



## UNDERSTANDING SUBSTANCE ABUSE AMONG SENIOR SECONDARY STUDENTS IN RURAL JODHPUR: KNOWLEDGE, ATTITUDES, AND SOCIO-DEMOGRAPHIC CORRELATES

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### ABSTRACT

Substance abuse poses significant challenges globally, affecting individuals, families, and communities. Adolescents are particularly vulnerable, with substance initiation often occurring during this developmental stage. Despite increasing recognition of the issue, there's limited research on substance abuse among senior secondary students in rural areas like Jodhpur. This study assesses the knowledge and attitudes of senior secondary students towards substance abuse. A quantitative approach with a descriptive non-experimental design was adopted, surveying 60 students aged 15-19 at GOVT. Senior Secondary School Kalau, Jodhpur. Data were collected using structured questionnaires and attitude scales. Results indicate a moderate level of knowledge but a neutral attitude towards substance abuse among students. Associations between knowledge, attitude, and socio-demographic variables were explored, revealing significant correlations with religion, family type, and sources of information. However, factors such as monthly family income and parents' educational status showed no significant associations. These findings underscore the need for targeted interventions to improve awareness and attitudes towards substance abuse among adolescents in rural settings. Collaboration between schools, families, and community organizations is essential for promoting healthier behaviors and attitudes. Further research is needed to understand the complex interplay of socio-demographic factors and substance use behaviors among adolescents in rural areas.

**KEYWORDS:** Substance abuse, Adolescents, Senior secondary students, Knowledge, Attitudes, Rural areas.

### INTRODUCTION

Substance abuse is a complex and pervasive issue that poses significant challenges to individuals, families, and communities worldwide. It encompasses the harmful or hazardous use of psychoactive substances, including alcohol, tobacco, and illicit drugs, which can lead to various physical, psychological, and social consequences.<sup>[1]</sup> Substance abuse not only affects the health and well-being of individuals but also has broader implications for public health, social welfare, and economic productivity.<sup>[2]</sup>

According to the World Health Organization (WHO), the use of alcohol and illicit drugs among adolescents is on the rise in many parts of the world, with a considerable proportion of substance initiation occurring during adolescence. In addition, the misuse of prescription medications and other psychoactive substances has become increasingly prevalent among youth, posing new challenges for prevention and intervention efforts.<sup>[3]</sup> In

recent years, there has been a growing recognition of the need to address substance abuse among secondary school students, given their vulnerability to peer pressure, experimentation, and risk-taking behaviors. Research indicates that a significant proportion of senior secondary students are becoming increasingly involved in substance use, with implications for their academic performance, mental health, and overall well-being.<sup>[4]</sup>

Understanding the knowledge and attitudes of senior secondary students regarding substance abuse is essential for developing effective prevention and intervention strategies. Knowledge about the risks associated with substance abuse, as well as attitudes towards substance use and related behaviors, can influence students' decisions and behaviors regarding substance use.<sup>[5]</sup> However, there is limited research exploring the knowledge and attitudes of senior secondary students regarding substance abuse, particularly in rural areas such as Jodhpur. Therefore, this study aims to assess the

knowledge and attitudes of senior secondary students attending selected rural schools in Jodhpur regarding substance abuse. By examining students' knowledge and attitudes towards substance abuse, this study seeks to provide insights into the prevalence, patterns, and determinants of substance use among adolescents in rural settings.

## METHODOLOGY

- **Research Approach:** The present study adopts a quantitative research approach to assess the knowledge and attitudes of senior secondary students regarding substance abuse.
- **Research Design:** A descriptive non-experimental design is employed in this study to assess the knowledge and attitudes of senior secondary students regarding substance abuse. This design allows for the exploration of relationships between variables and the description of phenomena without manipulating variables or implementing interventions.
- **Setting of the Study:** The study is conducted at GOVT. Senior Secondary School Kalau, Jodhpur.
- **Population under Study:** The population comprises senior secondary students attending classes at GOVT. Senior Secondary School Kalau, Jodhpur.

