

A Study to Assess the Awareness and Attitude towards Ill Effects of Substance Use among Students in Selected Nursing Colleges

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Abstract: ***Objectives:** To assess the awareness towards ill effects of substance use among nursing students, to assess the attitude towards ill effects of substance use among nursing students, and to find out the relationship between awareness and attitude towards ill effects of substance use among nursing students. **Material and Methods:** A total of 282 undergraduate nursing students from Udupi District, Karnataka, India were recruited for the study. The data collection tools used were Socio-Demographic proforma, a structured questionnaire regarding awareness on substance use, and the Alcohol and drug attitude scale (ADAS). Both descriptive and inferential statistics were used to analyze the data. **Results:** The majority of the students (40.7%) had poor awareness on the ill effects of substance use and 91.1% had a positive attitude regarding the ill effects of substance use. There was no significant relationship was found between awareness and attitude toward the ill effects of substance use among nursing students ($r = .021$, p -value = .731). **Conclusion:** There is a need to conduct an awareness program on substance use and its ill effects among college students to improve awareness and choose the right path.*

Keywords: attitude, awareness, drug addiction, students, substance use.

1. Introduction

Drug abuse refers to the destructive or dangerous use of psychoactive substances including alcohol and other illicit drugs. Those psychoactive substances, when taken in or administered into one's system, affect mental processes. The use of addictive substances can cause substantial health and social problems for the persons who use them, and also for others in their families and societies. The common substances of addictive and abusive nature include alcohol, cocaine, opiates, hallucinogens, amphetamines, prescription, and over-the-counter drug abuse¹.

A report titled, "Magnitude of Substance Use in India, 2019" was published by the Ministry of Social Justice and Empowerment, Government of India. Alcohol is the most common substance used followed by cannabis and opioids as per the report. The prevalence of alcohol use is 4.6%, with a male: female ratio of 17:1, followed by cannabis at 2.8% and opioids at 2.1%. Regarding harmful and dependent use, 19% of alcohol users use it in a dependent pattern, whereas 0.3% of cannabis users use it in a dependent pattern. Opioid use is reported in 2.1% of the country's population, with heroin use being highest at 1.1% followed by pharmaceutical opioids at 0.9% and opium at 0.5%².

Youths including adolescents and young adults are predominantly susceptible to experimenting with substances. This is intermediated by the developmental traits of

sensation-seeking behaviour and impulsivity behavior, way of socialization, and peer pressure³. There is literature evidence that suggests that the shift from school to college influences the students to indulge in substance-using behaviors regarding initiation and maintenance of substance use⁴⁻⁶. Health and social problems associated with the use of and dependence on tobacco, alcohol, and illicit substances can be prevented by greater awareness by individuals, families, and societies to use suitable public health actions⁷. Knowledge and attitude about substance use are of vital importance for the prevention as well as treatment of drug abuse especially in adolescents as it is the age when the majority of drug users start the use of many substances⁸.

Nurses are vital in responding to problematic alcohol and other drug use; however, research shows many nurses hold negative attitudes towards people with alcohol and substance use disorders. Further, little content exists in most undergraduate degrees to address the stigma held by new nurses⁹. Nursing students play a major role in sensitizing the individual and community regarding the ill effects of substance use and thereafter encouraging them to abstain from drug use. The present study aims to assess the awareness and attitude toward the harmful effects of substance use among nursing students which helps in planning further awareness programs among them.

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2. Material and Methods

The study implemented a quantitative approach and descriptive correlational design. An online survey was conducted using a purposive sampling method. Data were collected from 25th March 2021 to 22nd May 2021. The inclusion criteria considered Nursing students between 18-21 years of age, and, 1st, 2nd year BSc, and 1st- year Diploma Nursing students. Nursing students who were unwilling to take part in the study were excluded. For the conduction of this research, ethical permission was obtained from the Institutional Ethics Committee of KMC and KH, Manipal (IEC: 115/2021).

The tools used to gather the data were Socio-Demographic Proforma, Structured questionnaire regarding awareness on substance use, and, Alcohol and Drug Attitude Scale (ADAS). The Socio-Demographic Proforma consists of 10 items, structured questionnaire regarding awareness on substance use consists of 30 multiple choice items and, ADAS consists of 28 items with a 5-point Likert scale. Validity and reliability were established for all three tools and a pre-testing was done before administering the tools.

The estimated sample size was based on the findings of a previous study on awareness and attitude on ill effects of substance abuse (Aesha Farheen Siddiqui, 2016).

$$n = \frac{Z^2 pq}{d^2}$$

Where,

n= sample size

z^2 = confidence level at 95%

p= estimated proportion of symptoms prevalence (previous study prevalence)

q=1-p

d^2 =margin of error

$n = \frac{(1.96)^2 (0.6) (0.4)}{(0.5)^2}$

The sample size comprised 282 nursing students between 18-21 years of age studying in selected nursing colleges of Udupi district, Karnataka.

