

AWARENESS REGARDING SUBSTANCE ABUSE AMONG ADOLESCENTS IN A SECONDARY SCHOOL

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ABSTRACT

Background: Adolescence is the phase of life between childhood and adulthood from ages 10 and 19 where they experience rapid physical, cognitive, and psychological growth. Substance abuse is the use of substances in excessive amounts or by methods harmful to individuals or others. This study aimed to find out the awareness regarding substance abuse among adolescents in a secondary school.

Methods: This study used a descriptive cross-sectional design among 81 adolescents studying in Greenland High School of Kathmandu district who were selected using a probability proportionate stratified random sampling technique. Data were collected through a self-administered semi-structured questionnaire. Data were analyzed using SPSS version 16 and descriptive and inferential statistics.

Results: The findings of the study revealed that 86.4% of respondents knew about substance abuse. About 97.5% had received information about substance abuse out of which 67.9% received information from mass media. Around 80.2% of respondents stated class drop and fighting with friends as the impact of substance abuse on education while, a total of 22.2% had a high level of awareness. None of the socio-demographic characteristics of respondents had an association with the awareness level regarding substance abuse.

Conclusions: The study concluded that the majority of adolescents had a moderate level of awareness regarding substance abuse. Therefore, awareness programs should be conducted for all adolescents focusing especially on consequences of substance use, ways of handling peer pressure and preventive measures of substance abuse.

Keywords: Adolescents, awareness, substance abuse

INTRODUCTION

Adolescence is one of life's most significant transitions marked by a rapid pace of growth and change. The estimated total population of adolescents in the world is 1.2 billion, which is about 18% of the global population.¹ The abuse of alcohol, tobacco, illegal drugs, or substances such as over-the-counter medicines, pharmaceuticals obtained through unsupervised retail buying, or even prescriptions is referred to as substance abuse.² It is estimated that around 318,000 deaths in 2016 were the direct result of substance use disorders.³

Adolescents are particularly vulnerable to substance abuse because they have an immature brain, which can lead to impaired decision-making capacity.⁴ Experimentation with drugs during adolescence is common and reasons driving adolescents to use substances include curiosity, experimentation, pleasure, reducing stress, and sense of

maturity. Peer pressure, parents who have drug addiction, and economic reasons are additional reasons driving adolescents to engage in substances use.⁵

The proportion of respondents who were substance abusers was significantly higher among students who had not received any formal lectures on substance abuse at school compared to those who had been taught.⁶ The prevalence of cigarette smoking among 15-19 years age group was 15.8% (men) and 0.5% (women) in Nepal.⁷ The median age of initiation of tobacco use among both men and women in Nepal was 17 years.⁸ Similarly, a study revealed that 32% of drug users started taking drugs first time in their early age of 15.8.⁹

Substance use is associated with negative physical, mental, and social outcomes, including addiction, substance-induced disorders, neurological complications, cognitive impairment, unemployment, imprisonment, and suicidal behavior.¹⁰

Substances included in this study were tobacco (both smoking and smokeless), and cannabis excluding alcohol and other drugs. Substance abuse is common among adolescents and has a profound impact on both adolescents and society. So, when adolescents are informed about the repercussions of substance abuse and how to avoid it, the incidence of substance abuse among adolescents may decrease, which may assist to improve their physical, mental, and social well-being. As a result, conducting substance abuse awareness program among adolescents is vital. Thus, the researchers are curious to find out the current level of awareness among adolescents in a school of Kathmandu district.

METHODS

A descriptive cross sectional research design was used to find out the awareness regarding substance abuse among adolescents. Study was conducted in Greenland High School, Tokha, ward no. 8 of Kathmandu district having total of 1500 students. The population of the study included the students of class 9 and 10 of Greenland High School. There were 98 students studying in grade 9 and 86 students studying in grade 10. Class 9 had 3 sections and class 10 had 2 sections. The students were randomly selected from all 3 sections from class 9 and 2 sections from class 10.

The study was conducted after the approval of research proposal from Research Department of Maharajgunj Nursing Campus. Prior to data collection, purpose of the study was explained to the respondents and written assent was taken from them.