- **Sample and Sample Size:** The sample consists of 60 senior secondary students aged between 15-19 years attending classes at the selected school. Convenient sampling technique is employed to select the sample based on the availability and willingness of students to participate in the study.

**Data Collection Tools and Techniques:** Two main tools are used for data collection:

1. **Structured Knowledge Questionnaire:** This tool consists of 30 structured questions related to the knowledge of senior secondary students regarding substance abuse.
2. **Attitude Scale (Likert Scale):** This tool comprises 20 attitude statements, including both positive and negative statements, to assess students' attitudes regarding substance abuse.

**Ethical Consideration:** Ethical considerations include obtaining permission from the school principal, obtaining written informed consent from participants, ensuring confidentiality of participants' identities, informing participants about the purpose and procedures of the study, and ensuring voluntary participation and the right to withdraw from the study.

## RESULT

**Table 1: Frequency and Percentage Distribution of Sample as per Demographic Variables N=60.**

Demographic Variable	Frequency	Percentage
<b>Gender</b>		
- Male	35	58.3%
- Female	25	41.7%
<b>Religion</b>		
- Hindu	45	75.0%
- Muslim	10	16.7%
- Others	5	8.3%
<b>Type of Family</b>		
- Nuclear	40	66.7%
- Joint	20	33.3%
<b>Monthly Family Income</b>		
- Below 10,000 INR	25	41.7%
- 10,000-20,000 INR	20	33.3%
- Above 20,000 INR	15	25.0%
<b>Educational Status of Parents</b>		
- Illiterate	10	16.7%
- Primary Education	20	33.3%
- Secondary Education	15	25.0%
- Higher Education	15	25.0%
<b>Number of Siblings in Family</b>		
- One	25	41.7%
- Two	20	33.3%
- More than two	15	25.0%
<b>Source of Information</b>		
- School	30	50.0%
- Family	20	33.3%
- Friends	10	16.7%

Table 1. Resents the knowledge and attitude scores of senior secondary students. The maximum scores for knowledge and attitude were 30 and 60, respectively. The mean knowledge score was 14.33, with a median of 14.50 and a mode of 11. The mean percentage for knowledge was 47.78%, and the standard deviation was

4.56. For attitude, the mean score was 37.63, with a median of 40 and a mode of 45. The mean percentage for attitude was 62.72%, and the standard deviation was 8.22. These scores indicate a neutral attitude towards substance abuse among senior secondary students, with a moderate level of knowledge.

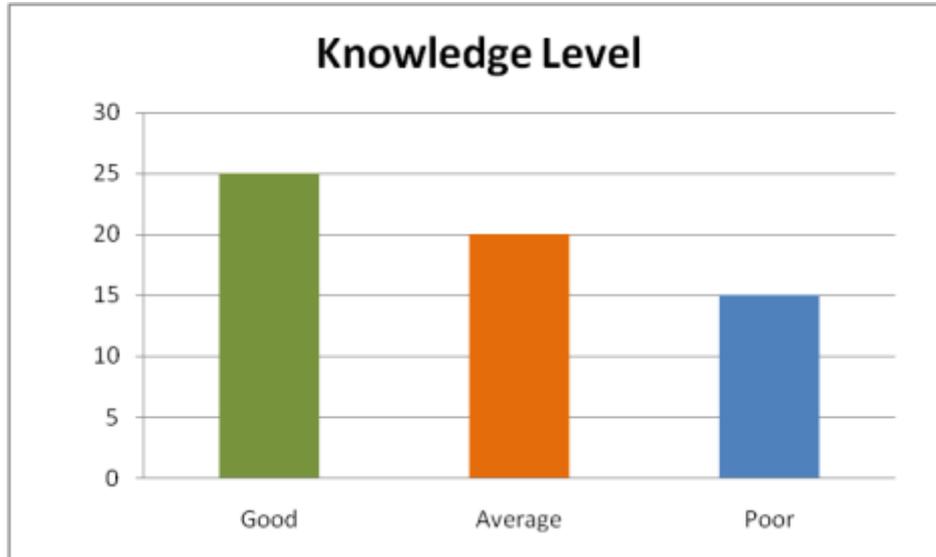


Figure 1: Bar graph showing frequency as per their knowledge score.

