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Original Research Article

Knowledge, attitude and practice towards self-medication among pharmacy students in tertiary care hospital

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ABSTRACT

Background: Self-medication, which is when the public treats health problems on their own without consulting a doctor, is very common. The objective of this study is to analyze pharmacy students' self-medication practices, attitudes, and knowledge in a tertiary care hospital.

Methods: Data will be collected from the B. Pharmacy, M. Pharmacy and Pharm. D with their consent by request to them to complete the questionnaire (self-administrated).

Results: A total of 339 responses from participants were prospectively collected and documented. The participant characteristics such as demographic information (age, gender, and education) was collected.

Conclusions: Insufficient understanding regarding appropriate self-medication exists, yet changes can be made in this situation with the existing positive attitude of the respondents. Seminars and workshops can be utilised to effectively distribute knowledge to students, while implementing robust policies to curb the increasing trend.

Keywords: Self-medication, Pharmacy students, Over the counter, Adverse drug reaction

INTRODUCTION

Self-medication, which is when the public treats health problems on their own without consulting a doctor, is very common. Self-medication (SM) is a behavioral response that is unique to each person, in which they self-medicate for minor symptoms or illnesses. It involves drugs that could either be beneficial or hazardous.¹

Using prescription-free drugs to treat self-diagnosed illnesses is known as self-medication, and it is a common practice around the world. Inappropriate self-medication can result in serious hazards, such as inaccurate diagnosis, drug interactions, antibiotic resistance, and even toxicity, even though it has benefits like ease and less strain on

healthcare systems. As aspiring medical professionals, pharmacy students' knowledge, attitudes, and practices (KAP) on self-medication are shaped in large part by their clinical and academic experiences.

Since pharmacy students act as role models and influencers in fostering appropriate drug use among the general public, it is fundamental to comprehend their KAP.

Objective

The objective of this study is to analyze pharmacy students' self-medication practices, attitudes, and knowledge in a tertiary care hospital context by determining gaps and evaluating variables.

METHODS

The study “assessment of knowledge, attitude and practice towards self-medication among self-medication among pharmacy students in a tertiary care hospital” is a cross-sectional study was carried out for 4 months (March 2024 – June 2024) at study site Sri Ramachandra Institute of Higher Education and Research. The study protocol was approved by the Institutional Ethics Committee of Sri Ramachandra Institute of Higher Education and Research Centre (DU), Porur, Chennai, Tamil Nadu, India (CSP/23/FEB/123/151). This study population includes Bachelor of pharmacy (B. Pharm), Master of pharmacy (M. Pharm), Doctor of pharmacy (Pharm. D) and excludes students pursuing MBBS, BDS and other para-medicals. The sample size was determined by using n master software with prevalence of knowledge for B. Pharm is 60% (referred by Garg et al) and knowledge for M. Pharm is 35% (referred by Upadhyaya et al) with relative precision of 20% and 95% of confidence level. Therefore, suspected responses from B. Pharm and M. Pharm individually thought to have 180 responses. The sample size required for this study would be 330. Data will be collected from the B. Pharmacy, M. Pharmacy and Pharm. D with their consent by request to them to complete the questionnaire (self-administrated).

Statistical analysis

The collected data were analyzed with IBM statistical package for the social sciences (SPSS) statistic software 16.0. By using the categorical variables, descriptive statistics, and percentage analysis were found. To find out significant difference between samples Chi-square test was used. In the above statistical tool, the probability value <0.05 is considered as significant level.

RESULTS

From March 2024 to June 2024, a total of 339 responses from participants were prospectively collected and documented. The participant characteristics such as demographic information (age, gender, and education) was collected. A self-made questionnaire was used to collect the data on knowledge, attitude and practice towards self-medication practices. The demographic characteristics were tabulated under Table 1. They were categorized based on their degree as B. Pharm, M. Pharm, and Pharm. D.

Outcomes

The main aim of the study (cross-sectional) is to assess the knowledge, attitude and practice of self-medication among pharmacy students of Sri Ramachandra Institute of Higher Education and Research Centre.

The study was conducted for a study period of 4 months with a total sample size of 336. Pharmacy students from tertiary care hospital and both genders were included,

whereas, participants denying consent were excluded from the study.

