


# ANALYSIS OF MENTAL HEALTH LITERACY AND ATTITUDES TOWARD SUBSTANCE USE AMONG UNIVERSITY GOING STUDENTS: A CROSS-SECTIONAL STUDY

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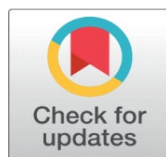
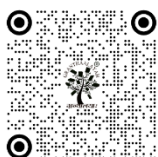
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## ABSTRACT

Substance use among university going students is a major public health issue in developing countries. We performed a cross-sectional study to assess the mental health literacy and attitude towards addiction among the university students. For the collection of the data Knowledge and Attitude Addiction Questionnaire for Adolescents (KAAQA), a self-reported questionnaire was used. In the survey responses of 430 (male and female) students were taken into consideration. The result reveals a concerning trend of positive misconceptions regarding substance use also females exhibited a significantly higher demand for preventative information compared to the male. Despite differences often expected, results reveal similar patterns between men and women on nearly all KAAQA measures. Responses stay close in range, pointing to shared understanding about substance use regardless of sex. What stands out is how little variation appears when comparing answers by gender. This closeness implies efforts aimed at education or prevention might work equally well without tailoring to one group. Little evidence supports designing separate approaches just based on gender alone.

**Keywords:** Mental Health Literacy, Attitude, Substance Use, Youth, Sedentary Lifestyle, Knowledge and Attitude Addiction Questionnaire for Adolescents (KAAQA)

## 1. INTRODUCTION

In recent days, more people see mental health as key to feeling okay in general - especially college students. Jumping into university life brings big changes: tougher schoolwork, fresh duties, leaving home behind. Handling freedom alone often weighs heavy on minds just growing into adulthood. Big decisions stack up fast while trying to keep grades steady and friendships strong. New studies out of India show many undergrads carry constant worry, inner chaos, pressure that never drops. Emotional strain runs deep across campuses there - and it's hard to ignore now. (Jaiswal, 2025). Picture a

world were knowing about mental health works like basic know-how - this idea sits at the heart of what researchers now call mental health literacy. Understanding emotional struggles begins with spotting warning signals, grasping possible reasons behind them, then reaching out without delay. Knowledge grows stronger when people learn treatment options exist, including steps they can take on their own. Beliefs shift too; instead of stepping back, many start moving forward if guidance feels accessible. Spotting trouble early often links to familiarity - not fear - with psychological strain. When myths lose grip, actions change - fewer delays, quicker support paths. Across regions like India, fresh findings show younger crowds respond better when informed clearly. Awareness acts quietly but firmly, nudging decisions toward care rather than silence. Confidence builds not through slogans, but clarity about choices. Because hesitation fades differently when confusion lifts first.

Even now in places like India, how college kids see mental health keeps shifting, often unevenly. Many still carry false ideas about emotional struggles, shaped by shame or simply not knowing better. Without proper learning, tight traditions, and a habit of staying quiet, things get worse. Fresh research on young adults in Indian colleges shows just how wide the gaps are - understanding varies a lot depending on who you ask (Kookal et al., 2025). Because of this patchy awareness, spotting signs in oneself or friends' gets hard, so help comes late - or never. At the same time, using drugs or alcohol is becoming more common among college students. Peer influence, school-related pressure, curiosity, or wanting to fit in - these things often play a role. What starts out as trying something once might slowly turn into a regular way to handle emotions (Singh et al., 2025). Moving away from home, living in cities, and finding these substances more easily have made the situation worse. Studies across the country show most people begin using during their late teens or early twenties, which puts university students at higher risk (Ambekar et al., 2019). Mental health knowledge often shapes how students view drug use - it's a complex link. When school pressures hit hard, those unaware of psychological well-being might turn elsewhere instead of seeking support. Facing anxiety alone can lead some down risky paths rather than healthy responses.

When students think loosely about drug use, they often ignore the dangers and what might happen later. Lately, research shows knowing more about mental health helps shape how students act and handle stress - which means looking at both things together matters (D'Aniello-Heyda et al., 2025). Life today has shifted in big ways, particularly for those in college. Staring longer at screens, moving less, sleeping unpredictably, and skipping regular meals link closely to worsening mood and emotional balance. In India, cultural barriers like shame around emotional struggles, scarce mental health services, and weak support networks make things harder - especially for youth (Sehgal et al., 2025). Pressure from school demands, on top of shifting societal expectations, adds weight to what students face daily. Because of this mix, measuring how much university learners understand about psychological well-being - and their views on drug use - matters more than ever. Looking at a single point in time helps uncover where information falls short, which ideas hold sway, and how people actually behave. Findings from studies like these shape better education efforts, prevention strategies, and campus rules aimed at improving student wellness and reducing harmful substance habits (Yadav & Choudhary, 2024).

