

“A Study to Assess the Knowledge among the Adolescent on Substance use Disorder at School of Navi Mumbai”

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Abstract

Teenagers are most likely to begin abusing drugs including alcohol, Tobacco and heroin during adolescent's period. There are very limited studies conducted regarding knowledge of substance use disorder in adolescents. This study was undertaken to assess the knowledge among the adolescent on substance use disorder at school of Navi Mumbai.

Objectives: 1) To assess the knowledge on substance use disorder among the adolescent. 2) To find the association between the knowledge of adolescent and selected demographic variable on health of the adolescent.

Design: -The quantitative research approach was adopted. The descriptive research design was applied in this study. The study was conducted in Swami Vivekananda High School and Jr. College of Sanpada, of class 11th and 12th. Non-probability convenient sample technique is used.

Result: The study was done to assess the knowledge among the adolescent on substance use disorder at school of Navi Mumbai.

65% of students are of 15-16 years of age and 35% of students are of 17-18 years of age. 32% were male and 68% were female. Majority of students were female as compared to male. As per religion 88% were Hindus, 2% were Christian, 7% were Muslim and 3% were other cast. 63% of students' family income is 10000-30000, 23% of students' family income is 30001-40000, 10% of students' family income is 40001-50000 and 4% of students' family income is above 50001. 34% of students living in urban area, 48% of students living in rural sector and 18% of students living in urban slums. 31% students having the family history of substance use and 69% of students do not have family history of substance use. In above table 5 students having excellent knowledge regarding substance use disorders, whereas 2 students having poor knowledge and 12 students. And 81 students are having a good and very good knowledge regarding the substance use disorders. The 'p' value and 'chi-square' obtained for

- Age = 0.91 (0.97)
- Gender = 0.036 (10.28)
- Religion = 0.86 (6.9)
- Family Income = 0.89 (6.38)

- Area of Living = 0.086 (13.86)
- History of substance use = 0.35 (4.43)

As per the above statistics there are two component which is having “p” value less than 0.05, there is a statistically significant association between knowledge on substance use disorder in relation with demographic variable.

Introduction

Start children off on the way they should go, and even when they are old they will not turn from it.

- proverbs 22:6

Adolescence is the stage that carries the greatest risk for initiating substance use as it is a traditional stage of physical and mental human development. Adolescents associated with rapid physical growth, sexual maturation and emotional development. Adolescents facing so many problems at their age, mainly morphological problems, psychological problems, social problems, family problems and educational problems. In addition many serious diseases in adulthood have their roots in adolescence

As per Erikson’s theory adolescents are in identity versus role confusion phase. They are still in teens and lacks maturity of thoughts and experience. She/he is not aware what is proper and improper and therefore is in danger of going on the wrong path. Youngsters like to experiment with a risky life without knowledge about long-term health dangers and risk.

Substance use disorder occurs when a person use of any drug or substance leads to health issue or problem at work, school or home. The mainly drug use by the people is alcohol, tobacco, charas, ganja and heroin.

Problem Statement

A study to assess the knowledge among the adolescent on substance use disorder at selected school of Navi Mumbai.

Objectives

- To assess the knowledge on substance use disorder among the adolescent.
- To find the association between the knowledge on substance use disorder of adolescent and selected demographic variable.

Review of Literature

- Literature regarding substance use disorder
- Literature regarding knowledge of substance use disorder

Literature Regarding Substance use Disorder

- The disorder journal of health science and research published article on 3 march 2018 on the level of awareness and attitude and ill effects of substance use disorder in the selected Belgaum district in India of age group 12-18 years. The sample size 320 out of that 75 is males and 245 is females. They have used likert scale to assess the attitude. In India 13.1% are children below 20 years are addicted to any others substance and 4.6% are taking treatment in various NGOs and hospital.
- The Faizur Rahman (2016 march) conducted a study on substance use among male adolescents in northern India in the G.V.S.M. college, Kanpur the age is 10-19 years. The sample is 539 male in that 15.02% was addicted to substance. The 10.95% was addicted to smoking and 3.34% was alcohol and also day by days these was increases.
- Kar, Debroy, Sharma and Islam in 2014 reported that there ae more than 5,00,000 street children in India who lived and work in inhumane condition and are at high risk of substance use disorder. 25% to 29% of street children in India alone may be estimated to be indulging in substance use disorder. Substance use disorder has increased among the children in sizeable proportion in many state of India such as Punjab, Gujrat.

