International Journal of Pharmacy and Pharmaceutical Research (IJPPR)
Volume 32, Issue 1, January 2026 ijppr.humanjournals.com ISSN: 2349-7203

Assessment of Knowledge, Attitude and Practice of Stress Management among Pharmacy Students: A Cross-Sectional Observational Study

Gaythri Ajaya Prasad[1], Vivek A K[1], Chintha Chandran[2], Shaiju S Dharan[3]

[1]Pharm. D Intern, [2]Department of Pharmacy Practice, [3]Principal,
Department of Pharmacy Practice,Ezhuthachan College of Pharmaceutical Sciences. India.

Received: 20 November 2025 Revised: 29 November 2025 Accepted: 21 December 2025

ABSTRACT

Background: Stress among pharmacy students can negatively affect academic performance and mental health. Evaluating knowledge, attitude, and practice (KAP) towards stress management helps identify gaps and guide interventions. **Methods:** A cross-sectional study was conducted among 112 pharmacy students (28 each from first to fourth year). Data were collected using a structured questionnaire on KAP toward stress management. Statistical analysis, including chi-square test was performed to determine the association between KAP scores and socio-demographic variables. **Results:** Good knowledge was observed in 64.3% of students, while 35.7% had moderate knowledge. Knowledge was significantly associated with age (P = 0.007) and year of study (P=0.003). Attitudes were predominantly neutral (64.3% with 17.9% positive and 17.9% negative). Attitude improved significantly with age and year of study. Stress management practices were mixed in 65.2% of students, healthy in 14.3% and unhealthy in 20.5%. Practice was significantly associated with age (P=0.004) and year of study (P=0.001). Effectiveness of stress management was rated moderate by 75% of students, excellent by 7.1% and severe difficulty by 17.9%. This was significantly related to age and year of study. Gender showed no significant association with any domain. **Conclusion:** While most pharmacy student have good knowledge of stress management, positive attitudes and consistent healthy practices are limited, especially in younger and first year students. Age and academic year are strong determinants of effective stress management, highlighting the need for early intervention, practical coping skills training and ongoing institutional support to improve coping abilities.

Keywords: Stress management, knowledge, attitude, practice, pharmacy students, academic stress

I. INTRODUCTION

Stress is a common issue among students especially due to academic pressure. It effects mental and physical well-being and it can impact academic performance.[1] According to the world health organization (WHO), stress is a psychological and emotional response to challenging situations, characterized by feelings of worry or tension. While it is a natural mechanism that helps individuals navigate difficulties, prolonged or excessive stress can have detrimental effect on both mental and physical well-being. [2,3]

Pharmacy students are future health care professionals. If they learn how to manage their own stress well, they will also be better prepared to guide patients in handling stress. However, many students especially in there early years may not know the best ways to manage stress.[4]

This study was done to find out the level of knowledge, attitude, and practice of stress management among pharmacy students and to see how factors like age, gender, year of study effect them. The results can help college plan programs to support students, reduce stress, and to improve there academic performance and quality of life.[5,6]

Several studies have explored the relationship between music and stress reduction. Music has been recognized for centuries as a tool for relaxation, healing, emotional expression.[7] Recent studies have shown that listening to music can lower cortisol levels, reduce blood pressure and improve mood. Music therapy has also been integrated into various clinical practices as a non-pharmacological intervention to improve psychological well being.[8,9] For students listening to music during study breaks or leisure time may help in relieving stress, improving focus and enhancing motivation.

Pharmacy education is considered highly demanding, combining theoretical knowledge, laboratory skills, clinical exposure and professional communication. Students are required to balance long hours of lectures, practical sessions, examination and internships. Additionally the competitive environment, fear of academic failure and concern about future employment amplify the psychological burden. Studies suggest pharmacy students report higher stress levels compared to peers in non health care disciplines.