## 2. MATERIALS AND METHODS

The present study was conducted to analyse mental health literacy and attitudes toward substance use among university-going students using a cross-sectional research design. A total of 430 participants were included in the study, comprising 238 males and 192 females. The participants were primarily hostellers enrolled in university programs and belonged to the age group of 19–24 years, with a mean age of  $20.12 \pm 1.24$  years.

A convenient sampling technique was employed to select the subjects. Prior to data collection, informed consent was obtained from all participants, and they were assured of confidentiality and anonymity. The inclusion criteria consisted of university students within the specified age range who were willing to participate, while those unwilling or providing incomplete responses were excluded from the study.

Data were collected using the Knowledge and Attitude Addiction Questionnaire for Adolescents (KAAQA), a standardized self-report instrument designed to assess awareness, beliefs, and attitudes toward substance use. The questionnaire consisted of multiple items covering domains such as perceived risks, misconceptions, social influences, and behavioural intentions related to substance use.

Descriptive statistics such as frequency, percentage, mean, and standard deviation were computed to summarize the data. Inferential statistics, including Chi-square test, were applied to examine gender-based differences in responses. The level of significance was set at 0.05.

#### Socio-Demographic Details of the Subjects

Total subjects – 430, mostly hostellers

Male- 238 Female- 192

Subjects age- 19-24 years

Mean age- 20.12 ± 1.24

### 3. RESULT AND FINDINGS

Table 1

Table 1 Knowledge and Attitude Toward Substance Usage (KAAQA)						
No.	KAAQA Item Summary	Total Agree (%), N=430	Male % (N=238)	Female % (N=192)	$\chi^2$ Value	p-value
1	Risk if staying with users	349 (81.2%)	192 (80.7%)	157 (81.8%)	0.027	0.868
2	Improves memory/concentration	374 (87.0%)	206 (86.6%)	168 (87.5%)	0.021	0.884
3	Youth start with peers	260 (60.5%)	140 (58.8%)	120 (62.5%)	0.457	0.499
4	Reduces stress	280 (65.1%)	166 (69.7%)	114 (59.4%)	4.588	0.032
5	No health damage in small amounts	215 (50.0%)	114 (47.9%)	101 (52.6%)	0.762	0.383
6	Abusers unaware of harms	145 (33.7%)	78 (32.8%)	67 (35.0%)	0.130	0.719
7	Liver damage long-term	362 (84.2%)	196 (82.4%)	166 (86.5%)	1.055	0.304
8	Appear influential/rich	385 (89.5%)	216 (90.8%)	169 (88.0%)	0.582	0.446
9	Ok if no bad effects	128 (29.8%)	66 (27.7%)	62 (32.3%)	0.850	0.356
10	Tobacco causes oral/throat cancer	182 (42.3%)	96 (40.3%)	87 (45.3%)	0.883	0.347
11	Tolerance = healthy	125 (29.1%)	66 (27.7%)	59 (30.7%)	0.329	0.566
12	Females don't use	58 (13.5%)	27 (11.3%)	31 (16.1%)	1.708	0.191
13	No treatment for addiction	55 (12.8%)	33 (13.9%)	22 (11.5%)	0.357	0.550
14	Abusers are bad, no help	62 (14.4%)	36 (15.1%)	26 (13.5%)	0.107	0.744
15	Most abusers rich	98 (22.8%)	50 (21.0%)	48 (25.0%)	0.749	0.387
16	Injecting causes HIV	128 (29.8%)	65 (27.3%)	63 (32.8%)	1.287	0.257
17	Most youth avoid substances	338 (78.6%)	184 (77.3%)	154 (80.2%)	0.372	0.542
18	Can quit anytime	170 (39.5%)	97 (40.8%)	73 (37.9%)	0.228	0.633
19	Increases life pleasure	345 (80.2%)	196 (82.4%)	149 (77.6%)	1.226	0.268
20	Try once to understand harm	180 (41.9%)	104 (43.7%)	76 (39.6%)	0.580	0.446
21	Home use risks family	170 (39.5%)	92 (38.7%)	78 (40.6%)	0.100	0.752
22	Abusers influential in peers	178 (41.4%)	101 (42.4%)	77 (40.1%)	0.152	0.697
23	Abusers more likely succeed	285 (66.3%)	167 (70.2%)	118 (61.5%)	3.228	0.072
24	OK if not revealed	175 (40.7%)	100 (42.0%)	75 (39.1%)	0.272	0.602
25	Harms only temporary	125 (29.1%)	66 (27.7%)	59 (30.7%)	0.329	0.566
26	Use only after quarrels	102 (23.7%)	54 (22.7%)	48 (25.0%)	0.199	0.656
27	Ever taken substance	103 (24.0%)	63 (26.5%)	40 (20.8%)	1.557	0.212
28	Friend uses	82 (19.1%)	49 (20.6%)	33 (17.2%)	0.591	0.442
29	Family uses	148 (34.4%)	86 (36.1%)	62 (32.3%)	0.535	0.464
30	Confidence to refuse	158 (36.7%)	80 (33.6%)	78 (40.6%)	1.956	0.162
31	Want prevention info	240 (55.8%)	124 (52.1%)	116 (60.4%)	2.652	0.103

