



Prevalence And Pattern Of Substance Use Among Adolescent Males In Visakhapatnam district, Andhra Pradesh: An Observational Study

Deepthi Karini ^{*1}, Vanitha Myreddy², Vulli Surya Rao ³, Hanumanth N⁴

^{1,3}Assistant Professor, ²Final year MBBS Student, ⁴Lecturer in Biostatistics,
Department of Community Medicine,

^{1,3}Government Medical College, Rajamahendravaram

^{2,4}Gayatri Vidya Parishad Institute of Health care and Medical technology, Visakhapatnam

***Corresponding Author:**

Dr. Deepthi Karini

Assistant Professor, Department of Community Medicine,
Government Medical College, Rajamahendravaram

Type of Publication: Original Research Paper

Conflicts of Interest: Nil

Abstract

Background: Adolescence and late childhood, being the most susceptible phase of life, students often try to experiment with substances under peer pressure and parental influence. Early initiation of substance abuse could lead to chronic comorbid conditions with poor prognosis.

Aims/Objectives: To determine the prevalence and pattern of substance use and estimate the level of risk among male adolescents in Visakhapatnam.

Methodology: This was a descriptive, cross-sectional study conducted in the recognized Government and Private schools and intermediate colleges, situated in Visakhapatnam district, Andhra Pradesh among 201 adolescent boys. An 8-item screening tool ASSIST (Alcohol, Smoking, and Substance Involvement Screening Test) developed by World Health Organisation was used for data collection.

Results: The prevalence of substance ever users was found to be 43.8%. Alcoholic beverages were found to be the maximum abused substance (32.3%) followed by Tobacco products (16.9%) and Inhalants (14.4%). The remaining drugs mentioned were Cannabis (2%) and Hallucinogens (0.5%). Among the ever users, 55.7% were Single drug users and the rest 44.3% were taking two or more drugs.

Conclusion: Our study concluded that there was an alarmingly high prevalence of substance abuse among users in Visakhapatnam. This result could assist in the urgent development of substance-specific interventions to tackle this problem.

Keywords: Substance use, Ever users, Adolescent males, Visakhapatnam

Introduction

Substance abuse was a widely prevalent public health problem throughout the world and it was a growing problem in India. Rapid industrialization, urbanization and changing life styles had left children struggling for their survival, forcing many to harbor in the dark world of substance abuse. Previously it was considered to be a problem of street children, working and trafficked children, but now it had become a wide spread phenomenon even among

school going children from different socioeconomic and educational backgrounds. Substance abuse especially among adolescents had become an issue of concern throughout the world. ^[1] Adolescence and late childhood period being the vulnerable phase of life, students often try to experiment with new activities under peer pressure and parental influence. They start on drugs for several reasons, out of curiosity, as a recreational activity for pleasure, and

as a stress coping method. [2] They easily fall prey to the habit of substance use, particularly tobacco and alcohol, owing to their easy accessibility and disposable pocket money. The consequences of drug use were often multifaceted, including academic difficulties, mental health problems, poor peer relationships, and involvement with juvenile justice system. Early uptake of these substances increases their likelihood to adopt other risk behaviours as well at a later age, such as multiple substance use, violence, and delinquency. [3] According to World Health Organization (WHO), substance abuse was defined as “Persistent or sporadic drug use inconsistent with or unrelated to acceptable medical practice”. [4]

Substance dependence was a psychiatric disorder, characterized by compulsive substance use and appearance of withdrawal symptoms when the substance was no longer used. [5] It was a multidimensional problem which involves not only the person, but also influences the society on diverse ways. [6] In India, approximately 5500 children and adolescents were using tobacco products daily, some as young as 10 years old. [7] Particularly alarming was the fact that age of initiation in substance abuse was progressively falling. [1]

With this background, this was the first of its kind study conducted among male adolescents in Visakhapatnam, Andhra Pradesh to understand the status of substance abuse in this region as it was important to know the magnitude of the problem so as to initiate suitable policies for prevention of the problem. Moreover, there was dearth of knowledge regarding pattern of substance use and substance related problems in this district.

