## **Original Research Article**

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# Pattern, knowledge and attitude regarding substance use among youth (11-24 years): findings from an exploratory survey

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#### **ABSTRACT**

**Background:** Substance use disorders are becoming a serious public health concern with its slow but gradual increase among adolescents and young adults. The study aimed to assess the knowledge, attitude and practices of youth about substance use.

**Methods:** A cross-sectional study was conducted among youth visiting various outpatient departments of a tertiary care teaching hospital. 270 youth participated in the study and were interviewed using pre-tested and pre-structured proforma entailing information on knowledge, attitude and practices about substance use disorders.

**Results:** Out of 270 study subjects, 54 (51 males and 3 females) had ever used drugs. Among male users, 96.07% used drugs for joy seeking whereas among females 66.66% used drugs due to teenager curiosity. All the respondents had information about drug use, with friends being the major source of information (85.18%) followed by electronic media (81.85%) and school curriculum (48.51%). 97.03% of the respondents knew that anxiety, euphoria, depression, happiness and aggressiveness can occur with substance abuse. Both males (98.64%) and females (97.91%) expressed a positive attitude towards helping a friend who is into drug abuse. Age at first use for tobacco (4%), alcohol (6.38%) and inhalants (12.5%) was found to be as young as 12-15 years.

**Conclusions:** The study participants were found to be knowledgeable about substance use disorders and had a positive attitude on majority of the attitude items. No current user and only 20% ever users in the study may be underreporting.

**Keywords:** Substance use disorders, Youth, Knowledge, Attitude, Practices

## INTRODUCTION

Substance use has been a long-standing public health challenge across the globe, including in India. The detrimental use of alcohol and other substances has been reported to cause devastating consequences on individuals, families, and societies. These include psychological, social and economic burden in societies, and many other physical harms like road traffic accidents. The harms of substance use extend far beyond

their corrosive effects on health, safety, and wellbeing and additionally include those associated with healthcare expenditures, productivity losses, criminal justice involvement, and other negative effects on social welfare.<sup>3</sup> 2002-2030 projections by the Global Burden of Disease Project estimate that five of the six fastest-growing causes of global mortality are related to substance use.<sup>4</sup> The incidence and harms of substance use, misuse, and dependence involve multilevel explanatory factors.<sup>5,6</sup> Interventions to reduce their

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individual- and population-level harms can often be hampered by biological, psychological, and social complexity, especially because substance use is often syndemic with other health and social problems such as HIV infection, hepatitis B and C, mental health disorders, and violence.<sup>7,8</sup>

In light of this, the protection of the health of populations by preventing the harmful use of drugs, and its effects remains a public health priority. 9-11 Lack of well-supported scientific evidence can be an obstacle in the successful implementation of public health action to curb the menace of drug abuse. Review of literature revealed dearth of studies on substance abuse in Jammu division of UT of J&K and also authors aimed to assess the current trends of substance use among the youth population. In this context, this study was planned by the researchers to assess the knowledge, attitude and practices regarding substance use among youth in UT of J&K.

#### **METHODS**

The present cross-sectional study was conducted amongst youth (11-24 years) attending the outpatient department of a tertiary care teaching hospital as patients or attendants. The study period was 1st November 2020 to 31st October 2021 and due approval was sought from Institutional Ethical Committee before the start of the study.

Using the formula, 4pq/l<sup>2</sup> to calculate sample size, the estimate was arrived at 264, using minimum prevalence of substance use at 12% and allowable error at 20%. The study was conducted once-a-week with about 5-6 youth interviewed on a daily basis. A written informed consent was obtained from all the study participants before selfadministered questionnaire was provided to them. For the youth under 18 years of age, parents' consent was sought before administering the questionnaire. As per the need, the consent was sometimes sought telephonically from the parents. For selection of study participants, consecutive sampling method was used. All the study participants were explained about the relevance of the study and were assured of the confidentiality. The questionnaire was completed under the supervision of the investigator.

## Inclusion criteria

Patients in the age group of 11-24 years and providing written consent for participation and healthy individuals with no diagnosed chronic medical condition were included.

## Exclusion criteria

Patients already on treatment for any psychiatric condition and death of any family member or close relative in the last one year were excluded.

The self-administered questionnaire composed of four sections including demographic data, knowledge, attitude and practice of substance use information. Global assessment programme on drug abuse of United Nation was used to develop the questionnaire. The questionnaire was pilot tested on a group of 25 youth before its final use for the survey and these respondents were excluded from the final study.

#### Working definitions

*Youth:* Those in the age group of 11-24 years were called youth.

