# A Questionnaire Based Study Regarding the Knowledge, Attitude and Practice of Self-Medication Among Second Year Undergraduate Medical Students

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## **ABSTRACT**

Background: Self-medication is becoming very common in our routine life which is an unhealthy and risky practice. Present study was done to determine the knowledge, attitude and practice of self-medication among second year undergraduate medical students of a private medical college in Bhopal, Madhya Pradesh. Material and methods: A pre-validated questionnaire was prepared and distributed among the students. Data was collected and analysed using Microsoft Excel and the results expressed as counts and percentages. Results: Total 139 students participated in the study voluntarily and most common reason for taking Self-medication was that there was no need to visit the doctor for minor illness. In maximum students, source of information of the drugs used for Self-medication was previous prescription and source of the drugs was medical store. Only 39% MBBS students accepted the fact, that they always visited a qualified practitioner whenever they fell ill. Most of the students took Self-medication for headache followed by cough, cold and fever. Out of total 139 students, most of the students took NSAIDS as Self-medication followed by lozenges. Conclusion: This study showed that students of second year MBBS after studying pharmacology became more aware about the drugs and hence do not hesitate in taking Self-medication which is a wrong practice. Key words: Self-medication, Questionnaire, Second Year MBBS, Knowledge, Attitude, Practice.

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# INTRODUCTION

Self-medication is defined as the use of medication by a patient on his own initiative or on the advice of a Pharmacist or a lay person instead of consulting a medical practitioner (WHO guidelines, 2000).<sup>[1]</sup> It has been observed that medical and paramedical students are commonly involved in the practice of self-medication, without complete knowledge about the therapy they are taking.<sup>[2]</sup>

Non-prescription drugs amongst youth, especially in students are being misused due to exposure to media and advertisements. It has become a serious ailment raising the concern of incorrect diagnosis and drug reaction as well. Being future medical practitioners, Self-medication has a special impact in medical students. Prevalence of Self-medication was found to vary in medical students

of different countries in earlier studies. [3,4,5,6,7] undertaken to ascertain the Self-medication practice among medical students. Since majority of the studies were conducted in countries other than India, pattern of Self-medication

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practices in our country remained uncharted. With this in mind, the present study was planned to determine the pattern of Self-medication practices, to find out the common ailments and common drugs used, reasons for Self-medication along with assessing relationship between the level of medical education and the Self-medication practices among medical undergraduates.

On one hand, students become more and more cautious in practising self medication, knowing that irrational and inappropriate usage of them might be more harmful than useful, so they, even in situations of minor illnesses prefer taking any medication only after consultation from a qualified practitioner. On the other hand, they may become confident, and in most cases, overconfident, regarding their "bookish" knowledge and may start implementing self care. They may either become successful in this attempt boosting up their confidence levels, hence encouraging them for its continued use or even over-use, or may suffer such setbacks leading to a detrimental health or a diseased state. However, it is also recognized that self-medication must be accompanied by appropriate health information.[6]

## **MATERIALS AND METHODS**

An anonymous questionnaire-based study in all the medical students of 2nd year MBBS attending theory classes in the department of Pharmacology in a private medical college, of central India, was conducted after getting permission from ethics committee of the college.

Students of all ages and both sexes were included in the study. A brief description of the nature of the study and the procedure of completing the questionnaire was explained to students taking part in the study. Questionnaire was self developed and pre validated consisting of twelve closed ended questions. The survey was descriptive and data was summarised as counts and percentages. Microsoft word and excel programs were used for analysis of data.

#### **RESULTS**

Total 139 students participated in the study voluntarily, out of them 57 (41%) were males and 82 (59%) were females. Mean age in years was 20.25; range was from 18 to 27 years. Out of 139 students total 123 (88.5%) students took Self-medication and the rest 16 (11.5%)

students have not taken Self-medication ever till now.

# Knowledge

Most common reasons for taking Self-medication were that there was no need to visit the doctor for minor illness (71%), it was time saving (58%), Self-medication provided quick relief (55%), and there was ease and convenience in taking Self-medication (44%). (Table 1)

The most common reasons for not taking Self-medication were that there was lack of knowledge about medicines (75%), risk of adverse effects (75%), risk of using wrong drugs (69%) and risk of misdiagnosing (69%). (Table 2).

In 97 (70%) students source of information of the drugs used for Self-medication was previous prescription.In 78 (56%) students source of the drugs used for Self-medication was medical store.

# Attitude

In our study we found that out of 139 students only 54 (39%) MBBS students accepted the fact, that they always visited a qualified practitionerwhenever they fell ill, while 65(47%) students said that they sometimes visited and 4(3%) students visited only rarely.

#### **Practice**

Out of total 139, students most of the students n=109 (78%) took Self-medication for headache followed by cough and cold n=98 (70%) and fever n=90 (65%). (Table 3).

