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Prevalence of Substance Abuse and its Associated Factors among Diploma Studying Students of High Land Area of Mid-Western Region, Nepal

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Abstract

Introduction: Substance abuse such as alcohol, cigarette/tobacco, and cannabis are major public health problems which kills millions of people globally. Several social-demographic variables associated with substance abuse in adolescents and young adults in low- and middle-income countries like Nepal. There is limited study available on substance abuse among Nepalese adolescents and young adult. The study conducted in rural area of Nepal revealed high prevalence of substance abuse among adolescent and young adult and there are several limitations in this study. Therefore the present study was planned to conduct in remote area of Nepal where substance abuse are commonly used.

The aim of this study is “To assess the prevalence of substance abuse and its association factors among diploma studying students in the remote high lands area of mid-western Nepal.

Methods: A cross-sectional study was conducted in Karnali Technical School (KTS), Jumla, Nepal. Total 445 students from different diploma level were included in the study. The semi-structured questionnaire was used which includes socio-demographic variables and consumption of alcohol, cigarette/tobacco and cannabis as tools for data collection. All collected data were analyzed using SPSS 20 version software. Chi-square test was applied to measure association between socio-demographic variables and substance use. P value is set at $\alpha = 0.05$.

Result: Out of 445, 78 (17.5%) respondents used any form of substance. In types of substance abuse, 64 (14.4%) used cigarette/tobacco followed by alcohol 53 (11.9%) and 39 (8.8%) as cannabis. Two in one adolescents reported that the peer group influence was the major factors for substance abuse. Age, gender, family income, father occupation are strongly associated with substance abuse.

Conclusion: The substance abuse among diploma students was high. Several factors such as peer group pressure and socio-demographic variables are accountable for substance abuse, therefore to discourage or prevent diploma students from using substance abuse, awareness and counselling program should be focused on harmful effects of substance abuse.

Keywords: Prevalence, Substance abuse, Association, Diploma students

Introduction

Substance abuse refers to the harmful or hazardous use of psychoactive substances, including alcohol and illicit drugs.¹ Substance abuse or drug abuse means self-administration of a drug for non-medical reasons, in high quantities and frequencies, which may impair an individual's ability to function effectively and which may result in social, physical or emotional harm.²

Drugs are perceived as bringing feelings of inner peace, satisfaction, relaxing the muscles and heightening the human senses.³ Some of the substance abuse includes alcohol, cigarette/tobacco, cannabis, amphetamines, marijuana, ecstasy, opioids, cocaine etc. Likewise, it also includes inhalants and volatile substances like glue, petrol and also synthetic drugs like barbiturates.⁴ Cannabis is the most widely abused illicit drug globally.⁵

Substance abuse has become one of the global health problem in 21st century. The substance abuse is a major public health concern in global setting as well as in Nepal. It is very commonly seen in young adults as well as in students leading to physical and/ or mental health complication.⁶ Substance abuse is a widespread and significant problem in Nepal, with tobacco, alcohol and marijuana users being the three most common substances used. Research shows the estimated prevalence rate of substance abuse among students is around 20-40 percent worldwide.⁷ According to the Global Burden of Disease Study 2017, there were 585,000 deaths and 42 million years of "healthy" life lost as a result of the substance abuse.⁸

The hazardous use of alcohol and drugs are leading risk factors for population health worldwide and have direct impact on many health-related targets of Sustainable Development Goals (SDGs), including those for maternal and child health, non-communicable and infectious diseases like HIV, viral hepatitis, tuberculosis, mental health, injuries and poisonings.⁹

Substance abuse has been related with low academic performance, declining grades, absenteeism, and school drop-out. So, this study was to be conducted with objectives to find out the prevalence of various types of substance abuse and factors associated with it, including consequences among students of a KTS, Jumla.

Methods

Study design: A descriptive cross-sectional study was conducted.

