"PROFILE OF SUBSTANCE ABUSERS ADMITTED AT DE-ADDICTION CENTERS IN A CITY OF NORTH KARNATAKA"

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LIST OF ABBREVIATIONS USED

1	WHO	World health organization
2	AIDS	Acquired immune deficiency disorder
3	HIV	Human immune deficiency virus
4	NFHS	National family health survey
5	DSM	Diagnostic and statistical manual of mental disorder
6	DALY	Disability adjusted life years
7	TB	Tuberculosis
8	UAE	United Arab Emirates
9	SPSS	Statistical package for social science
10	CPL	Consumer price index
11	PUC	Pre university course
12	NGO	Nongovernmental organization
13	PR	Pulse rate
14	BP	Blood pressure
15	RR	Respiratory rate
16	BMI	Body mass index
17	OBC	Other backward caste
18	ST	Scheduled tribe
19	SC	Scheduled caste

ABSTRACT

Title: Profile of substance abusers admitted at de-addiction centers in a city of North Karnataka

Introduction:

Substance abuse is defined as ‘‘Harmful or hazardous use of psychoactive substances, including alcohol and illicit drugs’’. The usage of substances can lead to health and social problems for the one, who consume them, and to the family members and to the community as well. Main substances used include tobacco, alcohol, cocaine, opiates, hallucinogens, amphetamines, prescription and over-the-counter drug abuse.

In the modern world, there is no area that is free from the hazardous effects of drug trafficking and drug addiction. Billions of drug addicts are leading miserable lives, between life and death. The psychological and physical effects of substance use can vary based on the particular substance involved but still the general effects of a substance use disorder involving any substance is always disastrous. The usage of alcohol can affect almost all organs like liver, brain, cardiovascular system etc and it is well known that tobacco abuse can lead to various cancers and it also affects all organs. The problem caused by substance abuse is not just that of person or a community which he lives in and a drug, but it also involves interaction between the triad. Drug dependence causes not only economic burden through rising health care costs, but also social costs.

As per 2013, an estimated 246 million globally using substances and cannabis is the most common consumed substance which is followed by opiods. In India, as per 2015, in population more than 15 years, prevalence of heavy episodic drinking is 17.2%. Men who use any kind of tobacco are 44.5 percent, 38.9 in urban and 48.0 in rural areas. Women who use any kind of tobacco are 6.8 percent in total, 4.4 in Urban

and 8.1in rural areas. The present study aims to assess the profile of substance abusers admitted at the Drug De-addiction Centres in Belagavi, a city of North Karnataka.

Objectives:

Primary objectives:

1. To study the profile of substance abuse among patients admitted at de-addiction centers in a city of North Karnataka.
2. To know the pattern of substance abuse.

Secondary objective:

1. To find out different triggers leading to substance abuse by qualitative in depth interview.

Materials and Methods:

Study design: A Cross - Sectional study.

Study period: 1st January 2020 to 31st December 2020 (12 months)

Sample size: Calculated by taking prevalence of 21.4 (454)

Sampling technique: Consecutive convenient sampling

Study population: Patients admitted at the five de-addiction centres namely Hope recovery centre, Sahara de addiction centre, Sri Sakthi hospital, Bapuji hospital and Navjeevan de-addiction centre located at Belagavi city during the study period.

Inclusion Criteria:

1. All admitted patients at five de addiction centres who were willing to participate will be enrolled.
2. Study participants aged between 18 to 60 years will be enrolled.

Exclusion criteria:

1. As per the record, registered patients with co morbidities like organic brain diseases and affective disorders.

2. Patients with any other mental disorder

Data collection:

Permission was obtained from the In charge of de-addiction centers. A written informed consent was obtained from the study participants before the interview, after explaining the nature of the study and building a good rapport and confidence amongst the participants which helped in extracting more information. A pretested and pre-designed questionnaire is used in evaluating the patients. Questionnaire covers the details regarding age, education, occupation, marital status, type of family, type of substance(s) used, duration of substance use, age of initiation for each substance, reasons for regular use of substance and relevant family history. In addition, qualitative in-depth interview is conducted among the selected study participants from each de-addiction centre by means of individual interview to find out different triggers leading to initiation of substance use.

Results:

The study shows that the most of the substance abuse patients in de addiction centers were in the age group between 26 to 40 (42.95 %). Most of them completed their education till degree (37.66 %), 25.99 percent of study participants hold a private employment and about 37.44 percent were from class III socio economic class. Most of them belong to semi urban area that is about 36.78 % and maximum number of participants was married (57.26%).

About 65 percent of the study participants had a family history of substance abuse. The most common used substance was alcohol (55.55%) and almost half of the study participants (48.01%) started using substances at the age between 20 to 29 years. The most common reason for using substances was peer pressure (38.55%) and the most common reason for admission to the de addiction centre was social reasons (43.39%).

More than half of the study participants had a previous history of hospitalization in a de addiction centre (57.70%) and more than half (55.6%) of the participants got admitted in de addiction centre by their family members. Alcohol intake was most commonly seen in participants who were married (89.6%) and the association between marital status of the study participants and alcohol intake was found to be statistically significant with a p value of 0.000096. Alcohol intake was higher in those participants who completed their education till primary school (97.8%). After doing chi square test, the association between educational status of the study participants and intake of alcohol was found to be statistically significant with a p value of 0.00001.

When the study participants were interviewed by in depth interview to know about the main triggers which lead to initiation of substance use, it has found that family background for addiction, peer pressure; relationship breakdown/ academic failures and physical environment were the triggers.

Conclusion:

The study shows that the most common used substance was alcohol and almost half of the study participants started using substances at the age between 20 to 29 years. The most common reason for admission to the de addiction centre was social reasons. Most of them completed their education till degree (37.66 %), 25.99 percent of study participants hold a private employment and about 37.44 percent were from class III socio economic class. The main triggers which lead to initiation of substance use were family background for addiction, peer pressure, relationship breakdown/ academic failures and physical environment.

Keywords: Substance abuse, psychoactive substances, de addiction, Drug dependence

TABLE OF CONTENTS

LIST OF TABLES

LIST OF CHARTS

INTRODUCTION

"If you can quit for a day, you can quit for a lifetime."

Benjamin Alire Saenz

(American poet and novelist)

Substance abuse is defined as ''Harmful/hazardous use of psychoactive substances or illicit drugs including alcohol''. The usage of drugs or substances can cause health and social problems for those who consume them, to the family members and to the community as well. Main substances used include tobacco, alcohol, cocaine, opiates, hallucinogens, amphetamines, prescription and over-the-counter drug abuse. [1]

Constant and continuous abuse of substances and drugs can cause dependency which is a group of cognitive, behavioural and physiological phenomena and usually involves a strong impulse to consume substance. [2]

The history of drug abuse is as ancient as evolution of human itself, but nowadays its problem has become a threat which is commonly affected by social, economic and certain psychosocial factors. [3]

Symptoms from substance abuse includes recurrent use of it which results in legal problems and can cause social or relationship problems, withdrawal symptoms, unsuccessful tries to halt the usage of drug, neglecting other aspects of life because of their substance use. [4]

Substance abuse is as ancient as human being himself on this globe. There are signs in many old civilizations that the mankind was using many of the plants and their saps to get high and to attain a phase of dreamy atmosphere. It is often said in

ancient epics that people offered intoxicant drinks to gods to worship them and to make them happy. [5]

History says India was a big producer of opium even back then before independence. The European traders like the Portuguese and the British found opium as an interesting substance and they gave wide propaganda for using opium as a pain killer. Soon they started exporting opium. Large number of people became its addicts as they started using it as a substance to get pleasure. The disastrous effects of the addiction became clear only later in their lives. [6]

Psycho active substance trade is the third largest business in modern globe, with a turnover of five hundred billion dollars next to petroleum and arms trade. Studies say that about one hundred and ninety million men around the world take one or the other substances. [7] In the modern world, there is no country that is free from the hazardous effects of substance addiction and trafficking. The governments all over the world are at a war with the drug lobbies. But its trafficking is still on the increase. India with its huge population faces this problem on a large scale. Even a small percentage of the population will mean that the actual number is very large. [8]

The psychological and physical effects of substance use can vary based on the particular substance involved but still the general effects of a substance use disorder involving any substance is always disastrous. The usage of alcohol can affect almost all organs like liver, brain, cardiovascular system etc and it is well known that tobacco abuse can lead to various cancers and it can also affects all organs. [9]

Nicotine, which is the most dangerous constituent in tobacco, is highly addictive and also it can cause and respiratory and cardiovascular diseases and it is

deadly for non-smokers as well. Second-hand smoke exposure causes adverse health problems and led to many million deaths annually. [10] Tobacco is often described as a gateway drug that can lead to the use and abuse of other substances. [11]

Substance use withdrawal symptoms make it difficult for individuals to quit. Unpleasant effects caused by it include anxiety, irritability, dizziness, craving, insomnia, drowsiness, headaches, digestive disturbances and depression. The addictive nature of it combined with the unpleasant withdrawal symptoms experienced when individuals try to quit, make these dependence such a chronic, relapsing disease. [12] If a mother uses substances or illicit drugs during pregnancy it can cause adverse effects on baby as well. [13]

There are multiple reasons like biological, psychological, and social risk factors that can predispose a person to abuse substances. It has a major impact on different levels like individuals, families, and communities and can cause Domestic violence, Child abuse, road traffic accidents and other domestic accidents, Physical fights and criminal activities, homicides and suicides. [14] Use of illicit drugs and substances can make driving a vehicle unsafe. Drivers who are using substances will cause problems for themselves and also for the passengers and others who share the road at risk. [15]

The problem caused by substance use is not just that of person or a community which he lives in and a drug, but it also involves interaction between the triad. [16] Drug dependence causes social cost and also economic burden through rising health related expenditure. Since it is a problem of public health concern, Public health activities detects the multi-factorial nature of it and give more importance on

addressing the of individual, social, psychological and economical factors which put up with it. [17]

Studies have proposed different explanations for why some persons become involved in substance abuse. Biological factors like family history of substance abuse, mainly alcohol and tobacco are one of the causes for initiation. Another explanation is that using substances can lead to affiliation with substance abusing peers, which, in turn, give them access to other drugs. [18] Peer pressure and popularity is associated with high risk for substance use especially adolescents. Studies have shown that the popularity within a group of friends increases with the use of different substances and because of this adolescents are more likely to be involved in such substance use. [19]

As per 2016, an estimated 246 million globally using substances and cannabis is the most common consumed substance which is followed by Opiods. Among these users, 27 million are suffering from substance use disorders. [20] An estimated 13% of individuals who injects drugs are living with HIV. It can also cause other blood borne disease like Hepatitis B and C. [21]

About 3.3 million deaths or 5.9 percent of all global deaths are due to alcohol consumption as of 2018. WHO reported that alcohol consumption can cause more than 200 diseases and also injury-related health conditions. In the age group 20 to 39 years, approximately 25 percent of the deaths are due to alcohol consumption. One fourth of male population drinks alcohol in India and neighboring countries and the usage among women is also increasing. [22]

Prevalence of alcohol use disorder and alcohol dependence is 3.9 and 2.9 respectively in WHO South East Asian region, and in India it is 4.9 and 3.8 percent respectively. [23]

According to National family health survey 4, in India, percentage of women and men age between 15 to49 who drink alcohol is 1.2 and 29 respectively. [24] According to Global adult tobacco survey (GATS), men who use any kind of tobacco are 44.5 percent, 38.9 in Urban and 48.0 in rural areas. Women who use any kind of tobacco are 6.8 percent in total, 4.4 in Urban and 8.1in rural areas. [25]

In Karnataka, according to NFHS 5 (2019-2020), women who use any kind of tobacco (%) are 4.6 in urban and 11.1 in rural and 8.5 in total and men who use any kind of tobacco (%) are 21.5 in urban 30.8 in rural and 27.1% in total. Women who consume alcohol (%) are 0.9 in urban 1 in rural and 0.9 in total. Men who consume alcohol (%) are 15.3 in urban 17.4 in rural and 16.5% in total. [26]

According to a study done in Belagavi to find out the prevalence of substance abuse in urban areas, the prevalence was 11.8%, with women having a prevalence of 17.9% and men 10.7%. The most common substance used was smokeless form of tobacco 78.87% followed by smoke form of tobacco 15.49%. [27]

Belagavi lies in the Northern part and is the largest district of Karnataka. Although substance use is believed to be a growing problem in Karnataka and especially in Belagavi district, limited studies have been conducted in this area in this context. It is not easy to do a study at community level mainly due to stigma related to the substance abuse. People will not to give information because of laws and legislations banning sale of illicit substances and also because of the risk of being criminally charged. Keeping this in mind, the present study aims to assess the profile of substance abusers admitted at different De addiction facilities in Belagavi, North Karnataka.

OBJECTIVES:

Primary objectives:

1. To study the profile of substance abuse among patients admitted at de-addiction centers in a city of North Karnataka.

2. To know the pattern of substance abuse.

Secondary objective:

1. To find out different triggers leading to substance-abuse by qualitative in depth interview.

REVIEW OF LITERATURE

The word "drug" is defined as "any substance that, when taken into the living organism, may modify one or more of its functions" (WHO). "Drug abuse" is defined as self administration of a drug for non-medical reasons, in quantities and frequencies which may impair an individual's ability to function effectively and which may result in social, physical, or emotional harm. "Drug dependence" is described as "a state, psychic and sometimes also physical, resulting from the interaction between a living organism and a drug, characterized by behavioral 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 sometimes to avoid the discomfort of its absence. [28]

In DSM-IV, 'psychoactive substance abuse' is defined as a 'maladaptive pattern of use indicated by continued use despite knowledge of having a persistent or recurrent social, occupational, psychological or physical problem that is caused or exacerbated by the use or by recurrent use in situations in which it is physically hazardous. [29]

ICD-10 acknowledges self administration of certain substances that may lead to mental and behavioral disorders. [30]

1. Alcohol
2. Cannabinoids
3. Tobacco
4. Opioids
5. Cocaine

6. Sedatives or hypnotics
7. Other stimulants including caffeine
8. Hallucinogens
9. Volatile solvents
10. Other psychoactive substances, and drugs from different classes used in combination.

Profile and pattern of substance abuse

A cross sectional study was conducted in 2020 in Srinagar, Kashmir to detect the patterns of Substance abuse at a Hospital, Srinagar. Out of the 135 study participants, most of them were belonging to the Muslim community (96.29%). About 68.14% were married and about 75.55% were from nuclear family. More than half of them were from urban areas (57.77%). Almost 77(57.03%) of the study participants were educated below the high school level. The most common substance used was tobacco (62.96%), followed by opioids (11.11%) and cannabis (11.11%). Psychiatric disorders (36.84%) were the most common co-morbidity associated with substance abuse. [31]

A record based retrospective study was conducted in 2020 in Imphal, Manipur, to estimate the socio-demographic details of substance abuse in patients at a de-addiction center. Study population consisted of 222 substance dependence patients from both sex in the age group of 18-60 years. Out of 222 study subjects, majority of them were males (95.5%) and the mean age of them was 35.5 years. One-third among the male treatment seekers (34.4%) belonging to the age group of 21-30 years and in females, 40% were belonging to 41-50 years of age. About 11.7 percent of male treatment seekers were illiterate or just could read and write. Maximum number of

study subjects (39.2%) was with an education up to secondary level or pre university level. One third of the patients (32.9%) were self-employed. Majority of the study participants were married (53.6%) and a very minimal number were belonging to the category of separation/widow/widower (5.4%). Among them, three of the men (1.4%) reported separation on account of substance abuse behavior and almost 68.5% were from joint family. Most common substance abused was alcohol (84%) followed by 61% tobacco, 17.5% opioids, 14.4% cannabinoids, 5.4% volatile solvents, and 5% of sedatives and hypnotics use. From the study they found out that 5.4% of them were injecting drug users and all of them were injecting intravenously and among those intravenous (IV) users 50% of them were sharing syringes. Out of the 222 subjects, 6.8% of them had a previous history seeking medical help. Among them, only 5.4% were previously admitted at one or more times. [32]

In 2019, a cross sectional study was done among patients with substance abuse disorders of Government Psychiatric Hospital, Kashmir, India to study the socio-demographic and clinical profile of substance abusers. Out of 300 participants, 98% of them who attended the hospital were males. About 40 % of the patients were married. Majority of participants (50.33%) presented in the age group of 21 to 30 years. About 10% were in the age group greater than 40 years. Maximum participants (66%) was from urban and semi urban areas. About 31 % of them were engaged with some kind of business and about 25% were doing some kind of job either government or private. Out of the 300 patients only 13% had previous history of hospitalization or treatment for substance abuse and the other 87% had come to the facility for the first time. Family history for the psychiatric disorders was present in 12% of the patients, family history of substance abuse of the same nature or other substances found out in 9.67% and history of some kind of medical disorder especially hypertension was also

evident among them. Cannabis was consumed by 17.67 % of the participants and alcohol by 15 %. Other substances included antihistamines, opiod derivatives, Benzodiazepines. Main reason for getting treatment in the de addiction centre was social reasons (41%) followed by co-morbidities (31%). Predominant Reason for initiation of Substance use was Peer pressure (35.67%) followed by curiosity (23.67%). [33]

According to a record based study conducted among 966 participants in 2019 in Punjab, to evaluate the socio-demographic profile and pattern of substance abuse among patients attending a Drug de addiction centre, all of them were males and natives of Punjab state itself. More than half (53.21%) of the participants were married. About 47.20% were self-employed. Heroin was abused by 67.60% of the study subjects. More than half of the abusers (51.66%) were abusing by injection. Only about 17.90% of the participants were dropped out of facility. About 61.80% were admitted to facility by relatives and 29.61% got admitted by social workers. [34]

In 2018, a study was conducted in Ahmadabad city, to determine the pattern of substance use among patients attending rehabilitation center. A total of 100 substance abusers interviewed for the study. Majority (46%) of the study participants were between 31 to 45 years. Almost 98% were men as compared to women (2%). 29% abusers were illiterate and 28% were graduates. Out of all, 48% of them were doing skilled work and about 20% were without proper employment. About 47% of them were married and rest of the participants were single (unmarried/ separated/ divorced). Most of them belonged to joint families (92%) and 55% was from upper and lower middle socio economic classes. Alcohol was the most commonly used (64%), followed by tobacco (20%). Marijuana (12%) and opium (4%) was used very rarely.