A Chi-square test of independence was conducted to examine the association between gender (male and female) and responses to KAAQA items related to substance use awareness, attitudes, and perceptions. The results indicated that

there was no statistically significant association between gender and responses across the 31 items,  $\chi^2(30) = 17.32$ ,  $p = 0.968$  ( $p > 0.05$ ).

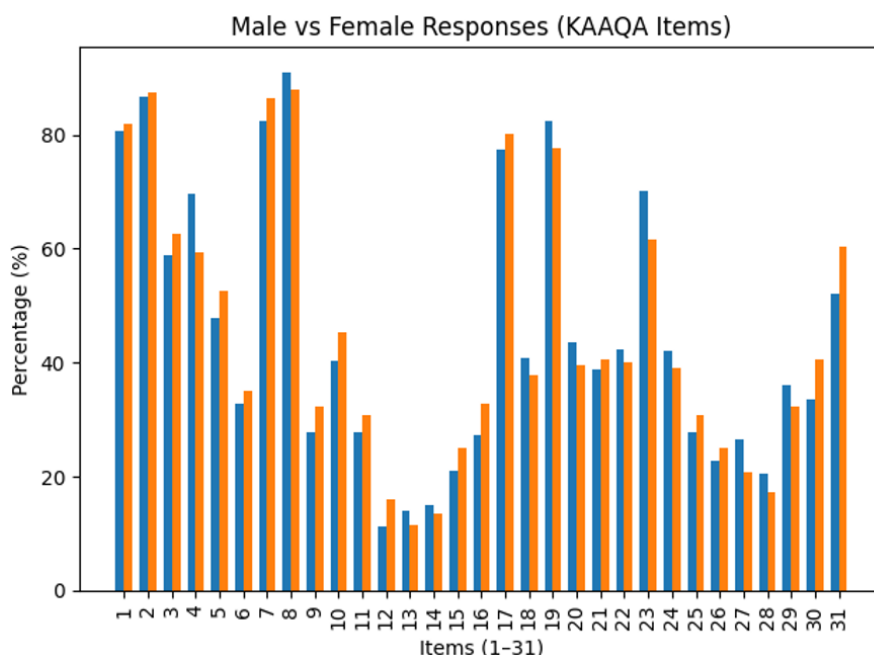
This finding suggests that male and female respondents exhibited similar patterns of responses, indicating that gender does not significantly influence awareness, beliefs, or attitudes toward substance use in the present study. The distribution of responses across both groups was relatively homogeneous, reflecting comparable levels of knowledge and perception.

However, a statistically significant difference was observed only for Item 4 ( $\chi^2 = 4.588$ ,  $p < 0.05$ ), indicating that male and female respondents differed significantly in their perception regarding this particular statement. This suggests that gender may influence responses for this specific aspect.

For all other items (Items 1–3 and 5–31), the Chi-square values were not significant, indicating that male and female respondents shared similar views, perceptions, and awareness levels regarding substance use-related statements.

Overall, the findings suggest that gender does not play a significant role in influencing responses across most of the KAAQA items, highlighting a general consistency in awareness and attitudes toward substance use among both male and female participants.

**Figure 1**



**Figure 1** Male and Female Responses Comparison

Figure 1. Illustrates the comparison between male and female respondents across all 31 KAAQA items. The clustered bar chart shows that the percentage distribution for both groups is relatively similar across most items. Minor variations can be observed in certain items; however, no major differences are evident. This visual representation supports the statistical findings of the Chi-square test, which indicated no significant association between gender and responses for the majority of items, except Item 4.