The analysis of the data was planned based on the objectives and hypothesis of the study. A master sheet was prepared using SPSS 16.0 version to organize and compute the data. Sample characteristics were described using frequency and percentage. The relationship between awareness and attitude toward ill effects of substance use was planned to be analyzed by Spearman's rank correlation coefficient.

3. Results

A total of 282 nursing students were recruited for the study. The tools were given to 330 students at selected nursing colleges of the Udupi district, out of which 300 students responded, 282 were considered based on the sample size and rejected 18 as the tool was incomplete. The overall response rate was 90.1%.

Table 1: Frequency and percentage distribution of sample characteristics

Sample Characteristics	Frequency (%)
Age in years	
18-21	282 (100)
Gender	
Female	233 (82.6)
Male	49 (17.4)
Year of study	
1 st year BSc (N)	87 (30.9)
2 nd year BSc (N)	117 (41.5)
1 st year Diploma (N)	78 (27.7)
Education of mother	
High school	176 (62.4)
Intermediate/diploma	43 (15.2)
Illiterate	16 (5.7)
Graduate	49 (16.7)
Education of father	
Highschool	143 (50.7)
Intermediate/diploma	63 (22.3)
Illiterate	15 (5.3)
Graduate	61 (21.6)
Occupation of mother	
Farmer/shop	2 (0.7)
Skilled worker	43 (15.2)
Unskilled worker	13 (4.6)
Unemployed	224 (79.4)
Occupation of father	
Farmer/shop	74 (26.2)
Skilled worker	107 (37.9)
Unskilled worker	91 (32.3)
Unemployed	10 (3.5)
Area of residence	
Rural	122 (43.3)
Urban	160 (56.7)
Type of family	
Nuclear	257 (91.1)
Joint	25 (8.9)
Source of income for the family	
Father	240 (85.1)
Mother	12 (4.3)
Both	30 (10.6)
Monthly family income in rupees	
<11,000	69 (24.5)
11,001 – 20,000	169 (59.9)
>20,000	44 (15.6)
Source of information on substance use	
Magazine	8 (2.8)
Newspaper	66 (23.4)
Radio	1 (0.4)
Television	207 (73.4)
Religion	
Christian	125 (44)
Hindu	145 (51.4)
Muslim	10 (3.5)
Others	2 (0.7)

The data presented in table 1 shows that 282 (100%) students were between 18-21 years of age and 233 (82.6%) of them were females. Most of them were 2nd year BSc Nursing students i.e., 117 (41.5%). Most of the students' fathers i.e., 143 (50.7%), and mothers i.e., 176 (62.4%) had an educational qualification up to high school level. In relation to the occupation of the father, most of them were skilled workers i.e., 107 (37.9%) meanwhile the majority of the mothers were unemployed i.e., 224 (79.4%). The

majority i.e., 160 (56.7%) were from the urban area and 257 (91.1%) students belong to the nuclear family. The source of income for the family was the father i.e., 240 (85.1%). Income for the 169 student's families was between Rs. 11001-20000. The source of information was television to most of the students (73.4%) and 145 (51.4%) belong to the Hindu religion.

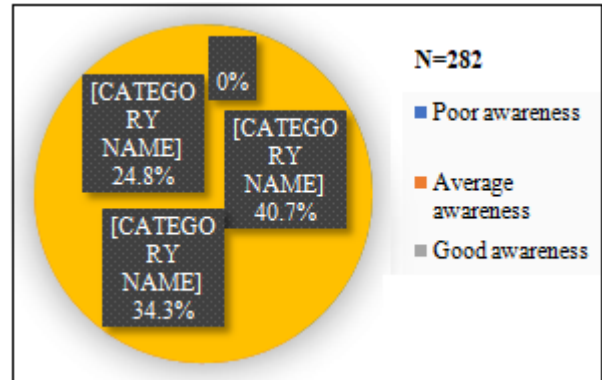


Figure 1: Pie diagram showing level of awareness towards ill effects of substance use

Awareness towards ill effects of substance use presented in figure 1 shows that majority of the students i.e., 40.7% had poor, 34.3% had average and 24.8% had good awareness regarding the ill effects of substance use.

Table 2: Categorical distribution in terms of Mean, Median and S.D. of awareness towards ill effects of substance use

Category	Mean	Median	S.D.	Min. possible score	Max. possible score	Min. Obtained Score	Max. Obtained Score
Substances and its uses (Item no: 1-7)	4.19	4.00	1.902	0	7	0	7
Effects of substance use (Item no: 8-25)	9.41	10.00	3.822	0	18	1	16
Treatment modalities (Item no: 26-30)	3.13	4.00	1.699	0	5	0	5

S.D.=Standard deviation, Min=Minimum, Max=Maximum

The data presented in table 2 describes the categorical distribution of awareness towards the ill effects of substance use. In the first category, substance and its uses in terms of mean, median, and standard deviation were 4.19, 4.00, and 1.902, respectively. In the second category, the effects of substance use in terms of mean, median, and standard deviation were 9.41, 10.00 and 3.822, respectively. In the third category, treatment modalities in terms of mean, median, and standard deviation were 3.13, 4.00, and 1.699, respectively.