Among the tobacco users, 40% of them were using Gutkha and rest was consuming Bidi or Cigarette. In this study, the most common trigger for initiating the substance use was social reasons (33%) followed by stress (26%). Influence of peer group (22%) was the next common cause. About 19% of them initiated the usage of drugs mainly because of the oddity and appeal to the newer environment. The main source for the provision of different kinds of substances was friends (62%) and 36% get it by themselves. Most of the study samples were admitted to the rehabilitation facility by their family member (60%) followed by friends (34%) and the remaining 6% came by themselves. Majority (84%) of the study participants felt some self improvement after getting admitted to the rehabilitation centre. [35]

According to a similar cross sectional study done in the year of 2017 in Kolkata city to study profile of substance abusers admitted in rehabilitation centers, among 295 study participants 92.2 % were male. Majority of them are between the age group of 19 to 30 years (45%). Among the study participants 45.6% male and 47.8% females are married. Out of 295 participants 55.8% male and 78.3% female are in nuclear family. About 6.25% of the female substance abusers were divorced. Most of the addicts were doing job in a private sector (28.7% male and 47.8% female).They mostly belonged to the income group of Rs. 1000 to 5000 with a median income of 8000. The most common substance used was alcohol (49.6%). Most common route of intake of substance was oral. [36]

A study was done in Punjab in the year of 2017 to study about the socio demographic profile of abusers. Out of 300 participants, 93.33% were males. Average age of patients was 29 years. Opioid was the most commonly used substance (59.67%). This was followed by alcohol (29%). Better sexual performance was the

main reason for starting substance abuse in 25.33% participants while for another 25%, peer pressure was the trigger. [37]

According to a cross sectional study which was done in 2017 in a hospital in Sylhet, Bangladesh, out of 155 participants 101(65.2%) were below the age of 30 years. The mean age of the participants was 25.9 years (SD 7.61). Among all patients 147 (94.8%) were male and 8 (5.2%) were female. Out of 155 patients 71.6% were referred by their family and friends. Out of all respondents 69.1% had history of initiation of abuse in between age of 11 to 20 years. Out of 155 patients 96 (61.8%) abused more than one substances and 32.8% abused multiple substances. Among them 34.2% patients had been suffering from medical disorders. Most of the cases came from urban localities (71.6%), which may be a reflection of the increase in urbanization in this country. [38]

In 2016, a cross sectional study done in Bagalkot city, Karnataka. Out of 50 subjects participated in the study; the mean age at presentation was 37 years. Minimum age of the study participants was 20 years and maximum age was 65 years. Almost sixty eight percent of the study participants had of a positive family history of substance abuse. Most of them had early onset alcohol dependence. Peer influence followed by experimentation was the most common cause (60%) for initiation of alcohol. Most of the subjects have not sought any previous help to the de addiction centre. 48.7% participants were brought by their family members for de addiction and withdrawal symptoms were the most common reason for admission in de addiction centre. [39]

A hospital based cross sectional study was conducted among 571 participants in 2016 in a de-addiction centre situated at Thrissur, Kerala to assess the demographic profile of alcohol use disorder patients admitted. Out of them, more than half (52.42%) who were seeking de-addiction belonged to middle age group with the mean age of 42 years. Among them, only 10.4% had studied up to graduation and above. The majority of the subjects had either studied up to high school or below (84.4%). The educational status of patients was comparable with the pattern among general population. In this study, 32.9% of the patients were skilled workers which include drivers, carpenters, mechanics, masons and similar workers who are having a high risk of substance abuse when comparing to other jobs. Most of the participants take alcohol as a way to minimize the pain resulting from physical stress and injury caused by long hour of manual labor. [40]

A study was conducted in the year of 2015 in GMERS Dharpur-Patan, Gujarat. Among 206 participants, (67%) participants were between 25 to 45 years of age and 69% were belonging to socio economic class IV and V. All the study subjects were male. Among them 14.6% of participants were illiterate. About 49.5% of them had family history of substance abuse. Peer pressure was the reason for initiating substance use in 81.6%. About 128 (62.1%) participants were abusing to alcohol. [3]

Another hospital based study was done in Uttarakhand, in 2015. Out of the 125 persons participated in the study, most of the study subjects commenced consuming substances from 10 to 19 years. Nicotine (89.6%) was the most commonly used substance and is followed by substances like cannabis (48.8%), codeine (48%) and alcohol (36.8%). The most common trigger for initiating substance abuse was

Peer pressure (72.8%). Those who are using benzodiazepines and alcohol, the age of onset was higher (>19 years). [41]

In 2015, a study was conducted in Veer Chandra Singh Garhwali Government Institute, Uttarakhand among 100 participants. Almost 95% were males and remaining 5% were females. About 87% were married and 62% were from nuclear families. Seventy nine percent of participants were having an education up to secondary school and above and only 6% were illiterate. The most common reason said by participants was Peer pressure (75%) while 12 percent of the participants said stress as the main culprit for initiation and usage of substances. Other triggers were prescription drugs (9%) and "curiosity" (3%). [42]

A cohort study was conducted in 2015 in Abu Dhabi, UAE to describe pattern of substance use disorder among patients of National Rehabilitation Centre. Out of 250 male participants taken from the NRC, smoking and marital status was significant factors associated with substance abuse disorder. Majority (95.6%) of them was smokers while doing the study and only 19.7 % were smokers in the comparison group. Most of the participants were coming under the normal BMI range. About 56.8% had a positive family history for drug addiction. Out of 250 participants, 210 patients (84.4 %) were poly substance abusers and 40 (15.6 %) them were using single substance. Majority of patients had normal BMI (37.2%). About 30% were overweight and 27.6 percent were obese. Only 5.2 percent were belonging to underweight. [43]

In 2014, a study was done in Srinagar, Garhwali region of Uttarakhand, India. Among the 219 study subjects, the mean age was 33.9 ± 10.9 years. Maximum number of them 44.3% belongs to the age group of 21–30 years. One hundred and

eight (68.5%) subjects were married. About 108 (49.3%) were graduates or studied above degree and 53 (24.2%) whose education was up to high school and intermediate. Maximum (24.2%) study participants were student. Only 23 (10.5%) subjects were illiterate. About 19.6% and 18.3% of the subjects were servicemen and driver respectively and 15.5% was doing business and 14.6% were daily wagers. Alcohol (74.9%) was the most common current substance use followed by tobacco (45.7%), cannabis (14.6%), opium (8.6%), and sedative-hypnotics (5.5%). The main reason for starting substance use was that friends using substance (89.5%). Peer pressure, negative mood, family history of substance use and "for fun" were other reasons for commencing substance abuse and were found in 26.0% ,43.4%, 42.5%, 32.0% respectively. [44]

In Amritsar city of Punjab, a study was done in 2014 among the patients of Swami Vivekananda De-addiction Centre mainly to recognize the emerging trends of substance abuse**.** About 10,568 patients in the centre were screened for urine toxicology. Among them, 92.87% were found positive for morphine and out of morphine addict patients, 54.74% patients were heroin abusers in one or the other form. Remaining 7.1% of the patients were abusing other substances like alcohol, cannabis, sedatives, cocaine, tobacco, amphetamines & and also inhalants. They used Heroin in the form of snorting, sniffing or even in injectable form. The dose of heroin used by the patients varied from person to person but on an average most of them abuses heroin from 500 mg up to 2 grams on daily basis. [45]

In Nigeria, a hospital based study was conducted in 2014 among 148 male participants, to determine the pattern of psychoactive substance use and also to assess the extent of its involvement among inhabitants at Kiru de-addiction Centre, Kano in

the North Central Region of Nigeria. The mean age of the participants was 23 years. Lifetime prevalence of psychoactive substance use was 47.4% and the prevalence of current use of more than one substance was 54.6%. Out of them, a total of 58.9% had primary school and below level of education, 14.9% were school drop outs. While considering the employment status, 29.1% were unemployed while 65.9% of them were doing work in mines. Most of the participants were taking ready available substances while the substances like Cocaine and Heroin were used more participants than alcohol. Uses of inhalants were also on the verge. While taking interview most of them said the reasons for substance abuse because of its ready availability, to get high, enhance the performances and also some unidentified personal problems. [46]

Another cross sectional study which was conducted in Ankara, Turkey in 2013 to determine the socio-demographic features of substance abusers in an emergency department of the hospital. Out of 134 participants, 93.3% (125) were male. 28(20.9%) of the patients had a history of chronic disease like hypertension and diabetes. Among them, 23 (17.2%) patients had a history of substance abuse. Most common cause for initiating the substance use was peer pressure and the most common route was oral route followed by intravenous. Marijuana was the most common substance used which is followed by Heroine. They were also using Phenytoin, Pregabalin, Flurbiprofen, Risperidone, Colchicines, Quetiapine, Alprazolam, Acetilsalycilic acid and Valproate as an abusive drug. Almost 76.1 % of the participants were using substances once daily, 14.9% uses once weekly, 3.7% uses once monthly and 0.7% uses yearly once. [47]

In Ahmedabad, a similar study was done in the year of 2013amon g 101 participants. Substance use was mostly present in between 25-45 years of age (66.3%) and among patients belonging to class IV and V SES (69.0%) according to modified B G Prasad classification. Only males got admitted for de-addiction and majority (80.6%) of them were married. Commonly abused substances were Alcohol (62.1%), Cannabis (13.6%) and Alprazolam (2.9%). Friends who abuses substances were the most common trigger for commencing substance abuse (81.6%). Alcohol usage among participants was associated significantly with family history of alcohol use. [48]

At PGI-MS, Rohtak, Haryana, a study was conducted in 2013, to study prevalence and pattern of substance dependence. Out of 521 participants, almost 99% participants were male. The substance abuse problem was found to be higher in rural areas (59.30%) and while considering the age group, it was mostly seen among the age between 26-45 years (63.91%). Majority of interviewed participants were married (74.85%) and presently living in a joint family (51.63%). Most of the participants were having up to secondary level or pre university level of formal education (37.42%) and are now self-employed (42.99%). The most common substance used for addiction was alcohol alone (33.78%) followed by alcohol along with tobacco use (22.84%). [49]

Similar study was performed in 2013 among patients in a drug de-addiction centre at the Police Hospital in Srinagar to study the socio-demographic and clinical profile of patients attending the centre. Out of 198 patients, the mean age of participants was 26 years and over half (56%) were from the lower-middle social class according to modified B G Prasad classification. The most common substances abused was opioids and cannabis and age of initiation was 11–20 years (76.8%). Peer

pressure was the major reason for initiating substance abuse. The most common reasons cited for seeking treatment were social (97.4%) and medical (89.3%). Most of the patients were accompanied by their family members (34.3%) or referred by private practitioners (27.2%), whereas 21.2% of patients reported on their own and 10.6% were brought by police.[50]

In the year of 2012, a cross sectional study was done among patients admitted at 3 different De-addiction centers in Mangalore city, India. All 83 participants recruited were males. Alcohol was most commonly abused substance (95.2%). Majority of the subjects (56.6%) said peer pressure was the main trigger for starting substance abuse. Positive family history of substance abuse was found in 63%. Stress related to work was the most common reason (54.2%) for regular substance abuse. More than two third (79.5%) got admitted by their relatives or friends while 19.3% had came on their own. [51]

A retrospective study was conducted in the year of 2011 in Abu dhabi, United Arab Emirates to inspect the data from the National rehabilitation centre to explore the trends of substance use disorder in the Arab people over the last 10 years and also to see the status of the treatment at the National rehabilitation centre. Out of 591 patients examined, all of them were males between the age group 16 - 66 years, 60% were unemployed, and 51% were educated below secondary school level and 42 percent were married. Among them, 77 percent were admitted voluntarily. Forty one percent were admitted due to alcohol usage, 20% for prescription drugs and 16% for heroin. Family history report says 155 (30%) of them had a history of alcohol abuse and 84 (16%) were from a family with drug abuse history. Younger patients preferred

Heroin while alcohol was the favorite among the participants aged 37-66 years. There was a drastic increase in Poly-substance use since 2009. [52]

A descriptive questionnaire based study was conducted among 500 participants in 2010 in Karachi, Pakistan. The aim of the study was to the describe and practices of substance use in the city of beliefs profile, socio economic Karachi. The most common substance used was cocaine (19.0%) and crack-cocaine (15.0%), followed by amphetamines (11.0%). Main psychological factors responsible for drug use were problems with parental or marital relations or relationship break ups (45.0%). Substances were used as an escape from stressful life (28.0%) or failures (18.2%). Nasal inhalation was the most frequent route of administration of drugs (31.6%). About 28.0% smoking was the route, oral (19.6%) and parenteral routes (8.0%) among others. In 38.2%, the source of money for buying substance was by the money through employment. About 29.6% used pocket money, 25.8% borrowed money and about 6.4% stolen the money for buying substances. [53]

In Kenya, a qualitative study was done in 2019 to find out the perceptions and the magnitude of substance abuse among University students in the coastal region of Kenya. Most commonly used substances were alcohol, marijuana, cigarettes and miraa (khat).The most common factors predisposing them to abuse drugs were, easy accessibility to drugs, availability of funds, excess freedom, peer pressure, male gender, stress, not being active in religious activities, poor parenting and the African culture that uphold substances such as alcohol as an acceptable social drink. The study subjects noted that alcohol and drug abuse can cause various negative effects and can affect the performance in studies and other things, risky sexual behavior, and other mental disturbances. [54]

Another qualitative study was done in 2019 in Iran to find out the factors associated with the first time use of substances experience among addicts in undergoing recovery. The study is done by conducting Interviews with 40 individuals at various addiction centers in the city of Kerman. The study Participants reported four factors. The first factor was family which includes addiction of any of the family member, positive attitude of family towards substance use, family's belief that drugs are curative, and a family member selling drugs. The next factor was friends and this include having addict friends at school, military service, marital life, and blindly following friend's opinion towards addiction. The next factor was partner which can be addiction of a spouse and their compulsions and the forth factor was stress. Three factors of family, friends, and stress were common for both males and females, interestingly; partner's addiction was only said by females as the main reason for their maiden drug use experience. [55]

In the year of 2014, another qualitative study was conducted in Iran for explaining the factors which led to initiation of substance use in young people. They got four major themes like paternal role, maternal role, family function and discipline methods. The maternal role consists of mainly incompetent maternity, and absence of maternity. Sometimes, they did not laid blame on parents directly, but still they are saying that they should not have used drugs if the support and care from family was good. [56]

METHODOLOGY

Source of data:

For primary and secondary objectives:

Patients admitted at five different de-addiction centres namely Hope recovery centre, Sahara de addiction centre, Sri Sakthi hospital, Bapuji hospital and Navjeevan de-addiction centre located at Belagavi city, North Karnataka during the study period.

Study design:

A facility based Cross - Sectional study

Study period:

Study was conducted over a period of 12 months from1st January 2020 to 31st December 2020.

Sample size:

Assuming the prevalence of alcohol abusers as 21.4 from a previous study, sample size was calculated using the formula $n=4pq/r^2$ where n is the sample size, p is the prevalence of substance abuse and q= 100-p. It came to 454 by taking 99% confidence interval and absolute error(r) 5. [57]

Sampling method

Consecutive sampling method was used. Here we selected every subjects admitted in different de addiction centers meeting the inclusion criteria until the required sample size is achieved.

Inclusion criteria:

1. All admitted patients at five de addiction centres who were willing to participate will be enrolled.

2. Study participants aged between 18 to 60 years will be enrolled.

Exclusion criteria:

1. As per the record, registered patients with co morbidities like organic brain diseases and affective disorders.

2. Patients with any other mental disorder

Method of data collection

Permission was obtained from the concerned government authorities (regional office of The Deputy drugs controller) and from the managing directors of the de-addiction centers. A written informed consent was taken from the study participants before the interview, after explaining the nature of the study and building a good rapport and confidence amongst the participants which helped in extracting more information. Informed consent was also translated into local languages like Kannada and Marathi. A pilot study was conducted among 20 subjects before starting the study for validity. A pretested and pre-designed questionnaire was used in evaluating the patients. Questionnaire consisted of three parts. First was regarding the socio-demographic details which covered the details regarding age, religion, education, occupation, type of family, socio-economic class according to modified B G Prasad classification, family history of substance abuse etc. Second part covered type of

substance(s) used, duration of substance use, age of initiation for each substance, reasons for regular use of substance, reason for admission in de addiction center etc.

Third part covered the examination part which includes general physical examination, Blood Pressure and Body mass index (BMI). In addition, qualitative in depth interview was conducted among the selected study participants from each de-addiction centre to find out different triggers leading to initiation of substance use. In depth interview was conducted by providing adequate privacy to the participants in order to get unbiased information. 22 in depth interviews were conducted by purposive sampling. Interviews were stopped once the point of saturation has reached. Responses of each participant were recorded and then noted down manually. No investigations or interventions are being conducted on patients.

Data Analysis:

Data collected using the questionnaire were coded and entered in to Microsoft Excel. Data management was done in Microsoft Excel and analysed using SPSS (statistical package for social science) software version 25. Descriptive data is expressed in percentages and frequencies. Tables and charts are prepared. Chi square test is used for finding the association between categorical variables. Qualitative study responses were Categorised into different themes and interpreted.

Definition of Study variables

Type of family [58]

1. Nuclear: The family consisting of married couple along with their dependent children.
2. Joint: It consists of number of married couples and their children who live in the same household
3. Three generation family: household where there are representatives of three generations and here young couples are unable to find separate housing accommodation and continue to live with their parents and have their own children
4. Problem family: here the standards of life are generally far below the accepted minimum and parents are unable to meet the physical and emotional needs of their children and the home life is utterly unsatisfactory.
5. Broken family: A broken family is one where the parents have separated, or where death has occurred of one or both the parents.

Educational Qualification:

1. Illiterate: those who cannot read or write with understanding in any language.
2. Primary: those who had completed one to five years of schooling.
3. Secondary: those who had completed six to ten years of schooling.
4. PUC: those who had completed education up to PUC.
5. Degree: those who had completed any graduation degree course or any post graduation course.

Occupation [59]

The source of their income, as self reported by the beneficiaries, who would earn his or her living by means of it.

1. Farmer: owns his land or on a contract basis or who works at any place including agricultural fields on a daily wage basis.
2. Labourer- who works on any place including agricultural fields on a daily wage base
3. Business/self employed: a person engaged in commercial or industrial business either an owner or executive
4. Government employee: beneficiary who is a permanent or contract worker in any government agencies.
5. Private employee: beneficiary who is a permanent or contract worker in any private companies or factories or NGOs.
6. Retired/pensioner: beneficiary who currently is not working and is receiving pension from any means
7. Unemployed: beneficiary who currently is not working or not receiving monitory benefits of any kind
8. Home maker: beneficiary who looks after the home, children and currently not working in any kind

Socioeconomic class [60]

Modified B. G. Prasad's classification was used for this. This scale is evolved in 1961. It was introduced considering the base of Consumer Price Index (CPI) for 1960 as 100 modified in 1982 and 2001 by introducing linking factors to convert CPI (1982).

All India average Consumer Price index (for Industrial workers) for January 2020 (on Base 2001=100) = 330.

Multiplication factor = Current index value (330)/Base index value in 2001 (100) = 3.3.

Therefore, New income value = multiplication factor × old income value × 4.63 × 4.93.

Here 4.63 and 4.93 are the linking factors put forwarded by the Labour Bureau of India

So, after substituting the values, the new scale is,

Socioeconomic status: class	**B. G. Prasad's classification of 1961 (monthly income in rupees)**	**Revised B. G. Prasad's classification for 2020 (monthly income in rupees)**
I	100 and above	7533 and above
II	50 to 99	3766-7532
III	30 to 49	2260-3765
IV	15 to 29	130-2259
V	Below 15	1129 and Below

Body Mass Index: [61]

Calculation of BMI = weight in kg/(Height in m)^2

BMI calculate was categorised as per WHO criteria for Asian population

Category	Body Mass Index
Underweight	< 18.5 Kg/m2
Normal	18.5 – 23.0 Kg/m2
Overweight	23.0 – 27.5 Kg/m2
Obese	>27.5 Kg/m2

ETHICAL CLEARANCE

Ethical clearance was obtained from Institutional Ethical Committee, J.N. medical college, KAHER, Belagavi. The ethical committee clearance letter has been attached.

RESULTS

Our study was a cross-sectional study done among 454 subjects admitted at five different de-addiction centres in Belagavi city namely Hope recovery centre, Sahara de addiction centre, Sri Sakthi hospital, Bapuji hospital and Navjeevan de-addiction centre located at Belagavi city, North Karnataka during the study period from January to December 2020.

The data collected was tabulated and analyzed under the following sections:

I-Socio demographic profile of study participants

II- Pattern of substance abuse

III- Clinical profile of study participants

I-Socio demographic profile of study participants

Table 1: Distribution of study participants according to their age (in years) (n=454)

Age group (in years)	Number	Percentage
18-25	95	20.92
26-40	195	42.95
41-60	164	36.13

In the present study, the mean age of the participants was 35.72±10.17. The distribution of study participants was maximum in age group between 26 to 40 years. About 42.95 % were belonging to this age group and about 36.13 % and 20.92% were among the age group between 41 to 60 and 18 to 25 years respectively.

Figure 1: Distribution of the study participants according to their age (in years) (n=454)

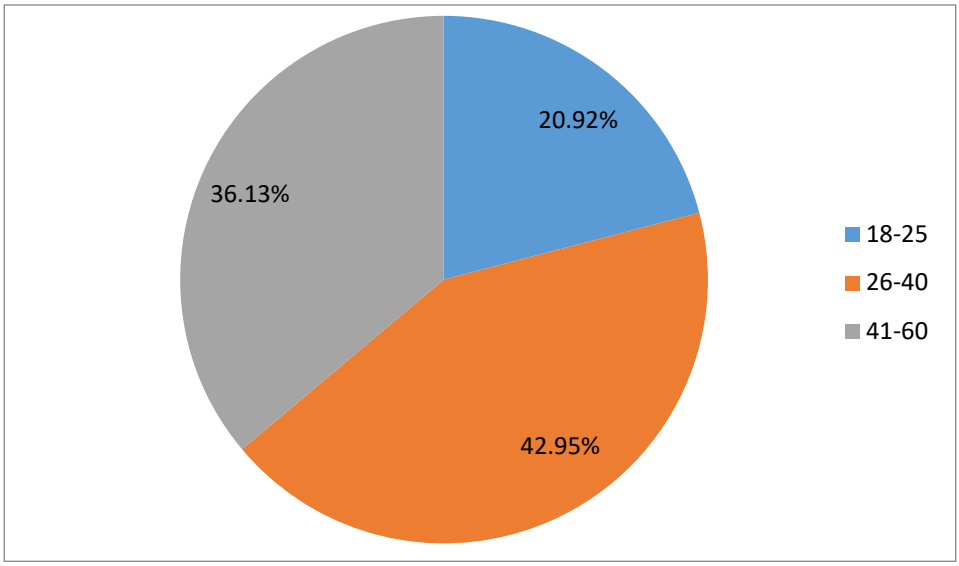


Table 2: Distribution of study participants according to their sex (n=454)

Sex	Number	Percentage
Male	454	100
Female	0	0

All the study participants were male (100 percent). No female participants were interviewed.