Materials And Methods

Study design: This was a school based, observational study

Type of study: Descriptive, cross-sectional study

Study site: The study was conducted in the recognized Government and Private schools and intermediate colleges, situated in Visakhapatnam district, Andhra Pradesh.

Duration: 1st August 2021 to 30th September 2021

Sampling technique and sample size calculation: The schools and colleges were selected randomly

from the list obtained from the district educational officer based on the cluster sampling method covering both the urban and rural areas of Visakhapatnam.

Prior permission was obtained from the appropriate authorities and principals of the schools and colleges for conducting the study. Random roll numbers were picked from each class from the attendance register in the selected schools and colleges and only those students present on the day of visit and who are willing to participate were included in the study. The sample size was calculated by using the formula $z^2 \times p(1-p) / e^2$ where the prevalence was taken as 33% based on a previous study conducted in Andhra Pradesh [8] and allowable error was taken as 20%. The required sample size was calculated to be 201.

Study population: Students from age 13 to 19 years, studying 7th to 12th from the selected schools and colleges who were willing to participate are included in the study. Exclusion criteria included female individuals, subjects absent on the day of visit and those who were not willing to participate in the study.

Method of data collection: All the students who fit into the study sample were given brief description about the study and questionnaire was administered to the students to fill on their own. On an average 30 minutes were spent for the whole process.

Study tool: The screening tool was based on the 8-item screening tool ASSIST (Alcohol, Smoking and Substance Involvement Screening Test) developed by the World Health Organisation (WHO) for the early identification of substance use related health risks and substance use disorders in primary health care settings was used. [9] It was modified for its use in adolescents for the current study covering tobacco, alcohol, cannabis, cocaine, amphetamine type stimulants, sedatives, hallucinogens, inhalants, opioids, and other drugs. According to the responses given by the study participants, the scores were recorded and added together across each individual substance and an ASSIST risk score was calculated for each substance to interpret their risk of health and other problems from their current pattern of use. Based on which, 0-3 scores were considered as low risk, 4-26 was considered as moderate risk and 27+ was high risk level for all the substances mentioned in the WHO ASSIST questionnaire except for alcohol. For alcohol, 0-10 was considered as low risk,

11-26 was considered as moderate risk and 27+ was high risk level. Those at low risk do not require any intervention, while those falling under moderate risk need brief treatment and high-risk individuals need intensive treatment, which may be provided by the health professionals within their primary care setting, or by specialist concerning drug and alcohol treatment services.

Statistical analysis: Data was entered in Microsoft Excel worksheet 2013 and Analysis was performed using SPSS software (Trial version 21). Descriptive statistical analysis was used in the present study. Continuous variables were presented as means and standard deviations for normally distributed data and as medians and inter-quartile ranges for skewed data, while categorical variables were presented as frequencies and percentages.

Results

A total of 201 adolescents were interviewed comprising of male students, aged 13-19 years chosen from the selected schools and colleges. The mean age of the study population was calculated to be 16.37 ± 1.9 years with almost equal representation from each age group of 13-15 years (36%), 15-17 years (30%) and 17-19 years (34%). Proportion of Hindu's was maximum (78.1%), followed by Christians (14.4%) and Muslims (7.5%). Majority of the study population were from Government institution (75.2%) and rest from private institutions (24.8%). Regarding academic standard, most of them were studying Intermediate 2nd year (12th class – 25.8%), followed by Intermediate 1st year (11th class – 23.4%) and 9th class (17.4%) and remaining comprised equal representation from 10th, 8th and 7th standards. More of the students were from rural background (55.7%) compared to urban (44.3%). And most of the study participants belonged to below poverty line (74.6%) and were receiving aid of government assistance. (Table 1). Among the study participants, 43.8% had used substance at least once in their life time – ever users (excludes substances that are prescribed by a doctor), of which more than half of them (55.7%) were Single drug users and remaining 44.3% were taking two or more drugs (Table 2 & 3). As shown in figure 1, Alcoholic beverages was the most used substance (32.3%) followed by Tobacco products (16.9%) and Inhalants (14.4%). Remaining drugs mentioned were Cannabis

