European Journal of Clinical Pharmacy
Print ISSN: 2385-409X **Online ISSN**: 3105-0409
Website: https://farmclin.com/

Original Research Article

A Descriptive Study On Awareness And Attitude Regarding Ill- Effects Of Drug Abuse Among College Students With A View To Develop Information Booklet In Selected Institute Of Vadodara.

Article History:

Name of Author:
Ms. Pragna Meda[1], Ms. Betty Koshy[2]

Affiliation: *[1]M.Sc. Nursing Second Year, Parul Institute of Nursing, Vadodara, Gujarat.*
[2] Ms. Betty Koshy, Associate Professor, Parul College of Nursing, Vadodara, Gujarat

Corresponding Author:
Betty Koshy

Received: 11-11-2025
Revised: 26-11-2025
Accepted: 16-12-2025
Published: 31-12-2025

Abstract: Drug abuse is a pervasive issue affecting societies worldwide, with its impact being particularly severe among young adults, including college students. Substance abuse among students is a growing concern, leading to various negative consequences, including academic failure, health issues, and legal problems. College life often exposes students to numerous challenges, including peer pressure, academic stress, and the desire for social acceptance, all of which contribute to the prevalence of drug abuse. Understanding the awareness levels and attitudes of students regarding the ill-effects of substance abuse is crucial in designing effective intervention and prevention programs.

Keywords: Awareness; Attitude; Ill-Effect; Drugs; Drug Abuse, College students: Information Booklet.

INTRODUCTION

Drug abuse, as defined by the World Health Organization (WHO), refers to the harmful or hazardous use of psychoactive substances, including alcohol and illicit drugs ("Substance Abuse"). The misuse of substances not only affects the individuals involved but also has far- reaching consequences on families, educational institutions, and society as a whole. Recent studies indicate that college students are particularly vulnerable to substance abuse due to their transition from adolescence to adulthood, a period marked by exploration, experimentation, and a quest for independence.[1]

Statistical Overview of Drug Abuse among College Students recent studies highlights the alarming prevalence of drug abuse in higher education institutions. According to the National Institute on Drug Abuse (NIDA),[2] nearly **44% of college students** reported using illicit drugs at least once in their lifetime Furthermore, a study by the Substance Abuse and Mental Health Services Administration (SAMHSA) found that approximately **22% of full-time college students** used illicit drugs in the past few months.[3]

The incidence rate of drug abuse varies depending on the type of substance. For instance, marijuana remains the most commonly used drug, with a prevalence rate of **35.9%** among college students in 2022.[4] In contrast, nonmedical use of prescription stimulants, such as Adderall, has an incidence rate of **9.8%** among college students. Additionally, opioids and hallucinogens have shown increasing trends, raising concerns about their long-term impact on student's health.[5] The purpose of the study is to assess the awareness and attitude regarding ill- effects of drug abuse among college students with a view to develop information booklet in selected institute of Vadodara.

NEED OF THE STUDY

- **ILL EFFECTS OF DRUG ABUSE**

Drug abuse is a pressing social and health concern that affects individuals, families, and societies worldwide. The misuse of substances such as opioids, cocaine, methamphetamine, and prescription drugs leads to severe physical, psychological, and social consequences. One of the most immediate and severe consequences of drug abuse is its impact on physical health. Substance abuse can lead to cardiovascular diseases, liver damage, respiratory problems, and neurological disorders. For instance, opioids like heroin can slow down respiratory functions, leading to fatal overdoses.[6]

Beyond physical harm, drug abuse has profound psychological effects. Substance use disorders often lead to cognitive impairments, memory loss, anxiety, depression, and psychosis.[7]

The social consequences of drug abuse are equally alarming. Families of drug users often experience emotional distress, financial burdens, and breakdowns in relationships. Children in households affected by substance abuse may suffer neglect, emotional trauma, and developmental issues.[8]

- **SIGNIFICANCE OF THE STUDY**

This research is significant for several reasons. Firstly, it contributes to the growing body of literature on substance abuse among young adults, providing insights into the factors that shape students' knowledge and attitudes. Secondly, it aids policymakers, educators, and health professionals in designing targeted awareness campaigns and intervention programs. According to the National Institute on Drug Abuse (NIDA), early prevention strategies can significantly reduce substance abuse rates among youth ("Preventing Drug Use"). Thus, understanding student perspectives will facilitate the development of more effective prevention programs.[9]

Additionally, this study is crucial for educational institutions, as it highlights the importance of fostering a drug-free environment through awareness campaigns and support systems. Addressing drug abuse at the college level can lead to healthier, more productive students who are better equipped to contribute positively to society.[10]

- **RATIONALE OF THE STUDY**

The descriptive nature of this study will provide a clear picture of existing gaps in awareness and prevailing attitudes among students. By identifying these gaps, this research will serve as a foundation for the development of an **information booklet**, which will act as an educational tool to enhance students' knowledge about the detrimental effects of drug abuse. The booklet will be designed to be accessible, engaging, and informative, offering evidence-based insights and preventive strategies.

REVIEW OF LITERATURE:

Kumar, N., et al (2024) aimed to assess the knowledge and attitudes regarding substance use among college students in South India. A community-based cross-sectional study was conducted with 2,170 students aged 18 and above, using a predesigned questionnaire. Results showed that 20% had good knowledge, and 86% had a positive attitude toward substance use; however, only 1.8% reported engaging in substance use. The study concluded that while substance use prevalence was low, there is a need for health education sessions to address the ill effects of substance use.[11]

Das, Shyamashree (2024) aimed to assess the knowledge and attitudes towards substance use among college students in a coastal town of South India. A community-based cross-sectional design was employed, involving 2,170 students aged 18 and above, who completed a predesigned questionnaire. Results indicated that 20% of participants had good knowledge, while 86% exhibited a positive attitude towards substance use. Notably, only 1.8% reported engaging in substance use. The study concluded that despite low prevalence, there is a need for health education sessions to address the ill effects of substance use among college students.[12]

Kannan, K., et al. (2024) this study aimed to assess college students' knowledge, attitudes, and expectancies toward cannabis use in Bangalore, India. A cross-sectional survey was conducted with 405 undergraduate and postgraduate students using standardized tools. Results indicated that 10% reported cannabis use in the past three months, with users displaying more favorable attitudes and positive expectancies toward cannabis. Additionally, a significant portion were unaware of the legal status and potential negative effects of cannabis. The study concluded that targeted preventive interventions and policies are necessary to address misconceptions and promote awareness among college students.[13]