Confidentiality was maintained by keeping questionnaire in a locked cupboard and storing data in a computer that is only accessible to the researchers. Anonymity was maintained by assigning codes on the questionnaire rather than participants' names as personal identifiers. Data was reported in group, individual identity was not disclosed in the report and the information was used for the study purpose only.

A probability, proportionate stratified random sampling technique was used to calculate the desired sample. Strata were formed based on sections of class 9 and 10. From each stratum, the students were selected by simple random sampling. Semi-structured questionnaire was developed by researchers based on objective and conceptual framework after literature review and consultation with the subject expert. Questionnaire consisted of two parts; questions related to socio-demographic variables

and questions related to awareness regarding substance abuse.

At first, collected data was checked for accuracy, completeness and duplication. Then data was edited, coded, organized, categorized, entered and analyzed by using Statistical Package for Social Sciences (SPSS) version 16. Data was analyzed by using simple descriptive test for frequency and percentage and inferential statistical to measure the association between level of awareness and selected variables.

RESULTS

Table 1. Socio-demographic characteristics of the respondents **n=81**

Characteristics	Number	Percent
Age group (in years)		
10-14	14	17.3
15-19	67	82.7
Mean age $\pm$ SD = 15 $\pm$ 0.861		
Sex		
Male	54	66.7
Female	27	33.3
Ethnicity		
Brahmin/Chhetri	46	56.8
Janjati	33	40.7
Madhesi	2	2.5
Religion		
Hinduism	57	70.4
Buddhism	19	23.5
Christianity	4	4.9
Islam	1	1.2
Type of family		
Nuclear	53	65.4
Joint	28	34.6

Table 1 shows the socio-demographic characteristics of the respondents. Out of 81 respondents, majority (82.7%) were of age group 15-19 years. Two third (66.7%) of respondents were male and more than half (56.8%) of the respondents were Brahmin/Chhetri. Majority of the respondents (70.4%) were Hindu and least (1.2%) were Muslim. Nearly two third (65.4%) of respondents lived in nuclear family. All of the respondents (100%) were staying with parents at home.

Table 2. Educational and occupational status of respondents' parents n=81

Characteristics	Number	Percent
Fathers' education		
Can read and write only	7	8.6
Primary level (Up to 8)	9	11.1
Secondary level (9 to 12)	34	42.0
Higher education	31	38.3
Mothers' education		
Cannot read and write	2	2.5
Can read and write only	6	7.4
Primary level (Up to 8)	12	14.8
Secondary level (9 to 12)	45	55.6
Higher education	16	19.8
Fathers' occupation		
Business	43	53.1
Service	19	23.5
Foreign employment	17	21.0
Agriculture	2	2.5
Mothers' occupation		
Homemaker	47	58.0
Business	17	21.0
Service	12	14.8
Agriculture	3	3.7
Foreign employment	2	2.5

Table 2 illustrates that majority (80.3%) of the respondents' father had completed secondary level and above education. Regarding mothers' education, 75.4% of the respondents' mothers had completed secondary level and above education. Regarding occupation, more than half (53.1%) of respondents' father were involved in business and more than half (58.0%) of respondents' mother were homemaker.

Table 3. Respondents' awareness on concept of substance abuse n=81

Characteristics	Number	Percent
Substance abuse is the use of substances in excessive amounts or by methods harmful to the individuals or others.	70	86.4
Tobacco use means using both smoke and chewing forms of tobacco.	57	70.4
Substance likely to be abused commonly by adolescents is Cigarette.	68	84.0
Common age for initiating substance use is 10-15 years.	25	30.9

Table 3 illustrates respondents' awareness related to concept of substance abuse. Majority (86.4%) of respondents knew about the meaning of substance abuse. Majority (70.4%) of the respondents knew about the meaning of tobacco use. Considering common substance which is likely to be abused by adolescents, most (84.0%) of respondents answered it as cigarette whereas 30.9% of the respondents answered 10-15 years as common age for initiating substance use.

Table 4. Respondents' awareness regarding risk factors of substance abuse n=81

Risk factors of substance abuse *	Number	Percent
Peer pressure	72	88.9
Curiosity	60	74.1
Family problem	54	66.7
Relaxation/pleasure	53	65.4
Imitation from family members	50	61.7
Advertisement	35	43.2
Substance accessibility	30	37.0
Separation from love (Break-up)	12	14.8

*** Multiple responses**

Table 4 illustrates the awareness of respondents regarding risk factors of substance abuse. Majority (88.9%) of the respondents were aware that peer pressure is one of the influencing factors of substance abuse whereas less than one fifth (14.8%) of respondents considered separation from love as the influencing factor of substance abuse.