e.g: marijuana, hashish (2%) and Hallucinogens e.g.: LSD (0.5%). Use of other substances like cocaine, amphetamine, sedatives, opioids and injectable drugs were not stated by anyone. The frequency of substance use in the past 3 months was elaborated in table 4. Only those substances used in the previous three months were continued with Questions 3, 4 & 5, and the responses to them was presented in the table 5. But questions 6 & 7 were asked to all the substances ever used and these were presented in the table 6. At the end of the interview, all the scores recorded were added together across each individual substance and an ASSIST risk score was calculated to interpret their risk of health and other problems from their current pattern of use. Regarding alcohol, which was the maximum abused substance amongst all others (n=65), 24.6% were at low risk, 70.8% were at moderate risk and remaining 4.6% were at high risk of health and other problems. Regarding tobacco users (n=35), 88.2% were at moderate risk, while for cannabis (n=4), three subjects were at moderate risk and one user was at high risk.

Alarming about the inhalant users (n=29) was that, about half of them (48.3%) were at high risk of experiencing severe problems and were likely to be dependent. (Table 7)

Discussion

Substance use had assumed epidemic proportion by penetrating almost all sections of the society, involving not only the adults, but also younger children mainly in the adolescent age group. The prevalence of substance abuse had shown a continuous upward trend. Exploring the magnitude of substance use was vital to develop effective strategies to generate awareness on the adverse effects on substance abuse and combat it so that the adolescents can imbibe them early in life to succumb short and long-term health benefits. In this study, the pattern and prevalence of substance use among male adolescents in Visakhapatnam, Andhra Pradesh was evaluated. The mean age of the study participants was 16.37 ± 1.9 years. Similar studies conducted in other parts of India reported little lower average age of their study samples, where the mean age was reported as 15.06 ± 2.358 ,^[10] 15.03 ± 3.0 years^[8] and 15.2 years.^[11] This could be due to the fact that most of these studies had included 10- 19 years age group adolescents, but in the current study, we

included subjects only from 13 years onwards till 19 years. Regarding religion, comparable findings were revealed by Qadri SS et al ^[11] and Joshi R et al ^[12] where Hindus constituted the maximum proportion. In contrast to this, majority of the study participants were Muslims (98.6%) in the study conducted by Baba TA et al at Srinagar, Kashmir. ^[13] In the present study, three-fourth of the study population were from Government institution (75.2%) and rest were from private institutions (24.8%). Similar findings were reported by Qadri SS et al ^[11] where 71.93% were from government schools and 28% were from private institutions. Regarding academic standard, most of them were from 12th class (25.8%), followed by 11th class (23.4%) and 9th class (17.4%).

Contrary to this, there was almost equal representation of students from all the classes (VII to XII) ranging from 15.98% to 17.40% respectively in the study by Qadri SS et al. ^[11] Even primary classes were included in few studies conducted at Karnataka and Kashmir. ^[12, 13] Most of the study participants were from rural background (55.7%) and 44.3% were from urban area in the current study. This was comparable to the findings of Baba TA et al, ^[13] where students from rural locality outnumbered the urban population. But studies from outside India showed quite opposite results (Urban - 57.8% Vs Rural - 42.2%). ^[14] Regarding financial status in this study, most of the study participants were below poverty line (74.6%), and remaining 25.4% were above poverty line.