Dhiman, Monita (2024) This study aimed to evaluate the knowledge and awareness of drug and substance abuse among undergraduate female students. A survey was administered to 948 female students enrolled in various graduate-level programs, with data collected electronically via Google Forms. Findings revealed varying levels of awareness, with significant gaps identified. While some students recognized the importance of drug abuse education, there was a clear demand for more comprehensive and focused awareness programs. The study concluded that understanding students' knowledge and perspectives can aid in developing effective strategies to prevent substance abuse.[14]

Jaswal, Neha, et al. (2023) reported study that aimed to estimate the prevalence and severity of substance use among college students in three neighboring cities of North India and explore demographic correlates. A cross-sectional online survey was conducted using the Alcohol, Smoking, and Substance Involvement Screening Test (ASSIST) with 393 respondents. Results showed that 58.3% reported lifetime substance use, with alcohol (54.7%), tobacco (40.2%), and cannabis (15%) being most common. The study concluded that comprehensive college substance misuse prevention policies are necessary to address the high prevalence.[15]

OBJECTIVES OF THE STUDY:

- To assess the awareness on ill effects of drug abuse among college students.
- To assess the attitude among college students.
- To find out the relationship between awareness and attitude regarding ill-effects of drug abuse among college students.
- To determine association awareness and attitude on ill-effects of drug abuse with selected demographic variable.

MATERIAL AND METHOD:

In view of the problem under study and to accomplish the objectives of the study a descriptive research design was used for this study and the study was conducted in selected Institute of Vadodara. A total of 400 samples of college students were selected by using non- probability purposive sampling technique. A structured knowledge questionnaire was prepared to assess the awareness regarding ill-effect of drug abuse and create Likert scale to assess the attitude regarding drug abuse among college students at Vadodara. A formal permission from the concerned authority was obtained for conducting the study at college.

DESCRIPTION OF TOOLS

SECTION-I: SOCIO-DEMOGRAPHIC QUESTIONNAIRE

The **Socio-Demographic Questionnaire** is a structured tool developed by the researcher to collect essential background information about the participants. This section aims to capture personal and familial variables that may influence students' awareness and attitudes regarding the ill-effects of drug abuse. The data obtained will help in understanding the socio-demographic profile of the participants and its association with the study variables.

SECTION II: DRUG ABUSE AWARENESS QUESTIONNAIRE

The Drug Abuse Awareness Questionnaire is a structured and self-administered tool developed by the investigator to assess the level of awareness among college students regarding the ill-effects, signs, modes of intake, and preventive strategies related to drug abuse. The tool also evaluates the students' knowledge of related government initiatives and policies.

This section consists of a total of 27 multiple-choice questions
(Questions 1 to 27), categorized into three key domains:

1. Awareness Regarding Modes and Warning Signs of Drug Abuse (Q.1 to Q.7):

These questions assess the student's understanding of the various routes of drug administration (oral, injection, inhalation, snorting), onset of drug effects, physical and behavioural warning signs, and the impact of drug use on mental and physical health.

2. Awareness Regarding Ill-Effects and Preventive Measures (Q.8 to Q.19):

This section explores the participant's knowledge of the short- and long-term physical, social, financial, and emotional consequences of drug abuse. It also includes items on preventive strategies such as community involvement, parental influence, college interventions, and health services that support drug abuse prevention and recovery.

3. Awareness Regarding Government Programs and Legal Aspects (Q.20 to Q.27s):

This domain focuses on students' awareness about national policies and acts (such as the Narcotic Drugs and Psychotropic Substances Act - NDPSA), government initiatives (like SAMHSA, NIDA, Drug-Free Communities Support Program), and helpline services for prevention and treatment of substance abuse.

SECTION III: DRUG ABUSE ATTITUDE LIKERT SCALE

The **Drug Abuse Attitude Likert Scale** is a standardized tool developed to assess the attitudes of college students toward drug abuse. This section aims to evaluate the participants' beliefs, perceptions, and emotional responses regarding drug use, users, and preventive strategies.

The scale consists of a series of **statements related to drug abuse**, to which respondents indicate their level of agreement or disagreement using a **5-point Likert scale**, as follows:

- **Strongly Agree (5 points)**
- **Agree (4 points)**
- **Neutral (3 points)**
- **Disagree (2 points)**
- **Strongly Disagree (1 point)**

The statements cover a range of themes, including:

- Personal beliefs about drug use and its consequences
- Social stigma and empathy toward individuals struggling with addiction
- Responsibility of society, family, and educational institutions in drug abuse prevention
- Support for rehabilitation and recovery-oriented approaches

The scale is designed to measure whether the respondent holds a **positive, neutral, or negative attitude** toward drug abuse and its impact on individuals and society. Higher scores indicate a more **negative attitude toward drug abuse**, reflecting awareness, concern, and support for preventive measures.

This tool has been **content validated by experts** in the fields of mental health, addiction studies, and nursing education to ensure its relevance, clarity, and sensitivity. The tool was pre-tested for reliability, and necessary modifications were made based on feedback.