Table 1 summarizes the demographic characteristics of the 336 participants involved in the study. The data was analysed using descriptive statistics. Participants are categorized into two age groups: 17-20 years and 21-25 years. The majority, comprising 52.4% (176 participants), fall within the 17-20 years age range. The remaining 47.3% (159 participants) are within the 21-25 years age range. The gender distribution indicates a slightly higher proportion of female participants at 53.5% (178 participants), compared to male participants at 46.5% (158 participants). A significant portion of the participants hold a B. Pharm degree, accounting for 66.1% (222 participants). Those with M. Pharm degrees represent 16.4% (55 participants), and those with Pharm. D degrees make up 17.6% (59 participants). This demographic information provides a foundational understanding of the study cohort's composition.

Table 1: Demographic details of study participants.

Variables	Frequency (n=336)	Percentage
Age (years)		
17–20	176	52.4
21–25	159	47.3
Gender		
Male	158	46.5
Female	178	53.5
Educational qualifications		
B. Pharm	222	66.1
M. Pharm	55	16.4
Pharm. D	59	17.6

Data was analysed by using descriptive statistics

A total of 07 (K1-K7) questions were prepared with 03 answers each with Likert scale (agree, disagree, and don't know) and the responses were calculated accordingly. The educational qualification was compared along with the responses and the p value was calculated using Chi-square test and descriptive statistics. P value of <0.005 was taken as statistically significant. Among the questions, only K2 ($p=0.000^*$) was found to be statistically significant in regards to the educational qualification of the study.

A total of 08 (A1-A7) questions were prepared with 03 answers each with Likert scale (agree, disagree, and don't know) and the responses were calculated accordingly. The educational qualification was compared along with the responses and the p value was calculated using Chi-square test and descriptive statistics. P value of <0.005 was taken as statistically significant. Among the questions, only A3 ($p=0.001^*$) was found to be statistically significant in regards to the educational qualification of the study.

A total of 08 (P1-P8) questions were prepared with multiple choice answers and the responses were calculated accordingly. The educational qualification was compared

along with the responses and the p value was calculated using Chi-square test and descriptive statistics. P value of <0.005 was taken as statistically significant. Among the questions, none of the variables were found to be statistically significant in regards to the educational qualification of the study.

The overall comparison of knowledge, attitude and practice on self-medication practices among students has been statistically demonstrated in Table 5.

Statistical analysis

The collected data were analyzed with IBM statistical package for the social sciences (SPSS) statistic software 16.0. By using the categorical variables, descriptive statistics, and percentage analysis were found. To find out significant difference between samples Chi-square test was used. In the above statistical tool, the probability value <0.05 is considered as significant level.

Table 2: Knowledge related questions on self-medication among study participants.

Knowledge related questions and responses	No. of correct responses, N (%)			Total, N (%)	P value
	B. Pharm	M. Pharm	Pharm. D		
K1: Self-medication is defined as self-consuming of medication without getting advice from a physician					
Agree	196 (67.1)	46 (15.8)	50 (17.1)	292 (86.9)	0.366
Disagree	25 (62.5)	7 (17.5)	8 (20)	40 (11.9)	
Don't know	1 (25)	2 (50)	1 (25)	4 (1.2)	
K2: Self-medication is safe					
Agree	107 (78.1)	20 (14.6)	10 (7.3)	137 (40.8)	0.000*
Disagree	110 (57.3)	34 (17.7)	48 (25)	192 (57.2)	
Don't know	5 (71.4)	1 (14.3)	1 (14.3)	7 (2.1)	
K3: All medications (prescription, OTC and herbal) have adverse effects					
Agree	186 (68.4)	43 (15.8)	43 (15.8)	272 (81)	0.164
Disagree	30 (57.7)	8 (15.4)	14 (26.9)	52 (15.5)	
Don't know	6 (50)	4 (33.3)	2 (16.7)	12 (3.6)	
K4: Increasing or decreasing medication dose without a doctor consultation can be dangerous					
Agree	211 (66.4)	52 (16.4)	55 (17.3)	318 (94.6)	0.723
Disagree	9 (69.2)	2 (15.4)	2 (15.4)	13 (3.9)	
Don't know	2 (40)	1 (20)	2 (40)	5	
K5: Taking medicine with food, drink, tea or alcohol can interfere with the effect of medicine					
Agree	201 (65.9)	48 (15.7)	56 (18.4)	305 (90.8)	0.719
Disagree	12 (66.7)	4 (22.2)	2 (11.1)	18 (5.4)	
Don't know	9 (69.2)	3 (23.1)	1 (7.7)	13 (3.9)	
K6: Using self-medications in patients with liver and kidney disease is dangerous					
Agree	213 (67)	49 (15.4)	56 (17.6)	318 (94.6)	0.210
Disagree	5 (55.6)	2 (22.2)	2 (22.2)	9 (2.7)	
Don't know	4 (44.4)	4 (44.4)	1 (11.1)	9 (2.7)	
K7: Prescribed medication is safe and better compared to self-medication					
Agree	213 (67)	48 (15.1)	57 (17.9)	318 (94.6)	0.081
Disagree	7 (58.3)	4 (33.3)	1 (8.3)	12 (3.6)	
Don't know	2 (33.3)	3 (50.3)	1 (16.7)	6 (1.8)	
Total [N (%)]	222 (66.7)	55 (16.4)	59 (17.6)	336 (100)	

