



Original Article

## Knowledge, Attitude and Practice Toward Over-The-Counter Drug Use Among Medical and Paramedical Students in a Tertiary Care Teaching Hospital: A Cross-Sectional Study

Dr. Parul Kamal<sup>1</sup>, Dr. Priya Singh<sup>2</sup>, Dr. Ritesh Kumari<sup>3</sup>, Dr. Ambrish Kumar Gupta<sup>4</sup>

<sup>1</sup>Assistant Professor, Department Of Pharmacology, Dr. Ram Manohar Lohia Institute Of Medical Sciences, Lucknow 226010, Up, India

<sup>2</sup>Assistant Professor, Department Of Pharmacology, Veerangana Avantibai Lodhi Autonomous State Medical College, Etah-207001, Up, India

<sup>3</sup>Senior Resident, Department Of Pharmacology, Lokmata Punyashloka Devi Ahilyabai Holkar Autonomous State Medical College, Auraiya- 206244, Up, India

<sup>4</sup>Professoer & Head, Department Of Pharmacology, Dr. Bhimrao Ramji Ambedkar Government Medical College Kannauj 209732 U.P., India

 OPEN ACCESS

### Corresponding Author:

**Dr. Parul Kamal**

Assistant Professor, Department Of Pharmacology, Dr. Ram Manohar Lohia Institute Of Medical Sciences, Lucknow 226010, Up, India

Email: [Dr.Parul.Kamal@Gmail.Com](mailto:Dr.Parul.Kamal@Gmail.Com)

Received: 20-04-2026

Accepted: 10-05-2026

Available online: 25-05-2026

Copyright © International Journal of  
Medical and Pharmaceutical Research

### ABSTRACT

**Background:** Over-the-counter (OTC) drugs are medications that can be purchased without a prescription from a registered medical practitioner. Easy accessibility and widespread availability of OTC medications have increased self-medication practices, particularly among healthcare students.

**Objectives:** To assess the knowledge, attitude, and practice regarding over-the-counter (OTC) drugs among medical and paramedical students at a tertiary teaching hospital in North India.

**Materials and Methods:** A cross-sectional questionnaire-based study was conducted among 271 medical and paramedical students from June to July 2024 at a tertiary care teaching hospital in North India. A pre-validated self-administered questionnaire was used to collect socio-demographic data and information regarding knowledge, attitude, and practice related to OTC drug use.

**Results:** Medical students demonstrated significantly better knowledge regarding OTC drugs, their adverse effects, and drug interactions compared to paramedical students. Familiarity with OTC drugs was significantly higher among medical students (70.21%) than paramedical students (50%) ( $p=0.016$ ). Awareness regarding adverse effects of OTC drugs was also higher among medical students (65.96%) compared to paramedical students (50%) ( $p=0.005$ ).

A significantly higher proportion of paramedical students reported purchasing OTC drugs without prescription during the previous three months compared to medical students (63.89% vs 37.87%,  $p=0.005$ ). Fever/headache and cold/cough were the most common conditions for which OTC drugs were used. Antipyretics and analgesics were the most commonly purchased OTC medications. Significant differences were also observed in checking expiry dates, storage practices, and awareness regarding regulations governing OTC drugs in India.

**Conclusion:** The study revealed widespread use of OTC medications among both medical and paramedical students. Although medical students showed comparatively better knowledge, unsafe attitudes and inappropriate practices regarding OTC drug use were identified in both groups. The findings highlight the need for educational interventions and awareness programs to promote rational and safe use of OTC medications among future healthcare professionals.

**Keywords:** Over-the-counter drugs, self-medication, knowledge, attitude, practice, medical students, paramedical students.

## INTRODUCTION

Medicines may be obtained either through a prescription written by a registered medical practitioner or, in certain situations, directly by the consumer without a prescription. Over-the-counter medicines, commonly referred to as OTC medicines, are drugs that can be purchased without a doctor's prescription and are generally intended for the management of minor or self-limiting conditions. Although such medicines improve access to treatment, their repeated or inappropriate use can result in serious consequences, including gastrointestinal bleeding, antimicrobial resistance, adverse drug reactions, and masking of underlying disease [1].