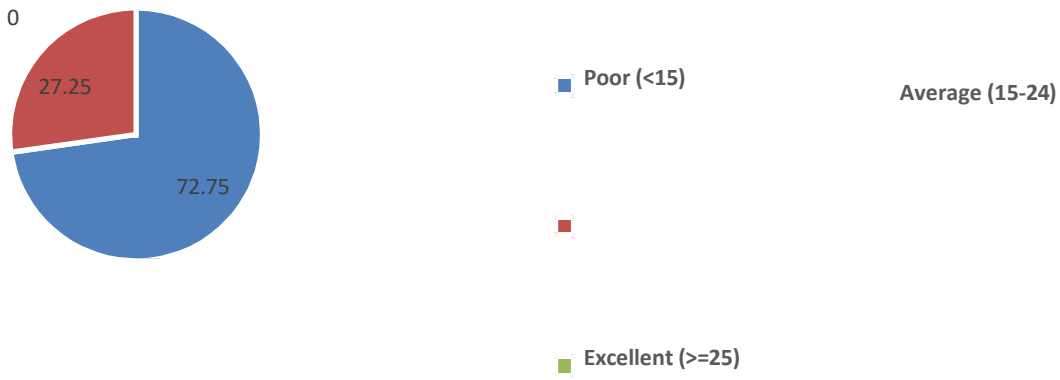
DATA COLLECTION PROCEDURE

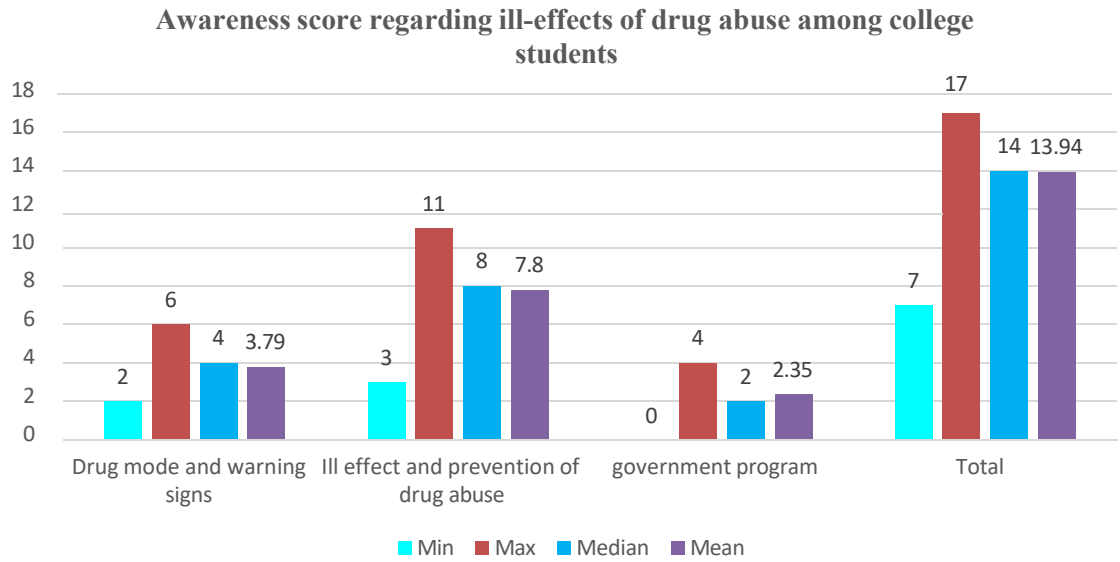
The investigator took consent from the college students. Confidentiality was maintained during data collection. A survey method is used for data collection and also provide information booklet regarding drug abuse and its ill effects and prevention. The conceptual framework of the present study was developed on the basis of health belief model given by Irwin M. Rosenstock.

RESULTS

AWARENESS SCORE REGARDING ILL-EFFECTS OF DRUG ABUSE AMONG COLLEGE STUDENTS

Awareness score regarding ill-effects of drug abuse among college students				
Statistics	**Drug mode and warning signs**	**Ill effect and prevention of drug abuse**	**Government program**	**Total**
Max Score	7	12	8	27
Min-Max	2-6	3-11	0-4	7-17
Median	4	8	2	14
Mean	3.79	7.8	2.35	13.94
Mean%	54.11	65	29.38	51.62
SD	1.01	1.73	0.85	2.54





Awareness level regarding ill-effects of drug abuse among college students			
Poor (<15)	**Average (15-24)**	**Excellent (>=25)**	**Total Score**
291(72.75%)	109(27.25%)	0%	400(100%)

The awareness of students regarding the ill-effects of drug abuse was assessed across three domains: **drug mode and warning signs, ill-effects and prevention of drug abuse, and government programs**.

For the domain of **drug mode and warning signs**, the maximum possible score was **7**. The obtained scores ranged from **2 to 6**, with a **median of 4**. The **mean score was 3.79 (SD = 1.01)**, which corresponds to **54.11% of the maximum possible score**. This indicates a **moderate level of awareness** among students regarding the mode of drugs and their warning signs.

In the domain of **ill-effects and prevention of drug abuse**, the maximum possible score was **12**, with observed scores ranging from **3 to 11**. The **median score was 8**, while the **mean score was 7.8 (SD = 1.73)**, equivalent to **65% of the maximum score**. This suggests that participants had a **relatively higher awareness** in this area compared to other domains.

For the domain of **government programs related to drug abuse**, the maximum possible score was **8**. The observed scores ranged between **0 and 4**, with a **median of 2**. The **mean score was 2.35 (SD = 0.85)**, which corresponds to only **29.38% of the maximum score**. This reflects a **low level of awareness among students** regarding existing government programs addressing drug abuse.

The **overall awareness score** had a maximum possible value of **27**, with participants scoring between **7 and 17**. The **median score was 14**, and the **mean score was 13.94 (SD = 2.54)**, which represents **51.62% of the total possible score**. This indicates that, overall, students demonstrated a **moderate level of awareness** about the ill-effects of drug abuse, with notable gaps in knowledge about government initiatives.

AWARENESS LEVEL REGARDING ILL-EFFECTS OF DRUG ABUSE AMONG COLLEGE STUDENTS

The overall awareness levels of students regarding the ill-effects of drug abuse were categorized into three levels: **poor (<15), average (15–24), and excellent (≥25)**. Out of a total of 400 students, the majority, **291 students (72.75%)**, were found to have a **poor level of awareness**. A smaller proportion, **109 students (27.25%)**, demonstrated an **average level of awareness**. Importantly, none of the students achieved an **excellent level of awareness (≥25 score)**.

This distribution clearly indicates that a **large majority of students lack adequate awareness** regarding the ill-effects of drug abuse, with only about one-fourth having an average understanding and **no participants attaining high awareness levels**. These findings highlight a significant **knowledge gap** among college students, underscoring the need for targeted awareness programs, educational interventions, and preventive strategies.

ATTITUDE REGARDING ILL-EFFECTS OF DRUG ABUSE AMONG COLLEGE STUDENTS

1. Attitude Score regarding ill-effects of drug abuse among college students

Attitude level regarding ill-effects of drug abuse among college students	
Max Score	85
Min-Max	52-72
Median	60
Mean	60.64
Mean%	71.34
SD	6.74

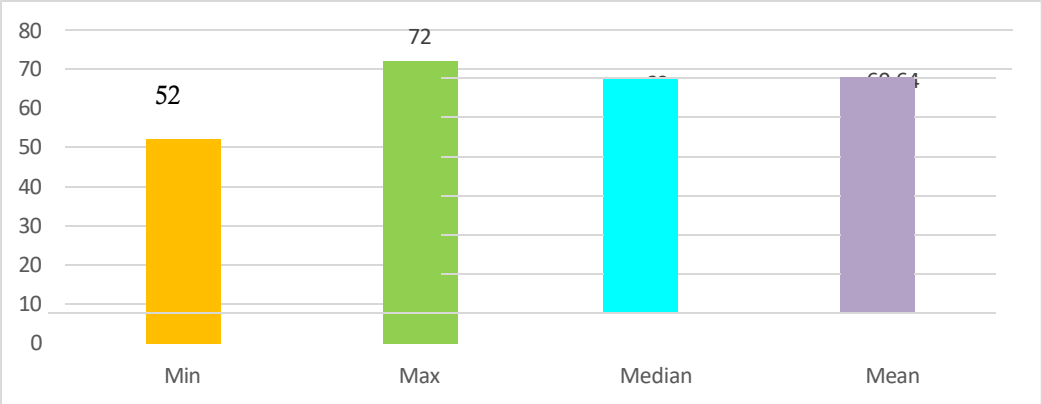
The overall awareness levels of students regarding the ill-effects of drug abuse were categorized into three levels: **poor (<15), average (15–24), and excellent (≥25)**. Out of a total of 400 students, the majority, **291 students (72.75%)**, were found to have a **poor level of awareness**. A smaller proportion, **109 students (27.25%)**, demonstrated an **average level of awareness**. Importantly, none of the students achieved an **excellent level of awareness (≥25 score)**.