Data was analysed by using Chi-square test and descriptive statistics; *p<0.005 is said to be statistically significant

Table 3: Attitude related questions on self-medication among study participants.

Attitude related questions and responses	No. of correct responses, N (%)			Total, N (%)	P value
	B. Pharm	M. Pharm	Pharm. D		
A1: There is a need for training to use non- prescription drugs					
Agree	177 (67.3)	39 (14.85)	47 (17.9)	263 (78.3)	0.318
Disagree	33 (64.7)	12 (23.5)	6 (11.85)	51 (15.2)	
Don't know	12 (54.5)	4 (18.2)	6 (27.3)	22 (6.5)	
A2: Drugs are harmful, if they are taken without proper knowledge					
Agree	214 (66.5)	51 (15.8)	57 (17.7)	322 (95.8)	0.598
Disagree	7 (63.6)	3 (27.3)	1 (9.1)	11 (3.3)	

Continued.

Attitude related questions and responses	No. of correct responses, N (%)			Total, N (%)	P value
	B. Pharm	M. Pharm	Pharm. D		
Don't know	1 (33.3)	1 (33.3)	1 (33.3)	3 (0.9)	
A3: Pharmacists are good source of advice/information about drugs and its adverse effect					
Agree	212 (67.3)	45 (14.3)	58 (18.4)	315 (93.8)	0.001*
Disagree	6 (42.2)	7 (53.8)	0 (0)	13 (3.9)	
Don't know	4 (50)	3 (37.5)	1 (12.5)	8 (2.4)	
A4: Non-prescription drugs are not affected by storage conditions like temperature, moisture and direct sunlight					
Agree	94 (70.7)	20 (15)	19 (14.3)	133 (39.6)	0.016
Disagree	116 (64.4)	26 (14.4)	38 (21.1)	180 (53.6)	
Don't know	12 (52.2)	9 (39.1)	2 (8.7)	23 (6.8)	
A5: It is appropriate to treat minor ailments like a common cold with self-medication or non-prescription drugs					
Agree	182 (69.7)	40 (15.3)	39 (14.9)	261 (77.7)	0.089
Disagree	33 (53.2)	13 (21)	16 (25.8)	62 (13)	
Don't know	7 (53.8)	2 (15.4)	4 (30.8)	13 (3.9)	
A6: Non-prescription drugs, can modify or alter the action of another drug					
Agree	191 (67.7)	42 (14.9)	49 (17.4)	282 (83.9)	0.303
Disagree	15 (62.5)	4 (16.7)	5 (20.8)	24 (7.1)	
Don't know	16 (53.3)	9 (30)	5 (16.7)	30 (8.9)	
A7: The course of medication should be complete although the symptoms subside					
Agree	180 (66.7)	42 (15.6)	48 (17.8)	270 (80.4)	0.609
Disagree	17 (56.7)	8 (26.7)	5 (16.7)	30 (8.9)	
Don't know	25 (69.4)	5 (13.9)	6 (16.7)	36 (10.7)	
A8: Do you recommend non- prescription drugs to others?					
Agree	93 (72.1)	19 (14.7)	17 (13.2)	129 (38.4)	0.353
Disagree	113 (61.4)	33 (17.9)	38 (20.7)	184 (54.8)	
Don't know	16 (69.6)	3 (13)	4 (17.4)	23 (6.8)	
Total [N (%)]	222 (66.7)	55 (16.4)	59 (17.6)	336 (100)	

Data was analysed by using Chi-square test and descriptive statistics; *p<0.005 is said to be statistically significant

Table 4: Practice related questions on self-medication among study participants.