Ever user: Those study subjects who had consumed substance (drug) even once in their lifetime in any quantity were the ever user.

Substance: Any psychoactive substance or drug which when taken into a living organism modifies one or more of its functions. The list of substance categories used in the study include: tobacco (smoking/chewing)<sup>2</sup> alcohol (beer, wine, hard liquor, desi alcohol); cannabis (bhang, charas, ganja, sulpha); inhalants (ink eraser fluid, petrol, glue, iodex); opium (doda, phukki); heroin (smack, brown sugar); pharmaceutical opioids (proxyvon, tidigesic, fortwin, codeine containing cough syrups); pharmaceutical sedatives (diazepam, nitravet or number 10, alprax, trika); injectable route (any substance).<sup>13</sup>

Substance use: persistent or sporadic excessive drug use inconsistent with or unrelated to acceptable medical practice (WHO expert committee on drug dependence 1969).

The data thus collected was analyzed used SPSS version 20.0. Categorical variables were represented by frequencies and percentages while mean values with standard deviation was used for continuous variables.

## **RESULTS**

A total of 270 subjects who visited the OPD of GMC Jammu during the study period and consented to participate were included in the study. The mean age of the respondents was 18.66±3.79 years. Majority (37.77%) of the respondents were in the age group of >21 years followed by 25.92% in 18-21 year age group. 222 (82.2%) study subjects were males while 48 (17.8%) were females, with male:female ratio being 4.62:1. When asked about place of residence of the study participants, it was found that majority (72.2%) were from urban areas. All the study subjects were unmarried. All the study subjects were literate. Among males, majority (38.28%) had completed graduation followed by secondary school education (25.7%) whereas among females, 37.5% had studied up to secondary level followed by graduation (35.41%). As far as literacy status of the parents of study subjects was concerned, it was revealed that father of only one male subject was illiterate (0.45%) while fathers

of all female subjects were literate (100%). On the contrary, mothers of 10.41% female subjects and 48.64% male subjects were illiterate. The mean family income per month of males and females was almost similar with total mean income being INR 64725.92±23663.35. The data also revealed that majority of the males (30.63%) belonged to monthly family income range of 50000-60000 INR while largest number of females (29.16%) belonged to monthly family income range of 40000-50000 INR (Table 1).

The study results revealed that all the respondents had information about drug use, with friends being the major

source of information (85.18%) followed by TV (81.85%) and schools (48.51%). All the male participants had knowledge about addiction causing drugs like tobacco, alcohol and cannabis and 97.74% of male participants had knowledge about opioids and cocaine while only one female participant did not have knowledge about these drugs. 82.22% subjects knew that sedatives can also cause addiction. On eliciting knowledge regarding short-term effects of drug use, it was found that 97.03% knew that anxiety, euphoria, depression, happiness and aggressiveness can occur with substance abuse. Only 38.88% reported improved memory and learning ability as an effect of drug use (Table 2).

Table 1: Socio-demographic characteristics of the study participants (n=270).

Cagiadamaguanhia yayiahlaa	Males (n=222)			s (n=48)	Total (n=270)	
Sociodemographic variables	No.	%	No.	%	No.	%
Age (in years)						
<21	137	61.7	31	64.5	168	62.2
>21	85	38.2	17	35.4	102	37.7
Residence						
Urban	160	72.07	35	72.9	195	72.2
Rural	62	27.9	13	27.08	75	27.7
Religion						
Hindu	172	77.47	31	64.58	203	75.18
Muslim	29	13.06	11	22.91	40	14.81
Others	21	9.45	06	12.5	27	10
<b>Educational status</b>						
Up to middle school	32	14.41	8	16.6	40	14.8
Secondary and higher secondary	105	47.2	23	47.9	128	47.4
Graduate	85	38.2	17	35.4	102	37.7
Literacy of father						
Literate	221	99.54	48	100	269	99.62
Illiterate	01	0.45	00	0.00	01	0.37
Literacy of mother						
Literate	114	51.35	43	89.58	157	58.14
Illiterate	108	48.64	05	10.41	113	41.85
Mean family income (in INR)	64666.66±25040.54		65000±16011.96		64725.92±23663.35	

Table 2: Knowledge of study participants regarding drugs causing addiction and their short-term effects.