Out of total 139 students, most of the students n = 115

**Table 1: Various reasons told by students in favour of self-medication** 

REASONS	NUMBER OF STUDENTS
No need to visit the doctor for minor illness	99
Time saving	81
Quick relief	76
Ease and convenience	62
Learning opportunity	22
Economical	19
Confidence on your knowledge about medicines	14
Crowd avoidance	14
If any others (please specify)	00

Table 2: Various reasons told by students for not taking self-medication

REASONS	NUMBER OF STUDENTS
Lack of knowledge about medicines	12
Risk of adverse effects	12
Risk of using wrong drugs	11
Risk of misdiagnosing	11
Risk of using drugs wrongly	8
Risk of drug dependence	2
If any others (please specify)	0

Table 4: Different drugs used for self-medication in our study

NUMBER OF STUDENTS
115
75
66
66
57
45

(83%) took analyseics as Self-medication followed by lozenges n=75 (54%) (Table 4).

Out of 139 students, total 123 (88.5%) students took Self-medication and the rest 16 (11.5%) students have not taken Self-medication ever till now. Among those students who took Self-medication 75 students sometimes practised while 47 students rarely practised and 4 students always practised self medication.

# DISCUSSION

In our study, we found that female students were more interested in taking Self-medication as compared to male students; this may be due to the fact that the female students are more hesitant to go to the hospital or outpatient department for minor illness. Similar findings were there in the study done by Thadani *et al.*<sup>[8]</sup>

Out of 139 students total 123 (88.5%) students took self medication, which is supported by the studies done elsewhere reported 76% in Karachi,<sup>[3]</sup> 94.1% in Slovenia,<sup>[4]</sup> 76.9% in Bahrain.<sup>[6]</sup>

In our study, most of the students who took

Table 3: Various indications for self-medication among the volunteers

INDICATION	NUMBER OF STUDENTS
Headache	109
Cough, cold, sore throat	98
Fever	90
Stomach ache	50
Diarrhoea	41
Vomiting	39
Menstrual symptoms	31
Ocular symptoms	5

Self-medication gave some reasons in favour that there was no need to visit the doctor for minor illness (71%), it was time saving (58%), andSelf-medication provided quick relief (55%) and reasons given by rest of the students for not taking Self-medication were that there was lack of knowledge about medicines (75%), risk of adverse effects (75%) and risk of using wrong drugs (69%). Similar findings were there in the study done by James *et al*.<sup>[6]</sup>

In our study, we found that source of information of the drugs used for Self-medication was previous prescription, this may be due to the fact that they had visited the doctor for the same illness previously and do not found it necessary to again visit the doctor for the similar complaints.

We also found that major source of the drugs used for Self-medication was medical store; this may be due to ease and convenience, similar results were found in the study done by Klemenc *et al.*<sup>[4]</sup>

We found that most of the students took Self-medication for problem of headache, this may be due to the strain on eyes while studying and lack of sleep for which they had to take analgesics, most of the times which was self administered. Similar findings were there in study done by Zafar *et al.*<sup>[3]</sup> and James *et al.*<sup>[6]</sup>

Analgesics were the most common group of drugs used for Self-medication in our study; similar findings were there in the study done by James *et al.*<sup>[6]</sup> and Thadani *et al.*<sup>[8]</sup>

#### CONCLUSION

Thepractice of Self-medication on the basis of

incomplete knowledge should be avoided and medical students who are themselves future healthcare providers of this nation, should be educated about the disadvantages of taking drugs without proper advice of a qualified doctor.

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# **QUESTIONNAIRE**

This questionnaire is designed to help us understand your preferences regarding knowledge, attitude and practice of self medication. Participation depends on your willingness. No personal information should be written on the paper (name, roll number).

Please answer legibly and add checkmark in front of the appropriate answers.

# **QUESTIONS:**

- 1) Initials:
- 2) Age (yrs):
- 3) Sex:
- 4) Whether taken Self-medication or not? Yes/
- 5) If yes, whether practised self medication
- a) Always

b) sometimes

- c) rarely
- 6) If yes, whether visited to a qualified medical practitioner
- a) Always

b) sometimes

- c) rarely
- 7) If yes, then which of the following was the source of information of the drugs used for self medication?

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- a) Classroom teaching
- b) textbook
- c) advertisement prescription
- d) previous
- 8) If yes, then what was the source of the drugs used for self-medication?
- a) Medical store
- b) home
- c) doctor parents
- 9) According to you which of the following were the reasons in favour of self medication?

No need to visit the doctor for minor illness	
Quick relief	
Time saving	
Confidence on your knowledge about medicines	
Economical	
Ease and convenience	
Learning opportunity	
Crowd avoidance	
If any others (please specify)	

10) According to you what were the indications for self medication?

Fever Cough, cold, sore throat	Headache	
Cough, cold, sore throat	Fever	
	Cough, cold, sore throat	
Stomach ache	Stomach ache	

Menstrual symptoms	
Vomiting	
Diarrhoea	
Ocular symptoms	
If any others (please specify)	

11) According to you which of the following drugs were used for self medication?

Analgesics	
Antimicrobials	
Multivitamins	
Antispasmodics	
Decongestants	
Lozenges	
If any others (please specify)	

12) According to you which of the following were the reasons for not taking self medication?

Lack of knowledge about medicines	
Risk of adverse effects	
Risk of using wrong drugs	
Risk of misdiagnosing	
Risk of drug dependence	
Risk of using drugs wrongly	
If any others (please specify)	