Literature Regarding Knowledge of Substance use Disorder

- Naresh Nebhinani (2012) conducted the research which aimed to assess the drug related knowledge and attitude among school and college students. The total sample of 192 student out of these 92 was high school students and 100 was college students. Most of the students appeared to have adequate knowledge about addictive substance and their harmful effects. This highlight the need for spreading more awareness for prevention as well as treatment of substance related problem.
- Wolter's Kluwer – Medknow Publication has published the articles on substance use which was conducted in west Bengal high school among 416 students in the classes 8-10. After doing study it was proved that 12.5% children abused any on the one substance irrespective of time and frequency. In that 26 were among the urban students and 26 were among rural area. The 6-7% of students are having some disease because of the substance use. They also know the consequences of the substance use before they are start to take it.
- Akbar Babsei Heydarabadi et.al(2013) have conducted a descriptive analytical cross sectional study on knowledge and attitude of dormitory students of Shahb Bahesti University of medical science about substance use disorder. The sample of 604 dormitory students of Shahb Bahesti University of medical science include 62.9% female and 92.9% participants were single and other were married.

Assumption

- The children may or may not have adequate knowledge on substance use disorder.
- Adolescent are more prone for the addiction of substance use.

Hypothesis

- H_{01} – There is no significant association between demographic variable and the level of knowledge of adolescent regarding substance use disorder.

- H₀₁— There is significant association between demographic variable and the level of knowledge of adolescent regarding substance use disorder.

Delimitations

- The study is delimited to 100 children from selected school of Nerul, Navi Mumbai.
- The study is delimited to student who can comprehend English.

Research Methodology

- **Research approach:**

In this study the quantitative research approach was adopted.

- **Research design**

The “descriptive” research design was applied in these study.

- **Setting of the study**

The study was conducted in the school.

- **Population**

Target population :- The adolescent in selected school of Nerul. Navi Mumbai.

Accessible population :- The adolescents age group of 12-18 years.

- **Sample**

Sample size :-100

Sample technique :- The Non-probability convenient sampling technique is used.

- **Sampling criteria**

Inclusive criteria:-

- Willing to participate in the study.
- Able to comprehend English/Marathi.
- Between the age of 12 to 18 years.

Exclusive criteria

- Excluding adolescents who are not available during the study.
- Adolescents who cannot comprehend English/Marathi.

- **Data collection tool**

The data collection instrument used for the study is semi-structured questionnaire.

- **Data collection technique**

In these study the self-reporting technique for data collection is used.

- **Development and selection of the tool**

The instrument used for this study was semi structured multiple choice question to assess the knowledge on substance use disorder.

- **Description of the tool**

A semi structured multiple choice questionnaire is a series of question asked to individuals. Section I consist of demographic variable. Section II consist of knowledge questionnaire on substance use disorder.

| Knowledge level | Percentage of marks |
|-----------------|---------------------|
| Poor | 0-20% |
| Average | 21-40% |
| Good | 41-60% |
| Very good | 61-80% |
| Excellent | 81-100% |

- **Pilot study**

Pilot study is small scale version or trial run designed to test the method. For the pilot study out of 100 sample we are taking 10 for pilot study.

- **Data collection process**

Prior permission was obtained from the principle of the institution and only then proceed for data collection. The Non probability sampling technique is used for study. Each participant was explained in detail about study and written informed consent was obtained. The participant were assured confidentiality of the data collected.

- **Plan for data analysis**

It was planned to analyse the data by using descriptive and inferential statics.

- Descriptive statics:-
- Inferential statics:- The association of knowledge with demographic data was checked with Chi Square test.

- **Ethical consideration**

The following ethical factor were covered while conducting study.

- Approval from the institutional ethical review committee.
- Detailed explanation was given to each study participant about the purpose of the study and informed consent was obtained from the students.
- Permissibility from selected institute for conduction of study.

Analysis and Interpretation of Data

This chapter deal with the analysis and interpretation of data collected 100 (N=100) students of selected school.

The study was done to assess the knowledge of adolescent regarding the substance use disorder at selected school of navi Mumbai. Analysis was done with the help of descriptive and inferential statistics based on the objectives given below.

- To assess the knowledge on substance use disorder among the adolescent.
- To find the association between the knowledge of adolescent and selected demographic variable on health of the adolescent.

Presentation of data : In the present study, the obtained that was tabulated, organized, analysed and interpreted by using descriptive and inferential statistics. The finding of study were presented as follow.

Section I : This section deals with demographic variables of adolescents from the study population.

Section II : Knowledge score regarding substance use disorder.

