

Original Article

Profile and pattern of drug use among treatment seekers in deaddiction center in a tertiary hospital - I-year study

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Abstract

Introduction: Drug use pattern is ever changing and has emerged as a global burden as it causes serious public health problems. **Aims:** To determine the sociodemographic profile and pattern of drug use among the treatment seekers in the deaddiction center, psychiatry department, over a 1 year period. **Materials and Methods:** Retrospective evaluation of case registries of 222 substance dependence patients in the age group of 18-60 years registering for the first time for treatment in the Drug Deaddiction and Treatment Centre (DDTC), Psychiatry Department, Regional Institute of Medical Sciences, Hospital from January to December 2009 was done. Statistical analysis was done using Statistical Package for Social Sciences (SPSS) 17. **Results:** We found that majority were males ($n = 212$). Among the current users, in order of frequency, drugs used were alcohol (84%), tobacco (61%), opioids (17.5%), cannabinoids (14.4%), volatile solvents (5.4%), and sedatives and hypnotics (5%). Also, 5.4% of them were currently injecting drug users and had high risk behaviors like sharing syringes and contact with commercial sex workers. About 13.1% of all the subjects had undergone screening for human immunodeficiency virus (HIV) and one-tenth were positive. Psychiatric morbidity like drug induced psychosis (28%), depression (18%), and anxiety (16%) were reported among 23.4% of the treatment seekers. One-fifth of patients reported physical complications: Hepatitis, neuropathy, anemia, etc. Very few (6.8%) subjects had a history of previous treatment of which only 5.4% were prior hospitalized. **Conclusions:** Present study can supplement information on drug use pattern and related complications which can be effectively used for local planning.

Key Words: Deaddiction, Psychiatric comorbidity, Substance abuse

INTRODUCTION

Substance abuse has emerged as a global phenomenon.^[1] It includes the use of licit substances such as alcohol, tobacco, diversion of prescription drugs, as well as illicit substances.^[2]

Drug abuse including alcohol may lead to health problems, social problems, morbidity, injuries, unprotected sex, violence, deaths, motor vehicle accidents, homicides, suicides, physical dependence, or psychological addiction.^[3]

In some cases, substance induced psychiatric disorders can persist long after detoxification, such as prolonged psychosis or depression.^[4] Also, alcohol misuse has been

implicated in 20% of brain injuries^[5] and 60% of all injuries in the emergency room setting.^[6]

Mortality with injecting drug use is a serious concern with increase in crude mortality rates to 4.25 among injecting drug users compared to the general population.^[7] Increased susceptibility to human immunodeficiency virus (HIV)/acquired immunodeficiency syndrome (AIDS) and other sexually transmitted diseases has been reported with alcohol^[8] as well as injecting drug use.^[9]

Considering these facts and lack of such studies from deaddiction center of tertiary hospital in Manipur, the present study was carried out to determine the sociodemographic profile and pattern of drug use among the treatment seekers in the deaddiction center, psychiatry department.

MATERIALS AND METHODS

This was a retrospective study design. Study population consisted of 222 substance dependence patients from both sex in the age group of 18-60 years who were registered

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for the first time for treatment. Treatment stands for any or combination of detoxification and psychosocial therapies. Substance dependence was diagnosed as per International Classification of Diseases (ICD)-10⁽¹⁰⁾ by a consultant psychiatrist after direct interview with the patient and their relatives. Their sociodemographic profile, pattern of substance use, and adverse health complications were retrospectively collected from the case registries of Drug Deaddiction and Treatment Centre (DDTC), Psychiatry Department, RIMS from January to December 2009. Data was scrutinized for completeness and analyzed using Statistical Package for Social Sciences (SPSS) 17 for windows.

RESULTS

Out of 222 subjects majority were males ($n = 212$, 95.5%). The mean age of males was 35.5 years. One-third of male treatment seekers (34.4%) were in the age group of 21-30 years and in females, 40% were in the age group of 41-50 years. One-tenth (11.7 %) of men treatment seekers were illiterate or just could read and write. Maximum proportion of patients (39.2%) had education up to 10th/12th classes (higher secondary level). The higher studies (graduation and above) was stated by 17% men respondents. In contrast to this, in women majority (60%) had graduated followed by 30% of them who studied up to 10th or 12th level and only 10% were illiterate. One-third of patients ($n = 73$ or 32.9%) were self-employed followed by 22.1% ($n = 49$) of never employed group. Student constituted 3.2% ($n = 7$) of the sample covered. A large majority of them were married (53.6%, $n = 119$) and a small section of samples were covered in the category of separation/widow/widower (5.4%, $n = 12$). There were three men (1.4%), who reported separation on account of substance abuse behavior and majority (68.5%) were from a joint family set up.