This distribution clearly indicates that a **large majority of students lack adequate awareness** regarding the ill-effects of drug abuse, with only about one-fourth having an average understanding and **no participants attaining high awareness levels**. These findings highlight a significant **knowledge gap** among college students, underscoring the need for targeted awareness programs, educational interventions, and preventive strategies.

ATTITUDE REGARDING ILL-EFFECTS OF DRUG ABUSE AMONG COLLEGE STUDENTS

2. Attitude Score regarding ill-effects of drug abuse among college students

Attitude level regarding ill-effects of drug abuse among college students	
Max Score	85
Min-Max	52-72
Median	60
Mean	60.64
Mean%	71.34
SD	6.74



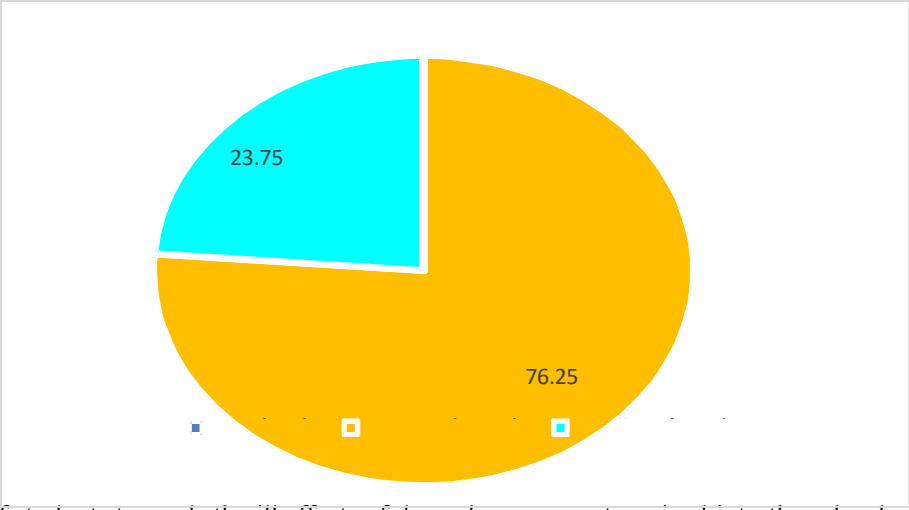
European Journal of Clinical Pharmacy
Print ISSN: 2385-409X **Online ISSN**: 3105-0409
Website: https://farmclin.com/

The attitude of students towards the ill-effects of drug abuse was measured with a maximum possible score of **85**. The observed scores ranged between **52 and 72**. The **median score was 60**, while the **mean score was 60.64 (SD = 6.74)**. When expressed as a percentage, the mean attitude score corresponded to **71.34% of the maximum possible score**.

These findings indicate that the students, on average, demonstrated a **favorable attitude towards the prevention of drug abuse**. The relatively high mean percentage suggests that students generally hold positive views about avoiding drug abuse and recognize its harmful consequences, although variations in scores imply that a section of students still reflected lower levels of positive attitude.

3. Attitude level regarding ill-effects of drug abuse among college students

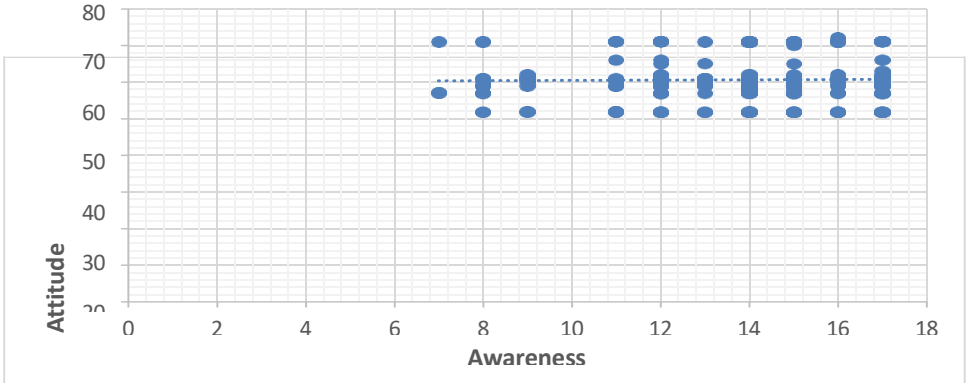
Attitude level regarding ill-effects of drug abuse among college students			
Poor (<40)	**Average (40-69)**	**Excellent (>=70)**	**Total Score**
0%	305(76.25%)	95(23.75%)	400(100%)



The attitude of students towards the ill-effects of drug abuse was categorized into three levels: poor (<40), average (40–69), and excellent (≥70). Out of the total 400 students, the majority, 305 students (76.25%), were found to have an average level of attitude. In comparison, 95 students (23.75%) demonstrated an excellent level of attitude. Notably, none of the participants fell into the poor attitude category.

This distribution indicates that while most students maintained an average attitude towards preventing drug abuse, nearly one-fourth reflected an excellent attitude, suggesting a positive outlook. The absence of poor attitude levels is encouraging, as it reflects that all students recognized, at varying degrees, the harmful effects of drug abuse and the importance of prevention.

Relationship Between Awareness And Attitude Regarding Ill-Effects Of Drug Abuse Among College Students.



The scatter diagram illustrates the relationship between awareness and attitude regarding the ill- effects of drug abuse among college students. The awareness scores ranged from 7 to 17, while attitude scores ranged from 52 to 72. Although a slight positive trend can be observed in the diagram, the calculated **Karl Pearson's correlation coefficient was r = +0.02, indicating a very low positive correlation** between awareness and attitude.