Section III : Association with knowledge on substance use disorder in relation with demographic variables.

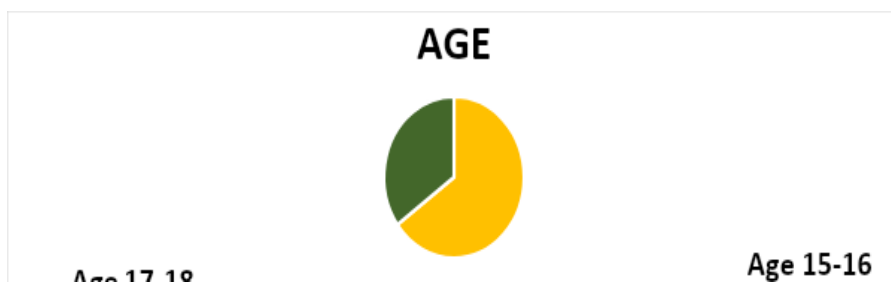
Percentage Distribution of Selected Demographic Variables of Students

The section deals with distribution of adolescents from the study population. The data obtained to describe the sample characteristics including age, gender, religion, family income, area, family history of substance use.

Table 1

| Age | Frequency | Percent |
|-------|-----------|---------|
| 12-13 | 0 | 0% |
| 13-14 | 0 | 0% |
| 15-16 | 65 | 65% |
| 17-18 | 35 | 35% |
| Total | 100 | 100 |

Interpretation: - 65% of students were 15-16 years of age and 35% of students were 17-18 years of age. There no students of age between 12-14 years.

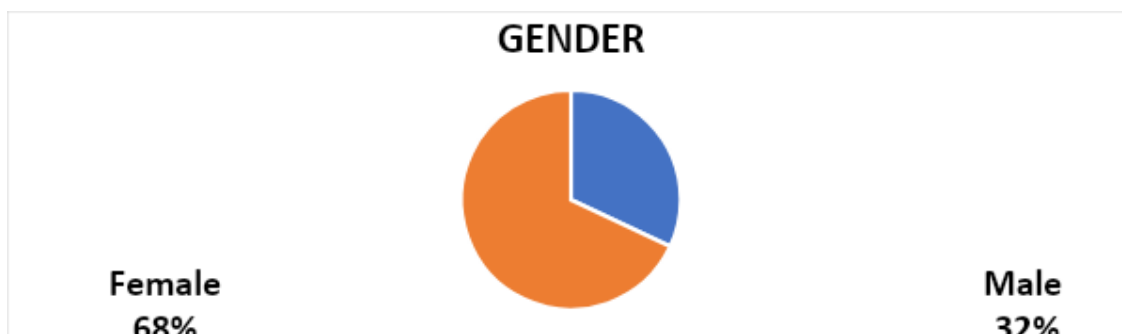


Pie chart showing age distribution of students

Table 2 Percentage Distribution based on Gender

| Gender | Frequency | Percentage |
|--------|-----------|------------|
| Male | 32 | 32% |
| Female | 68 | 68% |
| Total | 100 | 100% |

Interpretation:-32% of students were male and 68% were female. Majority of the students were female as compared to male.