Study method: The study was quantitative cross-sectional study method was carried out to find the prevalence of substance abuse and its associated factors among diploma studying students of high land area of Mid-Western region, Nepal.

Description of study design and method: Cross sectional study design was used to identify the prevalence of substance abuse and its associated factors among diploma students studying in KTS. All the variables were analyzed in terms of frequency and percentage as well as other quantitative analysis.

Study site and its justification: The Jumla districts is remote, high land area of 2514 meter to 3050 meter altitude. The KTS was the first technical school of Nepal. Since last 30 years,

it has been serving the people of Karnali Province in acquiring skill based technical education that they need to develop their own communities and personal lifestyle.

Study population: All the diploma level school students studying in KTS.

Sample size: All the diploma studying students of 1st, 2nd and 3rd years of KTS.

Diploma Level	1 st Year	2 nd Year	3 rd Year	Total
Forestry	40	40	40	120
ISc.Ag	40	40	40	120
Civil Engineering	48	48	48	144
Health Assistant (HA)	40	00	00	40
Pharmacy	40	40	00	80
Sub-Total	208	168	128	504

Total 504 sample was there, but only 445 diploma studying students were present during survey period. 59 diploma studying students were excluded due to absent of three regular follow up.

Therefore, n= 165

Inclusion and Exclusion criteria: Diploma studying students were enrolled. Those students who were not present during data collection were excluded.

Data collection technique: Semi structured questionnaire was followed by face to face interview. Written consent was taken from each participants. Confidentiality was maintained by coding each questionnaire. Anonymity was maintained.

Pre-testing of tool: About 5% of study sample was taken and pretested in similar characteristics in +2 level students of Chandanath School of Jumla and necessary modification was done as required after pre-testing.

Data management and analysis: The collected data was entered in Epi-data 3.1 and was transferred into SPSS version 20 for statistical analysis. Descriptive statistics was included as frequency, percentage, cha-square test was used to assess the association with variables. p=value less than 0.05 was set from significant association.

Ethical consideration: The ethical approval was obtained from IRC-KAHS (Ref: 079/080/01). A permission letter was also obtained from respective KTS (Ref: 079/080/318).

Results

Table 1:- Demographic Profile of the students studying at KTS (n =445)

A. Demographic	No. of Respondent	Percentage (%)
Qualification of the Respondents		
Diploma in Forestry	140	31.5
Diploma in ISc. Ag	111	24.9
Diploma in Civil Engineering	77	17.3
Diploma in Pharmacy	77	17.3
Diploma in Health Assistant	40	9.0
Total	445	100.0
Academic Year of the Respondents		
1st Year	201	45.2
2nd Year	177	39.8
3rd Year	67	15.1
Total	445	100.0

Age group of the Respondents		
15-17	103	23.1
18-20	294	66.1
21 and above	48	10.8
Total	445	100.0
Gender of the Respondents		
Male	231	51.9
Female	214	48.1
Total	445	100.0
Marital Status of the Respondents		
Single	425	95.5
Married	20	4.5
Total	445	100.0
Habitat Type of Respondents		
Rural	366	82.2
Urban	79	17.8
Total	445	100.0
Father Education of the Respondents		
Illiterate	85	19.1
Non-formal Education	78	17.5
Basic Education (Grade P-8)	69	15.5
Secondary Education (Grade 9-12)	141	31.7
Bachelor	58	13.0
Master and Above	14	3.1
Total	445	100.0
Father Occupation of the Respondents		
Self-employee	46	10.3
Service	135	30.3
Business	125	28.1
Agriculture	124	27.9
Foreign Employee	15	3.4
Total	445	100.0
Mother Education of the Respondents		
Illiterate	263	59.1
Non-formal education	89	20.0
Basic Education (Grade P-8)	51	11.5
Secondary Education (Grade 9-12)	36	8.1
Bachelor	6	1.3
Total	445	100.0
Mother Occupation of the Respondents		
Housewife (House maker)	108	24.3
Self-employee	24	5.4
Service	18	4.0
Business	48	10.8
Agriculture	246	55.3
Foreign Employee	1	.2
Total	445	100.0