Whereas study findings of Daniel LT et al reported that monthly family income of 75.45% was less than Rs.5000. ^[10] And in the study by Baba TA et al, a total of 58% had a monthly family income of less than 10,000 Rupees. ^[13]

In this research study, the overall prevalence of substance use at least once in lifetime (ever users) among the male adolescents was found to be 43.8%. This was quite similar to the findings of Saxena V et al ^[15] in his study at Dehradun district where 46.9% students accepted substance abuse. However, it was lower than the study results of Daniel LT et al ^[10], Qadri SS et al ^[11] and Ningombam S et al ^[16] who in their studies found the overall prevalence of substance abuse to be 55.6%, 60% and 54% respectively. But compared to our study, the findings of Baba TA et al (26.5%) and Kokiwar PR (32.7%)

^[8], prevalence of substance use was less. Even in the studies conducted outside India at Oman and Malaysia, the prevalence of substance use was quite less (20.7%). ^[17, 16] This variation in the study findings could be due to various factors like easy availability, law enforcement and socio-cultural environment in the study area. In the present study, there were multiple responses by the students to the type of substance abuse, but the most commonly ever used substance stated was Alcoholic beverages (32.3%), its intake was much higher compared to the findings from other parts of India conducted by Narain R et al (7.8%), ^[18] Daniel LT et al (11.4%) ^[10] Kokiwar PR et al (12.9%), ^[8] and Saxena V et al (8.7%). ^[15] However our study results match with the findings of Evren C et al ^[19] from Istanbul, where the alcohol use was noted among 34.2% adolescents. Tobacco products (16.9%) were found to be the second most consumed substance in this study, which was similar to the findings of Joshi R et al ^[12] at Karnataka, Rodzlan Hasani WS et al ^[14] at Malaysia and Hamed Al-Alawi AS et al ^[17] at Oman who reported consumption of tobacco products as 19%, 15.9% and 17% respectively. Whereas it was lower than the findings of Daniel LT in New Delhi, ^[10] Kokiwar PR et al in Andhra Pradesh, ^[8] Ningombam S et al in Manipur ^[16] and Qadri SS et al in Kashmir ^[11] who in their studies revealed that the ever use of tobacco was 77.5%, 60%, 46% and 35.69% (smoking) & 35.0% (chewing) respectively. This could be due to the social acceptability of alcohol and tobacco, and also easy availability of these substances. Impact of media, Imitation of the actors from watching movies and vigorous advertising in the last few years had led to increased consumption of these substances. Ever use of Inhalants was found in 14.4% of the adolescents, which was higher than findings of Qadri SS et al ^[11] (2.61%), but lower than Daniel LT et al ^[10] (26.23%).

Other drugs used in the present study were marijuana (2%) and Hallucinogens (0.5%). This was quite similar to the findings of Baba TA et al ^[13] who reported use of cannabis (4.4%) and hallucinogens (0.5%) and Evren C et al ^[19] who reported use of marijuana in 2.9% adolescents. In contrast, higher prevalence was reported by Qadri SS et al ^[11] and Ningombam S et al ^[16] who in their studies revealed that the ever use of cannabis was 8.45% and 14% respectively.

In the current study, none of the adolescents reported the use of cocaine, amphetamine, sedatives, opioids and injectable drugs. This could be because of the effective measures taken by governmental and non-governmental organizations against the use of these substances in the state.

Regarding frequency of use of each substance, there were very few studies conducted on this aspect. In the present study, around 30% reported the individual use of tobacco and alcohol once or twice in a month which was comparatively less than the findings of LT Daniel et al, where 60.65% were using the substances once or twice in a month. [10] More than 75% of the respondents in the current study never had a strong desire or urge to use the mentioned substances in the past three months, which was protective against high-risk use and drug dependence. Maximum respondents never had any social, legal, or financial problems because of the mentioned drugs in the past three months. Regarding fulfilment of the client's usual role obligations because of their substance use, more than 75% substance users had no interference with their role responsibilities in the past three months. Expression of concern such as discussion, questioning, advice, worry or anger about the client's substance use from their friends/relatives was seen mostly with tobacco, alcohol and cannabis use (50%-70%) especially in the past 3 months. While use of inhalants and hallucinogen was mostly ignored.

More than half of the substance users of tobacco, alcohol and cannabis had tried to cut down or stop using them but failed in the past three months. But the most serious thing was that majority of the Inhalant users (> 90%) have never even tried to do so.

In a similar study conducted by Kokiwar PR et al in Andhra Pradesh [8] only 16.5% had attempted to stop the use, but have failed, which was very less proportion compared to our study.