Table 3: Distribution of participants according to their area of residence (n=454)

Residence	Number	Percentage
Urban	162	35.69
Semi urban	167	36.78
Rural	125	27.53

Among the study participants, most of them belong to semi urban area that is about 36.78 % whereas 35.69% is from urban and 27.53% from the rural areas.

Figure 2: Distribution of participants according to their area of residence (n=454)

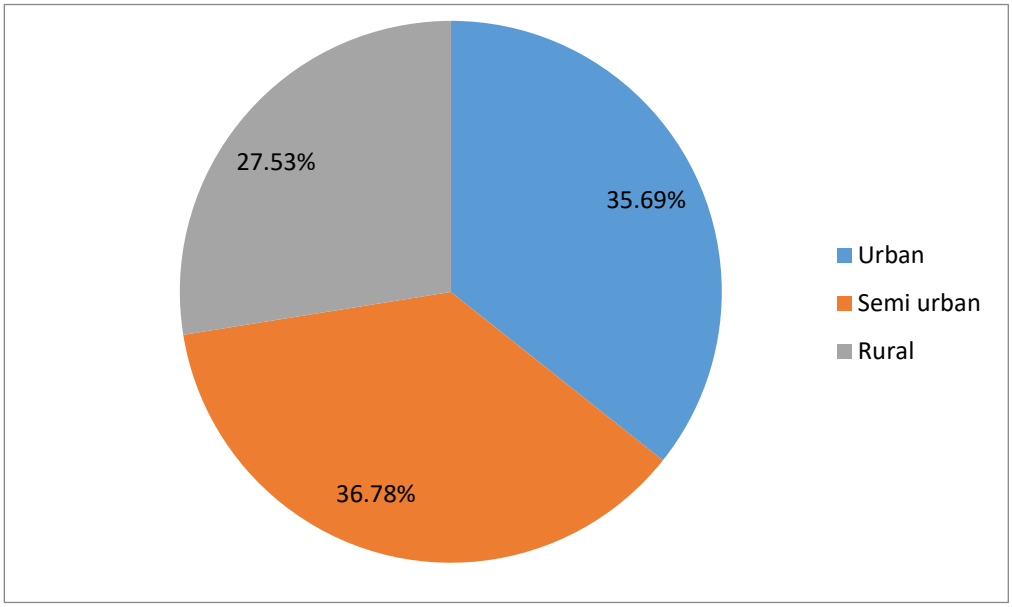


Table 4: Distribution of participants according to their marital status (n=454)

Marital status	Number	Percentage
Single	90	19.82
Married	260	57.26
Divorced	57	12.55
Widow/Widower	47	10.35

Most of them (57.26 percent) were married. About 19.82 percent were single and 12.55 percent were divorced. 10.35% of them were widowers.

Figure 3 Distribution of participants according to their marital status (n=454)

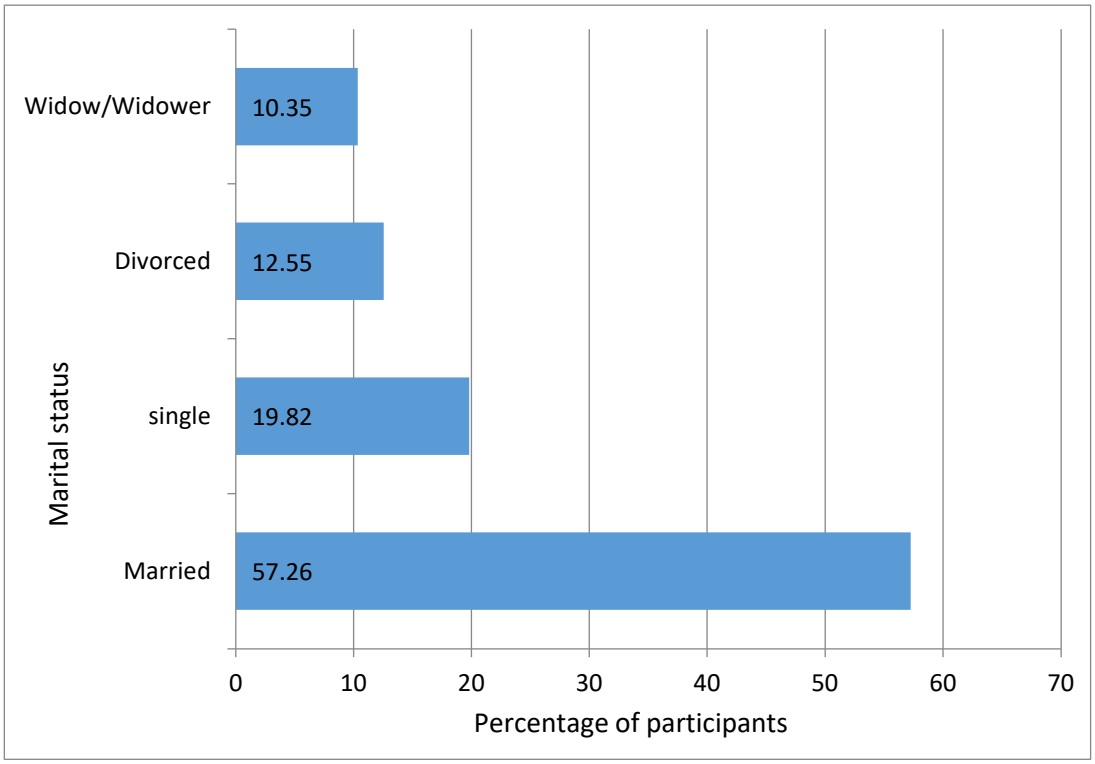


Table 5: Distribution of participants according to their religion (n=454)

Religion	Number	Percentage
Hindu	347	76.43
Muslim	63	13.88
Christian	44	9.69
Others	0	0

Almost two third (76.43 percent) of the study participants were Hindus. Among others, 13.88 percent were Muslims and 9.69 were Christians.

Figure 4 Distribution of participants according to their religion (n=454)

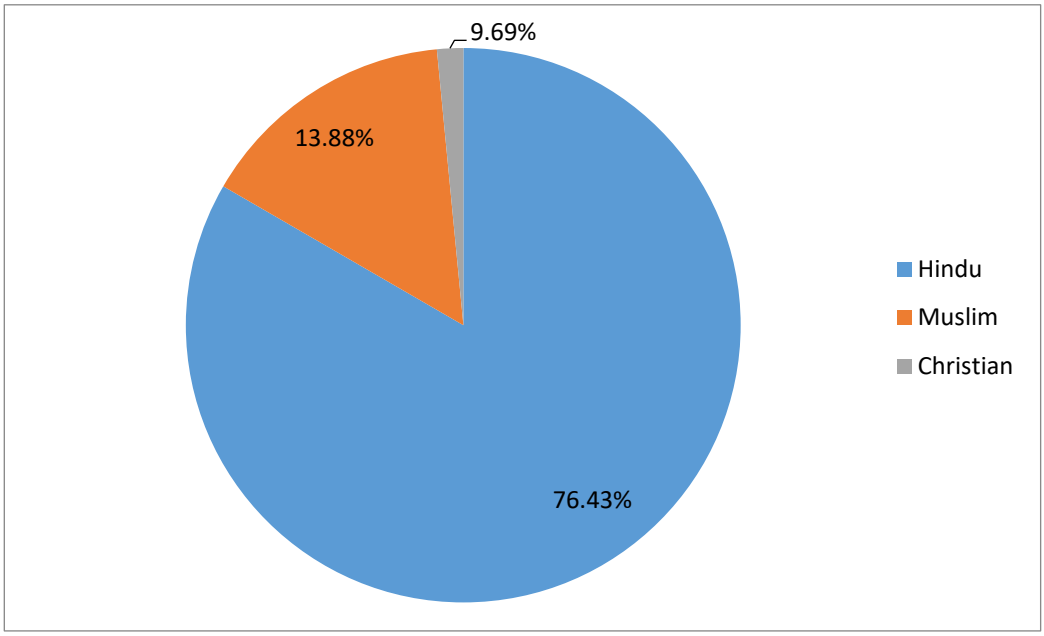


Table 6: Distribution of participants according to religious category (n=454)

Category	Number	Percentage
Scheduled caste	88	19.39
Scheduled tribe	31	6.89
OBC	97	21.36
Others(general)	238	52.42

Out of the 454 participants, 238 (52.42%) were belonging to general category. Among others, 21.42 percent were OBC, 19.39 were belonging to scheduled caste and 6.89 were belonging to scheduled tribes.

Figure 5: Distribution of participants according to religious category (n=454)

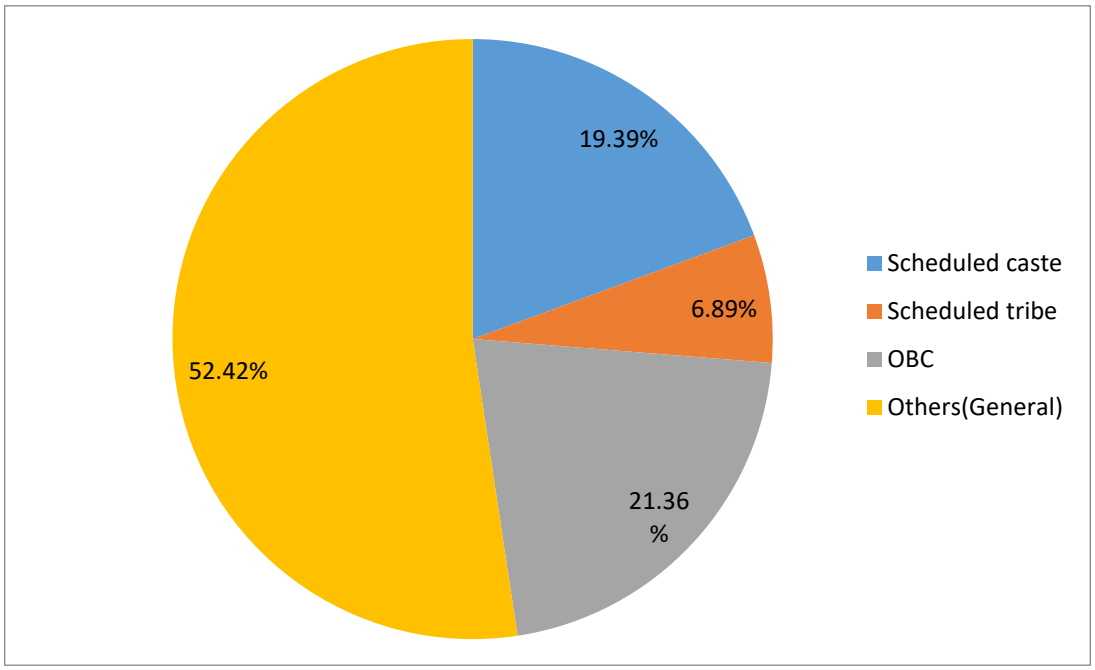


Table 7: Distribution of participants according to type of family (n=454)

Type of family	Number	Percentage
Nuclear family	142	31.27
Three generation family	33	7.2
Joint family	181	39.87
Problem family	41	9.11
Broken family	57	12.55

In our study, 39.27 percent of the study participants were from joint family whereas 31.27 percent were from nuclear family. Among others, 12.55 percent were from broken families, 9.11 were from problem families. Only 7.2 percent were belonging to three generation family.

Figure 6: Distribution of participants according to type of family (n=454)

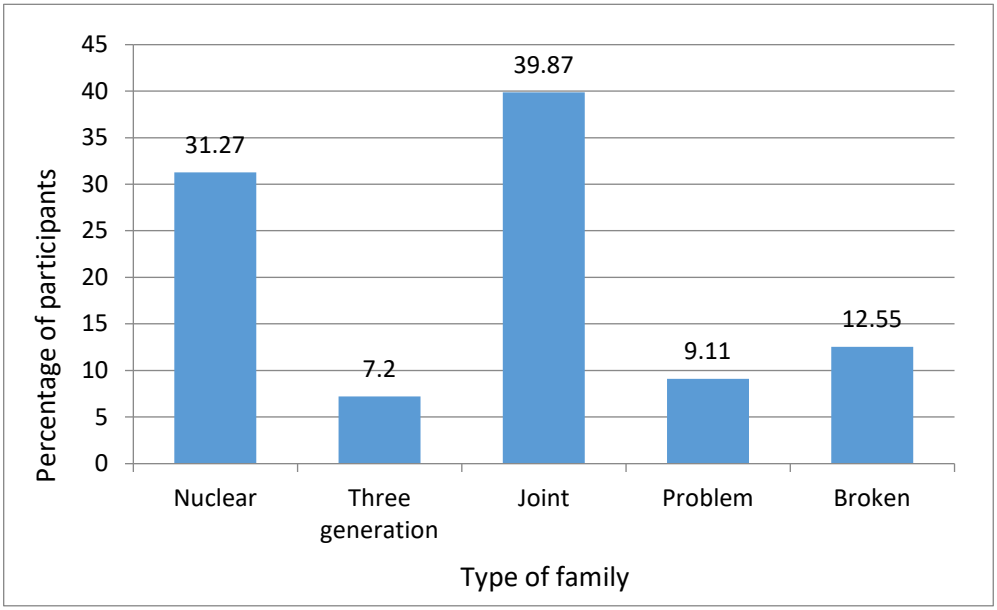


Table 8: Distribution of participants according to educational status (n=454)

Education	Number	Percentage
Illiterate	35	7.7
Primary	92	20.26
Secondary	67	14.75
Pre university	89	19.6
Degree	171	37.66

Most of the study participants were graduates (37.66 %). About one fifth (20.26%) of the study participants completed primary school, 19.6% completed Pre University and 14.75 % did their education till secondary school level. Only 7.7 percent participants did not go to school.

Figure 7: Distribution of participants according to educational status (n=454)

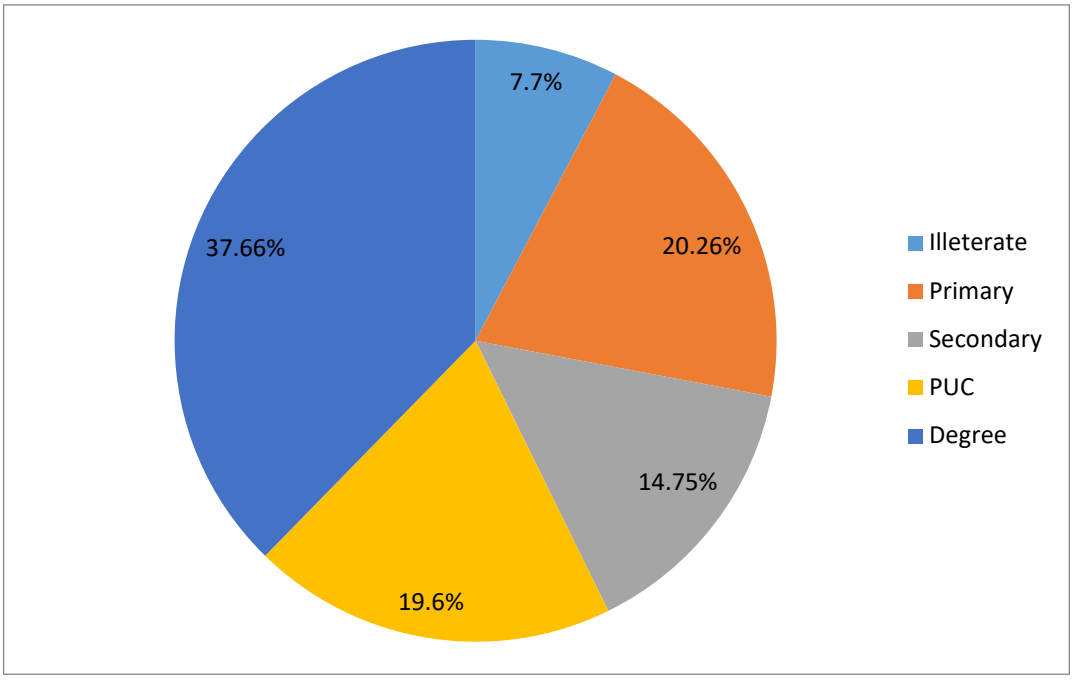


Table 9: Distribution of participants according to occupation (n=454)

Occupation	Number	Percentage
Farmer	52	11.45
Laborer	51	11.23
Self employed	95	20.92
Govt. employee	25	5.5
Private employee	118	25.99
Retired/pensioner	35	7.7
Unemployed	51	11.23
Home maker	27	5.95

In the present study, 25.99 percent of study participants hold a private employment, 20.92 percent were self employed, 11.45 percent were in to farming, 11.33 percent were laborers and another 11.23 percent were unemployed. Among others, about 7.7 percent were retired, 5.95 percent were home makers and 5.5 percent were government employees.

Figure 8: Distribution of participants according to occupation (n=454)

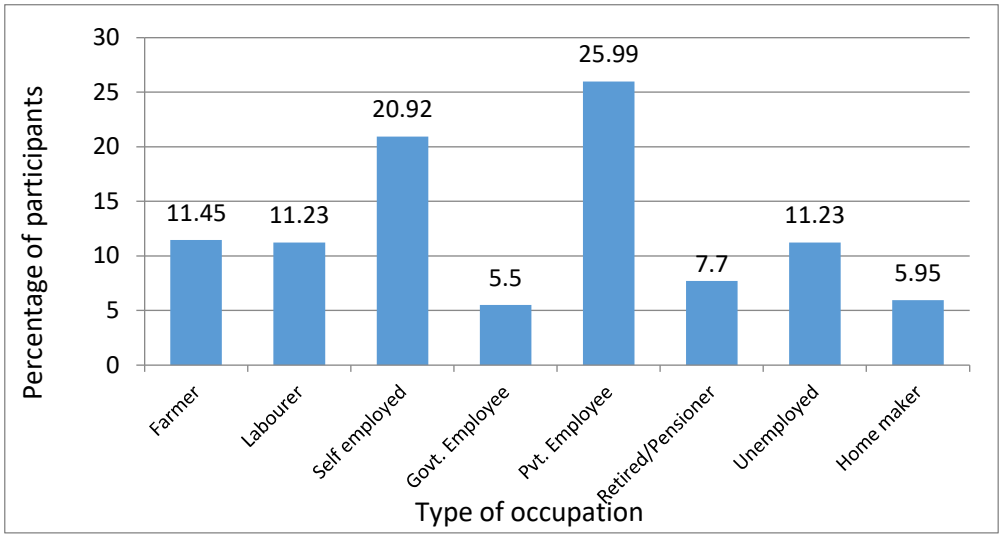


Table 10: Distribution of the study participants according to socio economic status (by modified BG Prasad classification) (n=454)

Socio economic class (modified BG Prasad)	Number	Percentage
Class I	60	13.21
Class II	97	21.36
Class III	170	37.44
Class IV	82	18.06
Class V	45	9.91

The present study shows that most number of participants (37.44 %) was belonging to the class III by Modified B. G. Prasad's classification. About 21.36 percent were from class II, 18.06 percent from class IV, 13.21 percent from class I and 9.91 percent from class V. The majority belongs to Class III and II of Modified BG Prasad classification. It is due to the fact that most of them own a private job or self employed where they are earning more.

