

Introduction to Substance Abuse



K. Reddamma

Psychoactive substances including alcohol, cannabis, khat, coca leaves and opium poppy have been consumed in different societies for centuries. In recent times, however, traditional use of these substances, which had social sanction and control, has given way to a more problematic pattern of use associated with many social and health problems. Additionally, the prevalence of persons consuming both licit and illicit substance is progressively increasing and the age of initiation decreasing.

The Ministry of Social Justice and Empowerment, Government of India and United Nations office on drugs and crime (UNODC) has recently completed a report of the extent, pattern and trends of drug abuse in India. According to the National household survey, the current one month period use for alcohol, cannabis and opiates were 21.4%, 3% and 0.7%, respectively. Prevalence of Intravenous Drug Users (IDUs) in general population is 0.1%. Applying the prevalence estimates to the population figures of 2001, the report estimates and projects that there are 6.25 crore alcohol users, 87 lakh cannabis users and 20 lakh opiate users in the country. These numbers, when applied to the total Indian population of 102.7 crore (2001 census), provides prevalence rates of 60/1000, 8/1000 and 2/1000 populations, respectively.

Dependent users were 17% for alcohol, 26% for cannabis and 22% for opiates. Unfortunately, only 18% seek treatment.

Overview of Substance abuse problems

The overuse of alcohol and other drugs is called substance abuse. It is common and costly. It can cause or worsen many medical problems and destroy families and lives.

Abused substances produce some form of intoxication that alters judgment, perception, attention, or physical control.

There are no universal 'safe' drinking limits. Moderate use, abuse and dependence are on a continuum of severity.

Licit substances

Tobacco:

People cite many reasons for using tobacco, including pleasure, improved performance and vigilance, relief of depression, curbing hunger, and weight control. According to WHO estimates, there are around 1.1 thousand million smokers in the world.

The primary addicting substance in cigarettes is nicotine. However, cigarette smoke contains thousands of other chemicals that also damage health. Hazards include heart disease, lung cancer and emphysema, peptic ulcer disease and stroke. According to the World Health Report (2002), over 90% of lung cancer in men and about 70% of lung cancer among women is directly attributable to tobacco smoking, among industrialized countries. Additionally, in these countries, the attributable fractions are 56-80% for chronic respiratory disease and 22% for cardiovascular disease.

Alcohol

People who drink alcohol are more likely to engage in high risk sexual behavior and have poor grades or job performance. Alcohol use may be an unconscious attempt at self treatment for another problem, such as depression.

Alcohol is estimated to cause about 20-30% of esophageal cancer, liver cancer, and cirrhosis of the liver, homicide, epilepsy, and motor vehicle accidents. Worldwide, alcohol causes 1.8 million deaths each year.

Illicit substances

Opiates

Reports by the UNDCP have shown that there has been a global increase in the production, transportation and consumption of opioids, mainly heroin. The worldwide production of heroin has almost tripled since 1985. Globally, it is estimated that 13.5 million people take opioids, including 9.2 million who use heroin. Heroin is also known as smack and horse. Overdose may result in death from respiratory depression. Since heroin is often injected, using dirty needles, its use can trigger other health complications

including destruction of heart valves, HIV/AIDS, infections, tetanus and botulism.

Cannabis

Cannabis is by far the most widely cultivated, trafficked and abused illicit drug. Half of all drug seizures worldwide are cannabis seizures. The geographical spread of those seizures is also global, covering practically every country of the world. About 147 million people (2.5% of the world population), consume cannabis (annual prevalence) compared with 0.2% consuming cocaine and 0.2% consuming opiates. In the present decade, cannabis abuse has grown more rapidly than cocaine and opiate abuse. Cannabis has become more closely linked to youth culture and the age of initiation is usually lower than for other drugs.

Cocaine

Cocaine (crack, coke, snow, rock) is derived from the coca plant of South America. Cocaine and its derivative 'crack' provide an example of both the globalization of substance use and the cyclical nature of drug epidemics. Traditionally people in the Andean countries of South America have chewed coca leaves for thousands of years. Cocaine became widely available in North America in the 1970s and Europe in the 1980s.

