen* is an organisation for the children of alcoholics so that they may better understand their patients' alcoholism.

*Narcotic Anonymous* is a non-profit fellowship or society of men and women for whom drugs has become a major problem. The recovering addicts meet regularly to help each other to stay clean. This is a programme of complete abstinence from all drugs. There is only one requirement for membership, the desire to stop using drugs.

**Nursing assessment**

Alcoholism and substance abuse are a disease that affect many areas of patients' life and nursing endeavours to maximize the patient's ability to perform in all of those areas. The patient is evaluated in physical, psychological and social terms.

The actually ill alcoholic who is admitted for detoxification or who is advertently begins withdrawal requires dynamic treatment. The health status alters so rapidly that the assessment and treatment plan must be frequently modified. During the tremulous phase, psychomotor hyperactivity may present a problem. Vital signs should be monitored frequently, the patient may be very anxious and will need reassurance, caloric needs may be heightened during this phase, because of increased activity. The alcoholic frequently nauseates during withdrawal. So meals may have to be small and frequent. Antiemetic medication should be administered before meals. This is an excellent time to interact with and reassure the patients and enhance his or her self esteem.

The following guide may assist nurses in making assessment of their patients:

1. Behaviour observation:
   (a) State of consciousness
   (b) State of orientation
   (c) Thought and sensory functioning
   (d) Motor activity
   (e) Perception of time and space
2. Psychosocial Observation:
   (a) Degree of anomia
   (b) Ability to perform social roles
   (c) Quality of interpersonal relationships
   (d) Emotional state: depressed, alienated, hostile anxious etc.
   (e) Coping behaviour; manipulations, rationalization, blame placing etc.
   (f) Threat to self security (intentional or inadvertent self-injury potential)
   (g) Degree of self awareness about the effect of socially deviant behaviour on self and significant others.
   (h) Nature of social network supportive, facilitation (of socially deviant behaviour), uninvolved.
   (i) Purpose of substance or practice abuse; to escape problems; to achieve a sense of well being, to avoid feeling emotional pain (e.g. anxiety, loneliness, worthlessness, depression); to improve self-esteem, to punish self/others.
3. Physical observations:
   (a) Vital signs
   (b) Skin colour and integrity
   (c) Appearance of eyes
   (d) Odour of breath
   (e) Muscle tremors

(f) Elimination patterns
(g) Nutritional status
(h) Personal hygiene
(i) Speech patterns
(j) Sleep patterns
(k) Evidence of infection
(l) Known health problem.

4. Contextual Observations:
(a) Substances or practices abused
(b) Alterations in life style
(c) Changes in personality
(d) Changes in spirituality
(e) Deterioration in physical appearance
(f) Nature of stressors (e.g. socio-cultural dysfunction, physical problems).
(g) Motivation for behaviour change (supplanting socially acceptable behaviour) eager to change behaviour, ambivalent about changing behaviour, resistance to changing behaviour.

**Nurses Role during Hospitalization**

As the patient is admitted to the psychiatric unit he is put on drug withdrawal. To achieve the goals of this phase of treatment confinement in a drug controlled institution is always desirable and in most cases essential.

Immediately after admission a complete medical and psychiatric history should be taken and a careful physical examination should be made. History should contain a detailed account of all drugs taken by the patient including dosage, frequency and route of administration. It is important to ascertain if and to what extent the patient has been taking the drugs because withdrawal phenomena for certain drugs like barbiturates may end up in fatality. Regardless of the history of drug, nurse takes the responsibility to make sure a careful search of all body orifices, clothing and accessories is made for concealed drugs. For maximal safety urine analysis for these drugs should be made routinely.

Patients go through the withdrawal phase under supervision in a hospital, recover their strength and start drug taking once again, the moment they are released from the hospital. Lack of education and ignorance on the part of the family and community contribute gravely to this problem. Thus a drug dependant comes in for treatment only with secondary motivation like—

When he is penniless,
When he has conflict with law,
When he suffers from physical illness,
When he has withdrawal symptoms.

Thus the nurse needs to give educational therapy to the client and the members of the family about the ill-effects of drug and alcohol abuse. Educational and vocational training programmes offer opportuinity for such persons to build self-esteem and to direct energy into socially acceptable channels.

Educational therapy helps the clients to look at past failures and to acertain the factors that contributed to those failures. It also includes instruction in such personal matters as grooming, dress and etiquette.

The common approach in India is that once the patient has been through the withdrawal phase the patient is put on supportive pharmacotherapy consisting of a combination of tranquilisers and antidepressants, hypnotics and nutrients. Policing of patient for atleast six months to one year by relatives of the patient is essential because the patient will have craving for the drug and will want to go back as "old habits die hard".

**Withdrawal Symptoms of Drugs**

During withdrawal the common symptoms are severe psychic depression, tiredness or exhaustion, hunger, lethargy, general malaise and suicidal behaviour.

The forms of the treatment are: Drug withdrawal, methadone substitution (still being used in some hospitals) and rehabilitation.

Methadone substitution has been used for patients who are opiods drug dependants. In such cases, tincture opii can be given in small doses, or codine can be used. If the amount of opiods taken is too large then inj. morphine may be given in small doses and then tapered off. Cloridine 0.1 mg three times a day for seven days can be given to offset the withdrawal symptoms.

To allay anxiety librium 10-20 mg Qid is given, for sleep Nitrezepam 10 mg at H.S. For lacrimation an antihistaminic, for diarrhoea mist kaolin and for pain analgesics can be used. Alcohol withdrawal or abstinence syndrome occurs after reduction in or cessation of prolonged heavy drinking and almost always disappear in 5 to 7 days. A coarse tremor of hand, tongue and eyelids may occur as well as nausea and vomiting, general malaise or weakness. Autonomic nervous system hyperactivity (increased pulse and blood pressure), anxiety, depressed or irritable mood and orthostatic hypotension, sleep disturbances, insomnia and nightmares may also occur during withdrawal.

