

## ORIGINAL ARTICLE

# KNOWLEDGE REGARDING DRUG ABUSE AMONG ADOLESCENTS IN SCHOOL

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## ABSTRACT

**Background:** Drug abuse is a common public health problem worldwide and a global threat. The objective of the study was to assess the knowledge regarding drug abuse among adolescents in a School of Dharan.

**Method:** A descriptive cross-sectional design was carried out among 144 students of Sagarmatha SD College. Probability proportionate sampling method was used and data was collected through self-administered Questionnaire and analyzed by descriptive and inferential statistics using SPSS version 25 and findings were presented in tabulated form.

**Findings:** More than half (54.9%) of the respondents had adequate level of knowledge. Adequate knowledge was present on meaning of heroin was (54.9%). Adequate level of knowledge present influencing factors ((70.1%) of the drug abuse is peer pressure, route of administration of marijuana and heroin (81.4%) and (59%) respectively. However, inadequate knowledge was present regarding meaning of drug abuse (34.02%) and heroin (13.2%) respectively, withdrawal symptoms of marijuana and heroin (20.1%), 24.3% & regarding preventive aspects of drug abuse & treatment were 24.3% and 11.1%. There was no significant association found between level of knowledge with demographic variables.

**Conclusion:** More than half of the respondents had adequate level of knowledge regarding drug abuse despite of this, there is inadequate level of knowledge regarding meaning of drug abuse, their effects and preventive & treatment measures. Which indicates need awareness program on drugs abuse to adolescents.

**Keywords:** Adolescent Students; Knowledge; Drug abuse

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## INTRODUCTION

Drug abuse is harmful or hazardous use of psychoactive substances including illicit drug use on society is the negative health consequences and puts a heavy financial burden on individuals, families and society<sup>1</sup>. Around 284 million people aged 15-64 used drugs worldwide in 2020 and 26 % increase over the previous decade. It estimates that 11.2 million people worldwide were injecting drugs. Around half of them number were living with hepatitis C and about 1.4 million were living with HIV, and 1.2 million were living with both. In United States more than 107,000 drug overdose deaths in 2021<sup>2</sup>.

About 275 million people used drugs in 2019, representing a 22 % increase from 226 million 2010 and drug use was increased rapidly in developing countries. Cannabis was the most widely consumed drug, with an estimated 200 million users globally in 2019. Globally number of people use drug rise by 11% by 2030<sup>3</sup>. Cannabis is the most widely used psychoactive drug among young people with about 4.7% of people aged 15-16 years using it at least once in 2018 Cannabis remains the most widely used illicit substance in the African Region<sup>4</sup>.

A cross-sectional study was conducted in Aligarh India. A total of 1431 students participate in study. Study shows that 89% of respondents had some knowledge about substance use. The mean age of starting the drug in students was 15.5 ± 2.7 years. Stress 57.9% was most common reason to use drugs<sup>5</sup>

Nationally, about 2.8% of Indians used cannabis product among them 20, 00000 were between the age of 10-17 and about 1.14% of total population used heroin and 8.5 Lakh people were injectable Drugs user<sup>6</sup>. A study conducted among 360 students age 16-18 in Kannada, India. The aims of

the study was to determine the knowledge on the effects of substance abuse among adolescents. The majority (50%) of the adolescents had average knowledge (39.2%) had good knowledge<sup>7</sup>. A cross-sectional study was conducted between October 2019 to January 2020 in Bangladesh, among 436 adolescent study revealed negative impact of drugs abuser's academic life and physical well-being followed by uncomfortable in classroom 76.1%, lack of concentrate in class lecture 44.1%, irregular in class 88.4%<sup>8</sup>. Study was conducted to assess the knowledge regarding substance abuse among 100 adolescent students in Amritsar, Punjab. Results shows that 57% had adequate knowledge and 43% had inadequate knowledge on substance abuse<sup>9</sup>. The number of current drug users are 1,30,424 among them, 1,21,692 (93.3%) male and 8,732 (6.7 %) female, study revealed that 1,00,165 (76.2%) drug user were below the age of 30 years and using different types of drugs such as cannabis 84.7%, The highest number of the drug users are found in Bagmati province 46,480 (36.6%) followed by Province no 1 27,6059 (21.2%). Out of every 10 drug users, 4 of them are unemployed. Peer pressure was major causes 89.4% growth from 2069 to 2076 was 5.65<sup>10</sup>. A descriptive cross-sectional study conducted to assess the level of knowledge regarding drug abuse among 106 school students of Shree Janak Secondary School, Nawalparasi, Nepal. Study revealed that 57.5% students had poor knowledge regarding effect of drug abuse, 67% of respondents said financial burden as cause, 60.4% said drug abuser performed poorly at school work. Majority 71.7% said awareness program as the way to prevent from drug abuse. Similarly, 52.8% said rehabilitation is the way to treat drug abuse<sup>11</sup>. A cross-sectional study was conducted from March 2018 to May 2018 in three