Figure 9: Distribution of the study participants according to socio economic status (by modified B G Prasad) (n=454)

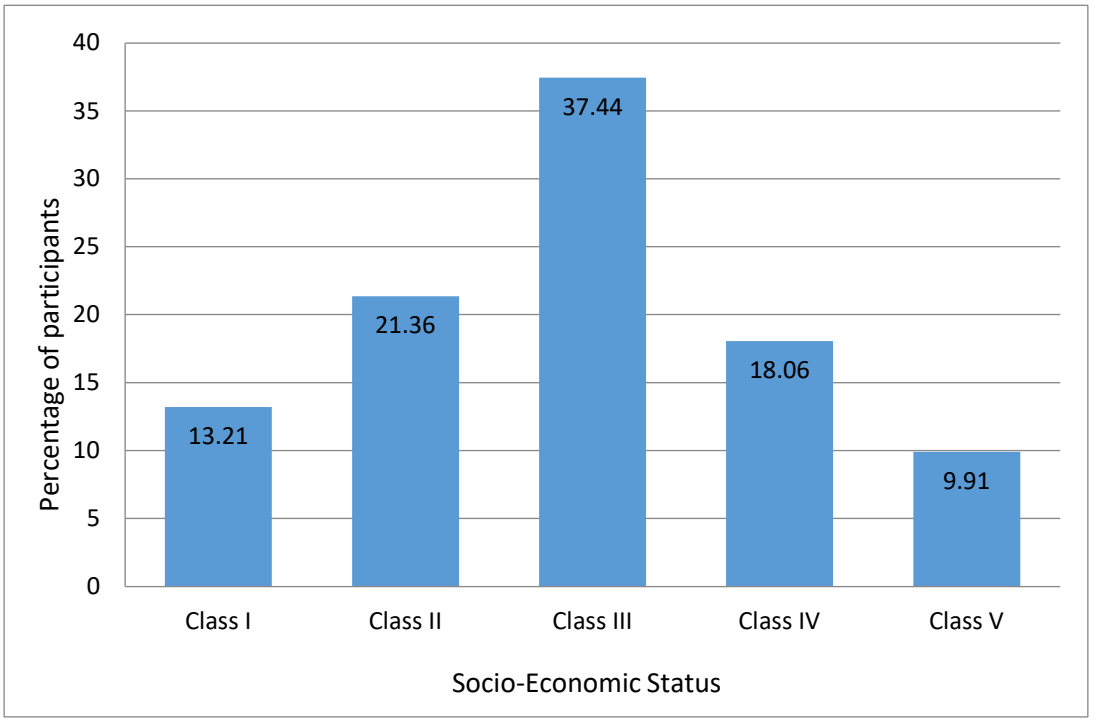
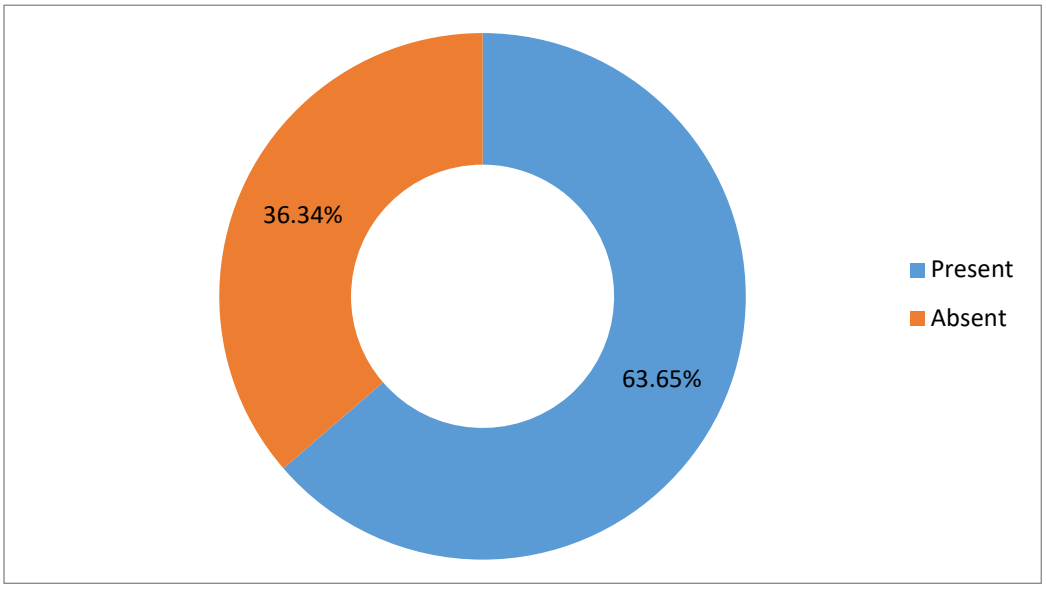


Table 11: Distribution of study participants according to family history of substance abuse (n=454)

Family history of substance abuse	Number	Percentage
Yes	289	63.65
No	165	36.35

About 63.65 percent of the study participants had a family history of substance abuse, whereas the rest of them (36.35) did not have a family history of the same.

Figure 10 Distribution of study participants according to family history of substance abuse (n=454)



II- Pattern of substance abuse

Table 12: Distribution of study participants according to types of substance abused (n=454)

Type of substance	Number	Percentage
Alcohol	252	55.5
Tobacco	7	1.54
Cannabis	22	4.84
Prescribed drugs	32	7.04
Inhalants	10	2.2
Alcohol and tobacco	104	22.91
Alcohol and cannabis	4	0.88
Cannabis and tobacco	5	1.1
Alcohol, tobacco and cannabis	18	4.0

In the present study, alcohol was the most common substance abused. About 55.55% of the study variables were abusing alcohol alone and 22.91 % were abusing alcohol and tobacco together. The next common substance abused was prescribed drugs (7.04 %) followed by cannabis 4.84 %. About 4% were abusing alcohol, tobacco and cannabis together and 2.2 % were using inhalants. Among others, only 2.54 % were abusing tobacco alone, 1.15 was abusing tobacco and cannabis together. Alcohol and Cannabis together was used by 0.88 % of the variables.

Figure 11 Distribution of participants according to types of substance abused (n=454)

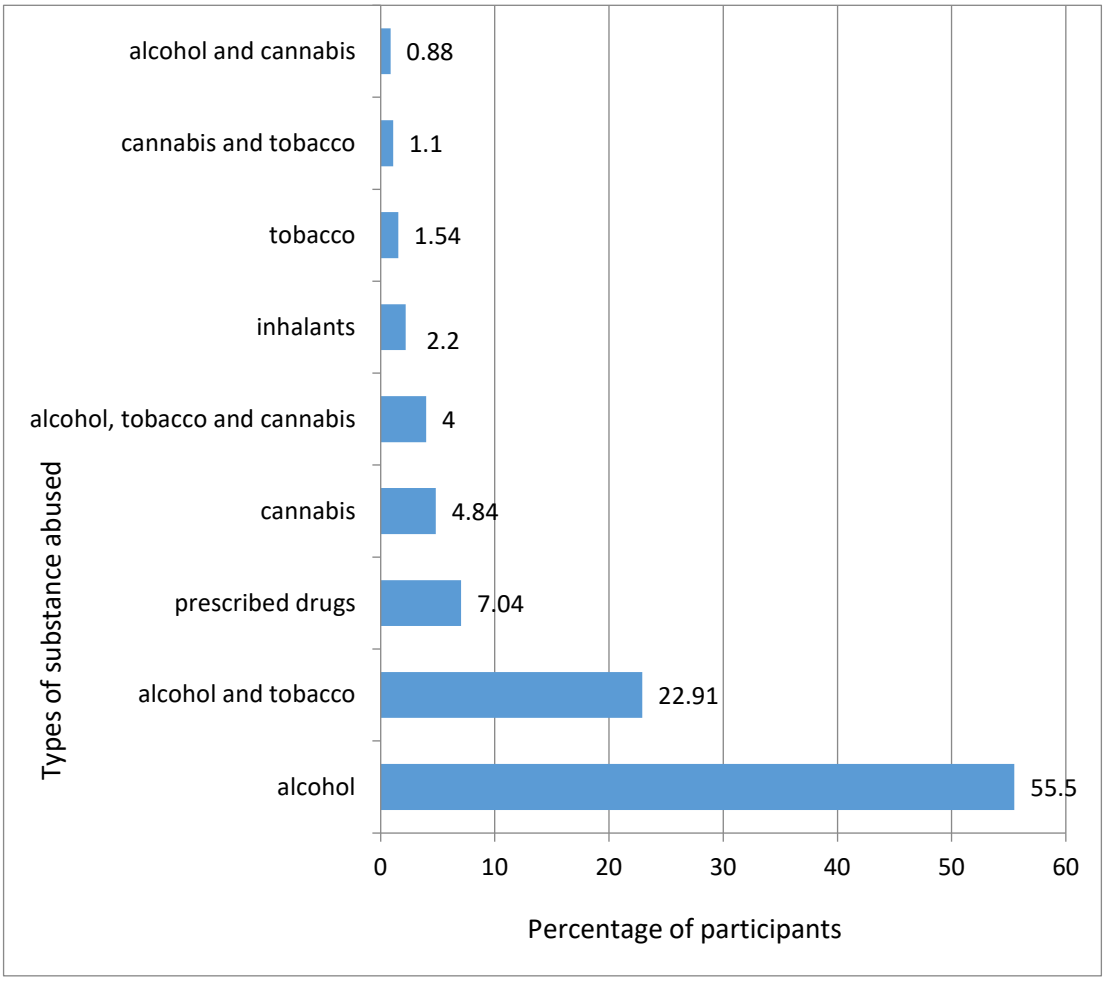


Table 13: Distribution of study participants according to route of substance intake (n=454)

Route of substance intake	Number	Percentage
Oral	283	62.33
Smoking	34	7.5
Parenteral	18	3.96
Oral and smoking	107	23.56
Oral and parenteral	2	0.45
Others	10	2.2

In the present study, oral (62.33%) was the most common route of intake. Oral with smoking was the next common route (23.565) since the next common substances used was alcohol with tobacco together, followed by smoking alone (7.55%) which can be either tobacco or cannabis. Next common route of intake was parenteral (3.96 %). Other routes like snorting and inhalation was used by 2.2% of the participants. The least common route was oral and parenteral together (0.45%).

Figure 12 Distribution of participants according to route of substance intake (n=454)

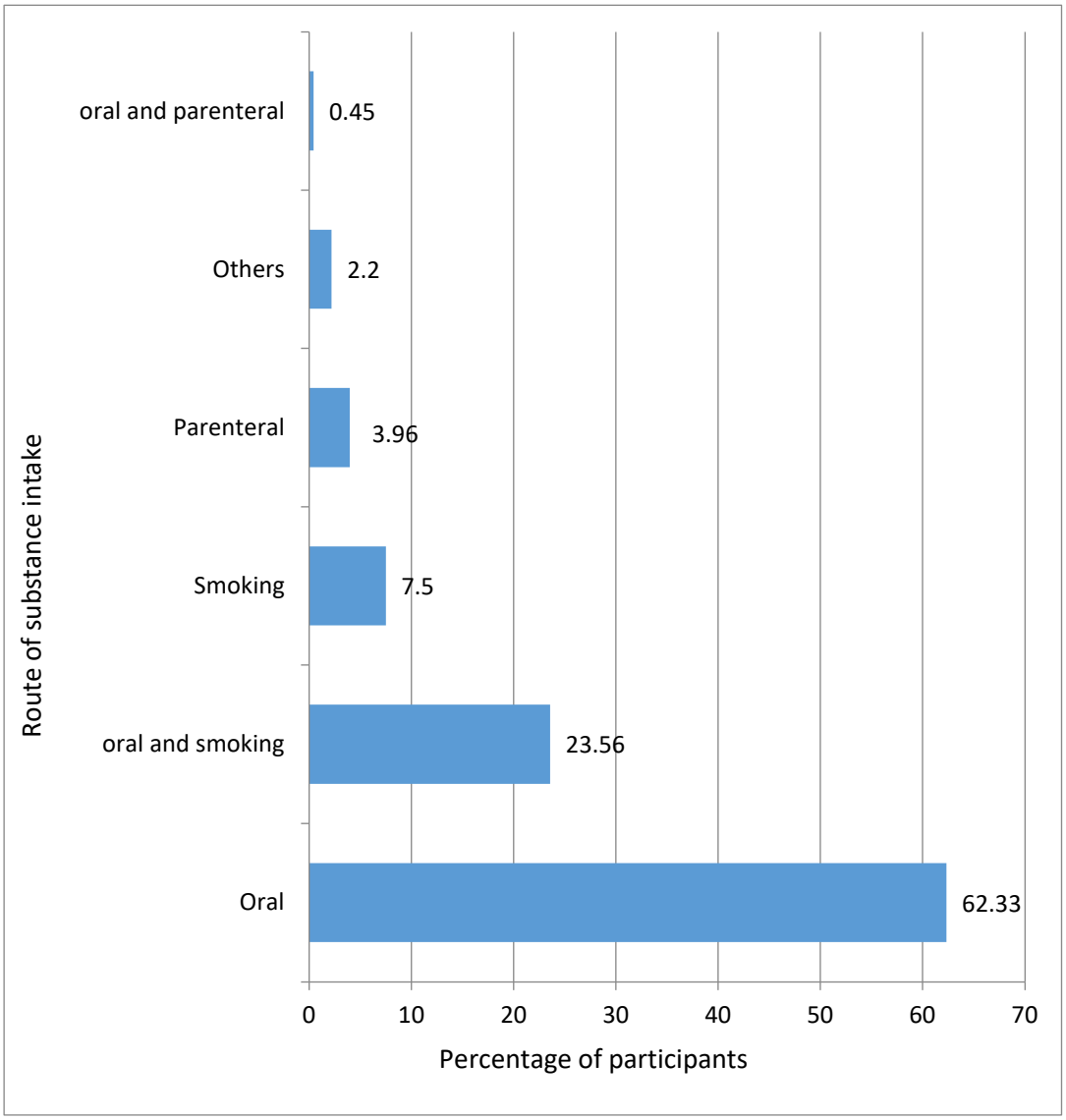


Table 14: Distribution of study participants according to frequency of use of substances (n=454)

Frequency of use	Number	Percentage
Once a day	131	28.8
Multiple times a day	207	45.6
Alternative days	45	9.91
When needed	71	15.65

In the present study, almost half of the study participants were consuming substance multiple times a day (45.6%) as most of them were consuming alcohol and tobacco. About 28.8% of the participants were taking substances once a day and 15.65% when needed. A very small percentage of samples (9.91%) were taking substances on every alternate day.

Figure 13: Distribution of study participants according to frequency of use of substances (n=454)

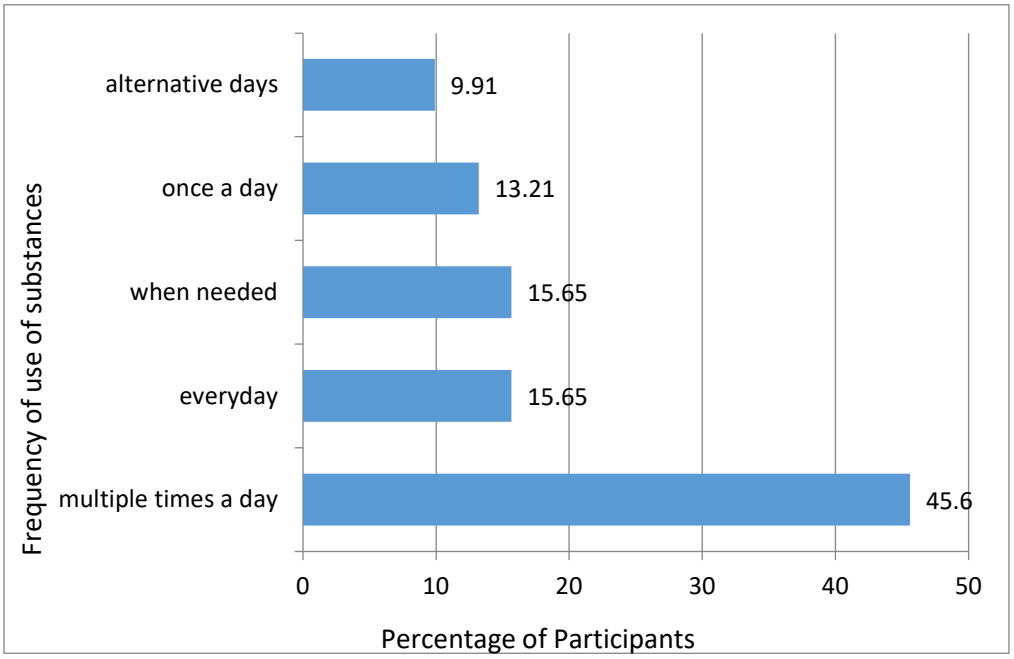


Table 15: Distribution of study participants according to age of initiation of substance abuse (in years) (n=454)

Age of initiation (in years)	Number	Percentage
<20	143	31.50
20-29	218	48.01
30-39	62	13.65
40-49	15	3.3
>50	16	3.54

Almost half of the study participants (48.01%) started abusing substances at the age between 20 to 29 years. Next common age of initiation is less than 20 years (31.50) followed by the age between 30 to 39 years. Very less number of them started taking substances late, 3.54 % started after 50 years and 3.3% started between 40 to 49 years.

Figure 14: Distribution of study participants according to age of initiation of substance abuse (in years) (n=454)

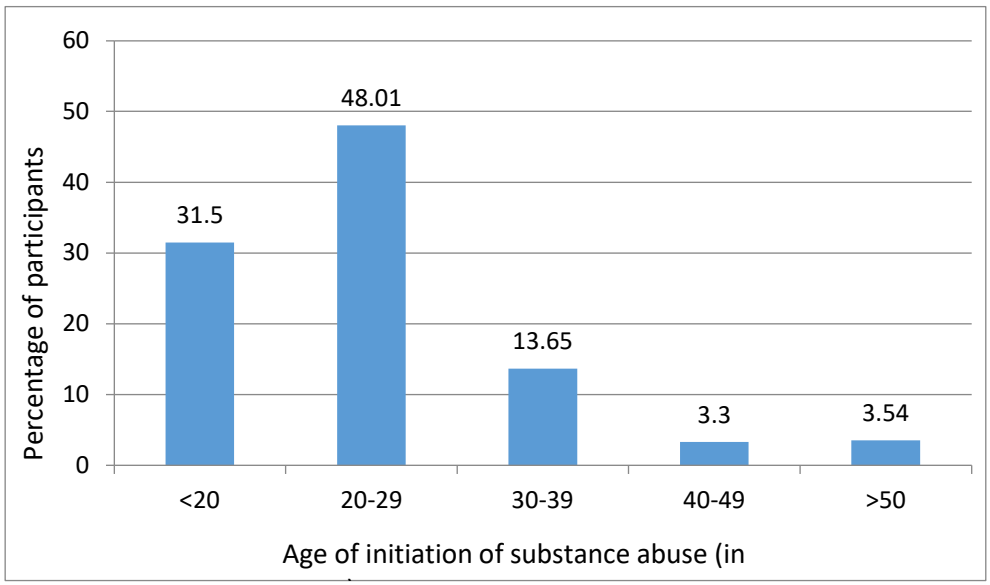


Table 16: Distribution of participants according to duration of substance abuse (in years) (n=454)

Duration of substance abuse (in years)	Number	Percentage
<5 years	154	33.92
<10 years	129	28.41
10-20 years	143	31.49
>20 years	28	6.18

In the our study, duration of substance abuse was less than 5 years in 33.92 % of the study participants and 31.49% were abusing substances for 10 to 20 years. More than one fourth (28.41 %) of them were abusing substances for a duration of more than 10 years and 6.18% of them for a duration of greater than 20 years.

Figure 15: Distribution of study participants according to duration of substance abuse (in years) (n=454)

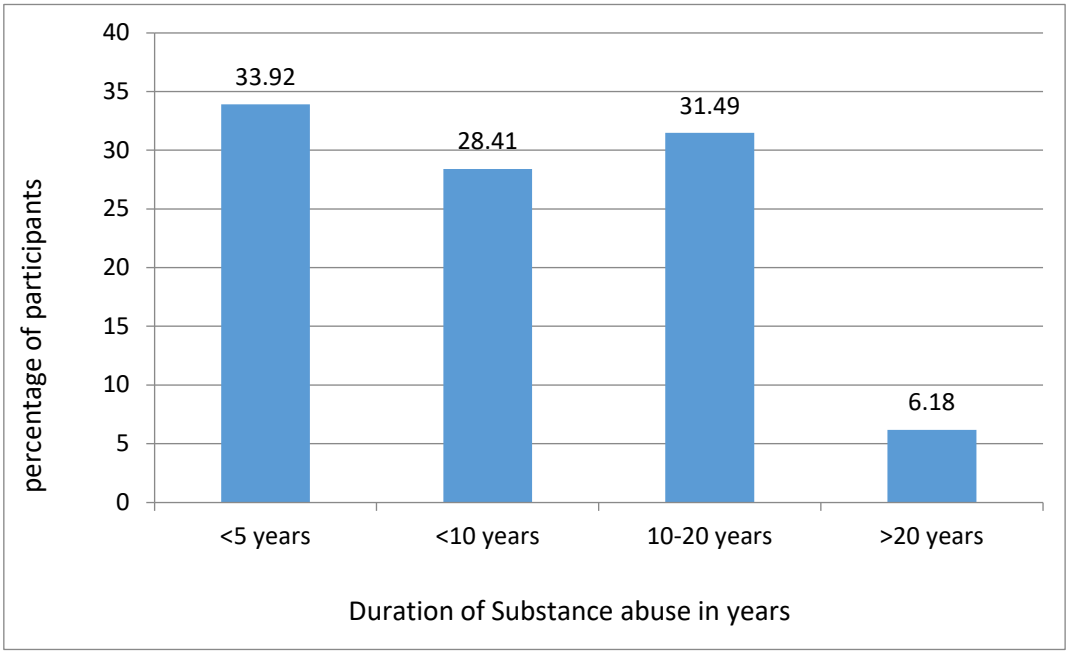


Table 17: Distribution of study participants according to reason for starting and continuing substance abuse (n=454)

Reason for starting and continuing use	Number	Percentage
Peer pressure	175	38.55
Curiosity	137	30.17
Family related stress	90	19.82
Role models	52	11.46

Most common reason for starting the substance abuse and continuing was peer pressure (38.55%) followed by curiosity towards the substance (30.17%). Other reasons were family related stress (19.8%) and role models (11.46%).