While in the study by Saxena V et al (8.7%) [15] revealed that 80.2% of the substance abusers expressed their desire to quit the habit and most of them were self-motivated.

A lack of strong support mechanism for these adolescents at the family and community level could be a major reason for their failure to stop using the drug. ASSIST risk score was calculated for each

substance to interpret their risk of health and other problems from their current pattern of use. Regarding tobacco users, 88.2% are at moderate risk, while for cannabis three-fourth are at moderate risk and one-fourth proportion of the users are at high risk. Alarming about the inhalant users is that, almost half of them are at high risk of experiencing severe problems. Regarding alcohol, maximum users (70.8%) are at moderate risk and about 4.6% are at high risk of health and other problems. These results could not be compared with any other studies as no research articles were found on adolescent age group.

Conclusion

The study results interpret that substance use was highly prevalent in the adolescent age group in Visakhapatnam district, which needs to be addressed at the earliest by taking effective measures. Educational campaigns involving parents need to be conducted concerning substance use along with communication of refusal skills to the students. Strict legislation measures to control selling substances to under 18 years of age and prohibition of substance use in public places could be effective. Periodic surveys, possibly every 2–3 years, would be useful to address the substance use issues and to evaluate the impact of the preventive measures.

Acknowledgements: We thank all the study subjects for participating in the study and giving their valuable responses.

Funding Sources: This research was approved and funded as a part of Indian council of medical research (ICMR) - short term studentship project for the year 2020. (Reference ID: 2020-07823)

Ethical Statement: Informed consent was obtained as appropriate from the students, parents and/or officials. Confidentiality of the data was assured. Approval was obtained from the Institutional Ethics Committee before the commencement of the study.

References:

1. UNDCP World Drug Report. New York; Oxford University press Inc.; 1997. Accessed on 25th August, 2021.
2. Naskar NN, Roy M, Bhattacharya SK. A study of some socioeconomic factors on drug abuse among the undergraduate medical students in

Calcutta. Indian J Community Med. 2004 Apr-Jun;29(2):69-71.