government schools of Kathmandu metropolitan city, among 250 adolescent students from grade 11 and 12, Study shows 6.8% used drugs and 70.58% said peer pressure was the major influencing factor <sup>12</sup>.

A cross-sectional study was conducted from July 2018 to December 2018 in Dharan among 1125 higher secondary school students. More than half of the drug users 50.71% used cannabis and the most common reason for using any substance was peer pressure 91.64%. Prevalence of ever users of drug was 18.19%<sup>13</sup>. Cross sectional study carried out among 115 students aged between 15-20 years of grade 12 to assess the knowledge of substance abuse among students studying in selected higher secondary school of Biratnagar. Majority of respondents (51.3%) answered correctly regarding the meaning of substance, only 19.1% knew the actual meaning of substance abuse similarly 53.9% of respondents peer pressure was cause for substance abuse <sup>14</sup>.

Many studies have shown that high prevalence of drug abuse among adolescents. Similarly, studies show that most of them drug using by peer influence and negative impact in academic family and in social relation. Therefore, the researcher was interested to study on this title.

## MATERIAL AND METHODS

A cross-sectional descriptive study design was used. The data were collected by using probability proportionate to sample size Sampling technique and self-structured questionnaire used for data collection. Data was collected from Paush 15th to Magh 15th 2079. The total sample size was 144. Ethical approval was taken form IRC of Manmohan Memorial Institute of Health Sciences. Informed Consent was obtained from all respondents before the data collection. Data analysis was done using SPSS version 25. Data was interpreted by using descriptive statistics (frequency, percentage, mean and standard deviation,) and inferential statistics (Chi-square test) were used to measure the association between the level of knowledge with socio demographic variables.

## RESULTS

Table 1 shows that, more than half (66.7%) of the respondents were between 15-17 years with a mean age were 17.10± 1.15. The Majority (60.4%) of respondents studied in grade 11 and 65.3% of respondents were Janajati and 54.2% of the respondents belonged to nuclear family.

Table 2 shows that less than half (34. %) of the respondents answered drug abuse is use of drug that is inconsistent with medical or social norms. Less than half (39.6%) of the respondents answered smoking and oral route are most common route of drug abuse. Less than half (30.6%) of the respondents answered adolescent age is common high-risk age.

**Table 1: Socio-demographic Information of the respondents**

Variables	Number	Percent
<b>Age (in Years)</b>		
15-17 year	96	66.7
18-19 year	48	33.3
Mean±S.D (17. 10 ±1.15)		
<b>Sex</b>		
Male	72	50.0
Female	72	50.0
<b>Level of education</b>		
Grade 11	87	60.4
Grade 12	57	39.6
<b>Ethnicity</b>		
Dalit	13	9.0
Janjati	94	65.3
Madhesi	8	5.6
Muslim	1	0.7
Brahmin/Chhetri	18	12.5
Others (Thakuri)	10	6.9
<b>Types of family</b>		
Nuclear	78	54.2
Joint	59	41.0
Extended	7	4.8

**Table 2: Respondents' General Knowledge regarding Drug Abuse**

Variables	Number	Percent
<b>Meaning of Drug abuse</b>		
Use of drug inconsistent with medical or social norms#	49	34.02
Use of illigial drug that is inconsistent manner	48	33.34
Use of prescription medicine	31	21.52
Use of medicine that is inconsistent with social norms	16	11.12
<b>Most common route</b>		
Smoking and oral route#	57	39.6
Snorting and topical	17	11.8
Injection and oral route	59	41.0
Topical and Smoking	11	7.6
<b>Common high risk age group</b>		
School age	65	45.1
Adult age	28	19.4
adolescent age#	44	30.6
Elder age	7	4.9

