



WWJMRD2022; 8(11):121-124  
www.wwjmr.com  
International Journal  
Peer Reviewed Journal  
Refereed Journal  
Indexed Journal  
Impact Factor SJIF 2017:  
5.182 2018: 5.51, (ISI) 2020-  
2021: 1.361  
E-ISSN: 2454-6615

**Biswadeep Banerjee**

Assistant Professor, dept. of  
Pharmacology, Gouri Devi  
Institute of Medical Sciences,  
Durgapur, west Bengal, India.

**Subir Kumar**

Associate Professor, dept. of  
Pharmacology, Phulo Jhano  
Medical College, Dumka,  
Jharkhand, India.

**Asim Kumar Ghosh**

Professor & Head, dept. of  
Pharmacology, Gouri Devi  
Institute of Medical Sciences,  
Durgapur, west Bengal, India.

**Akash Chandra**

Assistant, Professor, dept. of  
Pharmacology, SNMMCH,  
Dhanbad, Jharkhand, India.

**Correspondence:**

**Subir Kumar**

Associate Professor, dept. of  
Pharmacology, Phulo Jhano  
Medical College, Dumka,  
Jharkhand, India.

## To Study the Self Drug Administration Among 2<sup>nd</sup> Professional Mbbs Students

**Biswadeep Banerjee, Subir Kumar, Asim Kumar Ghosh, Akash Chandra**

### Abstract

#### Background

Self-drug administration among 2<sup>nd</sup> Professional medical students is very common but this is wastage of resources, increases resistance of pathogens and generally causes serious health hazards such as adverse drug reactions, prolonged suffering and drug dependence. Present study was done to determine the knowledge, attitude, practice and health hazards as drug side effects among 2<sup>nd</sup> Professional medical students.

#### Material & Methods

A questionnaire-based self-medication with consent was prepared and distributed among the students of 2<sup>nd</sup> Professional. Data was collected and analysed the results expressed as counts and percentages.

#### Results

Total 100 students participated in the study for taking self-medication and was no need to visit the doctor for minor illness. In maximum students, source of information of the drugs used for self-medication pharmacological based and learning process by their seniors in the college. The source of drug was pharmacology book, and other drug information books like cims, drug today, internet and medical store. Most of the students took self-medication for loose motion & headache followed by cough, cold & fever. Out of total 100 students most of the students took Paracetamol tablet as self-medication. There was less side effects with Paracetamol as constipation only among 5 students. More side effects were seen in capsule Amoxycillin as loose motion, pain abdomen, nausea & vomiting.

#### Conclusion

This study showed that second professional medical students after studying pharmacological books they do not use any wrong medicine as self-medication but some drug related side effects were noted with capsule Amoxycillin, tablet Metronidazole and tablet Paracetamol. So in my opinion medical students should take any kind of medicines or minor or major illness under supervision of their teachers and senior physicians.

**Keywords:** Self-medication, Questionnaire, 2<sup>nd</sup> Professional.

### Introduction

Self-medication can be defined as obtaining and consuming drugs without the advice of a physician for diagnosis, prescription or surveillance of treatment<sup>1</sup>. In several studies it has been found that inappropriate self-medication causes wastage of resources, increases resistance of pathogens and generally causes serious health hazards such as adverse drug reactions, prolonged suffering and drug dependence<sup>2</sup>. Self-medication is 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>3</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>4</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<sup>4</sup>. 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. However, it is also recognized that self-medication must be accompanied by appropriate health information<sup>5</sup>. 2<sup>nd</sup> Professional medical students know about drugs while studying Pharmacology. There is a strong possibility of self-medication among 2<sup>nd</sup> professional medical students. It will be a risky procedure. This work has been designed to evaluate the extent of self-medication among 2<sup>nd</sup> Professional medical students.

**Material & Methods**

An anonymous questionnaire-based study in all the medical students of 2nd year MBBS students [Batch 2018-19] attending theory classes in the department of Pharmacology in Gouri Devi Institute of Medical Sciences, Durgapur [West Bengal] of India, was conducted after getting permission from ethics committee of the college. Students

of all ages and both sexes were included in the study. The study period is of total three months from 5/12/2019 to 4/03/2020. 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. A questionnaire related to self-medication with consent was prepared and distributed among the students of 2<sup>nd</sup> Professional. Data was collected and analysed the results expressed as counts and percentages.

**Study Design- Cross – sectional & Descriptive study**

**Results**

The table-1 below showing the 64% male medical students and 36% female medical students had participated in this study. Most of the male and female students belong to the age group of 18-20 yrs in this study.

**Table-1:** Age and Sex Ratio of Medical Students

No.of total medical students	No. of total male students	No. of total female students	Percentage [Male students]	Percentage [Female students]
100	64	36	64%	36%

Age group	No. of total male students	No. of total female students	Percentage [Male students]	Percentage [Female students]
18-20 yrs	36	24	56.25	66.66
21-23 yrs	22	8	34.37	22.22
23-25 yrs	6	4	9.37	11.11

The table below showing that 72 students have self-confidence regarding knowledge about medicines. About 74 students think that it is not compulsory to consult doctor

for minor illness. About 85 students have given opinion that there is wastage of time to go doctor’s clinic.