In India, the term "over-the-counter" does not have a clearly defined legal status. Medicines that are not specifically categorized as prescription-only drugs are generally treated as non-prescription medicines [2]. Under the Drugs and Cosmetics Rules, 1945, prescription medicines are mainly regulated through schedules such as Schedule H and Schedule X, which restrict their sale unless prescribed by a registered medical practitioner. However, in actual practice, both non-prescription and prescription medicines are frequently obtained directly by patients, and unauthorized sale of prescription-only medicines continues to be a concern, especially in developing countries [3].

Self-medication refers to the use of medicines by individuals to treat self-recognized symptoms without consulting a qualified healthcare professional [4]. The World Health Organization has recognized responsible self-medication as an important component of self-care, particularly when individuals possess adequate knowledge, awareness, and access to appropriate healthcare information [5]. In this context, OTC medicines may help individuals manage minor ailments promptly, reduce unnecessary healthcare visits, and promote patient participation in health-related decision-making [6].

However, the growing trend of self-medication has also raised major public health concerns. Improper selection of medicines, incorrect dosing, prolonged use, use in contraindicated conditions, and failure to recognize adverse effects may lead to irrational drug use and preventable harm [7]. The problem is particularly relevant among students in healthcare-related fields, as they may have partial knowledge of medicines and may develop a false sense of confidence regarding drug use.

Misuse of OTC medicines is not limited to minor inappropriate use. Certain OTC preparations, such as cough and cold medicines containing dextromethorphan, have been reported to be misused, particularly among young adults. High-dose use of such preparations may produce hallucinations, dissociative symptoms, and other harmful effects similar to those associated with substance misuse [8]. This highlights the need to examine not only the availability of OTC medicines but also the knowledge, attitudes, and practices that influence their use.

There is limited published evidence regarding OTC drug use among medical and paramedical students in India. Since these students are future healthcare providers, their understanding and behavior toward OTC medicines can influence both their personal drug-use practices and their future professional advice to patients. Therefore, the present study was conducted to assess the knowledge, attitude, and practice regarding OTC drug use among medical and paramedical students in a tertiary care teaching hospital in North India.

## MATERIAL AND METHODS

A cross-sectional questionnaire-based survey was conducted on medical students in government medical college, kannauj, from June to July 2024. The data collected remained anonymous, and confidentiality was strictly maintained. A written consent form was provided by asking respondents to tick an option at the beginning of the online survey. Participation was on a voluntary basis. All MBBS students and all Paramedical students who were studying at Dr. Bhimrao Ramji Ambedkar Government Medical College kannauj who volunteer to participate were included and those students who did not volunteer to participate were excluded.

A self-administered, structured, and pre-tested questionnaire was used. The questionnaire was adopted from previously conducted similar studies and modified to fit with the current set-up. The questionnaire composed of four parts: socio-demographic characteristics (9 questions), knowledge-related questions (10 questions), attitude-related questions (8 questions), and practice-related questions (13 questions) respectively. The questionnaire was given to the students to fill after explaining the purpose of the study. For each positive response or correct answer, a score of 1 was allotted and a score of 0 was allotted for each negative response or wrong answer. Only completely filled questionnaires were sorted-out for data analysis.

Data were checked, sorted, categorized, and coded manually then transferred to Statistical Package for Social Sciences (SPSS) version 24 for analysis. Chi-square analysis was conducted and multivariable logistic regression analysis was used to determine the association between KAP and OTC use and its related adverse effects. A P-value of <0.05 was taken as statistical significance.

## RESULTS

A total of 271 participants were included in the study, comprising both medical and paramedical students. Among them, 148 (54.61%) were males and 123 (45.39%) were females. The majority of participants belonged to the age group of 21–22 years (45.02%), followed by 18–20 years (33.21%). Most respondents were medical students (86.72%), whereas paramedical students constituted 13.28% of the study population. Only 17.34% participants had a family background in the medical field.