If the withdrawal is to be successful the environment has to be controlled so that the patient gets only his prescribed dose. The nurses observation and reporting of signs and symptoms are an essential part of the treatment process.

Aversion therapy or negative conditioning makes use of learning therapy to cause a person to stop behaving in a socially unacceptable way as some unpleasant consequences are attached to the undesirable behaviour. Aversion therapy is applied in a systematic manner. First the unwanted behaviour is identified, next its baseline frequency is established, then any environmental factors supporting the behaviour are discerned.

A common type of aversion therapy for alcoholism involves the use of the drug disulfiram (Anta-

buse). Disulfiram interferes with the metabolism of alcohol so that even a single drinking usually causes a toxic reaction due to acetaldehyde poisoning. The patient is given disulfiram 250 mg once a day for three days or for four days thereafter, first having been warned in detail about the consequences of imbibing alcohol while using the drug. Nor should the patient start using the drugs unless 24 hours have elapsed since his last drink.

After having explained in detail of the consequences and the procedure the patient is made to write and sign a consent form in his own handwriting. This is the responsibility of the nurse, besides reinforcing the physicians instructions to the patients. On the third day of intake of disulfiram the patient is given his favourite drink but preferably 100 ml of 40% alcohol. Within five minutes the patient will experience flushing and feelings of heat in the face, sclera, upper limbs and chest. The patient will have tachycardia 140/minutes, respiration rate 22/minutes, hypotension B.P: 90/40 mm of Hg.

The patient may become pale, nauseated and experience serious malaise. There may also be dizziness, blurred vision, palpitations, air hunger, and numbness of the extremities.

After ten minutes the patient is given inj. ascorbic acid 1 amp. intramuscularly. Intravenous fluids 5% dextrose saline is started, thereafter vital signs return to normal within ten minutes.

Patients' abnormal feelings come to normal after 45 minutes. In some patients these symptoms may last for one to two hours. Disulfiram must be taken regularly to be an effective deterrent to alcoholism. This therapy requires self motivation to be successful.

Aversion therapy is also used in treating drug addiction. It is based on the premise that aberrant behaviour has been learnt and therefore can be unlearnt.

Nurses role is to ensure that candidates for aversion therapy have enough information to be able to weigh the advantages and disadvantages of negative co ditioning and to compare it to other available treatment. Since disulfiram can be discontinued at any time there are drawbacks to its treatment.

**Detoxification Centres**

These provide facilities for drying out, thereby replace jails. In detoxification centre, attention is given to a thorough health examination including a urine test for sugar and acetone. High protein meals with vitamins and mineral supplements are provided also tranquilizers and antacids for gastricis. A close observation and caring for the alcoholics are often necessary to prevent suicide.

These kind of centres are present in other countries as it is easy to treat patients in these centres. It will be desirable to have such detoxification centres in every big city of India.

**Primary Prevention**

Drug trafficking is a major irrepressible law and order problem. There should be stricter laws and punishments against drug peddling. Proper and suitable health education regarding the consequence of drug habits should be imparted.

The nurse is in a better position to teach people about the drug, its biological and psychological effects on the person.

The principle aim of control measures should be towards primary prevention to reduce the incidence of new cases and only indirectly to influence the prevalence rate of current users in the population. Persuasion (educative programme) and compulsion (control measures) must be applied judiciously.

I. Approach—Primary prevention

II. Approach—Individual or group therapy

III. Approach—Identification of high risk individuals and by various treatment approaches to reduce or completely stop their alcohol and drug addiction.

Nurses have to play an important role in the primary prevention and incorporate this into their professional practice which includes:

1. Improvement of the social conditions that affect families.

2. To strengthen the interpersonal and social skills of individuals. This leads to increased self-esteem and positive self concept.

Nurses can play an important part in developing and initiating policies that support the development of effective substance abuse prevention programmes.

The community nurses who are in the homes of families also have an important part to play in the treatment of the alcoholics. The community nurse is in a position where high visibility of alcoholism aids identification of cases early. Signs of alcoholism should alert the nurses in early recognition of this mental disorder. Some of these are as follows:

Drinking alone.
A feeling of having to have a drink.
Missing a day's work due to drinking in the morning.
Missing a social engagement due to drinking.
Drinking instead of eating.
Excessive drinking at meal time.

**Family Counselling**

It is the responsibility of the nurses to make sure that the family members are taught the fallacy of taking drug for everything. Parental counselling and guidance regarding rearing and upbringing of their children and avoidance of neglect and rejection in their care could probably have some beneficial effects. The parents should be helped to look at the way of modelling their children and bringing about changes if necessary. They may need guidance so that they can be supportive to the dependent members.

The community nurse may provide treatment in terms of family therapy, group and individual psychotherapy.

Where the nurse has contact with people in schools,

universities, industry and community activities, an educational programme about the use and abuse of alcohol and drugs can aid in prevention. Films and other audio-visual materials reinforce important concepts.

In schools the nurse may set up an educational programme for the teachers so that they can better help their students with the question of drinking alcohol and drug abuse.

Since the greatest impact of alcohol and drug abuse in the future may come from research rather than from services, nurses have an important role in this area too.

The psychiatric nurse thus needs to develop certain qualities in order to deal with her clients. She needs to be non-defensive, accepting but firm and realistic about the course of the therapy. She should show concern and interest in her client. She should develop self awareness and maintain an empathetic approach. The nurse should also have a high degree of alertness, tact and skill as she works with her clients.

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