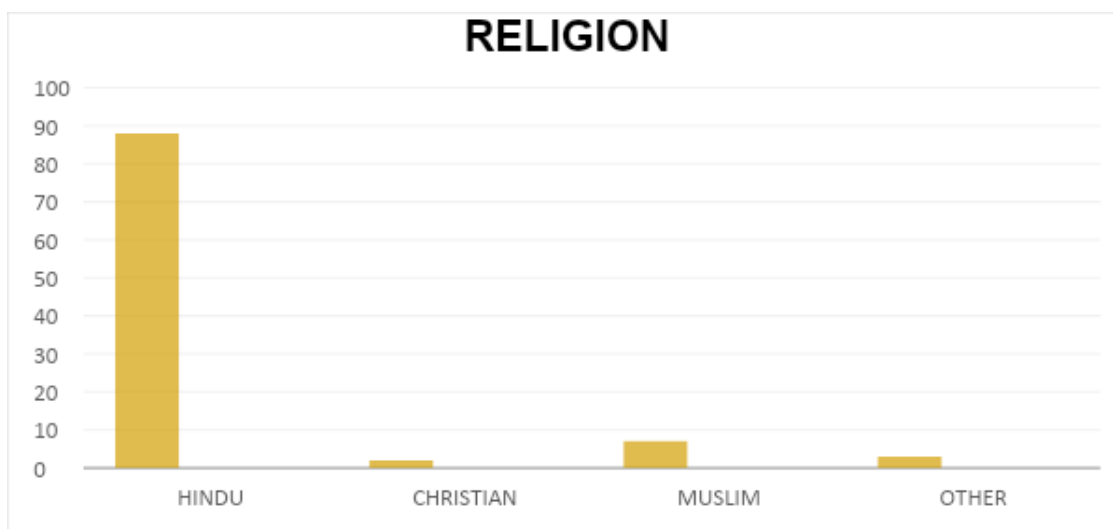


GRAPH NO 2 Pie chart showing Gender distribution of students

Table 3 Percentage Distribution based on Religion

| Religion | Frequency | Percentage |
|--------------|------------|-------------|
| Hindu | 88 | 88% |
| Christian | 2 | 2% |
| Muslim | 7 | 7% |
| Other | 3 | 3% |
| Total | 100 | 100% |

Interpretation:-88% of students were hindu, 2% of students were Christian, 7% of students were muslim and 3% is were other religion.

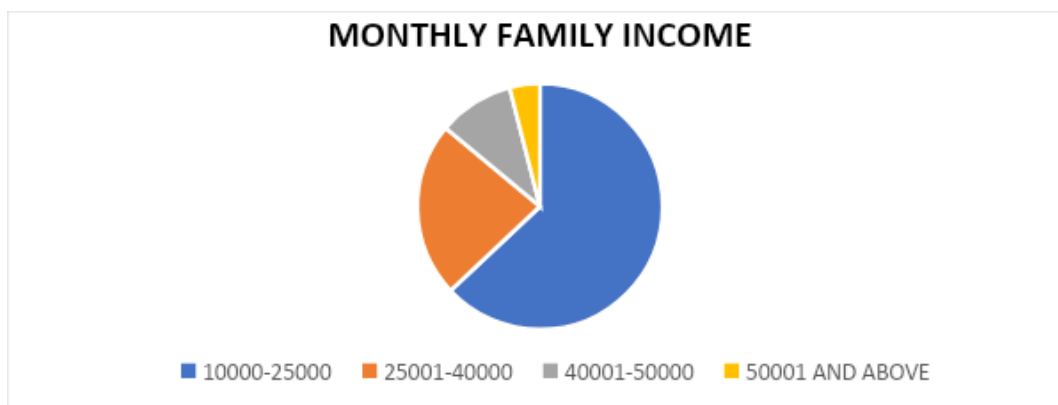


GRAPH NO 3 Bar graph show religion of students.

Table 4 Percentage Distribution based on Monthly Family Income

| Monthly Income | Frequency | Percentage |
|----------------|------------|-------------|
| 10000-25000 | 63 | 63% |
| 25001-40000 | 23 | 23% |
| 40001-50000 | 10 | 10% |
| 50001and above | 4 | 4% |
| Total | 100 | 100% |

Interpretation: -63% of families had 10000-25000 income per month, 23% of families had 25001-40000 income per month, 10% of families had 40001-50000 income per month and remaining 4% had more than 50001 income per month.



GRAPH NO 4 Pie chart showing Monthly Family Income

Table 5 Percentage Ddistribution based on Area Of Living

| Area of living | Frequency | Percentage |
|----------------|------------|-------------|
| Urban sector | 34 | 34% |
| Rural sector | 48 | 48% |
| Urban slum | 18 | 18% |
| Total | 100 | 100% |

Interpretation: - 34% of students are living in urban slum, 48% of students are living in rural slum and 18% of student are living in rural slum.