**Table 1: Sociodemographic Characteristics of the Participants; N=271**

Variables		Number (%)
<b>Gender</b>	Male	148 (54.61)
	Female	123 (45.39)
<b>Age in Years</b>	18-20	90 (33.21)
	21-22	122 (45.02)
	23-25	52 (19.19)
	More than 25	7 (2.58)
<b>Education Year</b>	MBBS 1 <sup>st</sup> Year	119 (43.91)
	MBBS 2 <sup>nd</sup> Year	108 (39.85)
	MBBS 3 <sup>rd</sup> Year	8 (2.95)
	Paramedical Students	36 (13.28)
<b>Education Categories</b>	Medical Students	235 (86.72)
	Paramedical Students	36 (13.28)
<b>Family in Medical Field</b>	Yes	47 (17.34)
	No	224 (82.66)

Regarding knowledge about OTC drugs, 67.53% participants were familiar with OTC medications. Medical students demonstrated significantly better familiarity with OTC drugs compared to paramedical students (70.21% vs 50%,  $p=0.016$ ). Awareness regarding the requirement of prescription for OTC medications also differed significantly between groups ( $p=0.038$ ). More medical students correctly identified that prescriptions are not required for OTC medicines compared to paramedical students. Knowledge regarding adverse effects of OTC drugs was significantly higher among medical students (65.96%) compared to paramedical students (50%) ( $p=0.005$ ). Similarly, awareness regarding drug-drug interactions and regulations governing OTC drugs in India showed statistically significant differences between groups ( $p<0.05$ ).

**Table 2: Knowledge of Study Participants Towards OTC Medications; N=271**

Knowledge Related Questions		Education Categories			p value
		N (%)			
		Medical	Paramedical	Total	
<b>Are you familiar with over counter drugs?</b>	Yes	165 (70.21)	18 (50.00)	183 (67.53)	<b>0.016</b>
	No	70 (29.79)	18 (50.00)	88 (32.47)	
<b>Do you have to carry doctor's prescription to purchase OTC drugs?</b>	Yes	54 (22.98)	15 (41.67)	69 (25.46)	<b>0.038</b>
	No	108 (45.96)	15 (41.67)	123 (45.39)	
	May be	48 (20.43)	2 (5.56)	50 (18.45)	
	Don't Know	25 (10.64)	4 (11.11)	29 (10.70)	
<b>Are over the counter drugs safe?</b>	Yes	86 (36.60)	21 (58.33)	107 (39.48)	<b>0.033</b>
	No	61 (25.96)	8 (22.22)	69 (25.46)	
	Don't Know	88 (37.45)	7 (19.44)	95 (35.06)	
<b>For which disease OTC drugs will be used?</b>	Acute illness	150 (63.83)	18 (50.00)	168 (61.99)	<b>0.029</b>
	Chronic illness	23 (9.79)	9 (25.00)	32 (11.81)	
	Don't Know	62 (26.38)	9 (25.00)	71 (26.20)	
<b>Can OTC drugs cause any side effects/adverse effects?</b>	Yes	155 (65.96)	18 (50.00)	173 (63.84)	<b>0.005</b>
	No	18 (7.66)	9 (25.00)	27 (9.96)	
	Don't Know	62 (26.38)	9 (25.00)	71 (26.20)	
<b>Do OTC drugs have any drug-drug interaction?</b>	Yes	107 (45.53)	16 (44.44)	123 (45.39)	<b>0.000</b>
	No	12 (5.11)	13 (36.11)	25 (9.23)	
	Don't Know	116 (49.36)	7 (19.44)	123 (45.39)	
	Yes	14 (5.96)	2 (5.56)	16 (5.90)	<b>0.944</b>
	No	180 (76.60)	29 (80.56)	209 (77.12)	

<b>Can OTC drugs be used after their expiry date?</b>	Don't Know	41 (17.45)	5 (13.89)	46 (16.97)	
<b>Will the storage condition like temperature, moisture and light affect the OTC drugs?</b>	Yes	174 (74.04)	25 (69.44)	199 (73.43)	<b>0.166</b>
	No	13 (5.53)	5 (13.89)	18 (6.64)	
	Don't Know	48 (20.43)	6 (16.67)	54 (19.93)	
<b>Is there any regulation or law for the purchase of OTC drugs in India?</b>	Yes	80 (34.04)	13 (36.11)	93 (34.32)	<b>0.001</b>

Assessment of attitude towards OTC medication revealed that more than half of the respondents considered OTC drugs cheap and easily available. A significantly higher proportion of paramedical students agreed that OTC drugs could be used for common ailments such as cold and cough compared to medical students (55.56% vs 42.98%,  $p=0.007$ ). Majority of respondents from both groups believed that storage conditions affect OTC drugs, although disagreement was more common among paramedical students ( $p=0.001$ ). Furthermore, paramedical students more frequently believed that OTC drugs could interact with other medications (66.67% vs 43.40%,  $p=0.000$ ).