**Correct Responses# \*Multiple Responses**

**Table 3: Respondents' Knowledge regarding Influencing factors of Drug Abuse**

Variables	Number	Percent
<b>Social factor *</b>		
Religious reasons	52	36.1
Peer pressure	101	70.1
Unemployment	58	40.3
Mass media	64	44.4
Easy availability of drugs	62	43.1
Occupation	19	13.2
<b>Psychological factors *</b>		
Low self-esteem	61	51.4
Poor stress management skills	74	33.3
Feeling of inadequacy and insecurity	48	52.8
Loneliness	76	47.9
Desire to escape from reality	69	38.2
Pleasure-seeking	61	42.4
<b>Biological factors</b>		
Gender	18	12.5
Heredity #	18	12.5
Ethnicity	14	9.7
Anxiety	94	65.3

**Correct Responses# \*Multiple Responses**

Table 3 shows that 70.1% of the respondents answered peer pressure is social factor to influencing for drug 52.8% of the respondents answered feeling of inadequacy, insecurity as psychological factors and 12.5% answered heredity is biological factors.

**Table 4: Respondents' Knowledge Regarding Effects of Drug Abuse**

Variables	Number	Percent
<b>Academic effects</b>		
Lack of concentration & irregular in class #	68	47.2
Good concentration & comfortable in classroom	28	19.4
Poor speech, regular & attend exams	19	13.2
Talkative, irregular & missed exams	29	20.1
<b>Family effects</b>		
Deprives the basic needs of their family & loss of job	60	41.7
Sufficient basic need and insecurity in children	33	22.9
Children become drug addicts & mental problems	24	16.7
Increase poverty & disturbed relationship #	27	18.8
<b>Social effects</b>		
Lower income, Low self-esteem and anxiety	9	6.3
Anxiety & increase criminal behavior	55	38.2
Unemployment & increase criminal behavior #	40	27.8
Increase criminal behavior and stress	40	27.8
<b>Psychological effects</b>		
Low self-esteem, loss of appetite and Suicide	25	17.4
Low self-esteem loss of appetite and frustration	45	31.3
Low self-esteem, anxiety and loss of appetite	22	15.3
Low self-esteem, Anxiety and Depression #	52	36.1
<b>Diseases caused by syringe sharing</b>		
Abscesses, sepsis and tetanus	22	15.3
Hepatitis A, rubella and HIV	28	19.4
Hepatitis B&C and HIV/AIDS #	75	52.1
Hepatitis B, rashes and AIDS	19	13.2

**Correct Responses#**

**Table 5 Respondents' Knowledge Regarding Preventative Measures of Drug Abuse**

Variables	Number	Percent
Communication Problems	55	38.5
Avoiding bad Company	73	51.0
Avoid imitation of ideal characters	47	32.9
Seek help for mental problems	72	50.3
Maintain a healthy lifestyle	66	46.2
Listen carefully and creates good relationship with child	47	32.6
Use mass media on general public and risk group	45	31.3
Reduction of over prescribing drugs	32	22.2
Controlling illicit drugs, treatment and rehabilitation of drug abuse person	56	38.9

**Table 6: Level of Knowledge regarding Drug Abuse**

Level of Knowledge	Number	Percent
Adequate knowledge ( $\geq 21$ )	79	54.9
Inadequate knowledge ( $<21$ )	65	45.1
Total	144	100

Table 4 shows that 47.2% of the respondents answered academic effects are lack of concentration & irregular in class Least (18.8%) respondents answered, increase poverty & disturbed relationships are family effects, 27.8% answered social effects are unemployment, increased criminal behavior, 36.1% answered low self-esteem, anxiety & depression are psychological effects and 52.1% answered sharing syringe leads to Hepatitis B&C and HIV/AIDS.