This result suggests that increased awareness does not strongly influence attitude among the students studied. While some students with higher awareness exhibited better attitudes toward drug abuse prevention, the relationship overall was negligible. The weak association implies that factors other than awareness may play a greater role in shaping students' attitudes, such as peer influence, personal experiences, or socio-cultural factors. Thus, while awareness-based interventions remain important, they may not be sufficient on their own to significantly improve attitudes

TO DETERMINE ASSOCIATION AWARENESS AND ATTITUDE ON IIL-EFFECTS OF DRUG ABUSE WITH SELECTED DEMOGRAPHIC VARIABLE

1. Association awareness on ill-effects of drug abuse with selected demographic variable

Sl no	Variable	Association of awareness ill-effects of drug abuse with demo variables			
		Degree of freedom	Chi square value	Critical value	Significance
1	Age in Years	1	0.17	3.84	p>0.05 NS
2	Gender	1	1.42	3.84	p>0.05 NS
3	Religion	3	0.57	7.82	p>0.05 NS
4	Parental Marital status	2	1.25	5.99	p>0.05 NS
5	Currently live with	2	3.28	5.99	p>0.05 NS
6	Residential Area	1	5.73	3.84	P<0.05 S
7	Parental Occupation	2	5.26	5.99	p>0.05 NS
8	Have you recently attended any training program related to drug abuse?				

Chi-square test was applied to determine the association between awareness scores on ill-effects of drug abuse and selected socio-demographic variables of the college students. The findings are summarized in the table.

The results revealed that age in years ($\chi^2 = 0.17$, df = 1, $p > 0.05$), gender ($\chi^2 = 1.42$, df = 1, $p > 0.05$), religion ($\chi^2 = 0.57$, df = 3, $p > 0.05$), parental marital status ($\chi^2 = 1.25$, df = 2, $p > 0.05$), current living arrangement ($\chi^2 = 3.28$, df = 2, $p > 0.05$), parental occupation ($\chi^2 = 5.26$, df = 2, $p > 0.05$), and recent participation in training programs on drug abuse (not significant) **showed** no statistically significant association **with awareness scores.**

However, a **statistically significant association was observed with residential area ($\chi^2 = 5.73$, df = 1, $p < 0.05$)**. This indicates that students residing in **urban areas demonstrated relatively higher awareness levels compared to those in rural areas**.

Overall, the findings suggest that except for residential background, socio-demographic factors such as age, gender, religion, marital status of parents, current living situation, parental occupation, and prior training did not influence awareness regarding the ill-effects of drug abuse.

2. Association of attitude on ill-effects of drug abuse with demo variables

Sl no	Variable	Association of attitude on ill-effects of drug abuse with demo variables			
		Degree of freedom	Chi square value	Critical value	Significance
1	Age in Years	1	1.07	3.84	p>0.05 NS

2	Gender	1	5.43	3.84	P<0.05 S
3	Religion	3	1.91	3.84	p>0.05 NS
4	Parental Marital status	2	3.57	5.99	p>0.05 NS
5	Currently live with	2	0.70	5.99	p>0.05 NS
6	Residential Area	1	5.73	3.84	P<0.05 S
7	Parental Occupation	2	0.036	5.99	p>0.05 NS
8	Have you recently attended any training program related to drug abuse?				

Chi-square test was performed to assess the association between attitude towards the ill-effects of drug abuse and selected socio-demographic variables of the students. The findings are presented in the table.

The results showed that **age in years ($\chi^2 = 1.07$, df = 1, p > 0.05), religion ($\chi^2 = 1.91$, df = 3, p > 0.05), parental marital status ($\chi^2 = 3.57$, df = 2, p > 0.05), current living arrangement ($\chi^2 = 0.70$, df = 2, p > 0.05), and parental occupation ($\chi^2 = 0.036$, df = 2, p > 0.05)** did not show a statistically significant association with attitude levels regarding drug abuse. Similarly, attending training programs related to drug abuse did not yield a significant association.

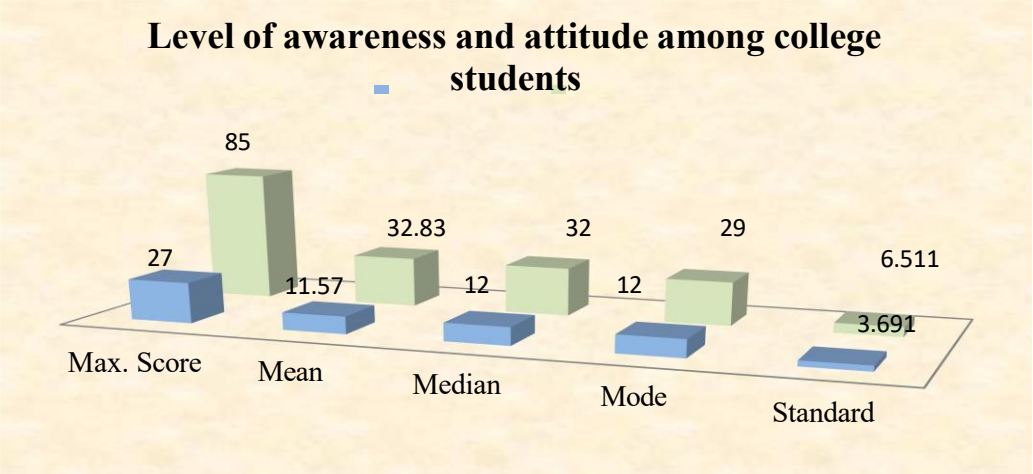
On the other hand, a **significant association was found with gender ($\chi^2 = 5.43$, df = 1, p < 0.05)** and **residential area ($\chi^2 = 5.73$, df = 1, p < 0.05)**. This indicates that male and female students differed significantly in their attitudes towards drug abuse, with females generally showing a more cautious and preventive attitude compared to males. Furthermore, students from **urban areas displayed a more positive attitude** towards the ill-effects of drug abuse compared to their rural counterparts, possibly due to greater exposure to awareness campaigns and health- related resources in urban settings.

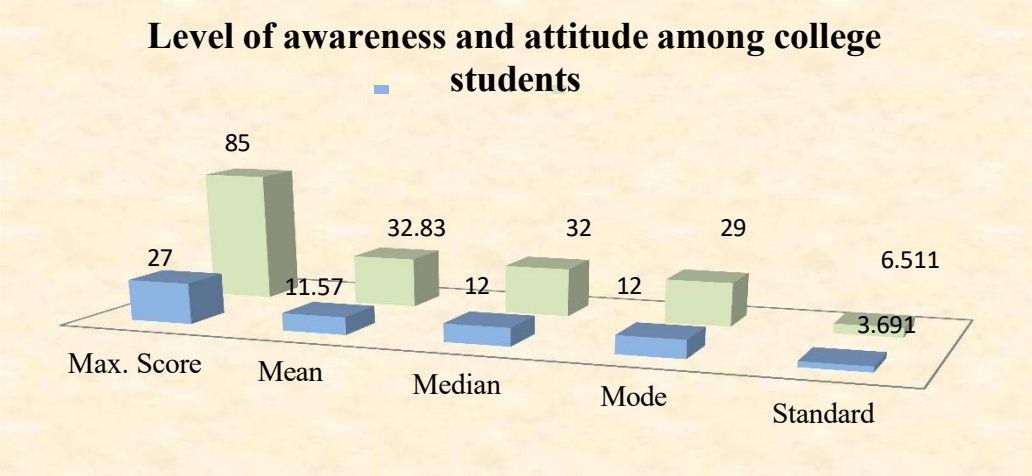
In summary, the findings suggest that **gender and residential area were important determinants of students' attitude towards the ill-effects of drug abuse**, while other socio- demographic factors such as age, religion, parental marital status, current living arrangement, parental occupation, and training exposure did not significantly influence attitude levels.