Table 5. Respondents' awareness about the effects of substance abuse n=81

Characteristics	Number	Percent
Short term effects of tobacco use*		
Bad breath	80	98.8
Tooth decay	55	67.9
Gum disease	55	67.9
Teeth erosion	28	34.6
Long term effects of tobacco use*		
Oral & throat cancer	76	93.8
Heart disease	67	82.7
Heart attack	28	34.6
Effects of smoking on health*		
Lung cancer	78	96.3
Respiratory disease	64	79.0
Heart disease	47	58.0
Heart attack	22	27.2
Psychological effects of cannabis *		
Difficulty maintaining attention	65	80.2

Characteristics	Number	Percent
Difficulty thinking and problem-solving	59	72.8
Problems with school and social life	59	72.8
Problems with memory and learning	50	61.7
Psychotic disorders	39	48.1
Impact of substance abuse on education*		
Class drop	65	80.2
Fight with friends	65	80.2
Failure in class	56	69.1
Absenteeism	54	66.7

* Multiple responses

Table 5 illustrates respondents' awareness about effects of substance abuse. Regarding short term health effects of tobacco use, most (98.8%) of the respondents mentioned bad breath. Similarly, regarding long term health effects of tobacco use, majority (93.8%) answered oral and throat cancer. Regarding health effects of smoking, almost all (96.3%) of respondent stated lung cancer. Most (96.3%) of respondents knew that passive smoking is harmful to health. More than two of respondents third (70.4%) tried to protect themselves from passive smoking. Regarding effects of cannabis, majority (80.2%) of respondents mentioned difficulty maintaining attention. Regarding impact of substance abuse on education, majority (80.2%) of respondents stated class drop and fight with friends respectively and two third (66.7%) of respondents stated absenteeism.

Table 6. Respondents' awareness regarding prevention of substance abuse

n=81

Characteristics	Number	Percent
Ways of dealing peer pressure*		
Give reason by saying substance is not good thing to take	67	82.7
Suggest that friend not to involve in such things	65	80.2
Say no thanks and leave	44	54.3
Associate with friends who do not take substances	25	30.9
Suggestion to friend to leave substance*		
Aware them about the harmful effects of substance on health	75	92.6
Ask them about the reason of taking substance and help them to get over it	68	84.0
Suggest them to maintain distance with friends who influenced them to take substance	51	63.0
Warn them that you will tell their parents and teachers if they took substance next time as well	25	30.9
Preventive measures*		
Raising awareness on effects of substance abuse	67	82.7
Banning on advertisement of tobacco, cigarette and other products	64	79.0
Providing adequate love and proper supervision to adolescents	60	74.1
Supervision and strict rule for substance use	59	72.8
Including substance abuse related knowledge on school textbooks	47	58.0
Not giving extra money to children	37	45.7

* Multiple responses

Table 6 illustrates respondents' awareness regarding prevention of substance abuse. Regarding ways of dealing with peer pressure, majority (82.7%) mentioned give reason by saying substance is not good thing to take. Regarding suggestion to friend to leave substance, most (92.6%) answered aware them about the harmful effects of substance on health. Similarly, majority (82.7%) of respondents considered raising awareness on effects of substance abuse can prevent substance abuse and 45.7% considered not giving extra money to children can prevent substance abuse.

Table 7. Respondents' level of awareness regarding substance abuse

n=81

Level of Awareness	Number	Percent
Low (<50%)	9	11.1
Moderate (50-75%)	54	66.7
High (>75%)	18	22.2

Table 7 shows respondents' level of awareness regarding substance abuse. It shows that 22.2% had high level of awareness, 66.7% had moderate level of awareness and 11.1% had low level of awareness.