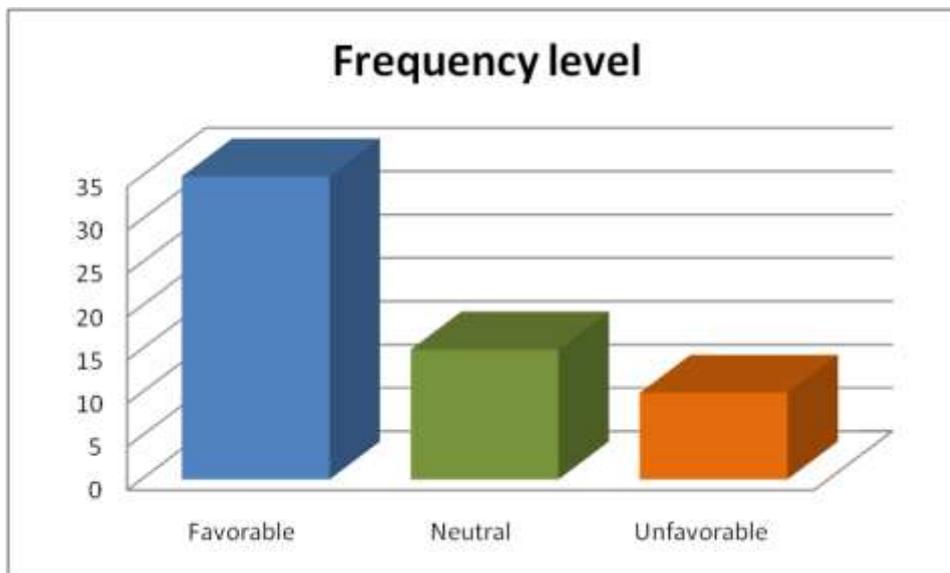


Figure 2: Bar graph showing frequency as per their knowledge score.

Table 2: Association of the Level of Knowledge and attitude score with Selected Socio-Demographic Variables Among Senior Secondary Students.

SR. NO.	Demographic Variables	Degree Of Freedom	Knowledge Score Calculated Value	Attitude Score Calculated Value
1	Gender	2	5.22 <sup>NS</sup>	7.18*
2	Religion	6	21.87*	18.63*
3	Type of Family	6	22.55*	20.15*
4	Monthly Income of the Family	6	26.20*	9.74 <sup>NS</sup>
5	Educational Status of Parents	6	16.77*	9.568 <sup>NS</sup>
6	Number of Siblings in Family	6	6.66 <sup>NS</sup>	13.52*
7	Source of Information about Substance Abuse	6	26.79*	13.21*

Note: NS - Not Significant, \* – Significant

Table 2 presents the association between the level of knowledge and attitude scores with selected socio-demographic variables among senior secondary students. The calculated values for knowledge and attitude scores are compared with the tabulated values to determine significance. The variables include gender, religion, type of family, monthly family income, educational status of

parents, number of siblings in the family, and source of information about substance abuse. The results indicate significant associations between knowledge and attitude scores with certain demographic variables, such as religion, type of family, and source of information, while others, such as monthly family income and educational status of parents, showed no significant association.

**Table 3: Knowledge and Attitude Scores of Senior Secondary Students.**

	Knowledge Score	Attitude Score
<b>Maximum Score</b>	30	60
<b>Mean</b>	14.33	37.63
<b>Median</b>	14.50	40
<b>Mode</b>	11	45
<b>Mean Percentage</b>	47.78%	62.72%
<b>Standard Deviation</b>	4.56	8.22

Table 3 displays the mean, median, mode, mean percentage, and standard deviation of knowledge and attitude scores of senior secondary students regarding substance abuse. The mean knowledge score was 14.33, with a median of 14.50 and a mode of 11, indicating a relatively consistent distribution of scores. The mean percentage for knowledge was 47.78%, suggesting that, on average, students answered approximately 47.78% of the knowledge questions correctly. For attitude, the mean score was 37.63, with a median of 40 and a mode of 45, indicating a more skewed distribution towards higher scores. The mean percentage for attitude was 62.72%, indicating a generally positive attitude towards substance abuse among the participants. The standard deviations for both knowledge and attitude scores were 4.56 and 8.22, respectively, suggesting a moderate level of variability in responses.