3. Bonomo YA, Bowes G, Coffey C, Carlin JB, Patton GC. Teenage drinking and the onset of alcohol dependence: a cohort study over seven years. *Addiction*. 2004 Dec;99(12):1520-1528.
4. World Health Organization. *Lexicon of alcohol and drug terms*. Geneva: World Health Organization: 1994. Accessed on 2nd September, 2021.
5. Bruijnzeel AW, Repetto M, Gold M.S. Neurobiological mechanisms in addictive and psychiatric disorders. *Psychiatr Clin North Am*. 2004 Dec;27(4):661-674.
6. Shaner A, Khalsa ME, Roberts L, Wilkins J, Anglin D, Hsieh SC. Unrecognized cocaine use among schizophrenic patients. *Am J Psychiatry*. 1993 May;150(5):758-762.
7. Patel DR, Greydanus DE. Substance Abuse: A Paediatric Concern. *Indian J Pediatr*. 1999 Jul-Aug; 66(4):557-567.
8. Kokiwar PR, Jogdand GS. Prevalence of substance use among male adolescents in an urban slum area of Karimnagar district, Andhra Pradesh. *Indian J Public Health*. 2011 Jan-Mar;55(1):42-45.
9. WHO ASSIST Working Group. The Alcohol, Smoking and Substance Involvement Screening Test (ASSIST): Development, reliability and feasibility. *Addiction*. 2002 Sep;97(9):1183-1194.
10. Daniel LT, Krishnan G, Gupta S. A study to assess the prevalence and pattern of substance use among male adolescents in suburban area of Delhi. *Indian J Soc Psychiatry*. 2017 Jan;33(3):208-212.
11. Qadri SS, Goel RKD, Singh J, Ahluwalia SK, Pathak R, Bashir H. Prevalence and pattern of substance abuse among school children in northern India: A rapid assessment study. *Int J Med Sci Public Health*. 2013 Jan;2(2):273-282.
12. Joshi R, Ashwini N, Vijaya AN & Mallapur MD. Patterns of tobacco consumption among adolescent boys residing at Khasbag, Belgaum, Karnataka: A community based cross sectional study. *RNJP*. 2016 April;1(2):54-57.
13. Baba TA, Ganai AM, Qadri SS, Margoob MA, Iqbal QM, Khan ZA. An epidemiological study on substance abuse among college students of North India (Kashmir valley). *Int J Med Sci Public Health*. 2013 Jan; 2(3):562-567.
14. Rodzlan Hasani WS, Saminathan TA, Ab Majid NL, Miaw Yn JL, Mat Rifin H, Abd Hamid HA, et al. Polysubstance use among adolescents in Malaysia: Findings from the National Health and Morbidity Survey 2017. *PLoS ONE*. 2021 Jan;16(1):e0245593.
15. Saxena V, Saxena Y, Kishore G, Kumar P. A study on substance abuse among school going male adolescents of Doiwala Block, District Dehradun. *Indian J Public Health*. 2010 Oct-Dec;54(4):197-200.
16. Ningombam S, Hutin Y, Murhekar MV. Prevalence and pattern of substance use among the higher secondary school students of Imphal, Manipur, India. *Natl Med J India*. 2011 Jan-Feb;24(1):11-5.
17. Hamed Al-Alawi AS, Shaikh J. Prevalence of Substance Abuse among the School Students in Al-Dhahirah Governorate, Sultanate of Oman. *Madridge J Nurs*. 2018 Jul;3(1):118-123.
18. Narain R, Sardana S, Gupta S. Prevalence and risk factors associated with substance use in children: A questionnaire-based survey in two cities of Uttar Pradesh, India. *Indian J Psychiatry*. 2020 Sep-Oct;62(5):517-523.
19. Evren C, Ogel K, Ciftci-Demirci A, Evren B, Goksan-Yavuz B, Bozkurt M. Prevalence of lifetime tobacco, alcohol and drug use among 10th grade students in Istanbul: data for year 2012. *Klinik Psikofarmakol Bülteni-Bulletin Clin Psychopharmacol*. 2014 Sep;24(3):201-210.

Tables & Figures

Table 1: Socio-demographic characteristics of the study population

Socio-demographic characteristics	Frequency (n)	Percent (%)
1. Age (in years)		

13 – 15	72	35.8
15 – 17	60	29.9
17 – 19	69	34.3
2. Religion		
Hindu	157	78.1
Christian	29	14.4
Muslim	15	7.5
3. Academic standard		
7th class	20	10
8th class	23	11.4
9th class	35	17.4
10th class	24	12
Intermediate 1st year	47	23.4
Intermediate 2nd year	52	25.8
3. Type of educational institute		
Government	151	75.2
Private	50	24.8
4. Residence		
Rural	112	55.7
Urban	89	44.3
5. Financial status		
APL (Above poverty line)	51	25.4
BPL (Below poverty line)	150	74.6
Total	201	100

Table 2: Prevalence of substance use among the study population

Table 2: Prevalence of substance use among the study population Substance use	Frequency (n)	Percent (%)

Ever used	88	43.8
Never used	113	56.2
Total	201	100

Table 3: Distribution of Drug combination among the ever substance users

Drug Combination	Frequency	Percent (%)
Single drug	49	55.7
Two or more drugs	39	44.3
Total	88	100.0%

Table 4: Frequency of substance use among the ever users in the past 3 months

Type of Substance	Never	Once or twice	Monthly	Weekly	Daily or almost daily
1. Tobacco (n=34)	5 (14.7%)	12 (35.3%)	9 (26.5%)	5 (14.7%)	3 (8.8%)
2. Alcohol (n=65)	7 (10.8%)	21 (32.3%)	24 (36.9%)	12 (18.5%)	1 (1.5%)
3. Cannabis (n=4)	3 (75%)	-	-	1 (25%)	-
4. Inhalants (n=29)	5 (17.2%)	19 (65.5%)	1 (3.4%)	1 (3.4%)	3 (10.3%)
5. Hallucinogens (n=1)	1 (100%)	-	-	-	-

Never: not used in the last 3 months

Once or twice: 1 to 2 times in the last 3 months.