Prevalence rates for lifetime use of cocaine are typically 1-3% in developed countries, with higher rates in the United States and in the producer countries. Cocaine dependence has become a major public health problem, resulting in a significant number of medical, psychological and social problems, including the spread of infectious diseases (e.g. AIDS, hepatitis and tuberculosis), crime, violence and neo-natal drug exposure.

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Amphetamine type stimulants

Amphetamine-type stimulants (ATS) refer to a group of drugs whose principal members include amphetamine and Methamphetamines. However, a range of other substances also fall into this group, such as methcathinone, fenetylline, ephedrine, pseudoephedrine, methylphenidate and MDMA or 'Ecstasy' – an amphetamine-type derivative with hallucinogenic properties. Smoking, sniffing and inhaling are the most popular methods of ATS use, but ways to take the drug vary widely across different regions.

Methamphetamines: The use of Methamphetamines (meth, crank, ice, speed, crystal) has increased, especially in the West. Methamphetamines are powerful stimulant that increases alertness, decrease appetite, and gives a sensation of pleasure.

The drug can be injected, snorted, smoked, or eaten. It shares many toxic effects with cocaine, including heart attacks, dangerously high blood pressure and stroke.

Club drugs: The club scene and rave parties have popularized an assortment of other drugs. Many young people believe these drugs are harmless or even healthy. These are commonly known as club drugs.

Ecstasy (MDMA, Adam, STP): This is a stimulant and hallucinogen used to improve mood and to maintain energy, often for all-night dance parties. Long-term use may cause damage to the brain's ability to regulate sleep, pain, memory, and emotions.

GHB (Liquid XTC, G, blue nitro): Once sold at health food stores, GHB's effects are related to

dose. Effects range from mild relaxation to coma or death. GHB is often used as a date-rape drug because it is tasteless, colorless, and acts as a powerful sedative.

Rohypnol (roofies, roche): This is another sedative that can be used as a date-rape drug. Effects include low blood pressure, abdominal cramps, confusion, and impaired memory.

Ketamine (Special K, K): This is an anesthetic that can be taken orally or injected. Ketamine can impair memory and attention. Higher doses can cause amnesia, paranoia and hallucinations, depression, and difficulty breathing.

LSD: (acid, microdot) and mushrooms (shrooms, magic mushrooms, peyote, buttons): Popular in the 1960s, LSD has been revived in the club scene. LSD and hallucinogenic mushrooms can cause hallucinations, numbness, nausea, and increased heart rate. Long-term effects include unwanted "flashbacks" and psychosis (hallucinations, delusions, paranoia, and mood disturbances).

PCP: (angel dust, hog, love boat): PCP is a powerful anesthetic used in veterinary medicine. Its effects are similar to those of ketamine but often stronger. The anesthetic effects are so strong that you can break your arm but not feel any pain. Usually, tobacco or marijuana cigarettes are dipped into PCP and then smoked.

Attitudes and Myths

Substance abuse is viewed differently depending on the substance used, the person using it, and the setting in which it is used. Nurses should be aware of these social and cultural attitudes and recognize their impact on individual users and people close to them. For instance, a

businessman who starts arguments after a few drinks with his associates would not usually be considered an alcohol abuser. If the same person were caught nipping from a bottle in his desk, he would probably be considered to have a drinking problem.

Tobacco abuse is still accepted in India and other countries despite convincing evidence of medical problems related to smoking and the effects of secondary smoke inhalation. On the other hand, a person who smokes opium would be considered deviant, even if the behavior took place in private.

Many nurses have negative, moralistic attitudes towards alcohol and other substance abusers. Some have had negative experiences with family members or friends who have had substance related problems. This may influence the nurse's ability to assess and care for these patients. Nurses often see substance abusers at their worst, during a medical or psychiatric crisis. They see these patients returning repeatedly for alcohol or substance related health problems.

MYTHS / TRUTHS

Many myths are available around substance abusers. To mention a few;

"People who drink too much only hurt themselves."

Truth: Every person who drinks has a parent, sibling, grandparent, best friend, or partner who worries about him or her. What if the person gets behind the wheel of a car?

"Alcohol is a safer drug because people generally react the same."

Truth: There are dozens of factors that affect reactions to alcohol including age, sex, body weight, time of day, food intake, how one feels mentally, body chemistry, expectations, etc.

"It's just a beer. It can't permanently damage you."