Unmanaged stress can lead to detrimental effects on academic performance and emotional well-being. Chronic stress is associated with anxiety, depression, poor concentration, sleep disturbances and burn out. In long term these issues may reduce the efficiency of future pharmacist impaired decision making in clinical settings and compromise patient care. Therefore understanding and implementing the effective stress management strategies is essential for sustaining student well-being and professional growth.[10]

To evaluate stress levels among pharmacy students several standardized psychometric tools are widely used. The percived stress scale (PSS) is the one of the most common instruments measuring the degree to which individuals percived there live as stressful. The depression, anxiety and stress scale (DASS-21) is another widely used tool that measures emotional states related to stress. Other instruments include the general health questionnaire (GHQ-12) and the academic stress scale (ASS) specifically tailored to academic stressors. These scales provide quantitative data enabling researcher and institutions to assess the prevalence and severity of stress.[11]

II. MATERIALS AND METHODS

Study design and setting:

This is cross-sectional study was carried out in Ezhuthachan college of pharmaceutical sciences, marayamuttom, Neyyattinkara, Thiruvanandhapuram, Kerela to assess the knowledge, attitude and practice (KAP),among stress management of pharmacy students.

Participants and procedure:

This study was carried out among pharmacy students of Ezhuthachan college of pharmaceutical sciences, marayamuttom, Neyyattinkara, Thiruvanandhapuram, Kerela. A total of 112 students participated with equal representation of each year of study (1^{st} year = 28, 2^{nd} year = 28, 3^{rd} year = 28, 4^{th} year = 28). Individuals aged 18- 26 were included in this study. And those who were not willing to participate was excluded from the study. Data were collected from July 2025 to August 2025, by use of Convenience sampling method.

Measurements:

A data collection form was included that contains subject demographic details, year of study, type of residence and lifestyle factors.

Data were collected using a structured pre-validated questionnaire designed to asses the knowledge, attitude, practice of stress management among pharmacy students. The questionnaire consisted of four main parts socio-demographic information, knowledge, attitude and practice.

III.RESULT AND DISCUSSION

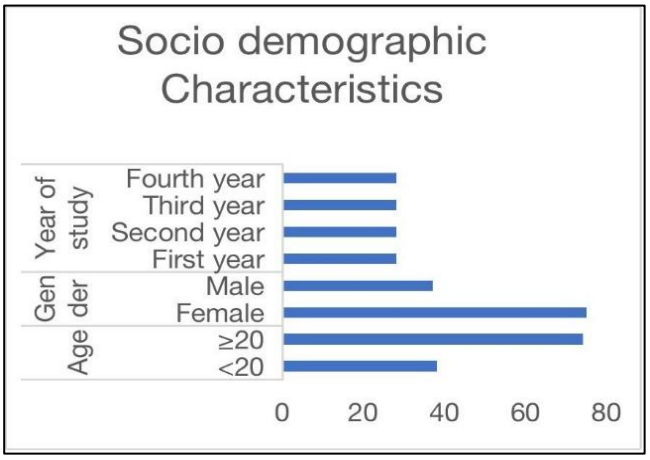
a) Demographic details

A total of 112 pharmacy students from Ezhutacahan college of pharmaceutical sciences participated in the study, with equal representations from each academic years (1^{st} to 4^{th} year). The majority were aged 20 years or above (66.1%) and in which 67% of the participants were females.

International Journal of Pharmacy and Pharmaceutical Research (IJPPR)
Volume 32, Issue 1, January 2026 ijppr.humanjournals.com ISSN: 2349-7203

Table 1. Socio-demographic characteristics of study participants

Variable		Frequency	Percent
Age	<20	38	33.9
	≥20	74	66.1
Gender	Female	75	67.0
	Male	37	33.0
Year of study	First year	28	25.0
	Second year	28	25.0
	Third year	28	25.0
	Fourth year	28	25.0
	Total	112	100.0