	Male (n=222)			Female (n=48)				Total (yes)		
Parameters	Yes		No		Yes		No		No.	%
	No.	<b>%</b>	No.	<b>%</b>	No.	%	No.	%	140. /0	70
Knowledge about drugs causing a	ddictior	1								
Tobacco, alcohol and cannabis	222	100	00	0.00	47	97.91	01	2.03	269	99.62
Opioids and cocaine	217	97.74	05	2.25	47	97.91	01	2.03	264	97.77
Sedatives	182	81.98	40	18.01	40	83.33	08	16.66	222	82.22
Knowledge about short term effect	Knowledge about short term effects of drug use									
Anxiety/depression/ euphoria/ happiness/ aggressiveness	219	98.64	03	1.35	43	89.58	05	10.41	262	97.03
Improved memory and learning ability	85	38.28	137	61.71	20	41.66	28	58.33	105	38.88
Raised self confidence	167	75.22	55	24.77	36	75	12	25	203	75.18
Seeing unreal images and hearing unreal sounds	187	84.23	35	15.76	36	75	12	25	223	82.59

Table 3: Knowledge of participants regarding available forms of banned drugs.

Knowledge about available form of banned drugs								Total (yes) n=270		
Drug/substance	Male (n=222)				Fema	Female (n=48)				
	Yes		No		Yes		No		No.	%
	No.	%	No.	%	No.	%	No.	%	_	
Cigarette (in minors), tablet, powder, liquid, injection	222	100	00	0.00	48	100	00	0.00	270	100
Chewing gum, patch, inhaled vapours of liquids, transparent crystals	107	48.19	115	51.80	20	41.66	28	58.33	127	47.03

Table 4: Response of study participants to attitude items.

	Attitude regarding drugs							
Type of attitude	Males (n=	:222)	Females (	Females (n=48)				
	No.	%	No.	%				
Scared of drug addicts	140	63.06	40	83.33				
Drugs are harmful	221	99.54	48	100				
Are more as criminals	42	18.91	18	37.5				
Are more as victims	190	85.58	37	77.08				
Avoid a drug addict	127	57.20	34	70.83				
Drug addicts to blame themselves	169	76.12	35	72.91				
Exaggerate troubles to get sympathy	163	73.42	37	77.08				
Help a friend who is into addiction	219	98.64	47	97.91				
Study/live/work with drug addict	59	26.57	05	10.41				

Table 5: Practice of substance use among the study participants.

Substance used		Pattern ever in lifetime use (n=54)		rn in last one year (n=54)	Age at first use (in years)	
	No.	%	No.	%	[mean±SD]	
Tobacco	50	92.59	50	92.59	15.78±1.14	
Alcohol	47	87.03	46	85.18	16.38±1.39	
Cannabis	31	57.40	27	50	17.48±1.31	
Inhalants	08	14.81	07	12.96	16.75±1.66	
Opium	05	9.25	05	9.25	18±1.41	
Heroin	39	72.22	37	68.51	17.61±1.40	
Pharmaceutical opioids	09	16.66	08	14.81	16.44±1.81	
Pharmaceutical sedatives	33	61.11	33	61.11	18.63±1.65	
Injectable route (any substance)	00	0.00	00	0.00	-	

All the subjects knew that cigarettes, some tablets, powders, liquids and injections, although banned, but can be availed for abuse (Table 3). 99.62% respondents knew that drugs can be acquired from tobacco/wine shops, 97.77% knew about drug peddlers and 59.25% knew about the availability of drugs at pharmacy/chemist shops. All the study participants were aware that treatment of substance abuse is possible.

As depicted in Table 4, females (83.33%) seemed to be more scared of drug addicts as compared to males (63.06%). Females were more likely to consider drug

addicts as criminals (37.5%) while a greater percentage of males (85.58%) considered drug addicts as victims. Both males (98.64%) and females (97.91%) expressed a positive attitude towards helping a friend who is into drug abuse.

Out of 270 study subjects, 54 (51 males and 3 females) admitted that they had used drugs at some point in their lives. Among males, 96.07% used drugs for joy seeking and 92.15% due to teenager curiosity whereas among females 66.66% used drugs due to teenager curiosity. 72.54% male ever users as against 33.33% female ever users quoted reason for drug use as imitating friends.

Also, 39.21% males among ever users accepted unhappy relationship as a reason for drug use. None of the subjects ever used drugs because of the presence of an addict in their family. 24.07% of the ever users admitted that it was easy for them to procure drugs while 72.54% found it difficult. 81.48% of the users usually took drugs in a group of 1-5 people, 14.81% took drugs alone and 3.7% took drugs in a group of more than 6. 51.85% of the ever users revealed that they had driven vehicle and 29.62% had indulged into fight under the effect of drugs. Also, 20.37% had experienced sadness/anxiety because of drug use.