LEVEL OF AWARENESS AND ATTITUDE REGARDING ILL EFFECTS OF DRUG ABUSE AMONG COLLEGE STUDENTS

S.N.	Area	Max. Score	Mean	Median	Mode	Standard Deviation
1.	Awareness	27	11.57	12	12	3.691
2.	Attitude	85	32.83	32	29	6.511

The table shows the level of awareness and attitude among college students regarding ill effects of drug abuse. With regards to level of awareness, out of maximum score 27 the mean awareness is 11.57, median is 12, mode is 12 and standard deviation is 3.691. With regards to level of attitude, out of maximum score 85 the mean attitude level is 32.83, median is 32, mode is 29 and standard deviation is 6.511.





DISCUSSION

SOCIO-DEMOGRAPHIC CHARACTERISTICS

The majority of participants (90.5%) were aged 18–19 years, reflecting a predominantly late adolescent group.

Most were female students (79.2%), while 20.7% were male.

A large proportion (82%) identified as Hindu, followed by Muslims (8.2%), Christians (3.5%), and others (6.25%).

Almost all students (95%) reported their parents were married, with 5% widowed.

Nearly half (45%) lived with family, 40% in hostels, and 15% alone.

The majority (75%) resided in urban areas, while 25% were from rural backgrounds.

Most parents were engaged in business (80%), while 20% were in service.

Importantly, none of the students had attended any recent training programs on drug abuse, suggesting a

gap in exposure to structured awareness interventions.

AWARENESS ON ILL-EFFECTS OF DRUG ABUSE

Awareness was assessed across three domains.
Drug mode and warning signs: Mean score = 3.79 (54.11%).
Ill-effects and prevention: Mean score = 7.8 (65%).
Government programs: Mean score = 2.35 (29.38%).
The overall awareness mean score was 13.94 (51.62%), reflecting a moderate level of awareness, with the lowest knowledge observed in government initiatives.
Categorically, 72.75% of students had poor awareness, 27.25% had average awareness, and none achieved excellent awareness.

ATTITUDE TOWARDS ILL-EFFECTS OF DRUG ABUSE

The mean attitude score was 60.64 (71.34%), indicating a generally favorable attitude towards drug abuse prevention.
Categorically, 76.25% of students had an average attitude, while 23.75% demonstrated excellent attitude. None exhibited a poor attitude.

CORRELATION BETWEEN AWARENESS AND ATTITUDE

A scatter plot analysis and Karl Pearson's correlation showed a very low positive correlation ($r = +0.02$) between awareness and attitude.

This suggests that awareness alone did not strongly influence attitudes, indicating that other factors such as peer influence, cultural norms, and personal experiences may play a larger role in shaping students' outlook towards drug abuse.

ASSOCIATION WITH SOCIO-DEMOGRAPHIC VARIABLES

Awareness was significantly associated only with residential area ($\chi^2 = 5.73$, $p < 0.05$), with urban students showing higher awareness. No significant association was found with age, gender, religion, parental marital status, living arrangement, parental occupation, or training program attendance.

Attitude was significantly associated with gender ($\chi^2 = 5.43$, $p < 0.05$) and residential area ($\chi^2 = 5.73$, $p < 0.05$). Female students and urban students demonstrated more positive attitudes. Other demographic variables showed no significant association.

The present study revealed that the majority of college students surveyed were late adolescents, aged 18–19 years (90.5%), and predominantly female (79.2%). These findings are aligned with broader demographic patterns in Indian higher-education settings. A multi centric study across primary health centers in India found urban male youths more likely to engage in substance use, whereas overall, participation in college tends to be higher among females (Shidhaye et al.). This may reflect evolving gender parity in access to education.

Religiously, Hindus comprised 82% of respondents, followed by Muslims, Christians, and others. Though specific comparative studies are limited, national demographic surveys indicate that students' religious distribution largely mirrors regional proportions (NFHS-5 data).16

Regarding parental marital status, most (95%) reported their parents were married. This aligns with typical Indian family structures, as seen in national census and survey reports, which document high rates of lifetime marriage among older generations and low divorce prevalence.

In terms of living arrangements, almost half of the students lived with family (45%), while 40% resided in hostels and 15% lived alone. Similarly, urban residence was predominant (75%), with 25% from rural areas. Several studies echo this urban dominance in college enrollment. For instance, Singh et al. report higher awareness and preventive attitudes among urban students, likely due to better access to media and institutional resources.

The study also found that 80% of parents were engaged in business, with 20% in service roles. This suggests a relatively stable socio-economic background among participants, in contrast to students from farming or unemployed parental backgrounds.

Importantly, none of the participants had attended any recent training programs related to drug abuse prevention. This highlights a critical gap in institutional or community-based interventions. Comparable studies—such as the one conducted in North Indian colleges—identify a widespread absence of structured training or awareness sessions targeting substance misuse, which hampers students' preparedness to resist peer pressure and risky situations (Ali et al.,).17

Integrative Discussion

Putting these findings in context, several implications emerge:
The skew toward late adolescents and female students suggests that preventive efforts should be tailored to this demographic, leveraging their higher institutional presence and potential peer influence.

The urban majority in your sample may partly explain higher baseline awareness or favourable attitudes, which urban-residence has been linked to in other

studies.

The absence of formal training programs is alarming given the established benefits of proactive substance-abuse education in fostering awareness and building coping strategies. This aligns with broader critiques of gaps in school and college curricula regarding drug education (Shidhaye et al.).18

Overall, your socio-demographic profile reflects typical Indian college populations—largely urban, female, and from business or service-oriented families—while revealing structural shortfalls in awareness initiatives.