Attitude Related Questions		Education Categories			p value
		N (%)			
		Medical	Paramedical	Total	
<b>OTC drugs are cheap and easily available as compared to other drugs</b>	Agree	126 (53.62)	22 (61.11)	148 (54.61)	<b>0.524</b>
	Strongly Agree	12 (5.11)	0 (0.00)	12 (4.43)	
	Neutral	79 (33.62)	10 (27.78)	89 (32.84)	
	Disagree	10 (4.26)	2 (5.56)	12 (4.43)	
	Strongly Disagree	8 (3.40)	2 (5.56)	10 (3.69)	
<b>Is it fine to share OTC drugs with others</b>	Agree	61 (25.96)	14 (38.89)	75 (27.68)	<b>0.082</b>
	Strongly Agree	4 (1.70)	1 (2.78)	5 (1.85)	
	Neutral	88 (37.45)	6 (16.67)	94 (34.69)	
	Disagree	65 (27.66)	11 (30.56)	76 (28.04)	
	Strongly Disagree	17 (7.23)	4 (11.11)	21 (7.75)	
<b>Is it fine to treat common ailment like cold and cough with OTC drugs</b>	Agree	101 (42.98)	20 (55.56)	121 (44.65)	<b>0.007</b>
	Strongly Agree	10 (4.26)	3 (8.33)	13 (4.80)	
	Neutral	86 (36.60)	4 (11.11)	90 (33.21)	
	Disagree	35 (14.89)	7 (19.44)	42 (15.50)	
	Strongly Disagree	3 (1.28)	2 (5.56)	5 (1.85)	
<b>Do you think storage condition like temperature, moisture will affect OTC drugs</b>	Agree	134 (57.02)	21 (58.33)	155 (57.20)	<b>0.001</b>
	Strongly Agree	28 (11.91)	4 (11.11)	32 (11.81)	
	Neutral	63 (26.81)	3 (8.33)	66 (24.35)	
	Disagree	8 (3.40)	7 (19.44)	15 (5.54)	
	Strongly Disagree	2 (0.85)	1 (2.78)	3 (1.11)	
<b>While buying OTC drugs one should bring all medication, he/she is taking</b>	Agree	89 (37.87)	22 (61.11)	111 (40.96)	<b>0.000</b>
	Strongly Agree	20 (8.51)	0 (0.00)	20 (7.38)	
	Neutral	87 (37.02)	4 (11.11)	91 (33.58)	
	Disagree	33 (14.04)	6 (16.67)	39 (14.39)	
	Strongly Disagree	6 (2.55)	4 (11.11)	10 (3.69)	

<b>It is fine to take pharmacist advice when one has to purchase OTC drugs that he/she has never taken before</b>	Agree	93 (39.57)	18 (50.00)	111 (40.96)	<b>0.376</b>
	Strongly Agree	20 (8.51)	4 (11.11)	24 (8.86)	
	Neutral	72 (30.64)	6 (16.67)	78 (28.78)	
	Disagree	36 (15.32)	7 (19.44)	43 (15.87)	
	Strongly Disagree	14 (5.96)	1 (2.78)	15 (5.54)	
<b>Do you believe OTC drugs affect the action of other drugs</b>	Agree	102 (43.40)	24 (66.67)	126 (46.49)	<b>0.001</b>

In terms of practice, 41.33% participants had purchased OTC drugs without prescription within the last three months. This practice was significantly more common among paramedical students (63.89%) compared to medical students (37.87%) ( $p=0.005$ ). The nearby medical store was the most common source of OTC medications (76.01%). Fever/headache was the most common condition for which OTC drugs were used (46.49%), followed by cold and cough (29.52%). Antipyretics were the most commonly purchased OTC drugs among medical students, whereas analgesics were more common among paramedical students ( $p=0.000$ ). A significant difference was also observed regarding checking expiry dates and storage practices of OTC medications. Medical students more frequently checked expiry dates, while a considerable proportion stored drugs randomly.