Figure 16: Distribution of participants according to reason for initiation and continuing substance abuse (n=454)

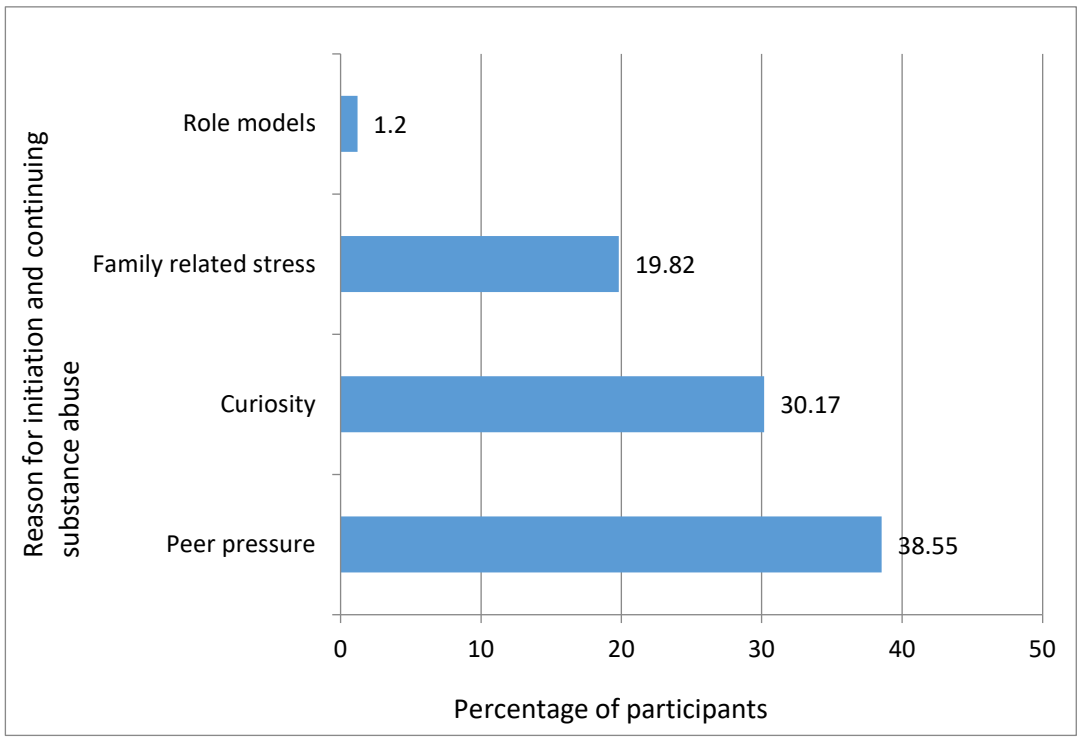


Table 18: Distribution of participants according to reason for regular use of substances (n=454)

Reason for regular use	Number	Percentage
Stress	84	18.50
Withdrawal	90	19.82
Easy accessibility	157	34.58
Enjoyment	123	27.1

In this study, major reason for regular abuse of substance was Easy accessibility (34.58%) followed by enjoyment and withdrawal which was 27.1 % and 19.82 % respectively. About 18.50 of them, the reason for regular use was stress.

Figure 17: Distribution of participants according to reason for regular use of substances (n=454)

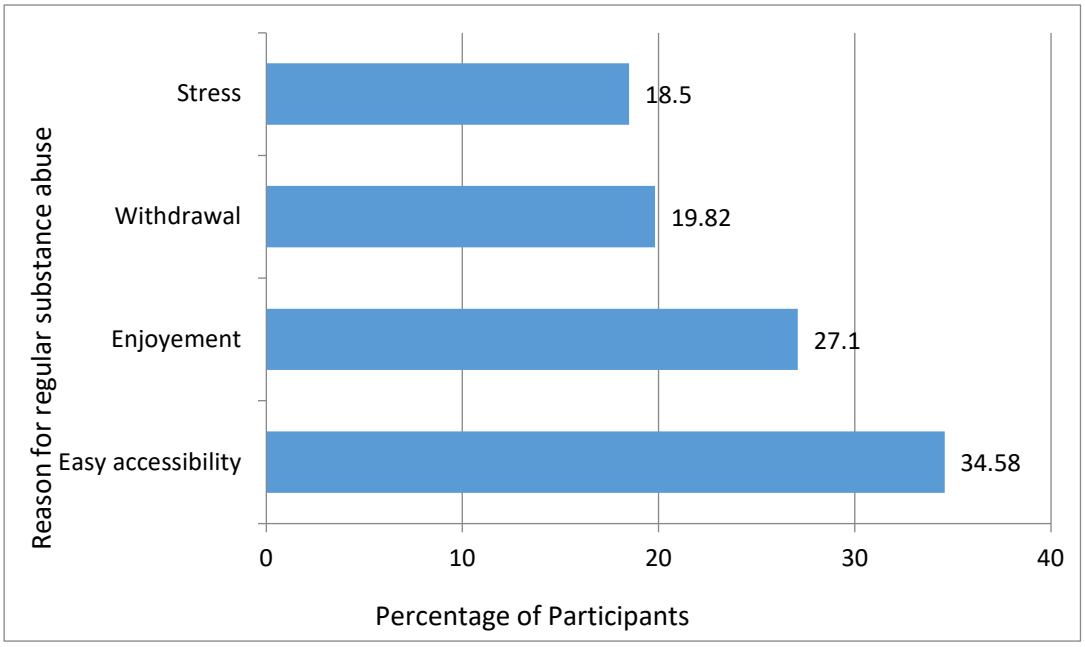


Table 19: Distribution of study participants according to reason for realization of substance abuse (n=454)

Reason for realization of use	Number	Percentage
Continuous carving	175	38.55
Difficulty in doing work	124	27.31
Self realization	73	16.08
Medical problems	32	7.04
Made aware by friends	50	11.06

Most common reason for realization of substance abuse was continuous carving (38.55%) followed by difficulty in doing work (27.31%). Other reasons include self realization (16.08%), made aware by friends (11.06%) and because of medical problems associated with it (7.04%).

Figure 18: Distribution of study participants according to reason for realization of substance abuse (n=454)

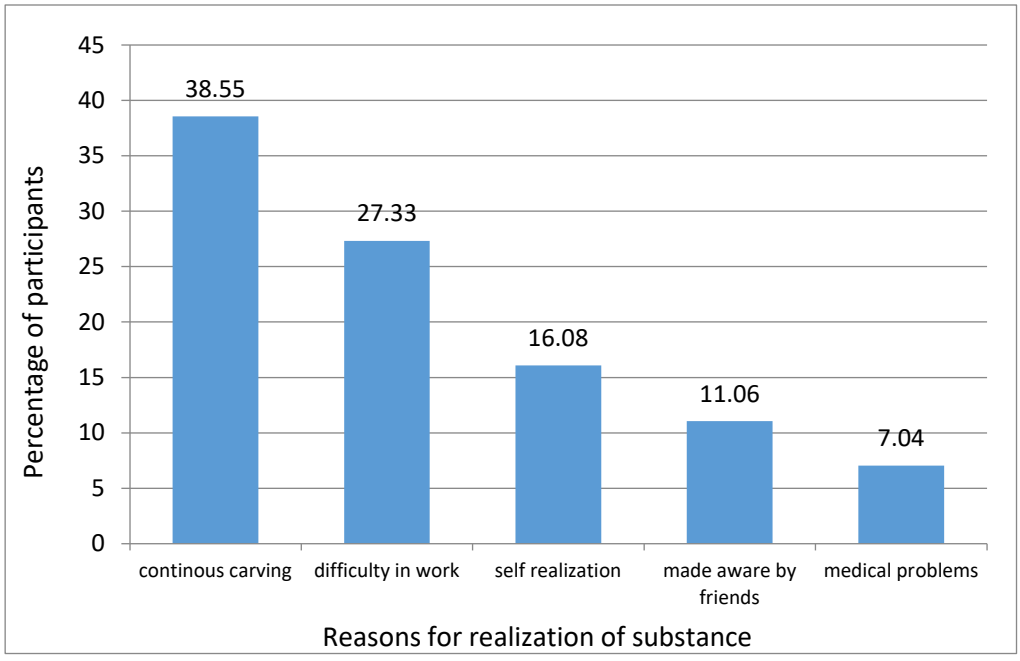


Table 20: Distribution of participants according to reason for admission in de addiction center (n=454)

Reason for admission	Number	Percentage
Social	197	43.39
Co morbidities	103	22.68
Withdrawal	117	25.77
Legal	37	8.16

In this study, the most common reason for admission to the de addiction centre was social reasons (43.39%) followed by admissions due to the withdrawals caused by the substance especially alcohol (25.77%). The next common reason for admission was because of co morbidities associated with abuse or addiction (22.68%). A very small percentage of study participants got admitted due to legal reasons (8.16%).

Figure 19: Distribution of participants according to the reason for admission in de addiction center (n=454)

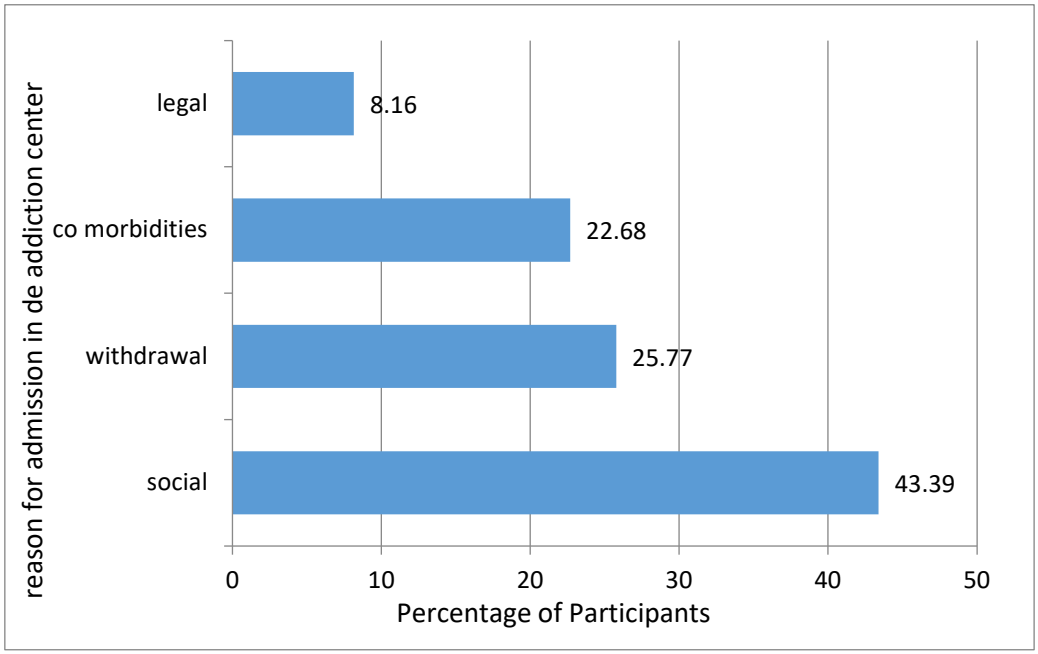


Table 21: Distribution of participants according to previous history of admission in de addiction centre (n=454)

Previous history of admission in de addiction centre	Number	Percentage
Yes	262	57.70
No	192	42.30

More than half of the study participants had a previous history of admission in a de addiction centre (57.70%) and 42.30 % of them are getting admitted for the first time.

Figure 20: Distribution of participants according to previous history of admission in de addiction centers (n=454)

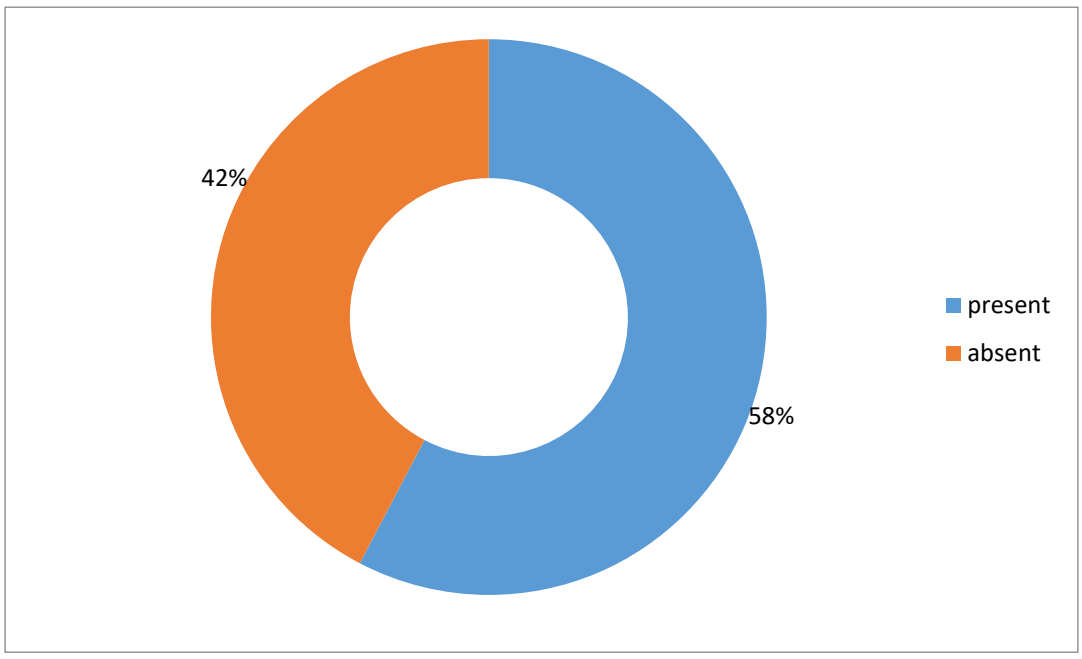


Table 22: Distribution of participants according to their source of expenditure for substance abuse (n=454)

source of expenditure for substance abuse	Number	Percentage
Employment	187	41.18
Pocket money	110	24.22
Borrowed	144	31.71
Stolen	13	2.89

Most of the study participants got the money for buying substances by employment (41.18%). About 31.71% of them borrowed money and 24.22% used their pocket money for buying substances. Only 2.89% had their source of expenditure for substance abuse from stealing.

Figure 21: Distribution of participants according to their source of expenditure for substance abuse (n=454)

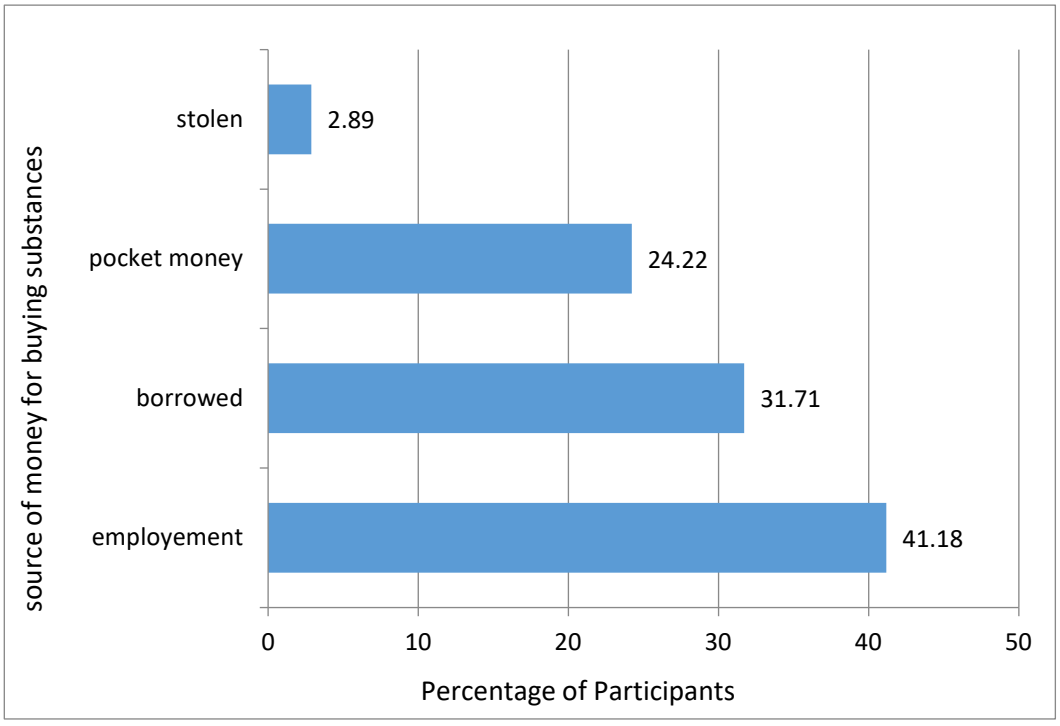


Table 23: Distribution of study participants according to who brought them to the de addiction centre (n=454)

Brought in centre by	Number	Percentage
Self	98	21.58
Family	257	55.6
Friends	66	14.53
Police	37	8.02

More than half (55.6%) of the participants got admitted in de addiction centre by their family members and about 21.58% got self admitted. About 14.53% got admitted by their friends and 8.02 by the police for some legal reasons.

Figure 22: Distribution of participants according to who brought them to the de addiction centre (n=454)

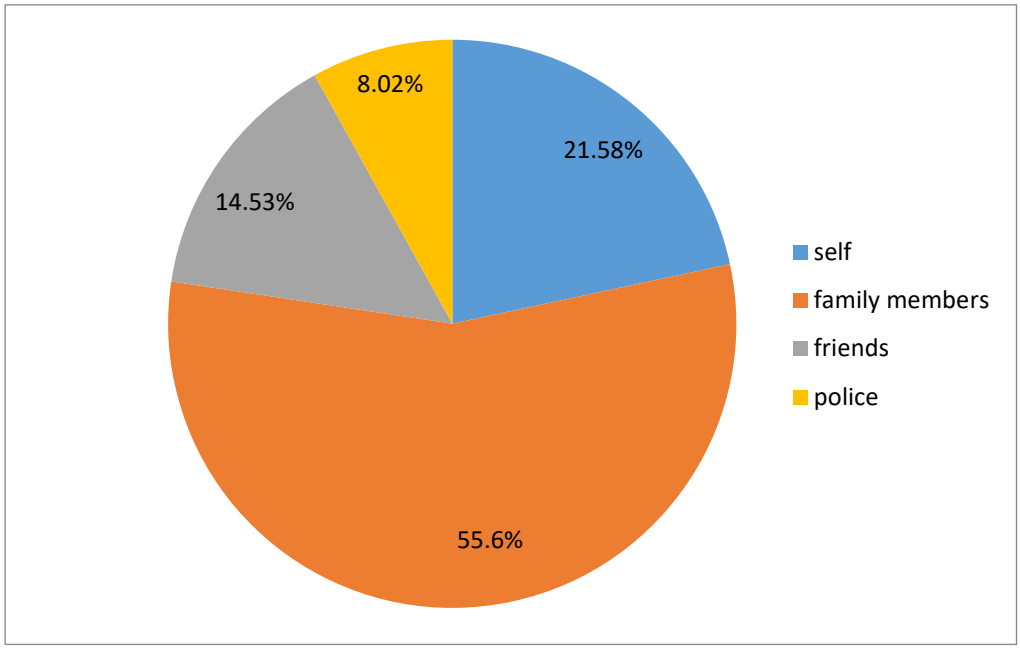


Table 24: Distribution of participants according to presence of any history of chronic illness (n=454)

Any chronic illness	Number	Percentage
Yes	205	45.15
No	249	54.85

Our study shows that more than half (54.85%) of the study participants had history of chronic medical illness like hypertension, diabetes and 45.155 had no history of such chronic problems.