Monthly: 1 to 3 times in one month.

Weekly: 1 to 4 times per week.

Daily or almost daily: 5 to 7 days per week.

Table 5: Responses of the study participants to questions 3,4 and 5 of the WHO-ASSIST Tool

Parameters in the WHO ASSIST Tool	Never	Once or twice	Monthly	Weekly	Daily or almost daily
Q3. Strong urge/desire to use the substance among the ever users in the past 3 months					
a. Tobacco (n=34)	26 (76.5%)	-	4 (11.8%)	2 (5.9%)	2 (5.9%)
b. Alcohol (n=65)	55 (84.6%)	-	5 (7.7%)	3 (4.6%)	2 (3.1%)
c. Cannabis (n=4)	3 (75%)	-	-	1 (25%)	-
d. Inhalants (n=29)	21 (72.4%)	-	6 (20.7%)	2 (6.9%)	-
Q4. Use of the drug had often led to health, social, legal or financial problems among the ever users in the past 3 months					
a. Tobacco (n=34)	30 (88.2%)	-	1 (2.9%)	-	3 (8.8%)
b. Alcohol (n=65)	61 (93.8%)	-	3 (4.6%)	-	1 (1.5%)
c. Cannabis (n=4)	3 (75%)	-	1 (25%)	-	-
d. Inhalants (n=29)	28 (96.6%)	-	1 (3.4%)	-	-
Q5. Use of the drug had often led the ever users to fail to do what was normally expected of them in the past 3 months					
1. Tobacco (n=34)	Tobacco was excluded from this question as per WHO ASSIST tool because in general, people don't fail their role obligations because they were smokers				
2. Alcohol (n=65)	55 (84.6%)	-	9 (13.8%)	-	1 (1.5%)
3. Cannabis (n=4)	3 (75%)	-	1 (25%)	-	-
4. Inhalants (n=29)	27 (93.1%)	-	1 (3.4%)	1 (3.4%)	-

Table 6: Responses of the study participants to questions 6 and 7 of the WHO-ASSIST Tool

Parameters in the WHO ASSIST Tool	No, Never	Yes, in the past 3 months	Yes, but not in the past 3 months
Q6. A friend/relative or anyone else ever had expressed concern about your use of drug			
1. Tobacco (n=34)	8 (23.5%)	25 (73.5%)	1 (2.9%)
2. Alcohol (n=65)	18 (27.7%)	38 (58.5%)	9 (13.8%)
3. Cannabis (n=4)	2 (50%)	2 (50%)	-
4. Inhalants (n=29)	28 (96.6%)	-	1 (3.4%)
5. Hallucinogens (n=1)	-	-	1 (100%)
Q7. Have you ever tried and failed to control, cut down or stop using the drug			
1. Tobacco (n=34)	12 (35.3%)	22 (64.7%)	-
2. Alcohol (n=65)	18 (27.7%)	39 (60%)	8 (12.3%)
3. Cannabis (n=4)	2 (50%)	2 (50%)	-
4. Inhalants (n=29)	27 (93.1%)	-	2 (6.9%)
5. Hallucinogens (n=1)	-	-	1 (100%)

Table 7: Level of risk determined by the patient’s specific substance involvement score

Type of Substance abuse	Low risk (0-10)	Moderate risk (11-26)	High risk (27+)

1. Alcohol (n=65)	16 (24.6%)	46 (70.8%)	3 (4.6%)
	Low risk (0-3)	Moderate risk (4-26)	High risk (27+)
2. Tobacco (n=34)	4 (11.8%)	30 (88.2%)	-
3. Cannabis (n=4)	-	3 (75%)	1 (25%)
4. Inhalants (n=29)	15 (51.7%)	-	14 (48.3%)
5. Hallucinogens (n=1)	1 (100%)	-	-