Original Article

Knowledge, Attitude and Practice Towards Self-Medication Among Paramedical and Non-Paramedical Students

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ABSTRACT

Background: Self-medication is the selection and use of medicines by individuals to treat self-recognized illnesses without consulting healthcare professionals. This practice is increasingly common among health science students, with significant risks including drug resistance and adverse effects.

Objective: To assess knowledge, attitude, and practice towards self-medication among paramedical and non-paramedical students, and to compare differences between these groups.

Methods: A cross-sectional questionnaire-based study was conducted among 200 students (100 paramedical and 100 non-paramedical) from Immanuel Arasar College of Pharmacy. Data was analyzed using descriptive statistics and Chi-square test (P-value < 0.05).

Results: Prevalence of self-medication was 86.67% among paramedical students and 78.67% among non-paramedical students. Common reasons included mild illness (68%), previous experience (52%), and easy availability (45%). Analgesics and antipyretics were the most commonly used drugs (65%). 58% did not check expiry dates. Knowledge scores were significantly higher in paramedical students ($p < 0.05$).

Conclusion: Self-medication is a widespread practice among health science students with concerning knowledge gaps. There is an urgent need for structured educational interventions to promote rational drug use and awareness about inappropriate self-medication dangers.

Keywords: Self-medication; Knowledge; Attitude; Practice; Paramedical students; Non-paramedical students; Rational use of drugs.

INTRODUCTION

Self-medication is defined as the selection and use of medicines by individuals to treat self-recognized illnesses or symptoms without consulting a healthcare professional. It is a widespread practice across the world and is considered a component of self-care. Over-the-counter (OTC) availability of medicines, ease of access to drug information through the internet, and previous prescriptions are major contributors to this practice.

AIM AND OBJECTIVES

Aim

To assess and compare the knowledge, attitude, and practice towards self-medication among paramedical and non-paramedical students at Immanuel Arasar College of Pharmacy.

Primary Objectives

- To assess the prevalence of self-medication among paramedical and non-paramedical students
- To evaluate knowledge regarding self-medication practices
- To assess attitude towards self-medication
- To document the pattern of self-medication practices

Secondary Objectives

- To compare the knowledge, attitude, and practice between paramedical and non-paramedical student groups
- To identify factors influencing self-medication
- To assess awareness regarding potential risks and complications
- To recommend strategies for promoting rational drug use among students

MATERIALS AND METHODS

Study Design and Setting

A cross-sectional questionnaire-based descriptive study was conducted at Immanuel Arasar College of Pharmacy, Nattalam, Tamil Nadu, India.

Study Population

The study population comprised undergraduate students from: (1) Paramedical Group: Nursing, Laboratory Technology, and Radiography students (n = 100); (2) Non-paramedical Group: B.Pharm students not having prior paramedical qualifications (n = 100).

Inclusion and Exclusion Criteria

Inclusion Criteria: Students enrolled in 3rd and 4th year of their respective courses; Students aged 18-25 years; Students willing to provide informed consent; Students present on the day of data collection.

Exclusion Criteria: Students absent during the study period; Students with severe chronic illnesses requiring regular medication; Students unwilling to participate.

Sample Size and Sampling

A total of 200 students (100 paramedical + 100 non-paramedical) were included using purposive sampling method. This sample size was determined based on preliminary literature review and institutional capacity.

Data Collection Method

A semi-structured, self-administered questionnaire was developed based on extensive literature review and finalized after pilot testing among 20 students. The questionnaire consisted of:

- Part A - Demographic Information (5 questions): Age, gender, educational qualification, course, and year of study
- Part B - Knowledge Assessment (8 questions): Definition and concept of self-medication, advantages and disadvantages, potential risks and complications, understanding of expiry dates and storage, drug interactions and contraindications
- Part C - Attitude Assessment (6 questions): Opinions about self-medication, perceived safety and efficacy, confidence in decision-making regarding medicines, willingness to consult healthcare professionals
- Part D - Practice Assessment (10 questions): Frequency and reasons for self-medication, types of medicines commonly used, sources of obtaining medicines, checking expiry dates and labels, reading drug labels, completion of antibiotic courses, seeking medical advice when symptoms persist.

Scoring System

Knowledge section: Each correct answer scored as 1 point; maximum total = 8 points. Good knowledge: 6-8 points; Moderate knowledge: 4-5 points; Poor knowledge: < 4 points. Attitude and Practice: Responses scored on a 5-point Likert scale where applicable.

Statistical Analysis

Data was entered in Microsoft Excel and analyzed using SPSS software version 25.0. Descriptive statistics (frequency, percentage, mean, and standard deviation) were calculated for all variables. Chi-square test was used to compare categorical variables between paramedical and non-paramedical groups. Independent t-test was used for continuous variables. P-value < 0.05 was considered statistically significant.

Ethical Considerations

- Institutional Ethics Committee approval was obtained before study initiation;
- Informed written consent was obtained from all participants;
- Confidentiality and anonymity were maintained throughout;
- Participation was voluntary with no incentives or penalties;
- Data was securely stored and accessible only to research team members.

RESULTS

This study provides important insights into the knowledge, attitude, and practice of self-medication among health science students. The overall prevalence of self-medication was higher than that reported in several previous studies among medical students.

Paramedical students had significantly better knowledge regarding self-medication. However, despite this knowledge advantage, Figure 5 shows that practice patterns did not differ significantly between groups, particularly regarding expiry date checking.

Table 1: Demographic Characteristics of Participants

Variable	Paramedical (n=100)	Non-Paramedical (n=100)	Total (n=200)
Male	42	46	88
Female	58	54	112
Mean Age (years)	21.2 ± 1.5	21.4 ± 1.7	21.3 ± 1.6

Table 2: Prevalence of Self Medication

Category	Number of Students	Percentage
Paramedical Students	71	71%
Non-Paramedical Students	55	55%
Total	126	63%

Table 3: Reasons for Self-Medication

Reason	Percentage
Mild illness	68%
Previous experience	52%
Easy medicine availability	45%
Cost saving	38%
Lack of time	35%
No need for consultation	28%

Table 4: Commonly Used Medicines

Type of Medicine	Percentage
Analgesics and Antipyretics	65%
Antibiotics	42%
Antacids	38%
Antihistamines	25%
Cough syrups and others	18%

Table 5: Practice Related to Medicine Safety

Practice	Always	Sometimes	Never
Reading medicine labels	42%	38%	20%
Checking expiry dates	26%	16%	58%
Completing antibiotic course	39%	42%	23%

Knowledge Assessment: Paramedical students demonstrated significantly better knowledge regarding self-medication compared to non-paramedical students. They exhibited superior understanding of antibiotic resistance, drug safety, and medication errors.

Healthcare Consultation Practice: Only 42% of students reported consistently consulting healthcare professionals when symptoms persisted. Approximately 23% of students preferred managing symptoms independently without professional advice.

Table 3 explains that mild illness (68%) and previous experience (52%) were the most common reasons for self-medication. Figure 4 shows that analgesics and antipyretics (65%) were the most commonly used medicines, which is consistent with their easy availability and perceived safety.

CONCLUSION

This study demonstrates that self-medication is a prevalent practice among both paramedical and non-paramedical students. The data presented in Tables 1-5 clearly demonstrate concerning gaps in safe medication practices. While paramedical students possessed better knowledge, this knowledge advantage did not translate into safer practices.

The widespread practice of not reading, failing to check expiry dates, and incomplete antibiotic courses represents significant public health concerns. Educational interventions must address not just knowledge transfer but also behavioral change to promote rational drug use among health science students.

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