AWARENESS DOMAINS OF DRUG ABUSE

The present study evaluated awareness in three domains — drug mode and warning signs, ill-effects and prevention, and government programs — and found a moderate overall awareness (mean = 13.94/27; 51.62%). Participants performed best on items related to the ill-effects and prevention of drug abuse (mean = 7.8/12; 65%) and least well on knowledge of government programs (mean = 2.35/8; 29.38%). Categorically, a large majority (72.75%) had poor overall awareness while 27.25% scored in the average range and none achieved an excellent level. These domain-specific results point to a common pattern: general risk knowledge (what drugs do and how to prevent use) is more widely held than procedural knowledge about services, helplines, or rehabilitation programs.

Several original research studies report comparable findings. A Bhatt, P., and S. K. Sharma. (2018) descriptive cross-sectional study assessing awareness among college and school students reported moderate overall knowledge of substance-related harms but documented low familiarity with institutional or programmatic resources, similar to the weak scores observed in the government-programs domain of this study 19

A comparable study by Nabi et al. (2024) conducted in Kashmir found that 96.6% of young adults had awareness of drug abuse, primarily from mass media, but only about half recognized common addictive drugs such as sedatives or opioids (Nabi et al. 2024). This divergence between general substance awareness and depth of knowledge mirrors your findings—general risk recognition is high, while specific procedural or program-related knowledge is comparatively lacking. Contrary to that local pattern, your results are even more pronounced, showing a steep drop in familiarity with government support services.20

ATTITUDES TOWARD DRUG ABUSE PREVENTION

The present study revealed a mean attitude score of 60.64 (71.34%), indicating a generally favorable stance among students regarding drug abuse prevention. Categorically, 76.25% of participants demonstrated an average attitude, while 23.75% showed an excellent attitude, and notably, none exhibited a poor attitude. This predominance of moderate to high attitude levels aligns with existing findings in the literature.

For instance, a cross-sectional study by Sashank, Kodali, and Benerji (2025) among high school students in Andhra Pradesh found that female students were significantly more concerned about addiction compared to male students, and that curiosity, peer influence, and family history significantly shaped students' attitudes toward substance use — reflecting nuanced but generally cautious attitudes among youth (Sashank et al. 2025). While their study focused on adolescents, it buttresses the notion that favorable attitudes toward prevention are common in educational settings, though nuances like gender and social context matter. Your study's comparable outcome of a fair-to-excellent attitudinal stance underscores the domain's robustness in both adolescents and young adults.21

RELATIONSHIP BETWEEN AWARENESS AND ATTITUDE

In the present study, the correlation between awareness and attitude toward the ill-effects of drug abuse was found to be very low positive, with r = +0.02, indicating practically no meaningful linear relationship between the two constructs. This finding suggests that higher knowledge does not necessarily translate into a more favorable attitude among the student population studied.

This observation is supported by comparable empirical evidence by Alshehri, F. S., A. M. Ashour, et al (2025) A recent cross-sectional study conducted in Saudi Arabia found a weak, non-significant correlation between knowledge and attitudes toward substance abuse, with r = 0.068 (p = 0.064). The minimal correlation reported in that study mirrors your finding, reaffirming that while students may demonstrate reasonable awareness of substance abuse issues, this does not automatically foster a positive attitude toward prevention or avoidance.22

ASSOCIATION OF AWARENESS REGARDING ILL-EFFECTS OF DRUG ABUSE WITH SELECTED SOCIO-DEMOGRAPHIC VARIABLES

The present study demonstrated a significant association between residential area and awareness of the ill-effects of drug abuse ($\chi^2 = 5.73$, $p < 0.05$). Specifically, students from urban areas exhibited higher levels of awareness compared to their rural counterparts. This urban–rural awareness gradient is

corroborated by earlier research conducted by Barman et al. (2011), who performed a cross-sectional study among schoolchildren in Punjab to evaluate knowledge and attitudes toward substance abuse. Their study found that rural students were more familiar with certain drug routes and availability, whereas urban students demonstrated greater awareness of health hazards associated with substance use (Barman et al. 2011). These findings align closely with your results and underline the importance of tailored intervention strategies across differing residential contexts.23

DETERMINANTS OF ATTITUDE TOWARD THE ILL-EFFECTS OF DRUG ABUSE

In this study, most socio-demographic variables—including age, religion, parental marital status, living arrangement, occupation, and recent training—showed no significant association with students' attitudes toward drug abuse. However, gender ($\chi^2 = 5.43$, $p < 0.05$) and residential area ($\chi^2 = 5.73$, $p < 0.05$) were significant determinants: female students held more preventive, cautious attitudes, and urban students displayed more positive attitudes toward drug abuse prevention compared to rural counterparts.

These findings are supported by a recent study by Sashank, Kodali, and Benerji (2025), who investigated attitudes and knowledge concerning substance abuse among high school students in rural and urban areas of Andhra Pradesh. They found that female students were significantly more concerned about addiction than males, and students from rural areas demonstrated different attitude profiles compared to urban peers, often due to varying levels of exposure and educational resources (Indian Journal of Clinical Psychiatry 5.1 (2025): 10–19). This pattern is consistent with your results, highlighting gender and locality as key influencers of students' attitudes toward drug abuse prevention.24

A cross-sectional web-based survey was conducted with 1,345 students at a mid-sized U.S. liberal arts college, assessing substance-specific descriptive norms, injunctive norms, perceived availability, and risk perceptions. Findings revealed that 21% of participants reported nonmedical use of prescription stimulants, with current marijuana use being the strongest correlate across substances. The study concluded that prevention efforts should target current marijuana users and consider injunctive norms in educational programs.25

LIMITATIONS

Limited sample size from a single college may not represent all student populations.

The cross-sectional descriptive design limits the ability to infer causation between awareness, attitude, and socio-demographic factors.

Some socio-demographic variables such as socio-economic status, peer influence, or family history of substance abuse were not included, which might have influenced results.

The findings may not be generalized to students from professional courses, working youth, or those from different socio-cultural backgrounds.

RECOMMENDATIONS

For Education and Awareness:

Regular workshops, seminars, and peer-led education programs should be conducted to improve awareness on ill-effects of drug abuse.

Special emphasis should be placed on increasing knowledge of government programs, helplines, and rehabilitation services, where awareness was found to be low.

For Research:

Future studies should include larger and more diverse samples across multiple institutes and regions.

Comparative studies between urban and rural students, or between professional and non-professional courses, may provide further insights.

Intervention studies (before–after design) can help assess the effectiveness of educational booklets, awareness programs, or digital campaigns.

For Policy and Practice:

Integration of drug abuse awareness into the college curriculum or orientation programs can enhance knowledge sustainability.

Collaboration between educational institutions, health departments, and NGOs can strengthen outreach and prevention strategies.