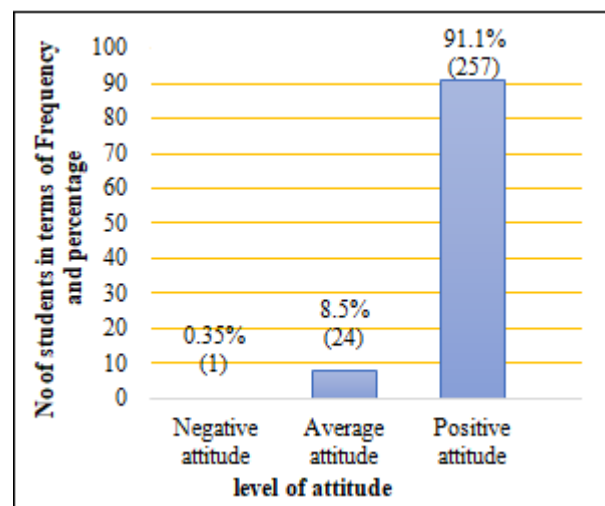


Figure 2: Bar Graph showing level of attitude on ill effects of substance use

The bar graph in figure 2 shows that the majority 257 (91.1%) had a positive attitude, 24 (8.5%) had an average attitude and 1 (0.4%) had a negative attitude towards the ill effects of substance use.

Table 3: Mean, median, S.D., minimum and maximum possible score, and minimum and maximum obtained score of attitude towards ill effects of substance use.

Max. Possible Score	Min. Possible Score	Max. Obtained Score	Min. Obtained Score	Mean	Median	S.D.
140	28	140	55	107.38	109.00	16.632

S.D.=Standard deviation, Min=Minimum, Max=Maximum

The data presented in Table 3 shows the description of attitude towards ill effects of substance use in terms of mean, median, standard deviation, minimum and maximum obtained scores as 107.38, 109.00, 16.632, 55, and 140, respectively.

Table 4: Relationship between awareness and attitude towards ill effects of substance use

Variables	r	p-value
Awareness and Attitude	.021	.731

Spearman's rank correlation coefficient test was used to find the relationship between awareness and attitude toward the ill effects of substance use among nursing students. The data presented in table 4 shows that there is no significant relationship between awareness and attitude toward the ill effects of substance use among nursing students ($r = .021$, p -value = .731).

4. Discussion

The present study was conducted among 282 nursing students in selected nursing colleges of Udupi district, Karnataka. The findings reveal that majority of the students that is, 40.7% had poor, 34.3% had an average and 24.8% had good awareness regarding the ill effects of substance use. The findings of the present study were contradicted by a cross-sectional study conducted on awareness of substance use and its associated factors. Sufficient awareness was found among 82.4% of students regarding substance abuse. Good awareness along with positive association was seen in terms of age, scholastic year, and subject (science). There was a significant association between family income & parental education and status of living with the awareness level of students.¹⁰ The findings of the present study were contradicted by another study conducted among 53 college students of Udupi district, Karnataka. The study reveals that 91 % of the students had an average knowledge, 2% had poor knowledge and 7% had good knowledge during the pre-test on substance abuse and its consequences. There was a steady increase in the knowledge score to 53.8% during the post-test.¹¹

The present study was conducted among 282 nursing students in which the majority that is, 257 (91.1%) had a positive attitude, 24 (8.5%) had an average attitude and 1 (0.35%) had a negative attitude towards the ill effects of substance use. The present study findings were supported by a study conducted among 150 students to assess knowledge and attitude regarding substance abuse. The findings show that the majority of them (94.0%) had a positive attitude towards substance abuse.¹² The findings of the present study were supported by another study conducted among 689 nursing students from Cartagena (Colombia). It was revealed that students had a favorable attitude toward the use of legal and illegal substances and their prevention as they considered the use of the substances (80.0%), trafficking (79.4%), and production (80.4%) as the current challenges.¹³

The results revealed that there is no significant relationship between awareness and attitude toward the ill effects of substance use among nursing students ($r = .021$, $p = .731$). The findings of the present study were contradicted by a study conducted in Belgaum district, Karnataka among 320 adolescent students. The study findings showed that there was a positive correlation ($r=0.4524$) between awareness and attitude among adolescent students.¹⁴ The findings of the present study were contradicted by another study conducted to assess the knowledge and attitude regarding substance abuse. The study findings showed that there was a positive correlation between knowledge and attitude ($p=0.037^*$) regarding substance abuse.¹²

There are limitations to this study. The purposive sampling technique was used for the present study with a limited number of samples. Due to the pandemic situation, the data collection was done online mode. Furthermore, the study was limited to selected colleges of the Udupi district, Karnataka state, India.

5. Conclusion

In conclusion, the findings of the present study reveal that students had a poor awareness with a positive attitude towards the ill effects of substance use. The results revealed that there is no significant relationship between awareness and attitude toward the ill effects of substance use among nursing students. An educational programme on substance use and its ill effects can help the students gain more awareness and choose the correct path and reduce unwanted challenge.

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Conflict of interest

The authors have no conflicts of interest.

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