Figure 23: Distribution of participants according to presence of any chronic illness (n=454)

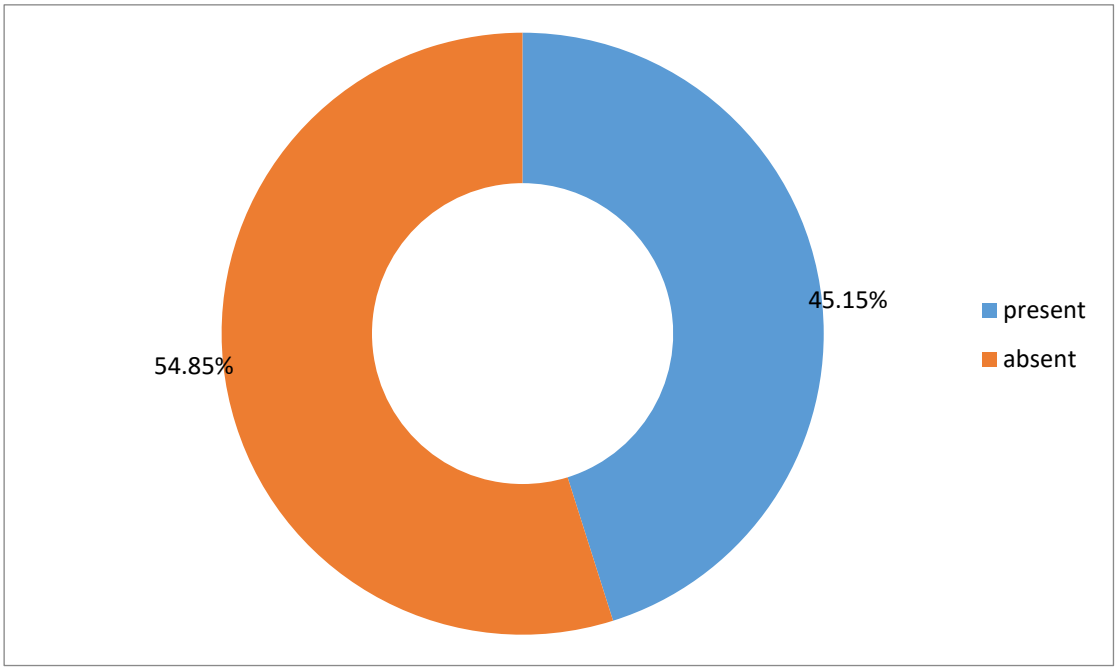


Table 25: Distribution of participants according to attitude of family members towards them (n=454)

Attitude of family members	Number	Percentage
Positive	103	22.68
Negative	351	77.32

More than three by fourth (77.32%) of the participant's family had a negative attitude towards them and about 22.68% had a positive attitude.

Table 26: Distribution of study participants according to their attitude about rehabilitation in de addiction centre (n=454)

How do you feel now	Number	Percentage
Positive	217	47.80
Negative	237	52.20

More than half of the study participants (52.20%) had a negative feeling about rehabilitation and 47.80 had a positive feeling about the rehabilitation.

III- Clinical profile of study participants

Table 27: Distribution of study participants according to presence of pallor, icterus, pedal edema, clubbing and lymphadenopathy (n=454)

General physical examination	Present		Absent	
	Number	Percentage	Number	Percentage
Pallor	122	26.87	332	73.13
Icterus	135	29.73	319	70.27
Pedal edema	119	26.21	335	73.79
Clubbing	130	28.63	324	71.37
Lymphadenopathy	66	14.53	388	85.47

In our study, 26.87 percent of the study variables had pallor, 29.7 percent of the participants had Icterus, 26.21 percent of the participants had pedal edema, 28.63 percent of the study participants had clubbing and 14.53 percent had lymphadenopathy.

Figure 24: Distribution of participants according to presence of pallor, icterus, pedal edema, clubbing and lymphadenopathy (n=454)

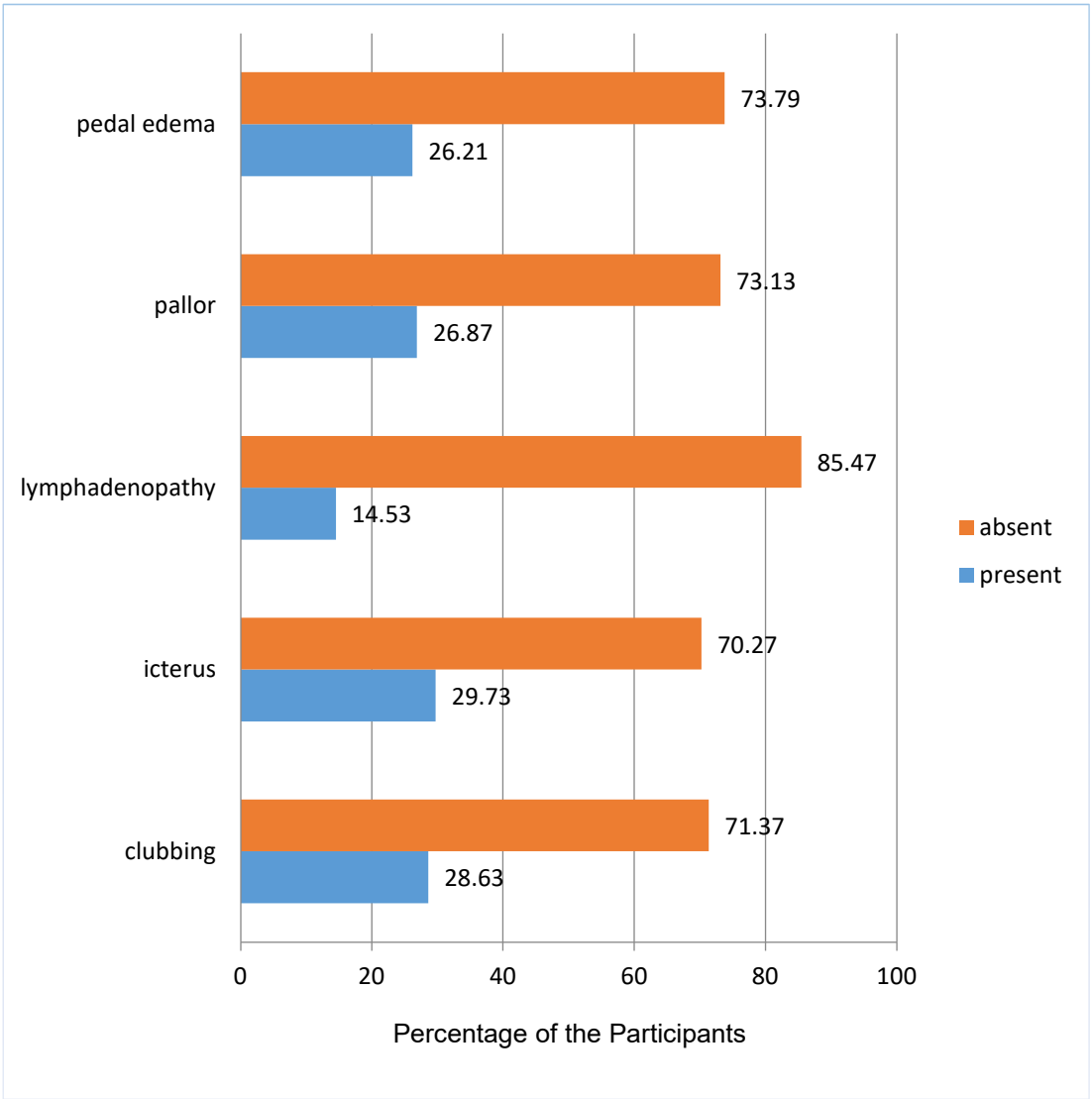


Table 28: Distribution of study participants according to their body mass index (n=454)

BMI	Number	Percentage
<18.5 kg/m^2	20	4.40
18.5-23 kg/m^2	231	50.88
23-27.5 kg/m^2	171	37.66
>27.5 kg/m^2	32	7.06

The above table shows the distribution of the study participants according to the body mass index. Almost half of the study participants (50.88%) were normal (BMI=18.5-23 kg/ m^2). About 37.66 percent were overweight (BMI = 23-27.5 kg/m^2) and 7.06 percent were obese (BMI=>27.5 kg/m^2). Only 4.4 percent were belonging to underweight (BMI=18.5 kg/m^2).

Figure 25: Distribution of study participants according to their body mass index (n=454)

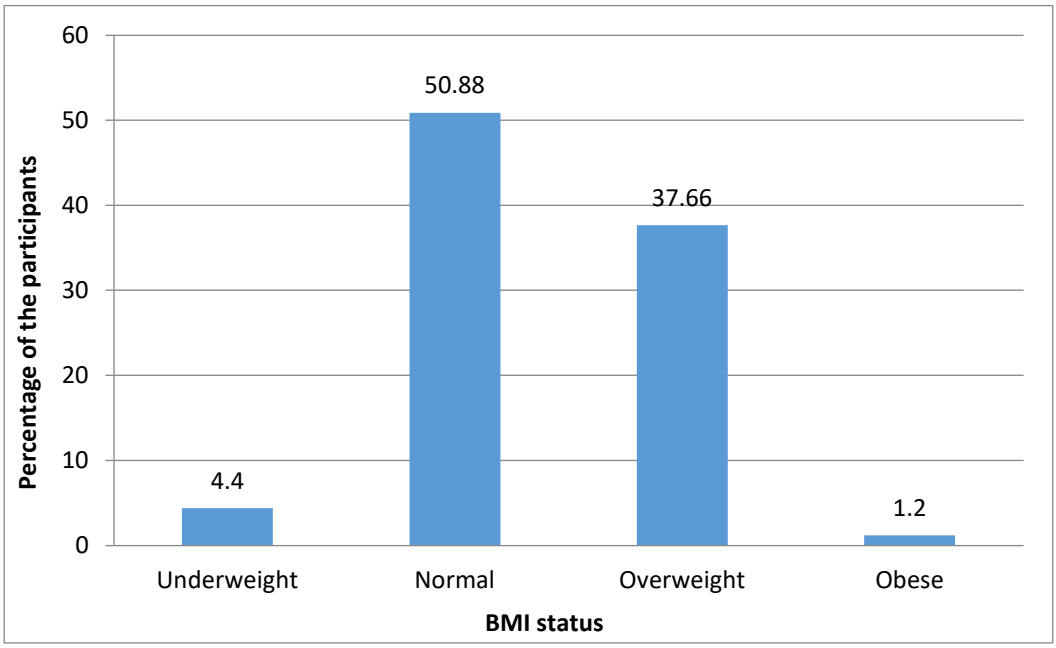


Table 29: Distribution of participants according to their Blood pressure (n=454)

Blood pressure	Number	Percentage
Normal	294	64.75
Hypertensive	160	35.25

The above table shows the distribution of the study participants according to the Blood pressure. Among the abusers, 64.75 percent had a normal blood pressure and about 25.25 had an elevated Blood pressure (systolic more than 120 and diastolic more than 80).

Figure 26: Distribution of participants according to their blood pressure. (n=454)

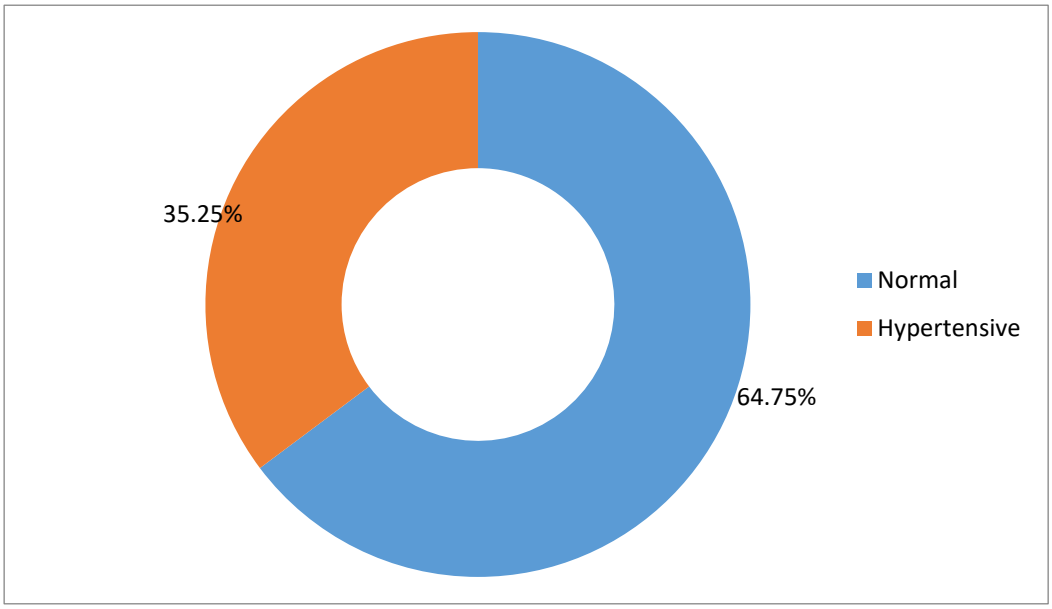


Table 30: Association between marital status and alcohol intake among the participants (n=454)

Marital status	Alcohol intake- Yes		Alcohol intake- No		Total	
	Number	**Percentage**	**Number**	**Percentage**	**Number**	**Percentage**
Single	69	76.6	21	23.4	90	19.82
Married	233	89.6	27	10.4	260	57.26
Divorced	45	79	12	21	57	12.55
Widow/Widower	31	66	16	34	47	10.35
Chi square value- 21.1978			**d.f- 3**		**p value 0.000096**	

Alcohol intake was most commonly seen in participants who were married (89.6%) and the association between marital status of the study participants and alcohol intake was found to be statistically significant with a p value of 0.000096.

Table 31: Association between family type of the study participants and alcohol intake (n=454)

Type of family	Alcohol intake- Yes		Alcohol intake- No		Total	
	Number	**Percentage**	**Number**	**Percentage**	**Number**	**Percentage**
Nuclear	124	87.3	18	12.7	142	31.27
Three generation	31	94	2	6	33	7.2
Joint	148	81.8	33	18.2	181	39.87
Problem family	31	75.6	10	24.4	41	9.11
Broken family	44	77.2	13	22.8	57	12.55
Chi square value- 7.899			**d.f- 4**		**p value 0.095349**	

The trend shows presence of alcohol intake was higher in participants from three generation family (94%) but the association between family type and alcohol intake was not statistically significant since the p value was not <0.05.

Table 32: Association between Educational status of the study participants and alcohol intake (n=454)

Educational status	Alcohol intake- Yes		Alcohol intake- No		Total	
	Number	Percentage	Number	Percentage	Number	Percentage
Illiterate	20	57.1	15	42.3	35	7.7
Primary	90	97.8	02	2.2	92	20.26
Secondary	61	91	06	09	67	14.75
Pre university	67	75.2	22	24.8	89	19.6
Degree	140	81.8	31	18.2	171	37.66
Chi square value- 38.3489			**d.f- 4**		**p value 0.00001**	

Our study shows that alcohol intake was higher in those participants who completed their education till primary school (97.8%). The association between educational status of the study participants and intake of alcohol was statistically significant with a “p value” of 0.00001.

Table 33: Association between Socio economic status of the study participants and alcohol intake (n=454)

Socioeconomic status (modified B G Prasad)	Alcohol intake- Yes		Alcohol intake- No		Total	
	Number	Percentage	Number	Percentage	Number	Percentage
Class I	50	83.3	10	16.7	60	13.21
Class II	75	77.3	22	22.7	97	21.36
Class III	144	84.7	26	15.3	170	37.44
Class IV	70	85.4	12	14.6	82	18.06
Class V	39	86.6	06	13.4	45	9.91
Chi square value- 3.3467 d.f- 4 p value 0.501564						

In our study, the presence of alcohol consumption was higher in participants from class V socio economic class (86.6%) by modified B G Prasad classification and this association between socio economic status of the study participants and alcohol intake was not statistically significant (p value of 0.501564).

Table 34: Association between family history of substance abuse among the study participants and alcohol intake (n=454)

Family history of substance abuse	**Alcohol intake- Yes**		**Alcohol intake- No**		**Total**	
	Number	**Percentage**	**Number**	**Percentage**	**Number**	**Percentage**
Present	248	85.8	41	14.2	289	63.65
absent	130	78.8	35	21.2	165	36.34
Chi square value- 3.7193 d.f- 1 p value 0.5378						

Presence of alcohol consumption was higher in participants who had a family history of substance abuse (85.8%). The association between family history of substance abuse among the study participants and alcohol intake was not statistically significant (p value of 0. 0.5378).

In-depth interview results

When participants were asked about what was there trigger which lead to initiation of substance use, the following responses were obtained. All the responses obtained were segregated into themes.

The themes were:-

1- PEER PRESSURE	**2- FAMILY BACKGROUND FOR ADDICTION**
3- RELATIONSHIP BREAKDOWN/ ACADEMIC FAILURES	**4- PHYSICAL ENVIRONMENT**

1- Peer pressure

Peer pressure and friendly connections was the most common reason stated by participants. It is often difficult for teenagers to ignore their peer groups and this can have a massive influence on their behaviors and actions.

My friends all were drinking and smoking when I was doing my degree. I was in a hostel where this was very common. Initially I was simply sitting eating all the foods which they bring along with the alcohol. Then they started offering. First I denied but eventually I also started using it.

Peer pressure is manly happening when someone is away from home especially for educational purpose or for job and it mainly happens in parties or on special occasions.

I never thought I will drink alcohol ever in my life since my father was an alcoholic and I know the consequences. But when I went for higher studies, I stayed in a hostel and started drinking with my friends.

Some of them stated they initiated substance abuse because their friends will think that they are coward if they are not using substances mainly alcohol or tobacco.

After my studies I got a job in Bangalore, stayed with my friends in an apartment. They used to party every weekend. Actually they did not force me to consume alcohol, but I had a feeling that in a city like Bangalore, If I am not using any kind of substance my friends will think that I am a mamma boy or a coward. So eventually I started using and became an addict.

2-Family background for addiction

Some of the participants stated that family background of addiction especially parents or siblings were the trigger for them to start substance use. They felt it as normal since their Parents used to drink from home in front of them.

My father was an alcoholic. He used to drink from home. He had kept his bottles inside his room. I started drinking from his bottle whenever he was not in house. I used to even pour water inside my dad's bottle so that he will not notice that I am drinking.

Some of them said their siblings were the reason for them to start using substance. Siblings also used to smoke and drink in home and they also stated that siblings will offer the substance to them. Most of them stated that tobacco was their first ever substance to use

My brother used to smoke from his room and he will ask me to see whether the parents are coming. He started giving me one puff of cigarette and the frequency increased thereafter. Then later I started buying on my own and thereafter we used to smoke together. Smoking cigarette was the first thing to start and thereafter I started using cannabis, alcohol and now I am addicted to all of them.

Some of them stated that they started drinking in family functions. Family members used to drink alcohol on special occasions and celebrations.

I am from a joint family. Whenever some functions comes all my relatives including my dad and brother used to drink alcohol. So I started drinking with them when I was 19 years old. That was the trigger for me and later I went to Pune for my study purpose. There I became a full time alcoholic, used to drink almost every day.

3- Stress following failure in relationships and academics

Few of them stated that stress following relationship breakdowns or academic failures were the trigger factor for initiation of substance use. These include stress following disconnection with the family members, lack of support from the family, love or relationship breakdowns or divorce.

I started drinking alcohol after my divorce. After separation I started roaming more frequently and because of the stress following divorce I started drinking and now I am addicted to it.

Some of them stated that stress following the business fallouts. They said that since they had this fall out, they didn't have money but even then they borrowed and started substance use mainly alcohol.

I was doing a small scale business in my hometown. Start up was good but later on it failed. It cost me a huge debt and I was depressed following this and started drinking.

Relationship breakdown included parent- child relationship breakdown too. Some of them stated that separation from the parents following their divorce was also a reason for them to start using substances.

I was thirteen when my parents got divorced. I was living with my dad and brother. I used to feel lonely and our dad used to come very late to home. This was the reason for me to start smoking. Later I started to drink alcohol too when I was seventeen.

4- Physical environment

This includes easy access to substances. They also stated that because of excess free time which they are getting they started using substances. Some of them said that they are working in army and it was easy for them to get alcohol and that's how they started.

I was working in Army in North India. For us alcoholic beverages were easily available. Since it is easily accessible I started using it.

Some of them stated that because of extreme climatic cold Condition they started taking alcohol.

I was working in a farm in Chikmagalur. It was very cold out there in the evening and in the night. Most of the workers used to drink because of this extreme cold climate so I also started with them. Work was only till 3 pm and nothing was there to do after that. So because of this excess time, i started drinking alcohol.

DISCUSSION

Our study was a cross-sectional study done among 454 patients admitted in five different de-addiction facilities to study profile of substance abuse in patients admitted at de-addiction centers, to determine socio demographic profile, pattern of substance abuse and also to find out different triggers leading to substance-abuse by qualitative in depth interview.

Socio demographic profile of study participants

Table 1 shows distribution of study participants according to their age.

In the present study, the distribution of study participants was maximum in age group between 26 - 40. About 42.95 % were belonging to this age group and 36.12 % and 20.92% were among the age group between 41-60 and 18-25 respectively. Similar results were found in a cross sectional study done in Ahmadabad city. Out of 101 participants, substance abuse was mostly seen in the age between 25-45 years (66.3%). [48] Another study was conducted in the year of 2015 in GMERS medical college, Gujarat. In this study, among 206 participants138 (67%) participants were between the age group of 25 to 45 years. This was also similar to our study. This age group is most vulnerable since they face stress of getting a job and bringing up children. [3]

Table 2 in present study shows distribution of study participants according to their sex.

In our study, all the study participants were male (100 percent).

