



## International Journal of Research in Pharmacology & Pharmacotherapeutics



ISSN Print: 2278-2648 IJRPP |Vol.7 | Issue 1 | Jan - Mar - 2018  
ISSN Online: 2278-2656 Journal Home page: www.ijrpp.com

Research article

Open Access

### Self medication practise among final year MBBS students of brims Bidar

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#### ABSTRACT

##### Introduction

In developing countries like India easy availability of a wide range of drugs coupled with inadequate health services has resulted in increased proportion of drugs used as self medication.

##### Objective

This study was undertaken to determine the knowledge, attitude & practice of self medication among final year MBBS students, BRIMS, Bidar

##### Methods

This study carried, questionnaire-based, descriptive study. A self-developed, pre-validated questionnaire consisting both open and close ended questions was filled final year MBBS students. Data was reviewed, organized and summarized as counts and percentages and evaluated using MS Excel .

##### Results

Out of a total of 100(10-no response) students, 70.5% were male & 29.4% were females. Their age ranged from 17-27 years. Out of these, 67.36%% students had taken self medication with 50.52% being females and 16.84% being males. The commonest indications for self-medication were fever seen in 47.50% of the students followed by, cough/common cold 35.36%. 55.55%% of the students didn't feel the need to go to a doctor and this was the most frequent reasons for resorting to self-medication and the main source of self medication was books/internet 50% . Analgesics were the commonest drugs used (50.72%) followed by antimicrobials (14.03%) with 53.44% of the students completed the recommended course of antimicrobials.

##### Conclusion

The practice of self-medication in our study was common and often inappropriate and this high prevalence is a cause of concern. Education and proper information about the drugs may go a long way in promoting responsible self medication.

## INTRODUCTION

Self medication is defined as the use of medication by a patient on his own initiative or on advice of pharmacist or a lay person instead of consulting a medical practitioner [1]. Different studies were done on self medication which revealed that it is a fairly common practice, especially in economically deprived communities and internationally, it has been reported that self-medication is an emerging topic [2]. In developing countries like India easy availability of a wide range of drugs coupled with inadequate health services has resulted in increased proportion of drugs used as self medication.

Inappropriate self medication results in wastage of resources, increase resistance to pathogens and generally entails serious health hazards such as adverse drug reactions, prolonged suffering and drug dependence. It is now accepted that self-care in the form of responsible self-medication can be beneficial for patients, healthcare providers, the pharmaceutical industry and governments. [3] The potential risk/benefit of self medication should be compared to potential risks/ benefits of prescription medicines. Self-medication is an area where governments and health authorities need to ensure that it is done in a responsible manner, ensuring that safe drugs are made available over the counter and the consumer is given adequate information about the use of drugs and when to consult a doctor. [3]

Rational use of drugs has drawn public health attention globally with the aim of maintaining quality of health at low cost. Despite of this there is paucity of studies on self medication among students, therefore the present study was undertaken to determine knowledge attitude and practice of self medication and to identify the reasons for and the pattern of self medication among final year MBBS students of BRIMS, Bidar.

## AIMS AND OBJECTIVES

1. To determine the knowledge attitude and practice of self medication among final year MBBS students of BRIMS, Bidar.
2. To study the drug utilization pattern of self medication among final year MBBS students BRIMS, Bidar.

## MATERIALS AND METHODS

This is an anonymous, questionnaire-based survey. In the study pattern of drug use over a six-month period preceding the study was noted. A Self-developed, pre-validated questionnaire (Annexure 1) was prepared. Data was expressed as counts and percentages and evaluated using MS Excel. Some questions had multiple options to choose from therefore the sum total of percentage is not always 100%.