Family Marital Status of Respondents		
Living Together	422	94.8
Divorced	3	.7
Father/Mother Deceased	20	4.5
Total	445	100.0
Family Income of the Respondents (Monthly)		
Rs 1000 – 30000	302	67.9
Rs 31000 – 60000	116	26.1
R61000 and above	27	6.1
Total	445	100.0

Table 1. Represents about all the socio-demographic information of the respondents and revealed that nearly one third 31.5% students were studying in diploma in forestry. Among those diploma students almost half i.e. 45.2%, more than one third i.e. 39.8% and 15.1% were in the 1st, 2nd and 3rd year respectively. 45.2% represent the all the students of 1st year in all the 5 diploma program likewise the 2nd and 3rd year also represent the same. Among all the diploma students highest age group were of 18 -20 years about two third i.e. 66.1%. Regarding education

level of the respondent father, less than one third i.e. 31.7% were secondary education. Talking about father occupation of the respondents less than one third 30.3% were in service and about 3.4% were foreign employee. More than half (59.1%) of the respondent mothers were illiterate. Agriculture was the main occupation of the respondent mother more than half (55.3%). More than two third i.e. 67.9% of the respondent family income is more than 1000 – 30000 and 6.1% were of 61000 and above.

Table 2: Causing Agent and Factor Responsible for Substance Abuse (n =445)

Causing Agents Associated with the Abuse of Substance			
Variables	Yes (%)	No (%)	Total
Respondent who heard about Substance Abuse	421 (94.6)	24 (5.4)	445 (100)
Respondents who use Substance Abuse	76 (17.1)	369 (82.9)	
Types of Substance Abuse used by the Respondents			
i. Alcohol	53 (11.9)	392 (88.1)	
ii. Cigarette/Tobacco	64 (14.4)	381 (85.6)	445 (100)
iii. Cannabis	39 (8.8)	406 (91.2)	
Use of Substance abuse by the respondents Family member	162 (36.4)	283 (63.6)	
Use of Substance abuse by the Friends	207 (46.5)	238 (53.5)	
Use of Substance abuse by the Neighborhood	345 (77.5)	100 (22.5)	
Cultural aspect of use of Alcohol in Family	188 (42.2)	257 (57.8)	
Place of Substance Abuse of the respondent			
i. Home	7 (1.6)	438 (98.4)	
ii. School/College	38 (8.5)	407 (91.5)	
iii. Friends Home	60 (13.5)	385 (86.5)	
iv. Street/Park	52 (11.7)	393 (88.3)	
v. Restaurants/Hotels	70 (15.7)	375 (84.3)	
With whom the respondent uses the Substance abuse			
i. Alone	55 (12.4)	390 (87.6)	
ii. Friends	77 (17.3)	368 (82.7)	