The most abused substance among ever users in their lifetime was tobacco (92.59%) followed by alcohol (87.03%) and heroin (72.22%). None of them had ever used substances through injection route. On studying pattern of substance use in last one year among ever users, the commonest substance found was tobacco (92.59%) followed by alcohol (85.18%) and heroin (68.51%). None reported use of injectable route. Tobacco (92.59%), alcohol (62.95%) and pharmaceutical sedatives (37.03%) were the commonest substances used in the last 30 days. On further eliciting the frequency of substance use, it was found that among a total of 50 tobacco users, 43 (86%) used it for 20-30 days in the last month and out of a total of 34 alcohol users, 28 (82.35%) consumed it for 1-10 days in the last month. The data also suggested that among ever users, age at first use for tobacco (4%), alcohol (6.38%) and inhalants (12.5%) was found to be as young as 12-15 years. For all the other substances, age at first use was 15-18 years. Interestingly, except for heroin, none of the study subjects showed age at first use above 21 years (Table 5).

### **DISCUSSION**

The findings of the present study have revealed that none of the respondents was current user of drugs but 20% (54/270) of the respondents were found to be ever users. These findings are in agreement with those reported by NFHS-5 for alcohol users in males aged 15 years and above. As per data for UT of Jammu and Kashmir from NFHS-5, it was found that 3.6% women and 38.3% men of more than 15 years had used tobacco in different forms. Similar figures for alcohol consumption was 0.2% and 8.8% respectively. Further, NFHS-5 revealed that approximately 25% of men more than 15 years were consumers of tobacco and alcohol in Jammu district. <sup>14</sup> Faizi et al reported ever user rate of 33.3% and current user at 12.9%. <sup>15</sup> A study conducted by Ahmad et al in male adolescents reported a lower prevalence of 13.3%. <sup>12</sup>

The average age of initiation of substance use among the ever users in the present study varied; with tobacco it was 15.78±1.14 years while for pharmaceutical sedative, it was found to be 18.63±1.65 years. These findings are congruent to those reported by Faizi et al, Sarangi et al and Saxena et al. <sup>14,16,17</sup> However, these results were found to be in older age group when compared with the findings

and Narain et al and Bardhan et al. 18,19 These recent findings of early initiation of substance use can be attributed to easy accessibility, lack of willpower to cope stress and influence of sibling/parent.

As far as knowledge of the respondents about common drugs causing addiction was concerned, it was found that all of them had very good awareness and their source of information was electronic and print media as well as their friends. These findings are in consonance with those reported by Faizi et al and Narain et al. 14,17 All the respondents knew about tobacco and alcohol addiction and these results are similar to those reported by Faizi et al. 14

Faizi et al reported that commonly abused substances like tobacco and alcohol were not even considered abusive and this reflects the mindset of current youth who were now considering both tobacco and alcohol more as a part of culture. The results further elucidated that respondents were knowledgeable about short-term effects of drug use which are in confirmity to the results reported by Haddad et al from Jordan. The knowledge about intake of banned drugs varied among the respondents with better knowledge among the male respondents. These results were in contrast to those reported by Faizi et al where respondents had limited knowledge about the substances which are abused as well as their routes of intake. He

Attitude of the study participants was found to be positive on items like willing to help a friend who is addicted to drugs. These attitude items are in fact a reflection of the adequate levels of knowledge already discussed among the study participants. But the respondents had a negative attitude when asked to live/work with a drug addict and these results were in agreement with those reported by Bashir et al who reported that only 32.1% had a positive attitude towards addicted patients and addiction. Faizi et al reported a risk-taking attitude among respondents where half of them did not consider drug abuse to be dangerous and were not averse to trying it. Bhad et al also reported thrill-seeking attitude among the respondents.

None of the study subjects was current user and only 20% were ever users, though a healthy sign in the present study but it may be due to underreporting. Among the ever users, majority had smoked tobacco and drank alcohol while 60% had taken pharmaceutical sedatives and these results were congruent with those reported by Faizi et al. <sup>14</sup> Among the gateway drugs in substance abuse, tobacco, alcohol and cannabis are prominent leading to use of harder drugs causing dependence later on. Literature review showed that this was the first study to assess knowledge, attitude and practices regarding drug abuse in Jammu city of UT of J&K, particularly among the youth which was the most active part of the community.

#### Limitation

Small sample size and cross-sectional nature of the study limited the generalization of the results.

## **CONCLUSION**

In conclusion, the findings of the study have indicated that one-fifth of the respondents were ever users. Levels of knowledge were adequate along with positive attitude to curb substance use. Tobacco, alcohol and cannabis were the substances used in order of preference among the ever users. With drug addiction menace showing a dreading upward trend among the society in general and youth in particular, it is pertinent to incorporate a chapter on substance use disorders in the study curriculum for adolescents.

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