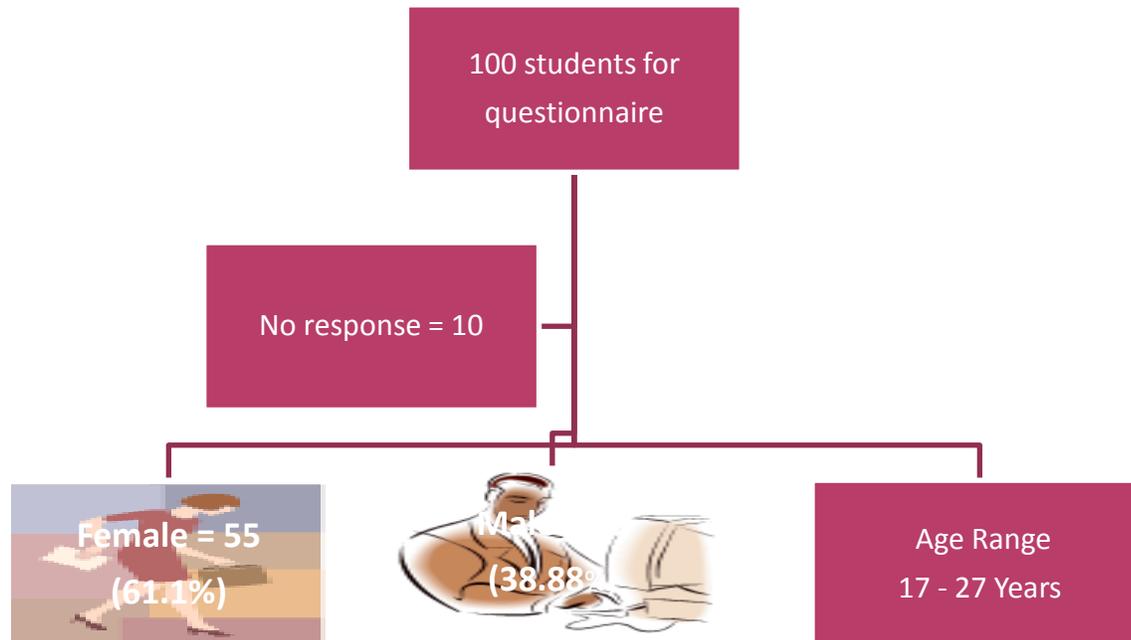
## ANNEXURE 1

### Questionnaire used for assessing prevalence of self and non-doctor prescribing

1. What is your name?
2. What is your full residential address?
3. What is your approximate Money you get from family?
4. Have you used medicines of your own without consulting either a doctor in the preceding six months: Yes/No
5. How many episodes of illness have you had in the preceding six months?
6. What was the main symptom of your illness?
7. What others symptoms did you experience?
8. Were there any associated complaints?
9. What type of medicine(s) did you use?
10. Can you tell me it's (their) name(s)?
11. If you took antimicrobials then did you complete the course: Yes/No
12. Did you have knowledge about dose, side effects, interactions, of the medicines you have taken? Yes/no.
13. What was the main source of information of yourself medication: books/internet, friends, advertisements, previous prescription.
14. What was your main reason for not consulting a doctor: Minor illness, Didn't feel the need, advised by friends/ previous prescription Previous experience, time/money constraints.
15. Do you think self medication is harmful: Yes/No
16. Did you find any Adverse Drug reaction & what was the most common ADR?

## RESULTS

### Baseline characteristics



### PREVALENCE OF SELF MEDICATION

#### Prevalence of self medication in males and females

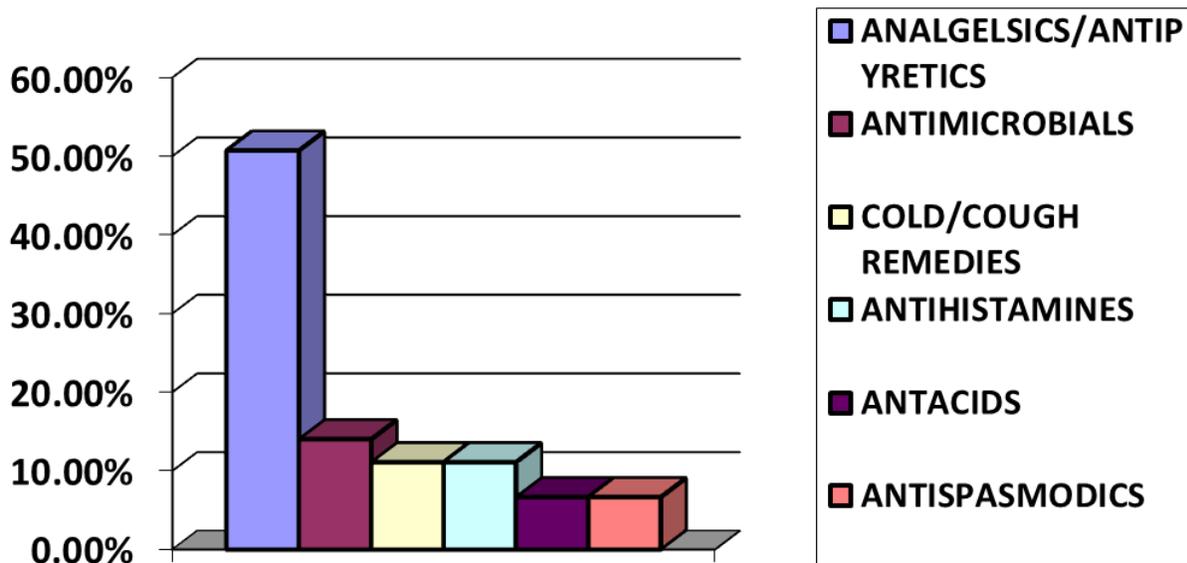
Out of the 90 students 67.36% had taken self medication in the past 6 months. Comparing the sex wise variation of self medication rate, out of a total 55 females, 35 were taking self medication & 20 were not taking self medication; while for males out of a total of 35, 30 were taking self medication 5 were not taking self medication.