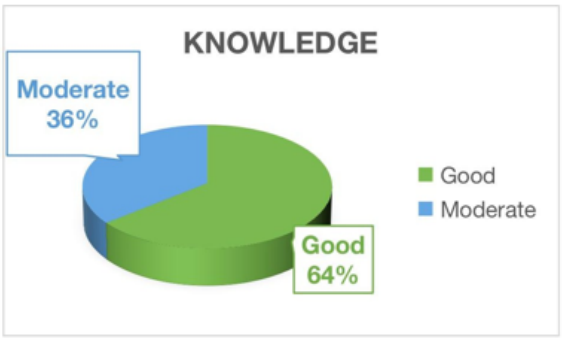


b) Knowledge

Most students demonstrated good knowledge of stress management (64.3%), while 35.7% had moderate knowledge and none of the participants were classified as having poor knowledge regarding stress management. Knowledge was significantly associated with age (p= 0.007, n= 72) and year of study (p= 0.003, n= 40). Knowledge levels were significantly higher among older students and those in higher academic years, showing a positive relationship between maturity, academic exposure and understanding of stress.

Discussion: This finding indicates that students gradually gain awareness of stress management concept as they progress through their course. The curriculum, clinical exposure and personnel experiences may all contribute to this improvement. Similar studies in other health care programs have also reported that senior students greater understanding of stress and its coping mechanism comparing to juniors. However the fact that more than 1/3rd of students still had only moderate knowledge highlights the need for educational interventions and early years.

Table 2: Distribution of knowledge levels regarding stress management



Knowledge	Frequency	Percent
Good	72	64.3
Moderate	40	35.7
Total	112	100.0

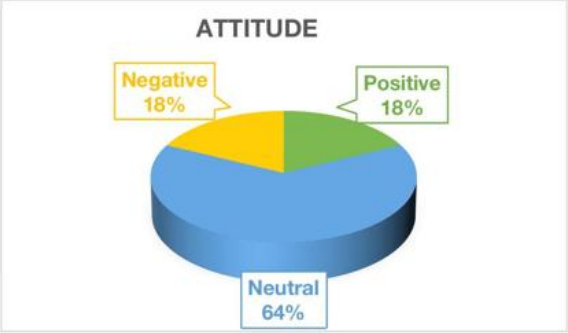
International Journal of Pharmacy and Pharmaceutical Research (IJPPR)
Volume 32, Issue 1, January 2026 ijppr.humanjournals.com ISSN: 2349-7203

c) Attitude

The majority of students showed a neutral attitude (64.3%). Participants with a positive attitude comprised 17.9% (n = 20), which was equal to the proportion of those with a negative attitude (17.9%, n = 20). Attitude was significantly associated with both age and year of study but not with gender. Younger and 1st year students were more likely to hold negative attitudes whereas senior students leaned towards positive and negative perceptions.

Discussion: The predominant of neutral attitudes suggests that students, although aware of stress management may not be fully convinced of its benefits or motivated to adopt it consistently. Younger and 1st year students were more likely to hold negative attitudes possibly due to difficulties in adapting to the sudden shift from school to college level academic pressures. On the other hand senior students where more inclined towards positive attitudes which may reflect maturity and experience. It Highlights that need for orientation programs and motivational interventions.

Table 3: distribution of attitudes toward stress management



Attitude	Frequency	Percent
Positive	20	17.9
Neutral	72	64.3
Negative	20	17.9
Total	112	100.0

d) Practice

Out of 112 participants, the majority (65.2%, n = 73) reported engaging in mixed practices regarding stress management. Only a small proportion of students (14.3%, n = 16) were identified as consistently adopting healthy practices, while 20.5% (n = 23) were found to engage in predominantly unhealthy practices. Practices were significantly associated with age and year of study.