Table 8. Association between respondents' awareness level and selected socio-demographic characteristics n=81

Demographic variables	Awareness				Chi Square Value	P value
	Adequate		Inadequate			
Age	No.	%	No.	%		
10-14 years	6	42.9%	8	57.1%	2.851	0.091**
15-19 years	12	17.9%	55	82.1%		
Sex						
Male	11	20.4%	43	79.6%	0.321	0.571
Female	7	25.9%	20	74.1%		
Religion						
Hindu	12	21.1%	45	78.9%	0.152	0.696
Non-Hindu	6	25.0%	18	75.0%		
Type of family						
Joint family	5	17.9%	23	82.1%	0.472	0.492
Nuclear family	13	24.5%	40	75.5%		

**** Continuity correction**

Table 8 illustrates the association between respondents' awareness level and socio demographic characteristics of respondents. No statistically significant association was found between awareness level and socio-demographic characteristics of respondents.

Table 9. Association between respondents' awareness level and educational status of respondents' parents n=81

Demographic variables	Awareness				Chi square value	P value
	Adequate		Inadequate			
Education of father	No.	%	No.	%		
Up to primary level	16	24.6%	49	75.4%	0.502	0.479**
Above primary level	2	12.5%	14	87.5%		
Education of mother						
Up to primary level	12	19.7%	49	80.3%	0.428	0.513**
Above primary level	6	30.0%	14	70.0%		

**** Continuity correction**

Table 9 illustrates the association between respondents' awareness level and information about respondents' parents. No statistically significant association was found between awareness level of respondents' and educational status of respondents' parents.

DISCUSSION

This research finding shows that majority (86.4%) of the respondents knew about the substance abuse. Similarly, regarding the common substance likely to be abused by adolescents, most (84.0%) answered it as cigarette. A similar finding was noted by a study done in Tanzania, which revealed that majority (99.3%) of participants had knowledge on substance abuse and 85.1% had knowledge on types of substance.¹¹

Regarding the awareness on risk factors of substance abuse, this study revealed that majority (72%) of

respondents answered peer pressure and 60% answered curiosity as a cause of substance abuse. The finding of the present study was contradicted by a study done in a school of Gaidakot, Nawalparasi which revealed almost all (95.3%) said teenage curiosity and peer pressure as the cause of substance abuse in adolescents.¹²

The findings of this study revealed (97.5%) of respondents have received information about substance abuse. This result is consistent with the study done on Lekhnath, Nepal where 97.40% had received information about substance abuse.²

The findings of this study revealed 54.3% mentioned peers, 45.7% mentioned family and 4.9% mentioned school as the source of information about substance abuse. The findings of the present study were contradicted by a study done in Ramotswa, Botswana which revealed 10.1% mentioned peers, 15.94% mentioned school as the

source of information about substance abuse.⁵

Regarding long term health effects of tobacco use, most (93.8%) answered oral and throat cancer, majority (82.7%) answered heart disease and 34.6% answered heart attack. This finding is contradicted to findings of the study done in Jaipur which stated that majority of boys (56.8%), and girls (58.3%) knew of its potential to cause heart disease. Similarly, 64.6% of boys and girls knew of cancer and 68.2% of boys and 68.1% of girls knew about death respectively.¹³

Regarding health effects of smoking, this study revealed that most (96.3%) of respondent stated lung cancer. Similar finding was revealed by a study done in Texas which revealed over 95% of the children were aware that smoking can adversely affect health.¹⁴

The present study reveals that most (96.3%) of respondents knew that passive smoking is harmful to health. Similar finding was noted by a study conducted in Jaipur which reveals that 77.1% boys and 75.8% girls knew that passive smoking is bad.¹³

Similarly, the present study reveals majority (82.7%) of respondents considered raising awareness on effects of substance abuse can prevent substance abuse. Similar findings were revealed by a study done in a school of Gaidakot, Nawalparasi which revealed majority (71.7%) of the respondents said awareness program as the way to prevent from substance abuse and 26.4% said counselling.¹²

CONCLUSIONS

The study's findings concluded that the respondents have a moderate level of awareness regarding substance abuse. Most of the respondents were not knowledgeable about the effects of substance abuse or how to prevent it. The study also found that none of the socio-demographic characteristics of the respondents seemed to influence their level of awareness regarding substance abuse. The study suggests that an awareness program is essential for all adolescents, with a focus on the consequences of substance use, how to handle peer pressure, and preventive measures for substance abuse.

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CONFLICT OF INTEREST

None

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