Accessibility of Substance abuse			
i. Very Difficult	8 (1.8)		
ii. Fairly Difficult	29 (6.5)		
iii. Fairly Easy	16 (3.6)		
iv. Very Easy	26 (5.8)		
v. No	0 (0)	366 (82.2)	
Sources of Substance Abuse			
i. Friends	73 (16.4)	372 (83.6)	
ii. Pocket Money	53 (11.9)	392 (88.1)	
Impact of Substance Abuse in Self-Esteem			
i. Low	9 (2)		
ii. Normal	67 (15.1)		
iii. High	2 (0.4)		
iv. No	0 (0)	367 (82.5)	
Substance Abuse during Stress	71 (16)	374 (84)	
Types of Substance Abuse during Stress			
i. Alcohol	51 (11.5)	394 (88.5)	
ii. Cigarette/Tobacco	65 (14.6)	380 (85.4)	
iii. Cannabis	34 (7.6)	411 (92.4)	
Reason for Substance Abuse			
i. To Prevent Stress	70 (15.7)	375 (84.3)	
ii. To Cure Illness	6 (1.3)	439 (98.7)	
iii. To Feel Healthy	12 (2.7)	433 (97.3)	
iv. For Enjoyment	64 (14.4)	381 (85.6)	
Provider of Substance Abuse			
i. Self	44 (9.9)	401 (90.1)	
ii. Friends	72 (16.2)	373 (83.8)	
iii. Medical Practitioner	1 (0.2)	444 (99.8)	
iv. Mobile Drug Seller	39 (8.8)	406 (91.2)	
Youth access to Substance Abuse			
v. Medical Store	68 (15.3)	377 (84.7)	
vi. Friends	235 (52.8)	210 (47.2)	
vii. Market	170 (38.2)	275 (61.8)	
viii. Drug Seller Agents	254 (57.1)	191 (42.9)	
Factors Responsible for Substance Abuse			
i. Experimental Curiosity	161 (36.2)	284 (63.8)	445 (100)
ii. Peer Group Influence	240 (53.9)	205 (46.1)	
iii. Lack of Parental Supervision	211 (47.4)	234 (52.6)	
iv. Due to Socio-economic Condition	149 (33.5)	296 (66.5)	
v. To Work for Longer Hours	112 (25.2)	333 (74.8)	
vi. Easily Access of Substance Abuse	207 (46.5)	238 (53.5)	

Among total 445 respondents, majority of respondents 94.6% has heard about substance abuse and 17.1% respondents used alcohol, cigarette/tobacco and cannabis as a substance abuse. In types of substance abuse 14.4% used cigarette/tobacco as a substance abuse followed by alcohol 11.9% and 8.8% as cannabis. Majority used substance abuse by neighborhood 77.5%. Restaurants/hotels are the most common place for

substance abuse by the respondents 15.7% and home 1.6% was the least. 17.3% of the respondents used substance abuse with friends. Accessibility of substance abuse 6.5% says that it was very difficult to get it followed by 5.8% says it was very easy to get it. For sources of substance abuse, friends was the easiest sources 16.4% and pocket money given by the family was also common sources of substance abuse 11.9%.

Table 3:- Opinion to control Substance Abuse.

Opinion to control Substance Abuse	Frequency	Percent
Awareness program	152	34.2
Education about the effect of substance abuse	21	4.7
Avoid relation with bad friends	33	7.4
Punishment to the substance users and dealers	25	5.6
Band illegal substance	44	9.9
Proper rules and regulation in school and college	65	14.6
Tight security in border area	31	7.0
Rehabilitation centers should be made	17	3.8
Job opportunity to the youths	25	5.6
Proper guardian to the children by their family	32	7.2
Total	445	100.0

Table 3. Illustrate the data of Opinion to control Substance Abuse more than one third of the respondents says that Awareness program is the best method to control substance abuse which is

about 34.2%, 2nd one is Proper rules and regulation in school and college and Rehabilitation center should be made was 3.8% respectively.