Similar results were found in a study done in Ahmedabad in 2013 to determine the profile of substance abusers admitted in de addiction centers. Only male patients were admitted in de-addiction centre. [48] Another cross sectional study conducted in the year of 2017 in a de-addiction center in Punjab. Out of 300 participants, 280(93.33%) were males while 20 (6.67%) were females. [37] According to a similar cross sectional study which was conducted in 2017 in a hospital in Sylhet, Bangladesh, out of 155 study samples participated ,147 (94.8%) were male and 8 (5.2%) were female. [38] The absence of females can be due to poor treatment seeking behavior, owing to shame and embarrassment that they might suffer on revealing this in society.

Table number 3 shows distribution of the study participants according to their area of residence.

Among the study participants, most of them belong to semi urban area that is about 36.78 % whereas 35.69% is from urban and 27.53% from the rural areas.

According to cross sectional study conducted in 2020 in Kashmir at a Tertiary Hospital, out of the 135 study participants, over half of them were belonging to urban areas (57.77%) and these results were in line with our study. [31] Another cross sectional study conducted in 2019 in patients with substance use disorders of Government Psychiatric Disease Hospital, Srinagar India to study clinical and socio-demographic profile of substance abusers. Out of 300 participants, maximum number (66%) of the subjects in the study was from urban and semi urban areas. [33] These may be because substances are easily available in urban areas.

Table number 4 in our study shows distribution of the study participants according to their marital status.

Most of them, that is, about 57.26 percent were married. About 19.82 percent were single and 12.55 percent were divorced. 10.35% of them were widowers. These findings were in concordance with a cross sectional study conducted in 2014 in an Urban Health Centre in Garhwali area, India to determine the socio demographic profile of substance users. Among the 219 study subjects, 108 (68.5%) subjects were married. [44]

According to a study conducted in the year of 2015 in Uttarakhand, out of 100 subjects, 87% were married. [42] Another cross sectional study conducted in 2013 among patients attending De-addiction centre, of PGI-MS, Rohtak, Haryana, India to study the prevalence and pattern of substance dependence. Out of 52, majority of interviewed participants were married (74.85%). [49] All these findings were similar to our study.

Table number 5 shows distribution of participants according to their religion.

Almost two third (76.43 percent) of the participants were Hindus, 13.88 percent were Muslims and 9.69 percent were Christians. This finding is in contrast to findings from a study conducted in a drug de-addiction centre in Srinagar, Kashmir. Out of 135 study participants, most of them were belonging to Muslim community (96.29%). [31] These opposite findings may be because our study area is a Hindu prominent area and Srinagar is a Muslim prominent area.

Table number 6 in our study shows distribution of study participants according to religious category.

Out of the 454 participants, 238 (52.42%) were belonging to general category. Among others, 21.42 percent were OBC, 19.39 were belonging to SC and 6.89 were belonging to ST.

Table number 7 in the current study shows distribution of the study participants according to type of family.

In the present study most of them belongs to joint family. About 39.27% were from joint family whereas 31.27% were from nuclear family. Among others, 12.55 were from broken families, 9.11 were from problem families. Only 7.2 percent were belonging to three generation family. These findings were in line to a record based retrospective study conducted in 2020 in Imphal, Manipur. In this study, study population consisted of 222 substance dependence patients. Out of these 222 study subjects, 68.5% was from joint family. [32]

According to a cross sectional study conducted in the year of 2017 in Kolkata city, among 295 study participants, out of 295 participants 55.8% male and 78.3% female are in nuclear family. Some of the female substance abusers were divorced (6.25%). [36] A similar study was done in Ahmadabad city. Out of 101 participants in this study, 58.3% Substance abusers were belonging to nuclear families. [48] These findings were in contrary with our study findings.

Table number 8 in the present study tells about distribution of study participants according to educational status.

It shows that most of the participants were graduates (37.66 %). About 20.26% completed primary school, 19.6% completed Pre University and 14.75% did their education till secondary school level. Only 7.7 percent were illiterate. We can see that as literacy rate increases substance abuse rate also increases and highest rate was seen among the graduates.

According to a record based retrospective study which was done in 2020 in Imphal, Manipur, to estimate the socio-demographic profile and also the pattern of substance use in treatment seekers, out of 222 study subjects, 11.7 percent of male treatment seekers were illiterate or just could read and write. Maximum number of study subjects (39.2%) was with an education up to secondary level or pre university level. [32] Similar study was done in 2014 in Nigeria to study about pattern of psychoactive substance use among inhabitants at Kiru Rehabilitation Centre, Kano in the North Central Region of Nigeria and also to assess the extent of its involvement. Out of 148 participants, a total of 58.9% had primary school and below level of education, 14.9% were school drop outs. [46] All these study findings were incompatible with our findings.

Table 9 in the study shows the distribution of participants according to their occupation.

About 25.99 percent of study participants hold a private employment, 20.92 percent were self employed, 11.45 percent were in to farming, 11.33 percent were laborers and another 11.23 percent were unemployed. Among others, about 7.7

percent were retired, 5.95 percent were home makers and 5.5 percent were government employees. These results were similar to a cross sectional study which was done in the year of 2017 in Kolkata city, West Bengal. Among 295 study participants, most of them do job in a private sector. [36]

Similar study was done in 2016 at Thrissur, Kerala and in this study, out of 571 participants, 32.9% of the patients are skilled workers which include drivers, carpenters, mechanics, masons and similar workers who are having a high risk of substance abuse when comparing to other jobs. [40]

According to a record based retrospective study which was done in 2020 in Imphal, Manipur, one-third of patients (32.9%) were self-employed and 22.1% were never employed. [32]

Table number 10 in the current study shows the distribution of participants according to socio-economic status.

Most of them were belonging to class III by Modified B. G. Prasad's classification. About 37.44 percent were from class III, 21.36 percent from class II, 18.06 percent from class IV, 13.21 percent from class I and 9.91 percent from class V. The majority belongs to Class III and II of Modified BG Prasad classification.

These findings were in concordance with findings from a cross sectional study which was done in 2018 in Ahmadabad city, Gujarat, India to determine the socio demographic profile and the pattern of substance abuse among the patients attending de-addiction center. Out of 100 substance abusers interviewed for the study, 55% was from class III socio economic classes. [35]

participants. Almost 69% of the total abusers were from class IV and V. [3] According to another study conducted in Ahmadabad city in 2013, out of 101 participants, 69 percent were belonging to class IV. [48] These findings were contrary to our study findings.

Table 11 in the present study shows the distribution of participants according to family history of substance abuse.

About 63.65 percent of the study participants had a family history of substance abuse, whereas the rest of them (36.35%) did not have a family history of the same. Similar results were found in a cohort done in 2015 in Abu Dhabi. Out of 250 male participants enrolled, more than half of them had a positive family history for substance use disorder (56.8 %). [43]

According to a cross sectional study conducted in the year of 2015 in Gujarat, out of the total 206 substance abusers, almost half of the participants were having a family history of substance abuse (49.5%). [3] This was also in line to our findings. Similar cross sectional study was done in 2019 among patients with substance use disorders of Government Psychiatric Disease Hospital, Kashmir. Out of 300 participants, family history of substance abuse of the same nature or other substances found out in 9.67% participants which were not similar to our findings. [33]

Pattern of substance abuse

Table number 12 in present study shows distribution of participants according to types of substance abused.

Alcohol was the most common substance used. About 55.55% of the study variables were using alcohol alone and 22.91 % were using alcohol and tobacco

together. The next common substance used was prescribed drugs which was 7.04 % followed by cannabis 4.84 %. About 4% were using alcohol, tobacco and cannabis together and 2.2 % were using inhalants. Among others, only 2.54 % were using tobacco alone, 1.15% was using tobacco and cannabis together. Alcohol and Cannabis together was used by only 0.88 % of the patients.

According to a study conducted in Ahmadabad city in 2013, out of 101 participants, commonly abused substance was Alcohol (62.1%). [48] This was similar to our study. Similar results were found in another cross sectional study which was conducted in 2018 in Ahmadabad city, Gujarat. A total of 100 substance abusers interviewed for the study. Alcohol was the most commonly used (64%), followed by tobacco (20%).Whereas Marijuana (12%) and opium (4%) was used very rarely. [35]

A similar cross sectional study was conducted in 2014 in an Urban Health Centre in Garhwali region of Uttarakhand. According to this study, among the 219 study subjects, alcohol (74.9%) was the most common current substance use followed by tobacco (45.7%), cannabis (14.6%), opium (8.6%), and sedative-hypnotics (5.5%). [44] Most of the studies alcohol was the most common substance abused and this is on concordance with our study.

Table number 13 shows distribution of study participants according to route of intake of different substances.

In the present study, most common route of intake was oral (62.33%) since alcohol was the most commonly abused substance. Oral with smoking was the next common route (23.565) since the next common substances used was alcohol with tobacco together, followed by smoking alone (7.55%) which can be either tobacco or

cannabis. Next common route of administration was parenteral (3.96 %). A small percentage of samples used other routes like snorting and inhalation (2.2%). The least common route was oral and parenteral together which was 0.45%.

Similar results were found in a cross sectional study conducted in Kolkata city, West Bengal. Among 295 study participants, most common route of intake was oral (46%). [36]

Another study which was conducted in 2013 in Ankara, Turkey to determine the socio-demographic features of substance abusers in an emergency department of the hospital. Out of 134 participants, the most common route was oral route followed by intravenous. [47] These results were similar to the present study.

Table number 14 shows distribution of study participants according to the frequency of use of substances.

In the present study, almost half of the study participants were consuming substance multiple times a day (45.6%) as most of them were consuming alcohol and tobacco. About 28.8% of the participants were taking substances once a day and 15.65% when needed. A very small percentage of samples (9.91%) were taking substances on every alternate day. These results were not similar to other study findings done in Turkey and Pakistan.

According to a cross sectional study which was conducted in 2013 in Ankara, Turkey to determine the socio-demographic features of substance abusers in an emergency department of the hospital, out of 134 participants, almost 76.1 % of the participants use substances once daily, 14.9% uses once weekly, 3.7% uses once monthly and 0.7% uses yearly once. [47] A descriptive questionnaire based study

which was conducted in 2010 in Karachi, Pakistan to and practices of beliefs profile, describe the socio economic substance use. In this study, out of 500 samples collected, 43.4% used substances when needed, 22.2% of the participants were using twice a day, 18.2% used substances once a day and about 16.2% were using on alternated days. [53]

Table number 15 in present study shows distribution of study participants according to age of initiation of substance abuse.

Almost half of study participants (48.01%) started abusing at the age between 20 to 29 years. Next common age of initiation is less than 20 years (31.50%) followed by the age between 30 to 39 years. Very less number of them started taking substance late, 3.54 % started after 50 years and 3.3% started between 40 to 49 years. These findings were similar to a study done in the year of 2015 in GMERS medical college, Gujarat. Among 206 participants, 45.6% had started substance use between 20 to 30 years while another 40.8% had initiated substance use in adolescent age before 20. [3]

According to a study conducted in Ahmedabad, Gujarat, out of 101 participants, age of starting of substance was below 30 years (86.1%). [48] Another cross sectional study conducted in 2013 among 198 patients in a drug de-addiction centre. Here the most common “age of initiation” was 11–20 years (76.8%). [50]

Table number 16 in present study shows distribution of study participants according to duration of substance abuse**.**

Among the study participants in the present study, 33.92 % of them were abusing substances for less than 5 years and 31.49% were abusing for 10 to 20 years. Almost 28.41 % of them were abusing substances for duration of more than 10 years and 6.18% for duration of greater than 20 years.

Table number 17 shows distribution of study participants according to reason for initiation and continuing substance abuse.

The most common reason was peer pressure (38.55%) followed by curiosity towards the substance (30.17%). Other reasons were family related stress (19.8%) and role models (11.46%).

A study was conducted in 2016 in Bagalkot city, Karnataka. Out of 50 subjects participated in the study; Peer influence followed by experimentation was the most common cause (60%) for initiation of substances. [39] This was similar to our study.

Similar results were found in a cross sectional study done in 2014 in an Urban Health Training Centre in Garhwali region of Uttarakhand, India to determine the socio demographic profile of substance users and also to evaluate the pattern of substance use. Among the 219 study subjects, the main trigger for starting substance abuse was that peer pressure (89.5%). [44]

A cross sectional study was conducted in 2018 in Ahmadabad city among the patients attending de-addiction center. A total of 100 substance abusers interviewed for the study. Among them, the most common trigger for initiating the substance use was social reasons (33%) and then followed by stress (26%). Influence of peer group

(22%) was the next common cause. About 19% of them initiated the usage of drugs mainly because of the oddity and appeal to the newer environment. [35]

Table number 18 in present study shows distribution of study participants according to reason for regular substance abuse.

The most common reason for regular abuse of substance was easy accessibility (34.58%) followed by enjoyment and withdrawal which was 27.1 % and 19.82 % respectively. About 18.50% of them, the reason for regular abuse was stress.

According to a cross sectional study done in 2012 in Mangalore, India to determine the reasons for initiation of substance use, out of 83 patients interviewed, stress was the major reason (54.2%) for its daily abuse. [51] According to a study performed in 2016 in Thrissur, Kerala, out of 571 participants, most of the participants take alcohol as a way to minimize the pain resulting from physical stress and injury caused by long hour of manual labor. [40]

Table number 19 in present study shows distribution of study participants according to reason for realization of substance abuse.

The most common reason was continuous carving (38.55%) followed by difficulty in doing work (27.31%). Other reasons include self realization (16.08%), made aware by friends (11.06%) and because of medical problems associated with it (7.04%).

Similar results were found in a cross sectional study conducted in 2012 in Mangalore city, India to assess the socio-demographic profile and the reasons for initiation of substance use. Out of 83 patients interviewed, about 59% told “reason for realization” of substances was their craving for the same. [51]

Table number 20 shows distribution of participants according to reasons for admission in de addiction center.

In our study, the most common reason for admission to the de addiction centre was social reasons (43.39%) followed by admissions due to the withdrawals caused by the substance especially alcohol (25.77%). The next common reason for admission was because of co morbidities associated with the abuse or addiction (22.68%) and because of legal reasons (8.16%).

According to a study done in 2013 among patients in a drug de-addiction centre at the Police Hospital in Srinagar, out of 198 patients, most common reasons cited for seeking treatment were social (97.4%). [50] According to another cross sectional study conducted in 2016 in Bagalkot city, Karnataka, India to find out the socio-demographic and clinical profile of men with alcohol dependence syndrome, out of 50 subjects participated in the study; withdrawal symptoms (66%) were the most common reason for admission in de addiction centre. [39]

Table number 21 in this study shows distribution of participants according to previous history of hospitalization.

More than half of the study participants had a previous history of hospitalization in a de addiction centre (57.70%) and 42.30 % of them are getting admitted for the first time.

According to a record based retrospective study was conducted in 2020 in Imphal, Manipur, out of the 222 subjects, 6.8% of them had a previous history seeking medical help. [32] A study was done in 2019 among patients with substance use disorders of Government Psychiatric Disease Hospital, Kashmir. Out of 300

participants, only 13% had previous history of hospitalization or treatment for substance abuse and the other 87% had come to the facility for the first time. [33] Similar cross sectional study conducted in 2016 in Karnataka. Here, out of 50 subjects, most of them (60%) have not sought any previous help to the de addiction centre. All these findings were opposite to our study findings. [39]

Table number 22 in this study shows distribution of study participants according to source of expenditure for substances.

The most of the study participants got the money by employment (41.18%). About 31.71% of them borrowed money and 24.22% used their pocket money for buying substances. Only about 2.89% have their source of money from stealing. These findings were in line to a descriptive questionnaire based study which was conducted in 2010 in Karachi, Pakistan. Out of the total 500 samples collected, in 38.2%, the source of money for buying substance was by the money through employment. About 29.6% used pocket money, 25.8% borrowed money and about 6.4% stolen the money for buying substances. [53]

Table number 23 in our study shows the distribution of the study participants according to who brought them to the de addiction centre**.**

More than half (55.6%) of the participants got admitted in de addiction centre by their family members and about 21.58% got self admitted because of the problem they are facing. About 14.53% got admitted by their friends and 8.02% by the police for some legal reasons.

Similar findings were there in a record based study conducted in Punjab in 2019. Among 966 samples participated, 597 (61.80%) were admitted to the facility by

relatives or friends. [34] A cross sectional study conducted in 2018 in Ahmadabad city, Gujarat also showed similar results where a total of 100 substance abusers interviewed for the study. Most of the study samples were admitted to the rehabilitation facility by their family member (60%) followed by friends (34%) and rest 6% came by themselves. [35]

Table number 24 in our study shows distribution of study participants according to any history of chronic medical illness.

Almost 54.85% of them had a history of other medical problems like hypertension, diabetes and the other 45.15% had no other medical problems.

A study was done in 2019 in patients with substance use disorders of Government Psychiatric Disease Hospital, Kashmir India.. Out of 300 participants, 9.67% had a history of some kind of medical disorder especially hypertension was also evident among them. [33]

Table number 25 in present study shows distribution of study participants according to attitude of family members towards the participants.

Almost 77.32% of the participant's family had a negative attitude towards them and about 22.68% had a positive attitude.

Table number 26 shows distribution of participants according to how they feel about the rehabilitation in de addiction centers.

More than half of the study participants (52.20%) had a negative feeling and about 47.80% had a positive feeling about their de addiction process.

According to a cross sectional study conducted in 2018 in Ahmadabad city, India to determine the socio demographic profile and the pattern of substance abuse among the patients attending de-addiction center, out of the 100 study samples, 84% felt some self improvement amongst themselves after getting admitted to the rehabilitation centre. [35]

Table number 28 shows distribution of study participants according to their BMI.

Almost half of the study participants (50.88%) were normal (BMI=18.5-23 kg/ m^2). About 37.66 percent were overweight (BMI = 23-27.5 kg/m^2) and 7.06 percent were obese (BMI=>27.5 kg/m^2). Only 4.4 percent were belonging to underweight (BMI=18.5 kg/m^2).

A cohort study conducted in 2015 in UAE to describe the pattern of substance use disorder in Abu Dhabi. Out of 250 male participants enrolled from the NRC, the majority of the patients fell within the normal BMI range (37.2%). About 30% were overweight and 27.6 percent were obese. Only 5.2 percent were belonging to underweight. [43] These results were similar to our study.

Table number 34 in our study shows association between alcohol abuse and family history of substance abuse.

The presence of alcohol consumption was higher in participants who had a family history of substance abuse (85.8%). The association between family history of substance abuse among the study participants and alcohol intake was not statistically significant (p value of 0. 0.5378).

According to a cross sectional study was done in Ahmadabad city, out of 101 participants, alcohol addiction was associated significantly with the positive family history of alcohol abuse. [48] This result was in contrary with our study.

Qualitative part of our study it shows that, main trigger which lead to initiation of substance use were family background for addiction, peer pressure, relationship breakdown/academic failures and physical environment.

According to a qualitative study done in 2019 in Iran to find out the factors associated with the first time use of substances experience among addicts in undergoing recovery, the participants reported four factors. The first factor was family which includes addiction of any of the family member, positive attitude of family towards substance use, family's belief that drugs are curative, and a family member selling drugs. The next factor was friends and this include having addict friends at school, military service, marital life, and blindly following friend's opinion towards addiction. The next factor was partner which can be addiction of a spouse and their compulsions and the forth factor was stress. [55]

Similar qualitative study conducted in 2014 in Tehran which explained factors which led to initiation of substance abuse in young people and they got four themes. Maternal role, paternal role, family function and discipline methods. [56]

CONCLUSION

Our study shows that most of the substance abuse patients in de addiction centers were in the age group between 26 to 40 (42.95 %). Most of them belong to semi urban area (36.78 %) and maximum number of participants was married (57.26%). Most of them completed their education till degree (37.66 %), 25.99 percent of study participants hold a private employment and about 37.44 percent were from class III socio economic class. About 65 percent of study participants had a family history of substance abuse.

Most common abused substance was alcohol (55.55%) and almost half of the study participants (48.01%) started using substances at the age between 20 to 29 years. The most common reason for abusing substances was peer pressure (38.55%) and social reasons was the most common reason for getting admitted in the de addiction centre (43.39%).

More than half of the study participants had a previous history of hospitalization in a de addiction centre (57.70%) and about 55.6% of the participants got admitted in de addiction centre by their family members.

Alcohol intake was most commonly seen in participants who were married (89.6%) and the association between marital status of the study participants and alcohol intake was found to be statistically significant with a p value of 0.000096. Alcohol intake was higher in those participants who completed their education till primary school (97.8%). After doing chi square test, the association between educational status of the study participants and intake of alcohol was statistically significant with a p value of 0.00001.