Among the current substance users, percentages of patients in order of decreasing frequency are 84%

reported use of alcohol, 61% tobacco, 17.5% opioids, 14.4% cannabinoids, 5.4% volatile solvents, and 5% of sedatives and hypnotics use [Figure 1]. It is observed that out of the total 222 subjects, 5.4% ($n = 12$) of them were injecting drug users and all of them (100%) were injecting intravenously and among those intravenous (IV) users 50% of them were sharing syringes. None of them were injecting through intramuscularly or subcutaneously [Table 1]. Among the IV drug abusers, 50% ($n = 6$) solely injected heroin intravenously. Three IV drug abusers were injecting both heroin and liquefied powdered preparation of Spasmo Proxyvon. Three of them were using only Spasmo Proxyvon intravenously [Figure 2]. About 6% of the total subjects had history of sexually transmitted diseases, jaundice, and risky practice of having sex with the commercial sex worker in their lifetime [Table 2]. Also 13.1% of them had undergone screening for HIV and out of those screened, 1.4% were HIV positive [Table 3]. Concurrent psychiatric comorbidities were seen among 23.4% ($n = 52$) of the treatment seekers [Figure 3]. One-fifth of patients admitted one or more physical complications on account of sustaining the habit of alcohol/drugs [Figure 4]. Out of the 222 subjects, 6.8%

Table 1: Injecting drugs and route of administration

Injecting drug users (IDUs)	Ever used (%)	Currently using (%)	Total (100%)
	5.9	5.4	222
Route of administration among current IDUs	Intravenous (%)	Sharing syringes (%)	Total (100%)
	100.0	50.0	12

Table 2: Drug-related complications

Parameter	Percentage	Total
Ever had STI	5.9	222
Ever had Jaundice	5.9	222
Having sex with CSW	5.9	212

STI: Sexually transmitted infection, CSW: commercial sex workers

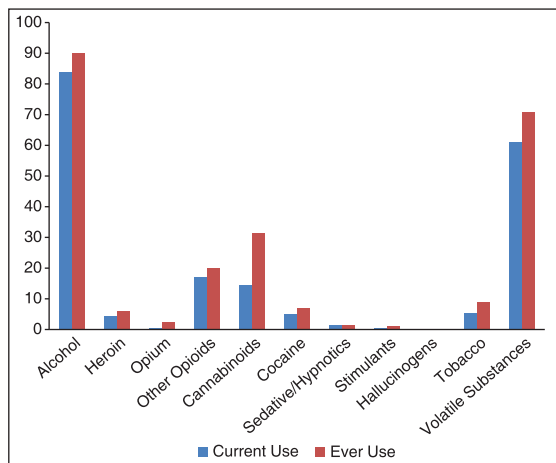


Figure 1: Pattern of abuse by types of drugs

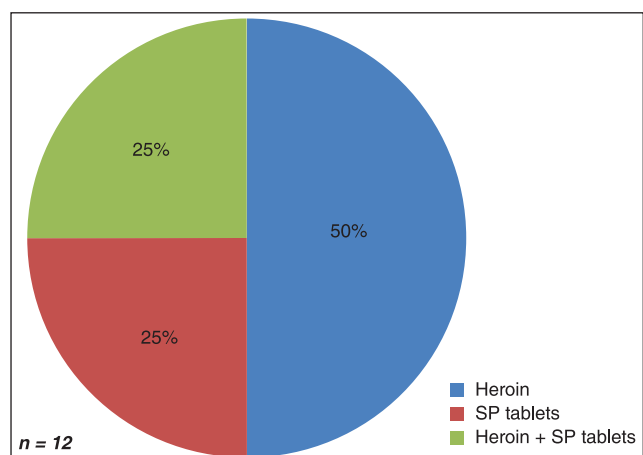


Figure 2: Pattern of intravenous (IV) drug use. SP = Spasmo Proxyvon

Table 3: HIV screening status

Parameter	Percentage	N	Total
Undergone HIV testing	13.1	29	222
Positive	1.4	3	29

HIV: Human immunodeficiency virus

(n = 15) had history of previous treatment. Among them, only 5.4% (n = 12) were priorly hospitalized at one or more occasions [Figure 5].

DISCUSSION

Majority of the treatment seekers in the DDTC, Psychiatry Department, RIMS were males (95.5%), similar to findings in urban population of Madhya Pradesh.^[11] The most vulnerable age group was between 21 and 30 years (34.4%), followed by 31-40 years which was similar to World Health Organization (WHO) Biennium Project.^[1] This may be because they face stresses of starting career, marriage, and bringing up children.^[11] There was more awareness of the harmful effects and inhibitions in educated, and hence, substance abuse was common in less educated.^[11] When analyzing the employment status, majority of the abusers were self-employed followed by never employed and the least were the students. Married group was having the highest percentage (53.6%) and of which 1.4% (n = 3) of the subjects gave the history of separation because of drug abuse behavior, which is also in concordance with other study.^[1] Contrary to the belief, a large majority of patients were staying within the institution of joint family.