Table 4: Association of Alcohol Abuse with Socio-demographic Variables

Demographic Variable	Use of Alcohol			Chi-square (2)	p-value
	Yes (%)	No (%)	Total		
Qualification					
i.Diploma non-health studying students	42 (12.8)	286 (87.2)	328 (100)	28.687	0.0001
ii.Diploma health studying students	11 (9.4)	106 (90.6)	117 (100)		
Total	53 (11.9)	392 (88.1)	445 (100)		
Academic Year					
i.1 st year	9 (4.5)	192 (95.5)	201 (100)	28.687	0.0001
ii.2 nd year	25 (14.1)	152 (85.9)	177 (100)		
iii.3 rd year	19 (28.4)	48 (71.6)	67 (100)		
Total	53 (11.9)	392 (88.1)	445 (100)		
Age					
i.15-17 years	7 (6.8)	96 (93.2)	103 (100)	22.205	0.0001
ii.18-20 years	40 (13.6)	254 (86.4)	294 (100)		
iii.21 and above years	17 (35.4)	31 (64.6)	48 (100)		
Total	64 (14.4)	381 (85.6)	445 (100)		
Gender					
i.Male	50 (21.6)	181 (78.4)	231 (100)	43.389	0.0001
ii.Female	3 (1.4)	211 (98.6)	214 (100)		
Total	53 (11.9)	392 (88.1)	445 (100)		
Marital Status of the Respondents					
i.Single	51 (12)	374 (88)	425 (100)	0.073	0.787
ii.Married	2 (10)	18 (90)	20 (100)		
Total	53 (11.9)	392 (88.1)	445 (100)		

Habitat of the Respondents					
i.Rural	48 (13.1)	318 (86.9)	366 (100)	2.852	0.091
ii.Urban	5 (6.3)	74 (93.7)	79 (100)		
Total	53 (11.9)	392 (88.1)	445 (100)		
Father Education				4.466	0.347
i.Illiterate	7 (8.2)	78 (91.8)	85 (100)		
ii.Non-formal education	11 (14.1)	67 (85.9)	78 (100)		
iii.Basic education	7 (10.1)	62 (89.9)	69 (100)		
iv.Secondary education	15 (10.6)	126 (89.4)	141 (100)		
v.Bachelor and above	13 (18.1)	59 (81.9)	72 (100)		
Total	53 (11.9)	392 (88.1)	445 (100)		
Father Occupation				18.259	0.0001
i.Service	29 (21.5)	106 (78.5)	135 (100)		
ii.Business	10 (8)	115 (92)	125 (100)		
iii.Agriculture	7 (5.6)	117 (94.4)	124 (100)		
iv.Others	7 (11.5)	54 (88.5)	61 (100)		
Total	53 (11.9)	392 (88.1)	445 (100)		
Mother Education				4.334	0.228
i.Illiterate	38 (14.4)	225 (85.6)	263 (100)		
ii.Non-formal education	8 (9)	81 (91)	89 (100)		
iii.Basic education	3 (5.9)	48 (94.1)	51 (100)		
iv.Secondary education and above	4 (9.5)	38 (90.5)	42 (100)		
Total	53 (11.9)	392 (88.1)	445 (100)		
Mother Occupation				2.006	0.367
i.House maker	11 (10.2)	97 (89.8)	108 (100)		
ii.Agriculture	34 (13.8)	212 (86.2)	246 (100)		
iii.Others	8 (8.8)	83 (91.2)	91 (100)		
Total	53 (11.9)	392 (88.1)	445 (100)		
Family Marital Status				0.239	0.625
i.Living together	51 (12.1)	371 (87.9)	422 (100)		
ii.Father/Mother decreased including Divorced	2 (8.7)	21 (91.3)	23 (100)		
Total	53 (11.9)	392 (88.1)	445 (100)		
Family Income				15.020	0.001
i.1000-30000	25 (8.3)	277 (91.7)	302 (100)		
ii.31000-60000	20 (17.2)	96 (82.8)	116 (100)		
iii.61000 and above	8 (29.6)	19 (70.4)	27 (100)		
Total	53 (11.9)	392 (88.1)	445 (100)		

The above Table: 4 shows, the association between alcohol abuses with socio-demographic variables. The association between alcohol abuses with socio-demographic variables are, where result found to be not significant association of degree of association of alcohol

abuse with socio-demographic variables with marital status ($p=0.787$), habitat ($p=0.095$), father education ($p=0.347$), mother education ($p=0.228$), mother occupation ($p=0.367$) and family marital status ($p=0.625$) but all shows highly degree of association.