The analysis revealed that among senior secondary students, 60% fell into the "Poor" category in terms of knowledge regarding substance abuse, while 30% were categorized as "Average," and only 10% were classified as "Good." Concerning attitudes towards substance abuse, 25% of senior secondary students demonstrated "Unfavorable" attitudes, while the majority, comprising 63.33%, exhibited a "Neutral" stance. A smaller proportion, approximately 11.66%, held "Favorable" attitudes towards substance abuse. The correlation analysis between knowledge and attitude scores yielded a correlation value of 0.00051. The calculated correlation value fell below the threshold, indicating a non-significant relationship between knowledge and attitude scores among senior secondary students.

## DISCUSSION

The results of this study shed light on the knowledge and attitudes of senior secondary students regarding substance abuse, providing valuable insights into the prevalence and determinants of substance use among adolescents in rural settings.

In terms of knowledge, the findings reveal that a significant proportion of senior secondary students

exhibit limited understanding of substance abuse, with 60% falling into the "Poor" category, indicating a need for targeted educational interventions to improve awareness and understanding of the risks associated with substance use. This aligns with findings from previous research by Yadav et al. (2021), which also highlighted gaps in knowledge among adolescent populations.<sup>[6]</sup>

Regarding attitudes towards substance abuse, the majority of senior secondary students demonstrated a "Neutral" stance, comprising 63.33% of the sample. Another study conducted by Idowu et al. (2018) suggests a strong opinions or beliefs regarding substance use that show same result majority of students have neutral to positive response regarding substance abuse.<sup>[7]</sup>

The correlation analysis between knowledge and attitude scores yielded a non-significant relationship, indicating that knowledge levels did not significantly influence attitudes towards substance abuse among senior secondary students. This finding contradicts some previous studies, such as the study by Jose et al. (2020), which reported a positive association between knowledge and attitudes towards substance abuse.<sup>[8]</sup> Further exploration is warranted to understand the underlying factors contributing to attitudes towards substance abuse among adolescents and to develop tailored interventions targeting knowledge enhancement and attitude modification.

Overall, the findings of this study contribute to our understanding of substance abuse among senior secondary students in rural areas and underscore the importance of comprehensive prevention and intervention strategies that address both knowledge gaps and attitudinal factors. By addressing these factors holistically, policymakers, educators, and healthcare professionals can work together to promote healthier behaviors and mitigate the impact of substance abuse on adolescent populations. Further research is needed to explore the effectiveness of such interventions and to identify additional factors influencing substance use behaviors among adolescents in rural settings.

The association analysis between socio-demographic factors and knowledge and attitudes towards substance abuse among senior secondary students reveals nuanced insights for targeted intervention strategies. Consistent with previous research Ajjawadimath (2020), significant associations were observed between certain demographic variables and both knowledge and attitudes.<sup>[9]</sup> For instance, religion was found to influence attitudes, aligning with study conducted by Urizar et al., (2022) emphasizing the impact of cultural and religious beliefs on substance use attitudes.<sup>[10]</sup> Similarly, family dynamics, reflected in the type of family, were associated with knowledge levels, indicating the crucial role of familial factors in shaping adolescents' understanding of substance abuse in study conducted by Syed et al., (2022).<sup>[11]</sup> However, some socio-demographic factors showed no significant associations, such as monthly family income and parents' educational status, suggesting that other contextual factors may play a more significant role in rural settings like Jodhpur. These findings underscore the need for tailored intervention strategies that account for the complex interplay between socio-demographic factors and adolescent attitudes and knowledge regarding substance abuse, emphasizing collaboration between schools, families, and community organizations to promote healthier behaviors and attitudes.

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