### MOST COMMON DRUGS

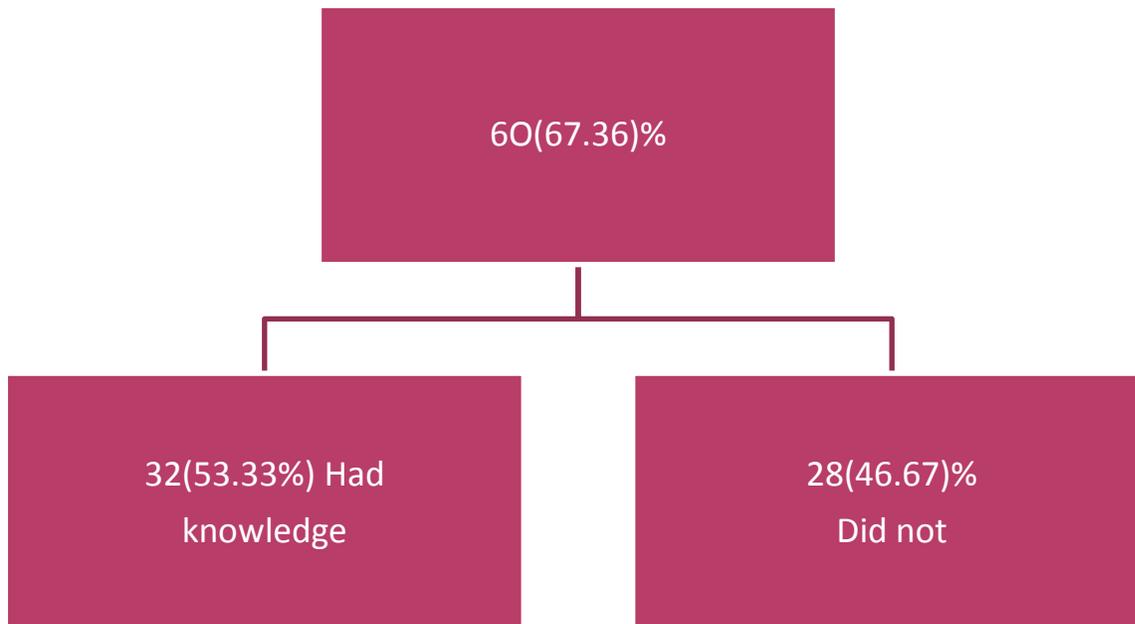
The average number of drugs consumed per student in a 6 months period was 2.37. The most

common drugs used were analgesics-antipyretics (50.72%), followed by antimicrobials (14.03%), cough/cold remedies (11.11%), antihistaminic (11.11%), antacids( 6.66%), (6.66%) & antispasmodics as shown in figure 2. Paracetamol alone or in combination was the most commonly used drug being used in 55% cases. There were (14.03%) antimicrobials consumed in total by all the year students, with Azithromycin having the maximal consumption, followed by Amoxicillin & Ciprofloxacin. (53.44%) students completed the course 46.56% did not complete.