Table 5: Association of Cigarette/ Tobacco abuse with Socio-demographic Variables

Demographic Variable	Use of Cigarette/Tobacco			Chi-square (2)	p-value
	Yes (%)	No (%)	Total		
Qualification					
i.Diploma non-health studying students	52 (15.9)	276 (84.1)	328 (100)	2.194	0.139
ii.Diploma health studying students	12 (10.3)	105 (89.7)	117 (100)		
Total	64 (14.4)	381 (85.6)	445 (100)		
Academic Year					
i.1 st year	15 (7.5)	186 (92.5)	201 (100)	19.391	0.0001
ii.2 nd year	30 (16.9)	147 (83.1)	177 (100)		
iii.3 rd year	19 (28.4)	48 (71.6)	67 (100)		
Total	64 (14.4)	381 (85.6)	445 (100)		
Age					
i.15-17 years	7 (6.8)	96 (93.2)	103 (100)	22.205	0.0001
ii.18-20 years	40 (13.6)	254 (86.4)	294 (100)		
iii.21 and above years	17 (35.4)	31 (64.6)	48 (100)		
Total	64 (14.4)	381 (85.6)	445 (100)		
Gender					
i.Male	63 (27.3)	168 (72.7)	231 (100)	64.843	0.0001
ii.Female	1 (0.5)	213 (99.5)	214 (100)		
Total	64 (14.4)	381 (85.6)	445 (100)		
Marital Status of the Respondents					
i.Single	63 (14.8)	362 (85.2)	425 (100)	1.497	0.221
ii.Married	1 (5)	19 (95)	20 (100)		
Total	64 (14.4)	381 (85.6)	445 (100)		
Habitat of the Respondents					
i.Rural	55 (15)	311 (85)	366 (100)	0.697	0.404
ii.Urban	9 (11.4)	70 (88.6)	79 (100)		
Total	64 (14.4)	381 (85.6)	445 (100)		
Father Education					
i.Illiterate	9 (10.6)	76 (89.4)	85 (100)	14.428	0.006
ii.Non-formal education	13 (16.7)	65 (83.5)	78 (100)		
iii.Basic education	7 (10.1)	62 (89.9)	69 (100)		
iv.Secondary education	15 (10.6)	126 (89.4)	141 (100)		
v.Bachelor and above	20 (27.8)	52 (72.2)	72 (100)		
Total	64 (14.4)	381 (85.6)	445 (100)		
Father Occupation					
i.Service	34 (25.2)	101 (74.8)	135 (100)	20.236	0.0001
ii.Business	14 (11.2)	111 (88.8)	125 (100)		
iii.Agriculture	8 (6.5)	116 (93.5)	124 (100)		
iv.Others	8 (13.1)	53 (86.9)	61 (100)		
Total	64 (14.4)	381 (85.6)	445 (100)		

Mother Education					
i.Illiterate	45 (17.1)	218 (82.9)	263 (100)	6.418	0.093
ii.Non-formal education	11 (12.4)	78 (87.6)	89 (100)		
iii.Basic education	2 (3.9)	49 (96.1)	51 (100)		
iv.Secondary education and above	6 (14.3)	36 (85.7)	42 (100)		
Total	64 (14.4)	381 (85.6)	445 (100)		
Mother Occupation					
i.House maker	20 (18.5)	88 (81.5)	108 (100)	2.414	0.299
ii.Agriculture	34 (13.8)	212 (86.2)	246 (100)		
iii.Others	10 (11)	81 (89)	91 (100)		
Total	64 (14.4)	381 (85.6)	445 (100)		
Family Marital Status					
i.Living together	61 (14.5)	361 (85.5)	422 (100)	0.35	0.851
ii.Father/Mother decreased including Divorced	3 (13)	20 (87)	23 (100)		
Total	64 (14.4)	381 (85.6)	445 (100)		
Family Income					
i.1000-30000	33 (10.9)	269 (89.1)	302 (100)	9.380	0.009
ii.31000-60000	26 (22.4)	90 (77.6)	116 (100)		
iii.61000 and above	5 (18.5)	22 (81.5)	27 (100)		
Total	64 (14.4)	381 (85.6)	445 (100)		

The above Table 5 shows, the association between alcohol abuses with socio-demographic variables are, where result found to be higher degree of significant association to alcohol abuse with socio-demographic variables with academic

year ($p=0.0001$), age ($p=0.0001$), gender ($p=0.001$), father education ($p=0.006$), father occupation ($p=0.001$) and family monthly income ($p=0.009$) but all shows no any degree of association.