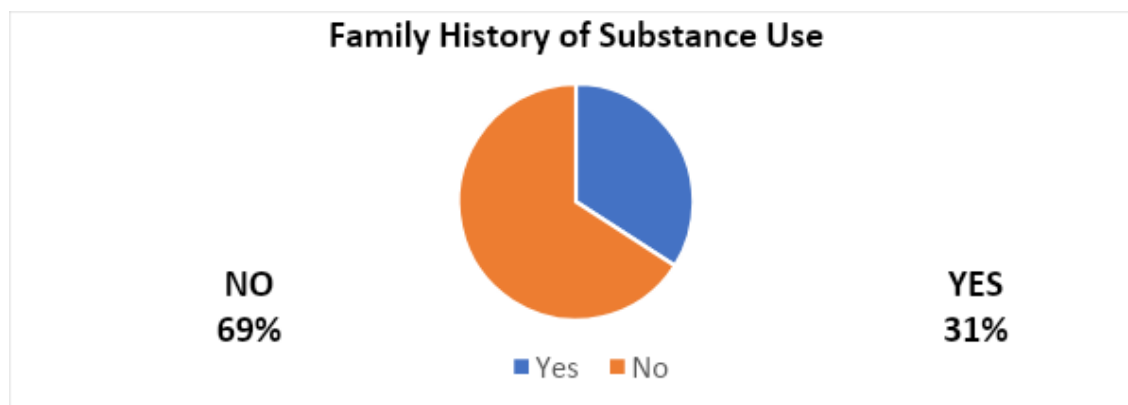


GRAPH NO 5 Bar graph showing Area Of Living Of Students.

Table 6 Percentage Distribution based on Family History of Substance use

| Family History | Frequency | Percentage |
|----------------|-----------|------------|
| Yes | 31 | 31% |
| No | 69 | 69% |
| Total | 100 | 100% |

Interpretation:- 31% of families of the student had a history of substance abuse and remaining 69% did not have the similar history.



GRAPH NO 6 Pie chart showing Family History of the Substance Use

To assess the level of knowledge regarding the substance use disorder.

Table NO 7

| Descriptive Statistics | | | | |
|------------------------|---------|------|--------|----------------|
| Minimum | Maximum | Mean | Median | Std. Deviation |
| 1 | 16 | 9.19 | 10 | 2.36 |

Interpetation:- The above table show that mean knowledge score among the students was 9.19. The standard deviation obtain is 2.36. The maximum existing knowledge score of the students was 16.

Table NO 8

| Level Of Knowledge | Frequency | Percentage |
|---------------------|-----------|------------|
| Poor (0-20%) | 2 | 2.0 |
| Average (21-40%) | 12 | 12.0 |
| Good (41-60%) | 35 | 35.0 |
| Very Good (61-80%) | 46 | 46.0 |
| Excellent (81-100%) | 5 | 5.0 |
| Total | 100 | 100.0 |

Interpretation:-In above table 5 students having excellent knowledge regarding substance use disorders. where as 2 students having poor knowledge and 12 students. And 81 students is having a good and very good knowledge regarding the substance use disorders.

- **Association between the knowledge on substance use disorder in relation with demographic variable.**
- **Age vs Knowledge on substance use disorder**

Table 9

| Age | Knowledge | | | | | Total | p-value (chi-sq Df = 4) |
|-----|-----------|---------|------|-----------|-----------|-------|-------------------------------|
| | Poor | Average | Good | Very Good | Excellent | | |

| | | | | | | | |
|-----------|-----------|-------------|-------------|-------------|-----------|---------------|------------|
| 15-16 Yrs | 1 1.5% | 7 10.8% | 22 33.8% | 32 49.2% | 3 4.6% | 85 100.0% | 0.91(0.97) |
| 17-18 Yrs | 1 2.9% | 5 14.3% | 13 37.1% | 14 40.0% | 2 5.7% | 35 100.0% | |
| Total | 2 2.0% | 12 12.0% | 35 35.0% | 46 46.0% | 5 5.0% | 100 100.0% | |

• Gender vs Knowledge on substance use disorder

Table NO 10

| Gender | Knowledge | | | | | Total | p-value (chi-sq Df = 4) |
|--------|-----------|-------------|-------------|-------------|------------|---------------|-------------------------------|
| | Poor | Average | Good | Very Good | Excellent | | |
| Male | 1 3.1% | 2 6.3% | 7 21.9% | 18 56.3% | 4 12.5% | 32 100.0% | 0.036(10.28) |
| Female | 1 1.5% | 10 14.7% | 28 41.2% | 28 41.2% | 1 1.5% | 68 100.0% | |
| Total | 2 2.0% | 12 12.0% | 35 35.0% | 46 46.0% | 5 5.0% | 100 100.0% | |

Religion vs Knowledge on substance use disorder

Table NO 11

| Religion | Knowledge | | | | | Total | p-value (chi-sq Df = 12) |
|----------|-----------|-------------|-------------|-------------|-----------|--------------|--------------------------------|
| | Poor | Average | Good | Very Good | Excellent | | |
| Hindu | 2 2.3% | 11 12.5% | 32 36.4% | 38 42.3% | 5 5.7% | 88 100.0% | |

| | | | | | | | |
|-----------|-----------|-------------|-------------|-------------|-----------|---------------|-----------|
| Christian | 0 0% | 0 0% | 1 50.0% | 1 50.0% | 0 0% | 2 100.0% | 0.86(6.9) |
| Muslim | 0 0% | 0 0% | 1 14.3% | 6 85.7% | 0 0% | 7 100.0% | |
| Other | 0 0% | 1 33.3% | 1 33.3% | 1 33.3% | 0 0% | 3 100.0% | |
| Total | 2 2.0% | 12 12.0% | 35 35.0% | 46 46.0% | 5 5.0% | 100 100.0% | |