**Table 4: Practice of Study Participants Towards OTC Medications; N=271**

Practice Related Questions		Education Categories			p value
		N (%)			
		Medical	Paramedical	Total	
<b>Have you ever bought any drug without a prescription in the last 3 months?</b>	Yes	89 (37.87)	23 (63.89)	112 (41.33)	<b>0.005</b>
	No	107 (45.53)	12 (33.33)	119 (43.91)	
	Don't Remember	39 (16.60)	1 (2.78)	40 (14.76)	
<b>From where did you buy OTC drugs?</b>	Friends/Relatives	13 (5.53)	0 (0.00)	13 (4.80)	<b>0.294</b>
	Hospital Pharmacy	43 (18.30)	9 (25.00)	52 (19.19)	
	Nearby Medical Store	179 (76.17)	27 (75.00)	206 (76.01)	
<b>Will you consult doctor before using OTC drugs?</b>	Yes	106 (45.11)	17 (47.22)	123 (45.39)	<b>0.371</b>
	No	66 (28.09)	13 (36.11)	79 (29.15)	
	May be	63 (26.81)	6 (16.67)	69 (25.46)	
<b>What is/are the common reason for which you have used OTC drugs?</b>	Cheap	30 (12.77)	9 (25.00)	39 (14.39)	<b>0.085</b>
	Easily Available	116 (49.36)	17 (47.22)	133 (49.08)	
	Safe and Well Tolerated	46 (19.57)	8 (22.22)	54 (19.93)	
	Time Saving	43 (18.30)	2 (5.56)	45 (16.61)	
<b>How often you check the expiry date of OTC drugs?</b>	Often	173 (73.62)	18 (50.00)	191 (70.48)	<b>0.000</b>
	Sometimes	48 (20.43)	4 (11.11)	52 (19.19)	
	Rarely	8 (3.40)	9 (25.00)	17 (6.27)	
	Never	6 (2.55)	5 (13.89)	11 (4.06)	
<b>For which disease you have bought OTC drugs?</b>	Abdominal Issues	11 (4.68)	5 (13.89)	16 (5.90)	<b>0.308</b>
	Cold and Cough	69 (29.36)	11 (30.56)	80 (29.52)	
	Dysmenorrhea	3 (1.28)	0 (0.00)	3 (1.11)	
	Fever/Headache	111 (47.23)	15 (41.67)	126 (46.49)	
	Pain/Diarrhea/Constipation	41 (17.45)	5 (13.89)	46 (16.97)	
<b>Most common OTC drugs purchased</b>	Analgesics	52 (22.13)	12 (33.33)	64 (23.62)	<b>0.000</b>
	Antacids	24 (10.21)	0 (0.00)	24 (8.86)	
	Antiemetics	5 (2.13)	2 (5.56)	7 (2.58)	
	Antihistamines	11 (4.68)	7 (19.44)	18 (6.64)	
	Antitussives	11 (4.68)	6 (16.67)	17 (6.27)	
	Antipyretics	119 (50.64)	4 (11.11)	123 (45.39)	
	Expectorants	2 (0.85)	0 (0.00)	2 (0.74)	
	Multivitamins	11 (4.68)	5 (13.89)	16 (5.90)	
Anywhere Randomly	47 (20.00)	1 (2.78)	48 (17.71)		