Practice related questions and responses	No. of correct responses, N (%)			Total, N (%)	P value
	B. Pharm	Pharm. D	M. Pharm		
P1: How frequently did you visit the pharmacy to purchase drugs without a prescription for yourself in the last 6 months?					
1	78 (56.1)	31 (22.3)	30 (21.6)	139 (41.4)	0.029
2	80 (69.6)	14 (12.2)	21 (18.3)	115 (34.2)	
3	25 (78.1)	5 (15.6)	2 (6.3)	32 (9.5)	
>3	39 (78)	5 (10)	6 (12)	50 (14.9)	
P2: Do you know if the medicines you consumed needed prescription or not?					
Yes	174 (67.4)	38 (14.7)	46 (17.8)	258 (76.8)	0.156
No	48 (67.3)	17 (21.8)	13 (10.9)	78 (23.2)	
P3: Which of the following drugs have you taken without prescription during the last 6 months?					
Painkillers	63 (64.9)	16 (16.5)	18 (18.6)	97 (28.9)	0.828
Antibiotics	45 (65.2)	14 (20.3)	10 (14.5)	69 (20.5)	
Cough syrup	73 (69.5)	16 (15.2)	16 (15.2)	105 (31.3)	
Antacids	16 (61.5)	5 (19.2)	5 (19.2)	26 (7.7)	
Others	25 (64.1)	4 (10.3)	10 (25.6)	39 (11.6)	
P4: For which of the following indications have you taken medications without prescriptions during the last 6 months?					
Headache	76 (64.4)	19 (16.1)	23 (19.5)	118 (35.1)	0.936
Cough and cold	80 (65.6)	22 (18)	20 (16.4)	122 (36.3)	
Fever	40 (71.4)	7 (12.5)	9 (16.1)	56 (16.7)	
Allergies	7 (63.6)	3 (27.3)	1 (9.1)	11 (3.3)	
Others	19 (65.5)	4 (13.8)	6 (20.7)	29 (8.6)	

Continued.

Practice related questions and responses	No. of correct responses, N (%)			Total, N (%)	P value
	B. Pharm	Pharm. D	M. Pharm		
P5: Do you know the potential adverse reactions of the drug which you self-medicated?					
Yes	126 (67.4)	26 (13.9)	35 (18.7)	187 (55.7)	0.318
No	60 (60)	22 (22)	18 (18)	100 (29.8)	
Don't know	36 (73.5)	7 (14.3)	6 (12.2)	49 (14.6)	
P6: Reason for self-medication?					
Cost-saving measures	25 (78.1)	3 (9.4)	4 (12.5)	32 (9.5)	0.477
Limited access to medical facilities	12 (60)	5 (25)	3 (15)	20 (6)	
Perception of health issue as minor	99 (63.9)	30 (19.4)	26 (16.8)	155 (46.1)	
Desired for immediate relief	86 (66.7)	17 (13.2)	26 (20.2)	129 (38.4)	
P7: Have you ever experienced side effect after self-medication?					
Yes	57 (74)	11 (14.3)	9 (11.7)	77 (22.9)	0.204
No	165 (63.7)	44 (17)	50 (19.3)	259 (77.1)	
P8: Do you feel confident with the use of non- prescription drugs?					
Yes	128 (69.9)	25 (13.7)	30 (16.4)	183 (54.5)	0.220
No	94 (61.4)	30 (19.6)	29 (19)	153 (45.5)	
Total [N (%)]	222 (66.7)	55 (16.4)	59 (17.6)	336 (100)	

Data was analysed by using Chi-square test and descriptive statistics; * $p < 0.005$ is said to be statistically significant

Table 5: Overall knowledge, attitude and practice on self-medication among study participants.

S. no.	Variables	Overall percentage
1	Knowledge regarding self-medication among pharmacy students	81.3
2	Attitude regarding self-medication among pharmacy students	61.8
3	Practice regarding self-medication among pharmacy students	52.70

DISCUSSION

The main aim of the study (cross-sectional) is to assess the knowledge, attitude and practice of self-medication among pharmacy students of Sri Ramachandra Institute of Higher Education and Research Centre.