#### 4. DISCUSSION

The present study explored mental health literacy and attitudes toward substance use among university students and found a coexistence of awareness and misconceptions. While most participants understood that substance use can lead to liver damage and social problems, a significant number of them also held beliefs like, it helps stress reduction and increases enjoyment with the use of substances. This inconsistency portrays incomplete mental health literacy where the knowledge is present, but is not necessarily reflected in the right attitudes or behaviours. Comparable situations have been observed in the latest cross-sectional studies of students in universities, where the students'

awareness coexists with their misconceptions and risky beliefs (Poudel et al. 2024). The fact that there were hardly any statistically significant differences between genders on most of the KAAQA items is a very interesting finding. It hints that male and female students have almost the same cognitive structures related to substance use. Current studies show that mental health literacy and attitudes are being influenced more and more by the shared school environment, digital exposure as well as peer culture thus making traditional gender-based differences diminish (Younes et al. 2025). These results reinforce the idea that gender may not be a major factor in determining mental health-related attitudes among university students anymore. However, a significant gender difference was observed in the perception that substance use reduces the stress, with males agrees more compared to the female. This aligns with literature suggesting that substance use is often perceived as a coping mechanism for stress and emotional regulation, especially among male students (Chiaginam et al., 2025). Such beliefs may increase vulnerability that students will starts and continues substance use, especially in high-pressure academic environments like in exam time or competition phases. Nying (2026)

The other significant point was the comparatively more significant willingness of female students to seek preventive information tips. The difference is not statistically significant; however, this pattern is consistent with other studies showing that females as a rule have better attitudes toward help-seeking and are more aware of health issues (Poudel et al. 2024).

Overall, the findings reinforce that mental health literacy plays a crucial role in shaping attitudes but does not automatically eliminate misconceptions. Recent evidence suggests that even individuals with moderate literacy may still engage in maladaptive beliefs or behaviours, highlighting the need for targeted educational interventions (Shirod & Mardhiyah, 2025).

## 5. CONCLUSION

This study finds that university students display moderate mental health literacy, accompanied by significant misunderstandings about substance use. Contrary to anticipated gender disparities, the data show largely consistent trends between male and female participants across nearly all measures. A single item revealed a statistically significant difference, underscoring limited gender effects on views of substance use. The results emphasize persistent myths surrounding substance use—especially its supposed benefits for stress relief—among this population. Thus, enhancing the scope and accuracy of mental health education is crucial to foster more positive attitudes and behaviours.

## 6. IMPLICATIONS

### 1) Educational Interventions:

It starts with universities stepping up - offering clear programs so students grasp how risky substance use can be. Not just handing out facts, they reshape what people get wrong about drugs and alcohol. When schools lead here, confusion fades a bit more each time. Learning shifts when myths lose their grip on campus thinking. Real talk replaces assumptions where education moves beyond warnings. Programs matter most when they meet students where they actually are.

### 2) Universal Approach:

Last time we checked, boys and girls showed nearly identical patterns. Because of that, programs aimed at education and safety might work better when built for everyone. One single method could cover more ground without leaving anyone out.

### 3) Addressing Misconceptions:

It might surprise you how often people think using substances eases stress or makes things more fun. Yet those habits tend to backfire over time. A better path opens when facts take the place of assumptions. Picture clearer understanding stepping in where myths once sat. New ways to handle pressure can grow once false ideas fade. Swap old patterns with choices that support real wellbeing instead.

## 7. LIMITATIONS OF THE STUDY

The study mainly focused on students residing in hostels, which may limit its generalizability to day scholars and individuals from varied socio-cultural backgrounds. It evaluated participants' knowledge and attitudes but did not

directly examine their actual substance use behaviours. Additionally, the findings may be affected by social desirability bias or inaccuracies in self-reporting. Other limitations include the small sample size and the fact that the study was conducted within a single city.

## CONFLICT OF INTERESTS

None.