<b>Where do you store OTC drugs?</b>	Kitchen	6 (2.55)	1 (2.78)	7 (2.58)	<b>0.035</b>
	Medicine Box	158 (67.23)	31 (86.11)	189 (69.74)	
	Refrigerator	24 (10.21)	3 (8.33)	27 (9.96)	
<b>Did you experience any side effect after taking OTC drugs?</b>	Yes	41 (17.45)	9 (25.00)	50 (18.45)	<b>0.542</b>
	No	140 (59.57)	20 (55.56)	160 (59.04)	
	Don't Know	54 (22.98)	7 (19.44)	61 (22.51)	
<b>If after taking OTC drugs any side effects occur, what will you do?</b>	Consult a doctor	120 (51.06)	13 (36.11)	133 (49.08)	<b>0.125</b>
	Continue Taking the Drug	17 (7.23)	3 (8.33)	20 (7.38)	
	Stop Taking the Drug	77 (32.77)	14 (38.89)	91 (33.58)	
	Take a Lower Dose	10 (4.26)	5 (13.89)	15 (5.54)	
	Other	11 (4.68)	1 (2.78)	12 (4.43)	
<b>Have you taken more than recommended dose of OTC drugs</b>	Yes	27 (11.49)	7 (19.44)	34 (12.55)	<b>0.340</b>
	No	168 (71.49)	22 (61.11)	190 (70.11)	
	Don't Remember	40 (17.02)	7 (19.44)	47 (17.34)	

## DISCUSSION

The present study evaluated the knowledge, attitude, and practice regarding OTC drug use among medical and paramedical students in a tertiary care teaching hospital in North India. The findings showed that OTC medicine use was common among the participants, and important differences were observed between medical and paramedical students in terms of awareness, perception, and actual drug-use behaviour.

In this study, medical students had better familiarity with OTC medicines than paramedical students. This difference may be explained by their greater exposure to pharmacology, clinical subjects, and concepts related to drug safety during medical training. Similar observations were reported by James et al., who found that medical students demonstrated better awareness of self-medication practices, probably due to their academic exposure to medicines and healthcare-related information [10].

Knowledge regarding adverse effects and drug-drug interactions was also higher among medical students. However, a considerable proportion of participants in both groups remained unaware of the possible risks associated with OTC medicines. This is an important finding because OTC drugs are often perceived as safe simply because they are available without prescription. In reality, inappropriate use may cause adverse drug reactions, drug interactions, delayed diagnosis, treatment failure, or worsening of existing medical conditions. Similar concerns were reported in studies from Jordan and Pakistan, where gaps in awareness regarding safe medicine use were observed among students and the general population [11].

The attitude-related findings showed that many students considered OTC medicines useful for minor illnesses such as fever, headache, cold, and cough. This reflects the common belief that self-medication is acceptable for simple and familiar symptoms. While responsible self-medication may reduce unnecessary healthcare visits and save time, it becomes unsafe when medicines are taken without adequate knowledge of dose, contraindications, adverse effects, duration of use, and possible interactions. Studies from Saudi Arabia and Malaysia have also reported that convenience, easy availability, and previous experience are major factors encouraging self-medication practices [12,13].

The practice-related responses revealed that a substantial number of participants had purchased medicines without prescription during the previous three months. This behaviour was more frequent among paramedical students than medical students. The nearby medical store was the most common source of OTC medicines, indicating easy accessibility of such drugs in the community. Fever/headache and cold/cough were the most frequent reasons for OTC drug use, while antipyretics and analgesics were the commonly purchased drug categories. Similar findings were reported by Zafar et al., who observed frequent use of analgesics and antipyretics among university students for minor ailments [14].

Another important concern identified in the present study was the inconsistent practice of checking expiry dates and improper storage of OTC medicines. Although medical students showed comparatively better practices, unsafe storage and irregular checking of expiry dates were still observed. Improper storage conditions, including exposure to heat, moisture, or light, may affect the stability and effectiveness of medicines. Similarly, use of expired medicines may reduce therapeutic benefit and increase the risk of harmful effects.

The findings suggest that better knowledge does not always ensure completely safe practice. Even among medical students, certain risky behaviours were identified, including purchase of medicines without prescription, sharing medicines,

inadequate awareness of regulations, and inappropriate storage. This gap between knowledge and practice indicates the need for structured educational interventions focusing not only on theoretical information but also on practical aspects of rational OTC drug use.

The study also highlights the role of healthcare institutions in promoting safe medication behaviour among students. Since medical and paramedical students are future healthcare providers, their personal attitude toward OTC drug use can influence the advice they give to patients in the future. Educational sessions, pharmacovigilance-based teaching, awareness campaigns, and training on rational drug use may help improve safe medication practices.