CONCLUSION:

The findings reveal that in collage of Vadodara, among 400 samples selected by purposive sampling technique. The level of awareness among college students. With regard to the awareness scores, 99 (24.75%) college students have poor awareness, 290 (72.5%) college students have average awareness and 11 (2.75%) college students have good awareness regarding ill effects of drug abuse and the level of attitude among college students. With regard to the attitude scores, 373 (93.25%) college students have poor attitude, 21 (5.25%) college students have average attitude and 06 (1.5%) college students have good attitude regarding ill effects of drug abuse.

ACKNOWLEDGEMENT:

The authors are highly grateful to the Principal and management of Parul Institute of Nursing , Parul University , Limda , Vadodara for providing the

resources and support for the current research work.

ETHICAL CLEARANCE:

The research was completed with appropriate research guidelines , the study was proposed and submitted to the ethical committee , Parul University Institutional ethical committee for human research (PUIECHR/PIMSR/00/081734/8715), Limda , Vadodara and expert of the committee approved the study .

CONFLICT OF INTEREST: None

SOURCE OF FUNDING : NIL REFERENCES

REFERENCES

1. Smith, Jonathan, and Laura Jones. Youth and Substance Abuse: Trends and Challenges. Routledge, 2018.
2. NIDA. "Preventing Drug Use Among Youth and Adolescents." National Institute on Drug Abuse, 2022, www.drugabuse.gov
3. SAMHSA. Key Substance Use and Mental Health Indicators in the United States: Results from the 2023 National Survey on Drug Use and Health. Substance Abuse and Mental Health Services Administration, 2023.
4. Johnston, Lloyd D., et al. Monitoring the Future: National Survey Results on Drug Use, 2022. National Institute on Drug Abuse, 2023.
5. McCabe, Sean E., et al. "Nonmedical Use of Prescription Stimulants Among College Students: Trends and Implications." Addiction Research & Theory, vol. 31, no. 2, 2022, pp. 118-130.
6. Volkow, Nora D., et al. "The Opioid Crisis: Fueling the Fire of the HIV and Overdose Epidemics." American Journal of Public Health, vol. 109, no. 2, 2019, pp. 178-180.
7. Hall, Wayne, et al. "Cannabis Use and Mental Health in Young People: A Review of the Evidence." The Lancet Psychiatry, vol. 2, no. 12, 2015, pp. 1182-1192.
8. Brook, Judith S., et al. "The Effects of Early Adolescent Drug Use on Later Alcohol Abuse and Illicit Drug Use." Journal of Child and Adolescent Substance Abuse, vol. 12, no. 2, 2002, pp. 123-139.
9. National Institute on Drug Abuse. "Understanding Drug Use and Addiction." NIDA, 2020, www.drugabuse.gov/publications/drugfacts/understanding-drug-use-addiction.
10. Anderson, Mark. The Impact of Drug Abuse on College Students. Oxford University Press, 2019.
11. Kumar, N., et al. "Knowledge and Attitude Regarding Substance Use and Its Determinants Among College Students in a Coastal Town of South India." Journal of Family Medicine and Primary Care, vol. 11, no. 2, 2024, pp. 315–320.
12. Das, Shyamashree, et al. "Knowledge and Attitude Regarding Substance Use and Its Determinants Among College Students in a Coastal Town of South India." Journal of Family Medicine and Primary Care, vol. 11, no. 2, 2024, pp. 315–320.
13. Kannan, K., et al. "Knowledge, Attitude, and Expectancies Related to Cannabis Use: A Cross-sectional Community Study Among College Students from Bangalore, Karnataka." Indian Journal of Psychological Medicine, vol. 46, no. 3, 2024.
14. Dhiman, Monita. "Awareness of Drug and Substance Abuse Among Female Undergraduates: A Survey-Based Analysis." Graduate Journal of Interdisciplinary Research, Reports and Reviews, vol. 1, no. 2, 2024, pp. 76–84
15. Jaswal, Neha, et al. "Substance Use and Misuse Among College Students: Results of an Online Survey from Three Neighboring Cities of North India." Indian Journal of Psychiatry, vol. 65, no. 9, 2023, pp. 966–970.
16. National demographic surveys indicate that students' religious distribution largely mirrors regional proportions (NFHS-5 data).
17. Ali, Enub, et al. "Knowledge and Attitude of College Students towards Cannabis Use in Urban India: A Comparative Perspective of Users and Non-Users." National Medical Journal of India, vol. 38, 2025, pp. 78–83.
18. Shidhaye, Rahul, et al. "Determinants of Substance Use among Young People Attending Primary Health Centers in India." Global Mental Health, Cambridge University Press, Feb. 2024.
19. Bhatt, P., and S. K. Sharma. "The Level of Awareness and Attitude on Ill-Effects of Substance Abuse among Adolescents." International Journal of Health Sciences & Research, vol. 8, no. 3, Mar. 2018, pp. (see article). PMC, https://www.ijhsr.org/IJHSR_Vol.8_Issue.3_March2018/26.pdf
20. Nabi, Sahila, Mudasir Majeed, Nazia Zahoor, and S. M. Salim Khan. "Awareness towards Drug Abuse and Its Associated Factors in Young Adults of Kashmir, North India: A Cross-Sectional Study." ResearchGate, February 2024.
21. Sashank, V. S. S., Kodali, Madhavi, and Benerji, Therissa. "Attitude and Knowledge of High School Students Towards Substance Abuse." Indian Journal of Clinical Psychiatry, vol. 5, no. 1, 2025, pp. 10–19.
22. Alshehri, F. S., A. M. Ashour, H. S. Bafhaid, A. S. Algarni, M. H. Harbi, and N. M. Alorfi. "University Students' Knowledge and Attitudes Toward Substance Abuse: A Cross-Sectional Study from Saudi Arabia." Healthcare, vol. 13, no. 10, 2025, article 1122. MDPI, https://doi.org/10.3390/healthcare13101122.

23. Barman, Rajdip, Daljit Singh, Kuldip C. Sharma, and Balwant Singh Sidhu. "Comparative Evaluation of Knowledge, Attitude and Prevalence of Substance Abuse in Urban and Rural School-Going Children: A Cross-Sectional Study." Journal of Research in Medical Education & Ethics, vol. 1, no. 1, Jan. 2011, pp. 43–49. Indian Journals.
24. Sashank, V. S. S., Madhavi Kodali, and Therissa Benerji. "Attitude and Knowledge of High School Students Towards Substance Abuse." Indian Journal of Clinical Psychiatry, vol. 5, no. 1, 2025, pp. 10–19.
25. McCabe, Sean Esteban, et al. "Illicit Drug Use among College Students: The Role of Social Norms and Risk Perceptions." Journal of American College Health, vol. 68, no. 3, 2020, pp. 166–174.