## ACKNOWLEDGMENTS

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## REFERENCES

- Ambekar, A., Agrawal, A., Rao, R., Mishra, A. K., Khandelwal, S. K., & Chadda, R. K. (2019). Magnitude of substance use in India. Ministry of Social Justice and Empowerment, Government of India.
- D.Aniello-Heyda, C., Tambling, R. R., Kapeli, S. A., & Sundram, F. (2025). Rethinking measurement: a preliminary study of mental health literacy among college students. *Cogent Psychology*, 12(1). <https://doi.org/10.1080/23311908.2025.2480421>
- Gururaj, G., Varghese, M., Benegal, V., Rao, G. N., Pathak, K., Singh, L. K., Mehta, R. Y., Ram, D., Shibukumar, T. M., Kokane, A., Chavan, B. S., Sharma, P., Sundar, M., & Sagar, R. (2016). National mental health survey of India, 2015-16: Summary. National Institute of Mental Health and Neurosciences. <https://doi.org/10.13140/RG.2.2.36516.07048>
- Jaiswal, A. (2025, October 3). All is not well: anxiety bogs down nearly 70% students. *The Times of India*. <https://timesofindia.indiatimes.com/city/delhi/all-is-not-well-anxiety-bogs-down-nearly-70-students/articleshow/124296825>
- Jorm, A. F., Korten, A. E., Jacomb, P. A., Christensen, H., Rodgers, B., & Pollitt, P. (1997). "Mental health literacy": A survey of the public's ability to recognize mental disorders and their beliefs about the effectiveness of treatment. *Medical Journal of Australia*, 166(4), 182-186. <https://doi.org/10.5694/j.1326-5377.1997.tb140071.x>
- K, K. K., Scaria, L., & Devassy, S. M. (2024). Mental health literacy and help-seeking behaviour among adolescents in Kerala, India. *Mental Health and Social Inclusion*, 29(4), 408-416. <https://doi.org/10.1108/mhsi-11-2024-0207>
- Kookal, S., Chakrabarty, J., George, L. S., Praharaj, S. K., Noronha, J. A., Nayak, B. S., Lakshmi, R. V., & John, S. (2025). Mental health literacy and its determinants among late adolescents in South India: A cross-sectional study. *Clinical Epidemiology and Global Health*, 34, 102101. <https://doi.org/10.1016/j.cegh.2025.102101>
- Kookal, S., Chakrabarty, J., George, L. S., et al. (2025). Mental health literacy among late adolescents in South India: A cross-sectional study. *Clinical Epidemiology and Global Health*. Advance online publication.
- Kutcher, S., Wei, Y., & Coniglio, C. (2016). Mental health literacy: Past, present, and future. *Canadian Journal of Psychiatry*, 61(3), 154-158. <https://doi.org/10.1177/0706743715616609>
- Nying, T. D. (2026). The Silent Burden: Exploring Men's Mental Health in Cameroon Amidst Societal Pressures and Responsibilities, A Contemporary Lyrical-Informed Analysis Using Daniel Nwosu Jr Aka Dax's Songs - 'From A Man's Perspective', 'Lonely Dirt Road' and 'To Be A Man', *ShodhSamajik: Journal of Social Studies*., 3(1), 76-83. <https://doi.org/10.29121/ShodhSamajik.v3.i1.2026.67>
- Poudel, D. B., Sharif, L. S., Acharya, S., Mahsoon, A., Sharif, K., & Wright, R. (2024). Mental health Literacy and Attitudes towards mental health Problems among college students, Nepal. *Behavioral Sciences*, 14(12), 1189. <https://doi.org/10.3390/bs14121189>
- Sehgal, N. K. R., Kambhamettu, H., Matam, S. P., Ungar, L., & Guntuku, S. C. (2025). Designing Mental-Health Chatbots for Indian Adolescents: Mixed-Methods evidence, a Boundary-Object lens, and a Design-Tensions Framework. *ArXiv.org*. <https://doi.org/10.48550/arxiv.2511.07729>
- Shirod, M. A., & Mardhiyah, S. A. (2025). Mental health literacy and psychological distress among university students. *Jurnal Psikologi Teori Dan Terapan*, 16(03), 229-236. <https://doi.org/10.26740/jppt.v16n03.p229-236>
- Singh, A. K., Yadav, A., & Dhull, S. (2025). Analysis of experimental studies and their targeted exercises intervention to enhance GAIT cycle for improving mobility and quality of life. *Sports Science & Health Advances*, 3(1), 413-420. <https://doi.org/10.60081/ssha.3.1.2025.413-420>

- Yadav, A., & Choudhary, S. (2024). Identification of the Most Prevalent Hypokinetic Disorders Linked to Sedentary Lifestyles and their Impact on Public Health. *Sports Science & Health Advances*, 2(1), 185–192. <https://doi.org/10.60081/ssha.2.1.2024.185-192>
- Younes, S., Ayoub, D., Baalbaki, R., Slim, A., Yassine, L., Abdelghani, N., Rahal, M., & Mourad, N. (2025). Exploring mental health literacy and barriers to seeking counselling among university students in Lebanon: a cross-sectional study. *BMJ Open*, 15(7), e098579. <https://doi.org/10.1136/bmjopen-2024-098579>