Truth: Beer can do major damage to your digestive system. It can hurt your heart, liver, stomach, and other critical organs. It can take away years from life.

"Marijuana doesn't stay in your system very long."

Truth: Marijuana is fat soluble (alcohol is water soluble). THC, the active chemical in marijuana, can be detected in the urine 14 days after use. Even after a person has stopped smoking, the effects will linger.

"Switching between beer, wine, and liquor will make you more drunk than sticking to one type of alcohol."

Truth: Your blood alcohol concentration is what determines how drunk you are, not the flavors you selected. Alcohol is alcohol.

"Alcohol gives you energy."

Truth: It's a depressant. It slows down your ability to think, speak, and move.

"Cocaine is not addictive unless you use it frequently."

Truth: Cocaine is both physically and psychologically addictive. Even a single use of crack (a cooked form of cocaine) can be addictive/fatal.

“A cold shower or cup of coffee will sober someone up.”

Truth: Nothing sobers you up but time. You may be clean and awake, but you’re still drunk.

“Drugs are a bigger problem than alcohol.”

Truth: Alcohol and tobacco kill more than 50 times the number of people killed by cocaine, heroin, and every other illegal drug combined. Ten million Americans are addicted to alcohol. It is a drug.

“A drink or two will not interfere with my driving.”

Truth: Small amounts of alcohol can impair your judgment. Even one drink can cloud your thinking, dim your vision, and slow your reflexes.

Scope of Substance Abuse Nursing:

Nurses form a core component of many health care systems so their role in responding to problems related to psychoactive substance use is crucial. They are often under-utilized, mainly because of anxieties concerning role adequacy, legitimacy, lack of support and failure to implement interventions in a variety of settings. Nurses have unique opportunities through interactions they have with young people, families and significant others. Training and career preparation should encompass development of innovative strategies and take a

leading role in management of substance use patients. Nursing personnel need to be involved in the treatment of the homeless mentally ill, HIV-infected individuals and persons with dual disorders of mental health and substance use. The opportunity for nurses to address the problem with their patients presents itself along the full continuum of care.

The Association of Nurses in substance abuse states that dependent patients can be assisted through nursing interventions such as health promotion (physical, mental, social and spiritual), harm minimization (especially in women alcoholics and unborn child) risk reduction (counseling in individuals who had accident related to alcohol) maintenance and stability and palliative care and a pain-free death. They need to be involved in development of an effective support system, matching to appropriate helping services, empowerment and more. They have role in addressing psychosomatic problems of spouses and children of alcoholic abusers and substance abuse among women.

International Council of Nurses is alarmed by the growing number of youths who abuse dependence producing substances. Nurses as key providers in the health care for substance abuse play a crucial role in addressing substance abuse.

Striving to prevent and reduce substance abuse through policy and advocacy, promotion of healthy life styles and equipping youth with life skills to deal with stress, peer pressure and other risk factors are important roles for nursing.

Role of Nurse:

Direct care provider.

- Management and supervision.
- Teaching & research.
- Public health nurse.
- School health nurse.
- Forensic role.

Role of Nurse as Direct Care Provider.

- Assessment of patient for the use of substances and extent of use. The assessment can be done by proper history taking. This can be done by general nurses in the general medical surgical wards because some patients might not be aware of their dependence and will not report which can lead to various medical emergencies related to the withdrawal of the substances.
- Assessment of the motivational level of a person and takes active steps for motivational enhancement and relapse prevention.
- Conduct of group activities with the patients and the family members in the inpatient setting.
- Maintenance of the therapeutic environment of inpatient unit.
- Monitoring and recording of the withdrawal symptoms and complications.
- Implementing treatment orders as prescribed and watch for any side effects.
- Maintenance of records and reports.
- Maintenance of confidentiality of the records.

Role of Nurse as Manager and Supervisor.

- Management of ward.

- Management of ward behavior of patients.
- Supervision of patients in the ward.
- Supervision of other health care staff.
- Identification of drug related behavior in coworkers and reporting.
- Supervision and training of nursing and other staff.
- Maintaining drug inventory.

Role of Nurse in Teaching and Research

- Helping the patients to make informed choices.
- Teaching and guiding the fellow staff members to participate in research activities related to substance use nursing.
- Conduct and participate in research activities related to substance use nursing.
- Promote evidence-based practices.