Discussion: The gap between knowledge and practice is evident here. While most students knew about stress management, only a small group translated this knowledge into regular healthy behaviors such as exercise, meditation or time management. Younger students were more likely to adopt unhealthy practices such as avoidance, excessive screen time or irregular sleep patterns. This highlights the need for skill based training and mentoring to help students practice what they learn. Intervention such as skills-based workshops, mentoring, and regular reinforcement are effective stress management techniques.

Table 4 : Distribution of stress management practices

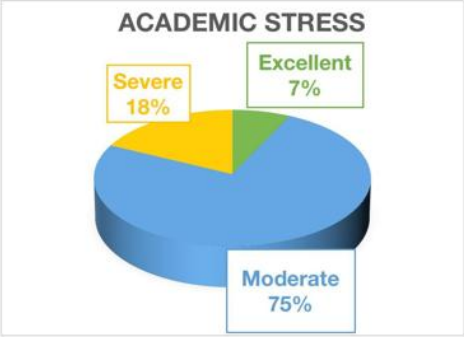
Practice	Frequency	Percent
Healthy	16	14.3
Mixed	73	65.2
Unhealthy	23	20.5
Total	112	100.0

e) Academic stress among pharmacy students

In the present study the effectiveness of academic stress management strategies was self rated by the students. 75% (n=84) students reported as moderate while 7.1% (n=8) of students reported as excellent and 17.9%(n= 20) students reported as severe difficulty in

handling academic stress. Younger and 1st year students faced more challenges with any reporting severe difficulty in coping with academic demands. These results highlights that academic work load, examinations and performance related pressure are key stressors for pharmacy students especially in the 1st years. The improvement seen in final year students may be due to increase familiarity with the course structure, better time management skills etc.

Table 5: Perceived effectiveness of academic stress management strategies



Academic Stress management strategies	Frequency	Percent
Excellent	8	7.1
Moderate	84	75.0
Severe	20	17.9
Total	112	100.0

Overall Discussion:

The finding of the study indicates that while pharmacy students possess a strong baseline knowledge of stress management. There is a clear gap between knowledge and practice. Most students adopt mixed coping strategies and only a minority follow healthy practices. Neutral attitudes dominate, suggesting a lack of motivation to apply stress management skills.[12,13]

These findings align with other studies on health care students, were 1st year students tend to struggle the most with stress, whole final year students demonstrate better coping skills. The progressive improvement with academic years highlights the role of adaptation, maturity and academic exposure. [14]

The study by Rehman and Baluja (2021) showed that medical students had good knowledge about stress management, but this was not fully reflected in their attitude and practice. Many students knew about healthy ways to manage stress like exercise and relaxation but still depended on unhealthy coping methods. This suggest that awareness along is not enough and there is a lead for proper stress management programs to help students apply their knowledge in daily life.[15]

These finding are consistent with piyush anand et al (2022), who conducted a KAP study to evaluate stress management among undergraduate medical students at JINMCH, Bihar and found that academic work load was the most common stressors specifically students identified the vast syllabus (25.3%) and lack of study time (19.3%) as major academic stress factors. Moreover 63% of MBBS students reported stress due to competition with peers, and 57% faced adaptation difficulties in the 1st year.

While our KAP study highlights stress in terms of coping effectiveness, piyush anand et al (2022) reported more specific academic triggers such as syllabus pressure and competitive peer environment. Both studies, however, agree that 1st year students are the most vulnerable group struggling with adaptation and workload.

Taken together, this finding suggest that academic stress is a universal issue among health care students, regardless of discipline. The difference lies in how it is expressed- pharmacy students often describe there stress as difficulties in managing workload effectively whereas MBBS students report concrete academic challenges such as syllabus, workload and competition.[16,17]

IV.CONCLUSION

In conclusion, this study looked at knowledge attitude and practice of stress management among pharmacy students at Ezhuthachan college of pharmaceutical sciences, marayamuttom, Neyyattinkara, Thiruvanandhapuram, Kerela. The present study found that pharmacy students had good knowledge of stress management but many showed neutral attitudes and followed mixed coping practices. Academic stress was managed only moderately by most students, with 1st year students struggling more compared to final year students. Gender did not influence stress levels, while age and year of study played a significant role. Overall the study highlights the gap between knowledge and practice and the need for early support programs such as orientation, counselling and

workshops to help students, especially 1st years more effectively and improve there well-being.