Family Income vs Knowledge on substance use disorder

Table No 12

| Family Income | Knowledge | | | | | Total | p-value (chi-sq Df = 12) |
|------------------|-----------|-------------|-------------|-------------|-----------|---------------|--------------------------------|
| | Poor | Average | Good | Very Good | Excellent | | |
| 10000-25000 | 1 1.6% | 6 9.5% | 22 34.9% | 29 46.0% | 5 7.9% | 63 100.0% | 0.89(6.38) |
| 25001-40000 | 1 4.3% | 4 17.4% | 7 30.4% | 11 47.8% | 0 0% | 23 100.0% | |
| 40001-50000 | 0 0% | 1 10.0% | 5 50.0% | 4 40.0% | 0 0% | 10 100.0% | |
| 50001 to above | 0 0% | 1 25.0% | 1 35.0% | 2 50.0% | 0 0% | 4 100.0% | |
| Total | 2 2.0% | 12 12.0% | 35 35.0% | 46 46.0% | 5 5.0% | 100 100.0% | |

Area of living vs Knowledge on substance use disorder

Table NO 13

| Area of living | Knowledge | | | | | Total | p-value (chi-sq Df = 8) |
|----------------|-----------|-------------|-------------|-------------|------------|---------------|-------------------------------|
| | Poor | Average | Good | Very Good | Excellent | | |
| Urban Sector | 1 2.9% | 0 0% | 15 44.1% | 17 50.0% | 1 2.9% | 34 100.0% | 0.086 (13.86) |
| Rural Sector | 1 2.1% | 11 22.9% | 15 31.3% | 19 39.6% | 2 4.2% | 48 100.0% | |
| Urban Slum | 0 0% | 1 5.6% | 5 27.8% | 10 55.6% | 2 11.1% | 18 100.0% | |
| Total | 2 2.0% | 12 12.0% | 35 35.0% | 46 46.0% | 5 5.0% | 100 100.0% | |

Family History of Substance use vs Knowledge on substance use disorder

Table NO 14

| History of substance use | Knowledge | | | | | Total | p-value (chi-sq Df = 4) |
|--------------------------|-----------|-------------|-------------|-------------|-----------|---------------|-------------------------------|
| | Poor | Average | Good | Very Good | Excellent | | |
| Yes | 1 3.2% | 5 16.1% | 14 45.2% | 10 32.3% | 1 3.2% | 31 100.0% | 0.35 (4.43) |
| No | 1 1.4% | 7 10.1% | 21 30.4% | 36 52.2% | 4 5.8% | 69 100.0% | |
| Total | 2 2.0% | 12 12.0% | 35 35.0% | 46 46.0% | 5 5.0% | 100 100.0% | |

Interpretation: The above all table shown the association between the knowledge on substance use disorder in relation with demographic variable. The 'p' value and 'chi-square' obtained for

- Age = 0.91 (0.97)
- Gender = 0.036 (10.28)
- Religion = 0.86 (6.9)
- Family Income = 0.89 (6.38)
- Area of Living = 0.086 (13.86)
- History of substance use = 0.35 (4.43)

As per the above statistics there are two component which is having “p” value less than 0.05, there is a statistically significant association between knowledge on substance use disorder in relation with demographic variable. Thus, hypothesis h1 was accepted.

Conclusion

As the research project came to an end, there was a feeling of deep gratification and sense of achievement was felt. The experience is very good to assess the knowledge of adolescents on substance use disorders of class 11th and 12th standard.

We analysed our data and interpreted it according to the student level of knowledge. This research project had made our learning experiences more enthusiastic and helpful for us. The main purpose of the study was to assess the knowledge regarding the introduction of substance use disorder, definition, list of commonly used drug, effects of substance use on human body occurring due to substance use.

32% of students were male and 68% were female. Majority of the students were female as compared to male.

LIMITATION

1. The population of the students of both the class 11th and 12th were not accurate as per their total population.

Recommendation

- A similar study can be conducted in a large sample.
- Similar study can be conducted between rural and urban area.
- Similar study can be conducted among office staff and workers.

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