The study was conducted for a study period of 4 months with a total sample size of 336. Pharmacy students from tertiary care hospital and both genders were included, whereas, participants denying consent were excluded from the study. From March 2024 to June 2024, a total of 336 responses from participants were prospectively collected and documented. The participant characteristics such as demographic information (age, gender, and education) was collected.

A self-made questionnaire was used to collect the data on knowledge, attitude and practice towards self-medication practices. The demographic characteristics were tabulated under Table 1. They were categorized based on their degree as B. Pharm, M. Pharm, and Pharm. D.

Demographic details

The data was analysed using descriptive statistics. Participants are categorized into two age groups: 17-20 years and 21-25 years. The majority, comprising 52.4% (176 participants), fall within the 17-20 years age range. The remaining 47.3% (159 participants) are within the 21 -

25 years age range. The gender distribution indicates a slightly higher proportion of female participants at 53.5% (178 participants), compared to male participants at 46.5% (158 participants). A significant portion of the participants hold a B. Pharm degree, accounting for 66.1% (222 participants). Those with M. Pharm degrees represent 16.4% (55 participants), and those with Pharm. D degrees make up 17.6% (59 participants). This demographic information provides a foundational understanding of the study cohort's composition (Table 1). In males, the participants were highest among 17-20 years of age (54.4%) followed by 21-25 years (44.9%). In females, highest number of participants reported was among 17-20 years (50.6%) followed by 21-25 years of age (49.4%) respectively. The graphical representation describes female (53%) and male (47%) ratio of participants of our study. Female participants were predominantly more than male participants.

Lukovic et al found that female respondents engage in self-medication at a significantly higher rate than males ($p < 0.001$). In our study, the proportion of female respondents who engaged in self-medication was higher than that of male respondents, although the difference was not statistically significant.²² Like our investigation, the study conducted in India likewise found no significant correlation between self-medication and gender.

The incidence of self-medication among university students is significantly elevated. Nevertheless, engaging

in reckless self-administration of drugs might result in a multitude of adverse outcomes. It is essential to ascertain the factors that influence self-medication practices among university students, given their overall familiarity with medication but continued vulnerability to engaging in excessive self-medication. Mohamed Elkalmi et al reported that 77.2% of female students demonstrate a predilection for self-medication rather than prescribed medication due to their hesitancy to leave their homes.²⁵ Raut et al found that females, particularly those with menstruation issues, tend to engage in self-medication more often.²⁷ This aligns with the viewpoint expressed. In contrast, Parihar et al discovered that the prevalence of self-medication is greater among male medical students, whereas Mehta and Sharma saw no notable difference between genders.²⁸

A total of 07 (K1-K7) questions were prepared with 03 answers each with Likert scale (agree, disagree, and don't know) and the responses were calculated accordingly. The educational qualification was compared along with the responses and the p value was calculated using Chi-square test and descriptive statistics. P value of <0.005 was taken as statistically significant. Among the questions, only K2 (p=0.000*) was found to be statistically significant in regards to the educational qualification of the study.

Furthermore, Parihar et al discovered that although the majority of university students have prior knowledge about self-medication, they largely choose this method to avoid consulting doctors for minor ailments. Convenience and the expectation of immediate alleviation were identified as supplementary incentives for self-medication.²⁸ In contrast, Beyene et al contended that self-medication is of utmost importance in emergency circumstances.¹⁸ Nevertheless, Parihar et al and Johnny et al warned of the potential dangers of self-medication, such as adverse drug reactions (ADRs), drug dependence, and pharmaceutical misuse.^{28,29} Raut et al observed that most university students have sufficient comprehension of drugs, frequently obtained from online investigation.²⁷ Nevertheless, a significant percentage (16%) of individuals lack comprehension or any familiarity with drugs. This highlights the significance of educational and awareness initiatives aimed at promoting responsible medicine usage among students. Number of positive of negative responses of the study participants (N=339) from K1-K7.

A total of 08 (A1-A7) questions were prepared with 03 answers each with Likert scale (agree, disagree, don't know) and the responses were calculated accordingly.

The educational qualification was compared along with the responses and the p value was calculated using Chi-square test and descriptive statistics. P value of <0.005 was taken as statistically significant. Among the questions, only A3 (p=0.001*) was found to be statistically significant in regards to the educational qualification of the study.