Role of Nurse in Primary health care settings

- Identify cases in the community.
- Performs motivational counseling and enhancement.
- Conducts public awareness programs.
- Counseling family members.
- Support and participate prevention efforts in community.

Role of Nurse in School health program.

- Provide primary prevention/education to individual students and classrooms in an age specific, culturally and developmentally appropriate way. Utilization of the proven approaches to prevention including enhancement of protective factors and reduction of risk factors; practicing of life skills; interactive teaching methods; inclusion of parents or caregivers;

coordination with community-based prevention.

- Recognize that students living in alcohol-affected homes may have a multiplicity of alterations in academic achievement, social skills, affect, and health.
- Provide support to the student without reinforcing the child's perception of being responsible for the family's situation.
- Refer those students that need evaluation and treatment for abusive or addictive chemical use and concurrent mental health problems, including suicide risk.
- Make appropriate referrals to agencies such as Social Services, Drug and Alcohol Treatment Services, Mental Health services, and the Child Protection Team.
- Respect the confidentiality of student and 'problem-solve' the ethical dilemmas often associated with substance use and abuse issues.

Forensic Role of Nurse

- Legal advice to the public about the issues related to the substance use/abuse.
- Legal advice to staff about the issues related to substance use/abuse.

Suggested reading materials

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Suggested slide material

Slide1

Introduction

- Alcohol & Drug use is growing problem in India
- Alcohol & Drug use is associated high-risk behaviors, i.e. Sexual risk behavior and Injecting Drug Use (IDU)
- Risk behaviors make the populations susceptible to Sexually transmitted diseases and Blood borne infections
- High risk groups i.e. female commercial sex workers (FCSWs) & their patients, Truck drivers, Male sex workers (MSW), also use Alcohol and Drugs
- Substance use- Risk behaviors – HIV susceptibility
- Substance use treatment and reduction in risky behaviors help in prevention of Sexually transmitted diseases and Blood borne infections including HIV infection

Slide2

Prevalence of Alcohol & Drug use

- The National Household Survey carried out in 2001-02 showed current (last 1 month) prevalence rates of use for various drugs were: 21.4% (alcohol), 3.0% (cannabis), and 0.7% (opiates).
- Prevalence of Intravenous Drug Users (IDUs) in general population 0.1%.
- DAMS data (Treatment seekers) IDUs 14%
- RAS ever injected drugs 43%.

Slide 3

Drug Use in India- National Survey

- Prevalence opiate 0.7% (0.7% R; 0.5%U)
- High prevalence areas- Mizoram, Manipur, Nagaland; Haryana, Himachal, Punjab,

Rajasthan; UP, West Bengal

- Estimated number of current opiate users 2.04 million
- Treatment seeking 18%
- IDU 0.1%-43% (depending upon location & setting)

Slide4

Drug Use in India- National Survey

- Special Populations
- IDU% - Rural 2.5% (UP), Border 40%, Prison 0.6-6.0%
- Female drug users 1-10%
- Female drug user HIV + (Manipur) 20%
- Female IDU HIV + (Manipur) 57%
- IDU-CSW HIV seropositivity 9 times

Slide5

Myths related to substance use

- People who drink too much only hurt themselves
- Alcohol is a safer drug because people generally react the same
- It's just a beer. It can't permanently damage you.
- Marijuana doesn't stay in your system very long
- Switching between beer, wine, and liquor will make you more drunk than sticking to one type of alcohol.
- Alcohol gives you energy.
- Cocaine is not addictive unless you use it frequently.
- A cold shower or cup of coffee will sober someone up.
- Drugs are a bigger problem than alcohol.
- A drink or two will not interfere with my driving.

Slide 6

Role of Nurse

- Direct care provider.
- Management and supervision.
- Teaching & research.
- Public health nurse
- School health nurse.
- Forensic role.

Slide 7

Direct Care Provider.

- Assessment of patient for substance use
- Motivational assessment & enhancement & relapse prevention.
- Conducting group activities.
- Maintaining therapeutic environment of inpatient unit.
- Monitoring withdrawal symptoms and recording.
- Carrying out treatment orders.
- Maintenance of records and reports.

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Role of Nurse as Manager and Supervisor.

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