Substance abuse is an important medical health problem in Belagavi and also around the world. Despite the limitation of being a facility based cross-sectional study and not represents the community as a whole, our study provides a glimpse of substance abuse problem in Belagavi. Most of the patients in de addiction centers were in the age group between 26 to 40. This age group is most vulnerable since they face stress of getting a job and bringing up children. Most of the cases came from urban or semi urban areas, which may be a reflection of the increase in urbanization in our country and also easy accessibility of substances in urban areas.

Absence of female patients may be due to poor treatment seeking behavior among them, owing to the shame and embarrassment that they might suffer on revealing this behavior to society. We can also see that as literacy rate increases substance abuse rate also increases and highest rate was seen among the graduates. Substance abuse was more common in participants who are holding a private or self employment when compared to farmers or home makers. Perhaps participants in this group need to maintain social relations and they may be using substances, especially alcohol as a media for interaction. There is a need for further studies to detect prevalence of substance abuse in the community.

RECOMMENDATIONS

1. To combat the present situation, accredited social health activists (ASHAs) should be trained to get information of substance abusers in their corresponding geographical areas and should be given incentives to ensure counseling and treatment compliance in this group.
2. Since the age of initiation of substance abuse is most common in adolescents, more concentration has to be given to this group and it is important to develop and apply preventive, curative and rehabilitative services before it is too late.
3. Substance abusers frequently seek emergency medical services for various symptoms, but usually they do not talk regarding their substance abuse. Emergency physicians should make sure about usage of substances.
4. It is very important to give more focus on the role of friends and families in substance abuse, training individuals to deal with stress, extending individual's knowledge about substance abuse and its adverse effects.
5. Social Medias or Mass Medias can be utilized to promote awareness among the public mainly highlighting the major social risks posed by substances.

STRENGTHS

1. This study was not done in single de addiction centre. It has done among participants from five de addiction centers that are situated in five different geographical areas of Belagavi city, so that it represents people from a wide area.
2. Along with quantitative data, the qualitative component has been done in the study and it has thrown light upon the main triggers for initiating substance abuse.
3. The present study tried to focus on type of substance used and pattern of substance abuse, socio demographic and clinical profile of the participants as well.
4. This study has also emphasized the reasons for getting admitted for de addiction or seeking treatment.

LIMITATIONS

1. We could not precisely estimate risk and prevalence of substance abuse in community, as it is a facility based study.
2. Since the study duration was for one year, the possibility of duplicate admission in the de addiction centre could not be ruled out.
3. This study has been conducted among treatment seeking population who are admitted in de addiction centers, which is possibly different from the whole community where substance abuse is still not considered as a disease, but only a social or legal problem.

SUMMARY

Our study was a cross-sectional study done among 454 patients admitted at five different de-addiction centres namely Hope recovery centre, Sahara de addiction centre, Sri Sakthi hospital, Bapuji hospital and Navjeevan de-addiction centre located at Belagavi city, North Karnataka during the study period from January to December 2020.

Distribution of study participants was maximum in age group between 26 to 40. All study participants were male. Most of them belong to semi urban area that is about 36.78 % whereas 35.69% is from urban and 27.53% from the rural areas. About 57.26 percent were married, 19.82 percent were single, 12.55 percent were divorced and 10.35% of them were widowers. About 39.27 were from joint family whereas 31.27 are from nuclear family. Among others, 12.55 were from broken families, 9.11 were from problem families.

Education status of study participants shows that most of them completed their education till degree (37.66 %). About 20.26% completed primary school. Only 7.7 percent were illiterate. About 25.99 percent of study participants hold a private employment, 20.92 percent were self employed, 11.45 percent were in to farming, 11.33 percent were laborers and another 11.23 percent were unemployed.

The present study shows that most of the participants were belonging to class III SES by modified B G Prasad classification. About 37.44 percent were from class III, 21.36 percent from class II, 18.06 percent from class IV, 13.21 percent from class I and 9.91 percent from class V. About 63.65 percent of the study participants had a family history of substance abuse.

Alcohol was the most common substance abused. About 55.55% of the study variables were abusing alcohol alone and 22.91 % were abusing alcohol and tobacco together. The next common substance abused was prescribed drugs which was 7.04 % followed by cannabis 4.84 %. About 4 % were abusing alcohol, tobacco and cannabis together and 2.2 % were using inhalants. Among others, only 2.54 % were abusing tobacco alone, 1.15 was using tobacco and cannabis together. Alcohol and Cannabis together was abused by 0.88 % of the variables. Most common route of intake was oral (62.33%). Oral with smoking was the next common route (23.565).

Almost half of the study participants (48.01%) started abusing substances at the age between 20 to 29 years. Next common age of initiation was less than 20 years (31.50) followed by age between 30 to 39 years. The most common reason for stating substance abuse was peer pressure (38.55%) followed by curiosity towards the substance or using it (30.17%). Other reasons were family related stress (19.8%) and role models (11.46%). Most common reason for regular use of substance was easy accessibility (34.58%) followed by enjoyment and withdrawal which was 27.1 % and 19.82 % respectively. About 18.50 percent of them, the reason for regular abuse was stress. The most common reason for realization of substance abuse was continuous carving (38.55%) followed by difficulty in doing work (27.31%). Other reasons include self realization (16.08%), made aware by friends (11.06%) and because of medical problems associated with it (7.04%).

More than half of the study participants had a previous history of hospitalization in a de addiction centre (57.70%). Almost half of the study participants were consuming substance multiple times a day (45.6%) and most of them were consuming alcohol and tobacco. Most of the study participants got the money for

buying substances by employment (41.18%). More than half (55.6%) of the participants got admitted in de addiction centre by their family members and about 21.58% got self admitted because of the problem they are facing. About 14.53% got admitted by their friends and 8.02% by the police for some legal reasons. Almost 54.85% of them had a history of other medical problems like hypertension, diabetes.

In the present study about 29.73% percent had Icterus and 26.21 percent had edema. Almost half of the study participants (50.88%) had a normal BMI. About 37.66 percent were overweight and 7.06 percent were obese. Only 4.4 percent were underweight.

Alcohol intake was most commonly seen in participants who were married (89.6%) and the association between marital status of the study participants and alcohol intake was statistically significant with a p value of 0.000096. Alcohol intake was higher in those participants who completed their education till primary school (97.8%). Association between educational status of study participants and intake of alcohol was statistically significant with a p value of 0.00001.

In the qualitative part of the study it shows that, the main trigger which lead to initiation of substance use were peer pressure, family background for addiction, relationship breakdown/ academic failures and physical environment.

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ANNEXURES

ANNEXURE I – ETHICAL CLEARANCE LETTER

K.L.E. ACADEMY OF HIGHER EDUCATION AND RESEARCH

(Deemed-to-be-University)

Accredited 'A' Grade by NAAC (2nd Cycle) [illegible]

JAWAHARLAL NEHRU MEDICAL COLLEGE,

NEHRU NAGAR, BELAGAVI-590010 (KARNATAKA-INDIA)

Website: http://www.jnmc.edu [illegible]

E-Mail: [illegible]

Phone: [illegible] Office: 2472556 [illegible]

Principal: [illegible]

Fax No.: [illegible] 2470759

Ref: MDC/DOME/ 182

Date: 24/12/2019

To:

REG.NO. BD0119002

PG student in Community Medicine,

J.N. Medical College,

BELAGAVI.

Sub: Institutional Ethical Clearance for the study.

With reference to the above, we wish to inform you that your proposed research project titled **"PROFILE OF SUBSTANCE ABUSERS ADMITTED AT DE-ADDICTION CENTRES IN A CITY OF NORTH KARNATAKA"**, is ethical and justifiable. The proposed research project has been cleared by the JNMC Institutional Ethics Committee on Human Subjects Research.

(Dr. Anita Dalal)
Member Secretary
JNMC Institutional Ethics Committee
on Human Subjects Research,
J.N. Medical College, Belagavi.

(Dr. Roopa M Bellad)
Chairman,
JNMC Institutional Ethics Committee
on Human Subjects Research,
J.N. Medical College, Belagavi.

14

ANNEXURE II - INFORMED CONSENT

"Profile of substance abusers admitted at de-addiction centers in a city of North Karnataka".

Investigator: _____

PG Student, Department of Community Medicine

J.N. Medical College, KAHER University, Belagavi-10.

Guide: _____

Associate Professor, Department of community medicine

J.N. Medical College, KAHER University, Belagavi-10.

You are hereby requested to involve yourself in this study to find out the **"Profile of substance abusers admitted at de-addiction centers in a city of North Karnataka"**, conducted by KLE hospital and medical research center, Belagavi.

Introduction:

The World Health Organization (WHO) defines Substance abuse as ''Harmful or hazardous use of psychoactive substances, including alcohol and illicit drugs''

Repeated use of these substances can lead to dependence syndrome-a cluster of behavioural, cognitive and physiological phenomena which involves a strong desire to take the drug, and difficulties in controlling its use.

Drug dependence causes not only economic burden through rising health care costs, but also social costs in the form of loss of productivity and family income, violence, security problems, traffic and workplace accidents .

The problem is not merely that of an individual or a community and a drug, but involves interaction between the triad.

Explanation of procedure:

In this study, you will have to answer a few questions about socio-demographic details, different patterns of substance abuse and factors triggering substance abuse. If u agree to participate then only questions will be asked to you. You will not be paid for participating in this study.

Possible benefits:

The investigator does not promise or guarantee you any direct benefits or services from this study. This study is going to help in detecting the Profile and pattern of substance abuse among patients admitted in de-addiction centers of Belagavi.

Possible risks:

There are no risks involved in this study.

Cost of participation:

The cost of the study will be entirely borne by the researcher. There will be no cost to you for your participation in this study.

Legal rights:

By signing this consent form, you are not waiving off any of your legal rights.

Privacy and Confidentiality:

Your identity will not be revealed and all information collected will be coded so that, no one other than the investigator will know your identity.

Withdrawal from the study:

You can withdraw from the study at any point of time.

Authorization to publish the results:

The researcher may use the information gathered from this study for presentation or publication in scientific journals. However, your personal identity will not be revealed.

Questions:

If you still have any queries, you can contact **Dr. Roopa M. Bellad** Chairperson, Institutional Ethics Committee for Human Subjects' Research, J.N. Medical College, Belagavi – 590010, Ph no: or **Dr.(Mrs) N.S. Mahantshetti**, Principal, J.N. Medical College, Belagavi-590010, Ph no: 0831-2471350.

CONSENT STATEMENT

"I have been explained in my own understandable language about the contents in this form and my queries have been clarified by the investigator and I have been told that I have the right to withdraw from participating in this study at any point of time. I have been assured that confidentiality will be maintained and will be used only for this study and my identity shall never be revealed in future".

I hereby give my consent for participation in the study "Profile of Substance abusers admitted at de-addiction centers in a city of North Karnataka" voluntarily and not under the influence of the investigator or any other influence.

Name of the participant

Signature

Name of the interviewer

Signature

Date: __/__/_____

Place: _____.

Signature of the guide

ANNEXURE III-QUESTIONNAIRE

TITLE:-

"Profile of substance abusers admitted at de-addiction centers in a city of North Karnataka"

(Note: "The personal data provided by you will be kept confidential. Only aggregated results will be presented/ published")

DATE: __/__/____

Sl. No: ___

SOCIO DEMOGRAPHIC DETAILS:

1] Age group (in years) : 1)18-25 2)26-40 3)41-60

2] Sex : 1) Male 2) Female

3] Residence : 1) Urban 2) Semi urban 3) Rural

4] Marital status : 1) Single 2) Married 3)Divorced
4) widow/widower

5] Religion : 1) Hindu 2) Muslim 3) Christian
4) others, specify

6] Category : 1) SC 2) ST 3) OBC
4) others

7] Type of the family : 1) Nuclear family 2) Three generation

3) Joint family 4) Problem family 5) Broken family

8] Educational qualification : 1) Illiterate 2) Primary (1-5years of schooling)

3) Secondary (6-10 years of schooling)

4) PUC (11^{th}, 12^{th}) 5) Degree

9] Occupation : 1) Farmer 2) Laborer

3) Self- employed 4) Govt. employee

5) Pvt. Employee 6) Retired/Pensioner

7) Unemployed 8) Home maker

10] Total monthly income : Rs_____

11] Number of family members : ____

12] Per capita income : Rs_____/ month

13] Socio economic status (modified B.G. Prasad's classification): 1) Class I2) Class II

3) Class III 4) Class IV

5) Class V

14] Family history of Substance abuse: 1) Yes 2) No

II. PATTERN OF SUBSTANCE ABUSE

15) Types of Substance used :1) Alcohol 2)Tobacco

3) Cannabis 4) Prescribed drugs

5) Inhalants 6) Morphine 7) Others

16) Route of administration :1) Oral 2) Smoking 3) Parenteral 4) Others

17) Age of initiation of Substance use : 1)<20 2)20-29 3)30-39 4)40-49 5)>50

18) Duration of Substance use : 1) <5 years 2) <10 years 3) 10-20 4)>20

19) Reasons for initiation and continuing of substances: 1) Peer pressure 2) Curiosity

3) Family related stress 4) Role models

20)Reasons for its regular use : 1) Stress 2)withdrawals

3) Easy accessibility 4)Enjoyment

21) Reasons leading to realization : 1) Continuous craving

2) Difficulty in doing work

3) Self realization

4) Medical problems

5) Made aware by family/friends

22) Reasons for admission in de-addiction centre: 1) Social 2) Co-morbidities

3) Withdrawal 4) Legal 5) Others

23) Previous history of hospitalization: 1) Yes 2) No

In de-addiction centre

24) Frequency of Substance use : 1) Once a day 2) Multiple times a day

3) Alternate days 4) When needed

25) Source of expenditure for substance abuse: 1) Employment 2) Pocket money

3) Borrowed 4) Stolen 5) Others

26) Brought in Hospital by : 1) Self 2) Family 3) Friends 4) Police

5) Others

27) Any other chronic medical illnesses :

28) Attitude of family members to you:

29) How do you now feel about your rehabilitation in de addiction centre:

III GENERAL PHYSICAL EXAMINATION

1. Built –Heavy \Moderate \Poor	9.Clubbing \ Kylonochia Pr /Ab
2. Nutrition – Adequate \ Inadequate	10.Lymphadenopathy Pr /Ab
3. Pallor – Pr \ Ab	11.Skin N \ Ab
4. Icterus – Pr \ Ab	12.Height_____cms Weight ____Kgs
5. Spine-N\AbN	13.BMI _____
6. Joints- N\AbN	14.PR _____\min
7. Temperature Febrile\Afebrile	15. BP_____mmHg
8. Oedemea Pr / Ab	16. RR_____\min

ANNEXURE IV - KEY TO MASTER CHART

1] Age group in years : 1)18-25 2)26-40 3)41-60

2] Sex : 1) Male 2) Female

3] Residence : 1) Urban 2) Semi urban 3) Rural

4] Marital status : 1) Single 2) Married 3) Divorced
4) widow/widower

5] Religion : 1) Hindu 2) Muslim 3) Christian
4) Others

6] Category : 1) SC 2) ST 3) OBC
4) Others/general

7] Type of the family : 1) Nuclear family 2) Three generation
3) Joint family 4) Problem family
5) Broken family

8] Educational qualification : 1) Illiterate 2) Primary
3) Secondary 4) PUC (11^{th}, 12^{th})/ITI
5) Degree

9] Occupation : 1) Farmer 2) Laborer
3) Self-employed 4) Govt. employee
5) Pvt. Employee 6) Retired/Pensioner
7) Unemployed 8) Home maker

10] Socio economic status (modified B.G. Prasad's classification): 1) Class I
2) Class II
3) Class II
4) Class IV
5) Class V

11] Family history of Substance abuse : 1) Yes 2) No

12) Types of Substance used : 1) Alcohol 2) Tobacco 3) Cannabis
4) Prescribed drugs
5) Inhalants 6) Morphine 7) Others
8) Alcohol and Tobacco
9) Alcohol and Cannabis

10) Cannabis and Tobacco
11) Alcohol, Tobacco and Cannabis

13) Route of administration : 1) Oral 2) Smoking 3) Parenteral
4) Others 5) Oral and smoking
6) Oral and Parenteral

14) Age of initiation of Substance use : 1) <20 2)20-29 3)30-39
4) 40-49 5)>50

15) Duration of Substance use :1) <5 years 2) <10 years 3)10-20
4)>20

16) Reasons for initiation/continuing substance use: 1) Peer pressure 2) Curiosity
3) Family related stress
4) Role models

17) Reasons for its regular use : 1) Stress 2) withdrawals
3) Easy accessibility 4) Enjoyment

18) Reasons leading to realization of Substance use: 1) Continuous craving
2) Difficulty in doing work
3) Self realization
4) Medical problems
5) Made aware by family/friends

19) Reasons for admission in de addiction center : 1) Social 2) Co morbidities
3) Withdrawal 4) legal

20) Previous history of hospitalization in de-addiction centre: 1) Yes 2)No

21) Frequency of Substance use : 1) Once a day 2) Multiple times a day
3) Alternate days 4) When needed

22) Source of expenditure for substance abuse : 1) Employment 2) Pocket money
3) Borrowed 4) Stolen 5) Others

23) Brought in Hospital by : 1)Self 2)Family 3)Friends
4) Police

24) Any other medical illnesses : 1) yes 2) no

25) Attitude of family members to you : 1) Positive 2) Negative

26) How do you now feel about your rehabilitation : 1) positive 2) Negative

27) Pallor – 1) Pr 2) Ab

28) Icterus – 1) Pr 2) Ab

29) Oedemea- 1) Pr 2) Ab

30) Clubbing \ Kylonochia- 1) Pr 2)Ab

31) Lymphadenopathy- 1) Pr 2)Ab

32) BMI- 1)Underweight 2)Normal 3)overweight 4)Obese

33) Blood pressure 1) Normal 2) Abnormal

ANNEXURE V - MASTER CHART

SL.NO	AGE GROUP	SEX	RESIDENCE	MARITAL STATUS	RELIGION	CATOGORY	FAMILY	EDUCATION	OCCUPATION	SES	FAM H/O SUB.ABUSE	TYPES OF SUBSTANCE	ROUTE	AGE OF INITIATION	DURATION	REASON FOR INITIATION	REASON FOR REGURAL USE	REASON LEADING TO REALIZATION	REASON FOR ADMISSION	PRVS H/O HOSPITALIZATION	FREEQUENCY OF USE	SOURCE OF EXPENDITURE	BROUGHT BY	ANY CHRONIC ILLNESS	ATTITUDE OF FAMILY MEMBERS	HOW DO YOU FEEL	BUILT	NUTRITION	PALLOR	ICTERUS	SPINE	JOINTS	TEMP	OEDEMA	CLUBBING	LYMPADENOPATHY	SKIN	BMI	PR	BP	RR
1	2	1	2	2	3	3	3	5	5	4	1	1	1	2	2	2	4	1	1	1	1	1	2	1	1	2	3	2	1	2	2	1	2	2	1	1	1	3	2	2	1
2	3	1	3	2	1	1	2	2	1	3	2	1	1	1	3	3	2	2	1	1	2	3	3	1	1	1	2	1	1	2	1	1	2	2	2	1	1	3	2	2	2
3	3	1	2	3	1	2	1	1	1	3	1	8	5	2	3	2	4	4	2	1	2	3	1	1	1	1	3	2	1	1	1	1	2	1	2	1	1	2	1	1	2
4	1	1	1	1	1	4	1	5	5	3	1	11	1	5	1	1	3	1	4	2	2	2	2	2	1	2	2	1	2	2	1	1	2	2	2	1	1	2	1	1	2
5	2	1	2	2	2	3	3	5	3	3	2	1	1	2	2	4	4	5	1	2	2	1	2	2	1	2	2	1	2	2	1	1	2	2	2	1	1	2	1	2	2
6	3	1	3	3	1	1	1	2	2	5	1	1	1	1	3	3	1	1	1	1	2	1	3	2	1	2	3	2	2	1	1	1	2	2	2	1	1	2	1	2	1
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13	2	1	1	2	1	4	3	5	5	5	1	1	1	1	2	2	3	1	4	1	1	3	4	1	1	2	1	2	2	1	1	2	2	2	2	2	1	2	1	1	2
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Introduction

Aim and Objectives

Review of Literature

Methodology

Results

Discussion

Conclusion

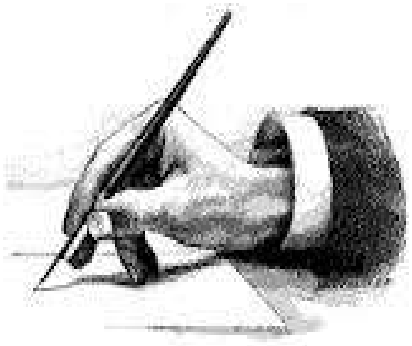
Recommendations

Strengths

Limitations

Summary

Bibliography



Annexures