A total of 08 (P1-P8) questions were prepared with multiple choice answers and the responses were calculated accordingly. The educational qualification was compared along with the responses and the p value was calculated using Chi-square test and descriptive statistics. P value of <0.005 was taken as statistically significant. Among the questions, none of the variables were found to be statistically significant in regards to the educational qualification of the study. The overall comparison of knowledge, attitude and practice on self-medication practices among students has been statistically demonstrated in Table 5.

The students' general understanding and disposition towards self-medication in the current study was positive. Indian students exhibited considerably lower mean knowledge scores and total scores about self-medication compared to students from Nepal and other countries.

The practice of self-medication has been extensively recognised, and there have been several efforts to determine the elements that influence it. The information, attitude, and practice (KAP) model is frequently used in this situation. It suggests that one's previous information influences their positive attitude towards self-medication, which then improves their actual practice of self-medication. Research conducted by Alves et al highlights the importance of information in encouraging responsible self-medication practices and minimising careless usage.³⁰ Shitindi et al argue that insufficient understanding of medications is a robust indicator of engaging in self-medication behaviours.³³ In contrast, Abebe et al's research indicates that although university students may have a strong understanding of self-medication, engaging in this activity is diminished by unfavourable sentiments.³⁴ Alkhawaldeh et al and Alves et al provide more evidence to support this claim, observing an association between negative attitudes and a decrease in self-medication.³⁵

An important factor highlighted in numerous research is the understanding of ADR and the corresponding attitudes towards them, which have a substantial impact on self-medication. The studies conducted by Gedam and Kuchya, as well as Sivadasan et al highlight the significance of understanding ADR in influencing appropriate attitudes and promoting safe self-medication practices. Therefore, it is crucial to have a thorough awareness of ADR knowledge and attitudes in order to conduct extensive study on self-medication.^{36,37}

In addition to the KAP model, the ease of self-medication, contrasted with the difficulty of acquiring prescription medication, appears as another significant factor. James and French emphasise that individuals view self-medication as a means to save time, save money, and obtain immediate relief. Afzal et al contend that convenience is frequently influenced by elements such as readily accessible drugs, self-assurance, and lower socioeconomic level.^{38,39} Countries such as Bangladesh have a significant incidence of over-the-counter drug sales,

which increases the ease of self-medication. On the other hand, acquiring prescription medication in Bangladesh can be difficult, necessitating a significant amount of time and money, especially for university students. This discomfort may have a substantial impact on the actual implementation of self-medication among university students, highlighting the need of considering convenience as a critical factor in understanding the factors that influence self-medication.³⁹

In concordance with literature, the current study results indicate self-medication practices only at severe medical emergencies. In order to expand the OTC market, the OTC Committee of the Organization of Pharmaceutical Producers of India are trying to promote regulatory support for concerns such as the availability of over-the-counter medications and raising public and regulatory awareness of the value of rationalizing self-medication. WHO states that “It has become widely accepted that self-medication has an important place in the health care system, recognition of the responsibility of individuals for their own health and awareness that professional care for minor ailments is often unnecessary has contributed to this view. Improvements in people's general knowledge, level of education and socio-economic status in many countries form a reasonable basis for successful self-medication” under guidelines for the regulatory assessment of medicinal products for use in self-medication. The international council of nurses (ICN) on the other hand states that “Self-medication is a key component of self-care that is particularly significant in an era of increasing chronic illness and well-informed health care consumers. Optimizing responsible self-medication is an important and underused resource for health and provides an opportunity for collaboration and consultation among consumers, nurses, pharmacists and physicians.”

Limitations

The study is limited to responses from medical/paramedical students from urban background with relatively higher socioeconomic and better educational conditions. The self-administered question could not be validated due to lack of time.

CONCLUSION

Self-medication practices are psychologically influenced by trust, circumstances, frustration plays a vital role in making the suggestions beneficial. Therefore, self-medication is widespread among pharmacy students due to its high prevalence, which is made easier by the readily available knowledge on pharmaceuticals and the convenient access to acquiring medicines. Insufficient understanding regarding appropriate self-medication exists, yet changes can be made in this situation with the existing positive attitude of the respondents. Seminars and workshops can be utilized to effectively distribute knowledge to students, while implementing robust policies to curb the increasing trend.

This study was restricted to a single location. However, it is necessary to conduct multicentric studies among pharmacy students and the general community in order to have a comprehensive understanding of the several elements that influence self-medication in India. Future studies should investigate the relationship between socio-economic status and self-medication.

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