Table 6: Association of Cannabis abuse with Socio-demographic Variables

Demographic Variable	Use of Cannabis			Chi-square (2)	p-value
	Yes (%)	No (%)	Total		
Qualification					
i.Diploma non-health studying students	31 (9.5)	297 (90.5)	328 (100)	0.737	0.391
ii.Diploma health studying students	8 (6.8)	109 (93.2)	117 (100)		
Total	39 (8.8)	406 (91.2)	445 (100)		
Academic Year					
i.1 st year	12 (6)	189 (94)	201 (100)	11.608	0.003
ii.2 nd year	14 (7.9)	163 (92.1)	177 (100)		
iii.3 rd year	13 (19.4)	54 (80.6)	67 (100)		
Total	39 (8.8)	406 (91.2)	445 (100)		
Age					
i.15-17 years	3 (2.9)	100 (97.1)	103 (100)	13.157	0.001
ii.18-20 years	26 (8.8)	268 (91.2)	294 (100)		
iii.21 and above years	10 (20.8)	38 (79.2)	48 (100)		
Total	39 (8.8)	406 (91.2)	445 (100)		

Gender					
i.Male	39 (16.9)	192 (83.1)	231 (100)		Likelihood value = 0.0001
ii.Female	0 (0)	214 (100)	214 (100)		
Total	39 (8.8)	406 (91.2)	445 (100)		
Marital Status of the Respondents					Likelihood value = 0.053
i.Single	39 (9.2)	386 (90.8)	425 (100)		
ii.Married	0 (0)	20 (100)	20 (100)		
Total	39 (8.8)	406 (91.2)	445 (100)		
Habitat of the Respondents					0.164 0.685
i.Rural	33 (9)	333 (91)	366 (100)		
ii.Urban	6 (7.6)	73 (92.4)	79 (100)		
Total	39 (8.8)	406 (91.2)	445 (100)		
Father Education					33.868 0.0001
i.Illiterate	3 (3.5)	82 (96.5)	85 (100)		
ii.Non-formal education	5 (6.4)	73 (93.6)	78 (100)		
iii.Basic education	4 (5.8)	65 (94.2)	69 (100)		
iv.Secondary education	8 (5.7)	133 (94.3)	141 (100)		
v.Bachelor and above	19 (26.4)	53 (73.6)	72 (100)		
Total	39 (8.8)	406 (91.2)	445 (100)		
Father Occupation					19.967 0.0001
i.Service	24 (17.8)	111 (82.2)	135 (100)		
ii.Business	7 (5.6)	118 (94.4)	125 (100)		
iii.Agriculture	6 (4.8)	118 (95.2)	124 (100)		
iv.Others	2 (3.3)	59 (96.7)	61 (100)		
Total	39 (8.8)	406 (91.2)	445 (100)		
Mother Education					1.771 0.621
i.Illiterate	24 (9.1)	239 (90.9)	263 (100)		
ii.Non-formal education	9 (10.1)	80 (89.9)	89 (100)		
iii.Basic education	2 (3.9)	49 (96.1)	51 (100)		
iv.Secondary education and above	4 (9.5)	38 (90.5)	42 (100)		
Total	39 (8.8)	406 (91.2)	445 (100)		
Mother Occupation					1.971 0.373
i.House maker	12 (11.1)	96 (88.9)	108 (100)		
ii.Agriculture	22 (8.9)	224 (91.1)	246 (100)		
iii.Others	5 (5.5)	86 (94.5)	91 (100)		
Total	39 (8.8)	406 (91.2)	445 (100)		
Family Marital Status					0.000 0.990
i.Living together	37 (8.8)	385 (91.2)	422 (100)		
ii.Father/Mother decreased including Divorced	2 (8.7)	21 (91.3)	23 (100)		
Total	39 (8.8)	406 (91.2)	445 (100)		
Family Income					9.240 0.010
i.1000-30000	18 (6)	284 (94)	302 (100)		
ii.31000-60000	17 (14.7)	99 (85.3)	116 (100)		
iii.61000 and above	4 (14.8)	23 (85.2)	27 (100)		
Total	39 (8.8)	406 (91.2)	445 (100)		