Overall, the present study shows that OTC medicine use is widespread among medical and paramedical students. Although medical students demonstrated better knowledge in several areas, both groups showed certain unsafe attitudes and practices. Strengthening awareness about adverse effects, drug interactions, expiry dates, proper storage, and legal aspects of OTC medicines is necessary to encourage rational and responsible self-medication among healthcare students.

## CONCLUSION

Self-medication with OTC drugs is widely practiced among medical students. Significant problems and malpractices were identified such as; sharing of OTC medications, doubling the dose of medications when they were ineffective, storage of OTC medications, and not reading labels and expiry dates.

## LIMITATIONS OF THE STUDY

Since the study was a cross-sectional study, the results of the study are dependent on the response given by the study participants and thus there may be respondent bias as the respondents may not tell their genuine behavior to some of the questions. The other limitation could be concerning the study participants, in which the study could have been more generalizable if other health professional students and/or students from the whole years of study (1st year to 6th year) were included.

## ACKNOWLEDGMENTS

The authors would like to acknowledge all the study participants for their collaboration and participation in the study.

**Conflict of Interest:** Nil

## REFERENCES

1. Kaur G, Kaur J, Pannu T, Singh HP, Kaur S, Kaur S, Kaur K, Kaur M. Dispensing Pattern of OTC Drugs for Dental alignments by Retailer Pharmacist in Amritsar, North India. *Arch of Dent and Med Res* 2015;1(4):11-14.
2. Nagaraj M, Chakraborty A, N Srinivas B. A Study on the Dispensing Pattern of Over the Counter Drugs in Retail Pharmacies in Sarjapur Area, East Bangalore. *Journal of Clinical and Diagnostic Research*. 2015;9(6): FC11-FC13.
3. Paes MR, De Sa S. Drug dispensing practices in private pharmacies in Goa. *Natl J Physiol Pharm Pharmacol* 2018;8(4):507-511.
4. Mok, C.Z.; Sellappans, R.; Loo, J.S.E. The prevalence and perception of self-medication among adults in the Klang Valley, Malaysia. *Int. J. Pharm. Pract.* 2020, 29, 29–36.
5. World Health Organization General Policy Issues. *Drug Inf.* 2000, 14, 2.
6. Bennadi, D. Self-medication: A current challenge. *J. Basic Clin. Pharm.* 2014, 5, 19.
7. Tesfamariam, S.; Anand, I.S.; Kaleab, G.; Berhane, S.; Woldai, B.; Habte, E.; Russom, M. Self-medication with over the counter drugs, prevalence of risky practice and its associated factors in pharmacy outlets of Asmara, Eritrea. *BMC Public Health* 2019, 19, 159.
8. Benotsch, E.G.; Koester, S.; Martin, A.M.; Cejka, A.; Luckman, D.; Jeffers, A.J. Intentional Misuse of Over-the-Counter Medications, Mental Health, and Polysubstance Use in Young Adults. *J. Community Health* 2014, 39, 688–695.
9. Mobrad AM, Alghadeer S, Syed W, Al-Arifi MN, Azher A, Almetawazi MS, Babelghaith SD. Knowledge, Attitudes, and Beliefs Regarding Drug Abuse and Misuse among Community Pharmacists in Saudi Arabia. *Int. J. Environ. Res. Public Health* 2020;17, 1334.
10. James H, Handu SS, Al Khaja KA, Otoom S, Sequeira RP. Evaluation of the knowledge, attitude and practice of self-medication among first-year medical students. *Med Princ Pract.* 2006;15(4):270–275.
11. Al-Azzam SI, Al-Husein BA, Alzoubi F, Masadeh MM. Self-medication with antibiotics in Jordanian population. *Int J Occup Med Environ Health.* 2007;20(4):373.
12. Al Essa M, Alshehri A, Alzahrani M, et al. Practices, awareness and attitudes toward self-medication of analgesics among health sciences students in Riyadh, Saudi Arabia. *Saudi Pharm J.* 2019;27 (2):235–239.
13. Mok CZ, et al. The prevalence and perception of self-medication among adults in Malaysia. *Int J Pharm Pract.* 2020;29:29–36.
14. Zafar SN, Syed R, Waqar S, et al. Self-medication amongst university students of Karachi: prevalence, knowledge and attitudes. *J Pak Med Assoc.* 2008;58(4):214–217.