### DRUG UTILIZATION PATTERN (SELF MEDICATION)



### Knowledge

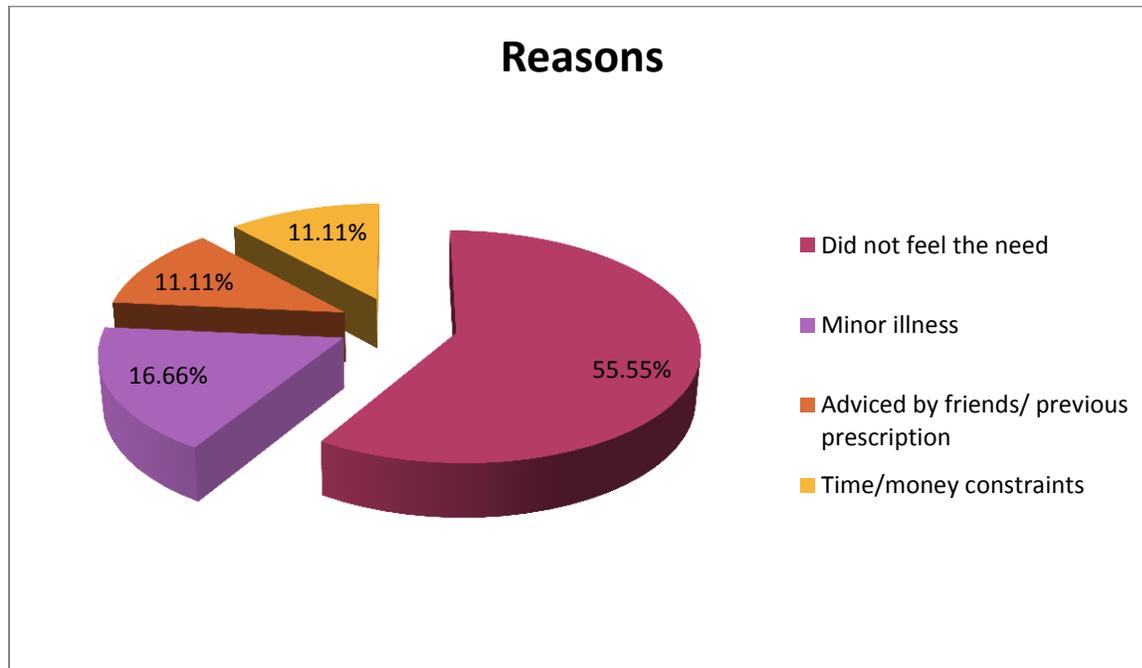


## Main Symptoms

The main symptom of the illness were fever seen in (47.50%) of the students followed by,

cough/common cold (35.63%), headache (11.11%) & body pain (5.55%).

## Reasons for not consulting a doctor



MAIN SOURCE OF SELF MEDICATION – books and internet (50%), friends (27.77%), advertisement (11.11%), previous prescriptions (11.11%)

## Adverse drug reactions

29.77% students reported adverse drug reactions in our study. No serious ADRs were reported. Sedation, itching, redness were the most common ADRs reported in our study

## DISCUSSION

Prevalence in our study out of the 90 students were 67.36% who had taken self medication in the past 6 months. Comparing the sex wise variation of self medication rate, out of a total 55 females, 35 were taking self medication & 20 were not taking self medication; while for males out of a total of 35, 30 were taking self medication 5 were not taking self medication. While it was 12.7% to 95%<sup>4,5</sup> in other developing countries while similar studies among

non medical university students have shown self medication rates ranging from 65% to 87%. [6]

### Knowledge and Attitude

Out of 60 students (67.36%), 32(53.33%) were having knowledge about side effects, dose, drug interactions adverse effects of the drug but 28(46.67%) did not. Patterns in general population in Punjab showed a lower knowledge of these i.e. 32% had knowledge of dose of the drugs and 23% had knowledge about side effects of the drugs while 43.4% had knowledge about drug interactions and 32.7% had knowledge about drug profiles in a study on non medical university students in Punjab. [7]

Common indication and source of Self medication- in our study. The main symptom of the illness were fever seen in (47.50%) of the students followed by, cough/common cold (35.63%), headache (11.11%) & body pain (5.55%). Source was books and internet (50%), friends (27.77%), advertisement(11.11%), previous prescriptions (11.11%). in a similar study among non medical university students in Malwa region doctors were the major source for self medication (53.04%), followed

by parents 26.8% and friends 9.5%<sup>7</sup> but in non medical students of Udaipur friends and family members<sup>6</sup> were the major source

## Drugs

### Analgesics

Analgesics have been reported to be the most commonly used group of drugs among medical and non medical population<sup>8</sup> Our study also found similar results. Among the analgesics, Paracetamol, alone or in combination was the most commonly used drug. This correlates well with fever being the most common indication for self medication.

In our study 14.03% of students used antimicrobials and Azithromycin was the most commonly used antibiotic. General population showed antimicrobials use to be 11% [8] This was comparatively lower. In one Iranian study, 48% non medical students practiced antibiotic self-medication [9] Interestingly, only 4.8% students at Gondar College of Medicine and Health Sciences in Ethiopia used antimicrobials while doing self-medication.<sup>13</sup> In our study 53.44 % respondents completed the course of antimicrobials. In comparison other studies

have reported rates as low as 26.8% & 37.6% [10]. No serious ADRs were reported. Sedation, itching, redness were the most common ADRs reported.

## CONCLUSION

High prevalence of self medication in my study is a cause of concern. As in others studies Analgesics-Antipyretics form the most common drugs used. Improper use of antimicrobials will promote emergence of resistance strains.

## RECOMMENDATION

Proper information and awareness on the use of drugs along with enforcing restrictions on the sale of drugs will help to promote responsible self medication.

Self medication in an area where governments and health authorities need to ensure that it is done in a responsible manner, ensuring that the safe drugs are made available over the counter and the consumer is given adequate information about the use of drugs and when to consult a doctor.

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