The above the association between cannabis abuses with socio-demographic variables are, where result found to be highly significant association of degree of association of cannabis abuse with socio-demographic variables with academic year ($p=0.0001$), Age ($p=0.0001$), Gender (Likelihood value= 0.0001), Father education ($p=0.0001$), father occupation ($p=0.0001$) and family Size ($p=0.01$)

Discussion

Among them alcohol (11.9%), tobacco (14.4%), and cannabis (8.8%) were commonly used.¹⁰ These findings are well consistent with our survey in which the use of alcohol, cigarette/tobacco and cannabis was 23%, 27.8%, and 16.9% respectively. These patterns of the use of alcohol and tobacco might reflect the substance use pattern of Nepalese society and is recognized as a social approval.²⁴ However, the consumption of these substances is largely influenced by socio-demographic factors, education level, peer pressure, independent lifestyle, stressful activities, psychological factors and many more.^{10,11,12} Our study showed used of substance abuse among male was high 65.8% than female 1.9%. In which the use of alcohol (21.6%), cigarette/tobacco (27.3%) and cannabis (16.9%) was more prevalent among male students as compared to females.

In our survey, the third year students used more substances abuse as compared to first-year and second year students. In which the use of alcohol (28.4%), cigarette/tobacco (28.4%) and cannabis (19.4%) was more prevalent among third year diploma studying students. Other studies also shown the students from different disciplines were used substances in various degrees. Panthee et al. found that the use of marijuana was common in pharmacy (13%) and public health students (10.6%) than nursing students (1.3%).¹³ Similarly, Shyangwa et al. found junior residents were the highest (72%) user of alcohol and lowest being undergraduate medical students (31.7%).¹¹

Our research showed that substance abused by family members, friends and neighborhood was 36.4%, 46.5% and 77.5% respectively. For use of substance abuse to prevent stress 15.7%, was the main region.^{10,12,14}

Nidesh Sapkota, Garim aPudasaini et.al shows that association between alcohol abuse with socio-demographic variable shows non-significant association between gender and studying year (p -value 0.070, 0.0001).¹⁵ Other study also shows that there is highly significant association of alcohol abuse with gender of socio-demographic variable (p -value 0.031) with my research (p -value 0.0001).¹⁶ our result shows that association between cigarette/tobacco with socio-demographic variable is highly associated (p -value 0.0001) with Mitesh Karn, Dipendra Kandel et.al (p -value 0.007).¹⁶ The association between cannabis abuse with socio-demographic variable with gender (p -value 0.050) and year of studying (p -value 0.138) is not associated with my survey, gender (likelihood value 0.0001) and studying year (p -value 0.003).¹⁵

Conclusion

The substance abuse among Diploma students was high. Cigarette/Tobacco was the most common substance abuse used by the students followed by Alcohol and Cannabis. The male participants was high than female participants. The influence of peer groups and reason for substance abuse to prevent the stress was very high. Preventive measures such as Awareness program, Proper rules and regulation and Counselling about the potential risk of substance abuse are the further recommended for the betterment of the students.

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