V. REFERENCES

1. Shah NP. Stress among Medical Students. Kerala Medical Journal. 2012 Jun 28; 5(2): 3437.
2. Sahoo S, Khess CR. Prevalence of depression, anxiety, and stress among young male adults in India: a dimensional and categorical diagnoses based study. J NervMent Dis. 2010;198(12):901-04.
3. Dutta JD, Raja J, Sivaprakasam P, Patil AB, Rama A. Stress and stressors among medical undergraduate students: a cross-sectional study in a private medical college in Tamil Nadu.
R. Indian J Community Med. 2017;42(4):222-25.
4. Gupta S, Choudhury S, Das M, Mondol A, Pradhan R. Factors causing stress among students of a medical college in Kolkata, India. Educ Health (Abingdon). 2015 Jan- Apr;28(1):92-5
5. Yusoff MS, Rahim AFA, Yaacob MJ. Prevalence and sources of stress among Universiti Sains Malaysia medical students. Malays J Med Sci. 2010;17:30–7.
6. Niemi PM, Vainiomaki PT. Medical students' distress-quality, continuity and gender differences during a six-year medical programme. Med Teach. 2006;28:136–41
7. Humphris G, Blinkhorn A, Freeman R, Gorter R, Hoad-Reddick G, Murtomaa H, et al. Psychological stress in undergraduate dental students: baseline results from seven European dental schools. Eur J Dent Educ. 2002;6(1):22–9.
8. Belfer ML. Child and adolescent mental disorders: the magnitude of the problem across the globe. J Child Psychol Psychiatry. 2008;49(3):226–36.
9. Shamsuddin K, Fadzil F, Ismail WS, Shah SA, Omar K, Muhammad NA, et al. Correlates of depression, anxiety and stress among Malaysian university students. Asian J Psychiatry. 2013;6(4):318-23
10. Al-Dubai SAR, Al-Naggar RA, Alshagga MA, Rampal KG. Stress and coping strategies of students in a medical faculty in Malaysia. Malays J Med Sci. 2011;18(3):57-64
11. Yusoff MSB, Abdul Rahim AF, Yaacob MJ. Prevalence and sources of stress among Universiti Sains Malaysia medical students. Malays J Med Sci. 2010;17(1):30-7
12. Kumar S, Dagli RJ, Mathur A, Jain M, Prabu D, Kulkarni S. Perceived sources of stress among Indian dental students. Eur J Dent Educ. 2009;13(1):39-45.
13. Alzahrani M, Alghamdi A, Alqarni A, Alshareef A, Alzahrani A. Stress levels among medical students and their coping strategies in Taif University. Med Teach. 2012;34(Suppl 1):S32-6.
14. Shamsuddin K, Fadzil F, Ismail WS, Shah SA, Omar K, Muhammad NA, et al. Correlates of depression, anxiety and stress among Malaysian university students. Asian J Psychiatry. 2013;6(4):318-23
15. Sreeramareddy CT, Shankar PR, Binu VS, Mukhopadhyay C, Ray B, Menezes RG. Psychological morbidity, sources of stress and coping strategies among undergraduate medical students of Nepal. BMC Med Educ. 2007;7:26
16. Piyush anand, Sinha RK, Kumari N, Akhtar A. Knowledge, attitude and practice of stress management among MBBS undergraduates in a medical college of Bihar, India. Int J Pharm Clin Res. 2022;14(4):845-50.

How to cite this article:
Gaythri Ajaya Prasad et al. Ijppr.Human, 2026; Vol. 32 (1): 109-114.

Conflict of Interest Statement: All authors have nothing else to disclose.