Drug use pattern was assessed during 30 days before registration (current use) and during their life time (ever use). Among the current users, substances used in order of frequency were alcohol (84%), tobacco (61%), heroin and other opioids (17.5%), cannabinoids 14.4%, volatile solvents 5.4%, and sedatives/hypnotics in 5%. Similar pattern of abuse was seen in other studies.^[1,12]

Among 5.4% of the current IV drug users, half were sharing syringes; while in the study by Ray on the National Survey of Drug Abuse (2004),^[12] current injecting users and sharing needles were 14.3 and 7.7%, respectively. Lower percentage seen in our study may be because the subjects came for treatment were only representing tip of the iceberg and many subjects might be attending to other rehabilitation centers and private sectors.

In this study, 5.9% of the subjects reported sexually transmitted infections (STIs), contact with commercial sexual worker, and occurrence of jaundice in their lifetime. The STI status was ascertained through a set of symptoms, viz. genital ulcer growth, burning urination, urethral discharge, itching around genital organs, and vaginal and rectal pain/discharge. In case a person

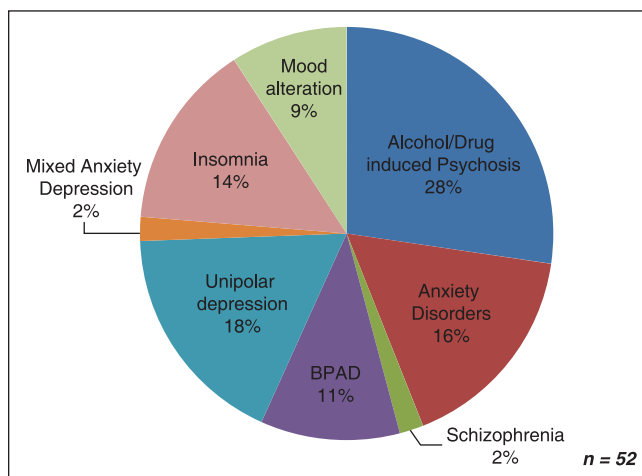


Figure 3: Concurrent psychiatric illness, BPAD: Bipolar affective disorder

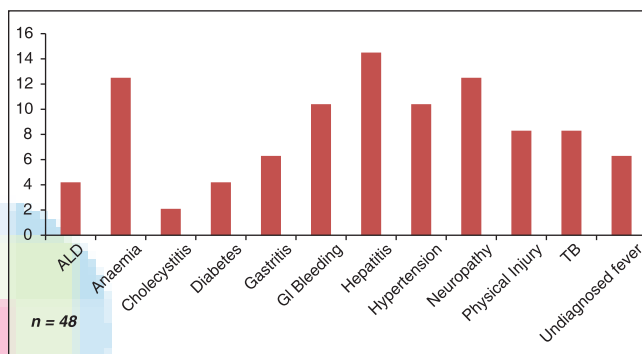


Figure 4: Concurrent physical illness, ALD: Alcoholic Liver Disease, TB: Tuberculosis

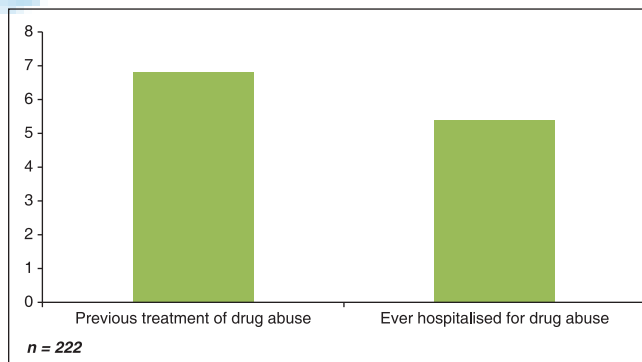


Figure 5: Health seeking practices of drug users

admitted occurrence of one or more symptoms, it was taken as a positive indication of STI. Around one-tenth (13.1%) had undergone screening for HIV and out of those screened, 1.4% had a positive status.

In our study, 23.4% reported psychiatric morbidity along with substance abuse disorder and about one-fifth of patients admitted one or more physical complications. In another study, psychiatric morbidity was found in 13.4% of the subjects and physical complications were

seen in one-sixth of the subjects.^[1] Higher percentage of psychiatric morbidity in our finding may be because of parallel service from the psychiatry department. Only 6.8% had a history of previous treatment; but in other study, 17.5% had previous treatment.^[1] Lower percentage in our study might be because of stigma and ignorance to report to the deaddiction center. We also found that majority of who reported prior treatments (5.4%) were hospitalized at one or more occasions.

CONCLUSIONS

The study refers only to those seeking treatment and not those who are in the community or form part of the general drug abusing population. Alcohol, tobacco, cannabis, and opioids were the major substances of abuse. Inhalant use is a serious concern due to emerging use in adolescents. Substantial number of patients had also drug-related complications and varied array of both physical and medical comorbidities. Out of them very few had sought for treatment, which is a major concern. There is a felt need for the assessment of the evolving trends of drug abuse. Aim is not only detection, treatment, and relapse prevention; but, suitable interventions for primary prevention should be considered. This study gives information on drug use and related complications, which can be effectively used for local planning.

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