**Table 7: Association of Level of Knowledge regarding Drug Abuse with socio-demographic variables**

Characteristics	Knowledge Level		p-Value	
	Ade-quate(%)	Inade-quate(%)		
<b>Age(in years)</b>				
15 -17	49(51.0)	47(49.0)	1.69	0.190
18-19	30(62.5)	18(37.5)		
<b>Sex</b>				
Male	42(58.3)	30(41.7)	0.700	0.400
Female	37(51.4)	35(48.6)		
<b>Level of Education</b>				
Grade 11	43(49.4)	44(50.6)	2.620	0.100
Grade 12	36(63.2)	35(48.6)		
<b>Ethnicity</b>				
Dalit	8(61.5)	5(38.5)	4.400	0.480
Janajati	47(50.0)	47(50.0)		
Madjeshi	5(62.5)	3(37.5)		
Muslim	1(100.0)	0(0.0)		
Brahmin/Chhetri	13(72.2)	5(27.8)		
Other (Thakuri)	5(50.0)	5(50.0)		
<b>Types of Family</b>				
Nuclear	44(56.4)	34(43.6)	0.490	0.780
Joint	32(54.2)	27(45.6)		
Extended	3(42.9)	4(57.1)		
<b>Economic Status enough for</b>				
<6 months	31(51.7)	29(48.3)	0.140	0.680
6-12 months	20(50.0)	20(50.0)		
12 months	19(79.2)	5(20.0)		
Enough and surplus	9(45.0)	11(55.0)		

Table 5 shows that 51% of respondents answered avoiding bad company and 50.3% of respondents said seeking help for mental problems similarly 46.2 % of respondents said maintain healthy lifestyle were preventive measures of drug abuse

Table 6 shows that more than half (54.9%) respondents had adequate knowledge score and least (45.1%) had inadequate knowledge score.

Table 7 shows that there was no association between level of knowledge with sociodemographic characteristics.

## DISCUSSION

In this study, 54.9% had adequate level of knowledge which is similar to the study conducted by Kaur in Amritsar, Panjab, among adolescent's students where 57% adequate knowledge<sup>9</sup>. The present study shows that 34.2% of respondents answered correctly about the meaning of drug abuse. The finding is contradict with the study carried out by Subba et al., 2015 in Biratnagar, Nepal revealed that 19.1% answer correctly. It could be due to difference in sample size grade of students and research setting<sup>14</sup>.

The current study shows that 70.1% answered peer pressure as the influencing factors which are similar to the study carried out by Subba et al., (2015) in Biratnagar, Nepal revealed that 53.5% of respondents answered peer pressure as influencing factor<sup>14</sup>. Present study shows that 47.2 % of respondents said less concentration in class as academic effect. Similar finding with the study conducted by Sujana in Bangladesh shows that 44.7 % of respondents said less concentration in class<sup>8</sup>. The current study shows that respondents said psychological and social effect 36.1% and 18.8% respectively. Contradict findings was revealed in study carried out by Vinish and Prashad in Kanada India shows that 51.6% of respondents psychological effects and 51.6% said social effect. It could be due to difference in sample size grade of students and research setting<sup>7</sup>.

The present study shows that 52.1% answered sharing syringe leads to hepatitis B&C and HIV/AIDS and 43.1% answered drug abuser must admit at Rehabilitation Centre for reduction from drug dependence. Similar study was carried out by Yadav in Nawalparasi, shows that 51.9% answered high chance of getting HIV with drug abuse and 52.8% answered Rehabilitation is the way to treat drug abuse<sup>11</sup>.

## CONCLUSION

Based on the findings of the study, more than half of the respondents have adequate knowledge. However, inadequate knowledge was present regarding meaning of heroin & marijuana, intoxication symptoms of marijuana & heroin as well as in preventive aspect. There was no association between level of knowledge with socio demographic variables.

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## AUTHOR CONTRIBUTIONS

Principal author: Poonam Khadka Chhetri conceived of the study, participates in design and coordination, statistical analysis and drafted the manuscript. Bamita Budhathoki: conceived of the study, participated in design and statistical analysis, Rhinu Shrestha: conceived of the study and design of study, Sabitri Giri : conceived of the study and design of study, Sunita Shrestha: conceived of the study, participated in design and Sajana Limbu participate in design, data collection and statistical analysis. All authors revised the draft critically and approved the final draft.

## COMPETING INTERESTS

All the authors declare no competing interests