**Table-2:** Reasons given by students in favour of self -medication.

Reasons	No. of students
Confidence regarding knowledge about medicines	72
Not compulsory to consult doctor for minor Ailments	74
Saving of time	85

The table below showing the number of students who are suffering from various ailments as-Headache, cough &

cold, vomiting skin infection etc and taken medicines for these ailments.

**Table-3:** Self-medication done by students for various Ailments.

Ailments	No.of students
Headache	71
Cough & Cold	56
Fever	80
Loose motion	75
Vomiting	43
Skin infection	63
Acidity	46

The table below showing the name of various medicines

taken by students as self-medication with their side effects.

**Table-4:** Different medicines used for self-medication and their side effects in our study.

Medicines	No.of students Took medicines	Side effects	No of students suffered
-----------	-------------------------------	--------------	-------------------------

Tab.Paracetamol	75	Constipation, Metallic taste	5 students from constipation and 34 students from metallic taste.
Capsule Amoxicillin	54	Loose motion, pain abdomen, nausea, vomiting	12 students suffered from loose motion,13 students suffered from pain abdomen and 6 students suffered from nausea and vomiting.
Tablet Metronidazole	74	Constipation, dizziness	12 students suffered from constipation and 2 students suffered from dizziness
Capsule Omeprazole	36	No side effects	
Tablet Domperidon	46	No side effects	
Neosporin ointment	63	No side effects	

## 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 <sup>6</sup>. In our study most of the students have taken tablet Paracetamol for headache with minimum side effects as constipation and metallic taste.. In our survey it is clear that Paracetamol tablet is safest drug among all drugs which are taken by about 75 students as self-medication and it is confirmed by students itself. About 85 students out of 100 have given reason of saving of time in favour of self-medication. In our study it is clear that students have not taken any wrong medicines as self-medication but those have suffered some side effects as constipation, dizziness, metallic taste, loose motion and mild pain abdomen. Self-medication is the utilization of medicines by persons on their own without any proficient medical supervision. In developing countries like India, most episodes are treated by self-medication due to easy availability of non-prescription drugs. It is more likely to be inappropriate without complete knowledge although it is becoming a routine practice nowadays especially by undergraduate medical students<sup>7</sup>. The prevalence of self-medication varied amongst different years of students and found increasing from first year to final year and the reason might be the knowledge of medicines in final year students which is comparable with the findings of previously conducted studies<sup>8</sup>. Self-medication amongst students is a global problem <sup>9</sup>. Studies in India report a rising incidence<sup>10</sup>.

## Conclusion

This study showed that second professional medical students after studying pharmacological books and drug information books as CIMS & Drug Today they do not use any wrong medicine as self-medication done by 2<sup>nd</sup> Professional medical students but most of them had suffered from some side effects as constipation, loose motion, dizziness. pain abdomen. High level of awareness acquired by second professional students restrict the self-medication covering only few common ailments by very safe drugs. Inappropriate self-medication causes wastage of resources, increases resistance of pathogens and generally causes serious health hazards such as adverse drug reactions, prolonged suffering and drug dependence<sup>2</sup> the study gives the message that scientific knowledge and awareness will minimize the self-medication which is supposed to be a risky and harmful practice and medical students should take medicines for minor or major illness under supervision of their teachers and senior physician.

## Limitation of Study

The limitations of this study included the absence of a comparative group, such as students from another field; the small sample size; and the absence of interventions, like providing information regarding hazards of self-medication.

## Conflicts of Interest

The authors declare that they have no competing interests

## Funding

Not applicable.

## Ethics Committee Approval

Institutional Ethics Committee, Gouri Devi Institute of Medical Sciences, Durgapur (west Bengal)

## References

1. Montastruc JL, Bagheri H, Geraud T, Lapeyre Mestre M.. Pharmacovigilance of self-medication. *Therapie*. 1997; 52:105–110.
2. Hughes CM, McElnay JC, Fleming GF. Benefits and risks of self-medication. *Drug Saf*. 2001; 24:1027–1037.
3. Porteous T, Bond C, Hannaford P, Sinclair H. How and why are non-prescription analgesics used in Scotland? *FamPract* 2005;22(1):78-85.
4. Montgomery AJ, Bradley C, Rochfort A, Panagopoulou E. A review of self-medication in physicians and medical students. *Occup Med (Lond)*. 2011;61(7):490-7. doi: 10.1093/occmed/kqr098. Epub 2011 Jul 4. [PubMed: 21727179]
5. Zafar SN, Syed R, Waqar S, Zubairi AJ, Waqar T, Shaikh M, *et al*. Self-medication amongst University Students of Karachi: Prevalence, Knowledge and Attitudes. *J Pak Med Assoc*. 2008;58(4):214-7.
6. James H, Handu SS, Al Khaja KA, Otoom S, Sequeria RP. Evaluation of the knowledge, attitude, and practice of self-medication among first-year medical students. *Med Princ Pract*. 2006;15(4):270-5.
7. Thadani S, Salman MT, Ahmad A. Knowledge, Attitude and Practice of Self-medication Among Second Year
8. Undergraduate Medical Students. *J Rational Pharmacother Res*. 2013;1(3):131-4.
9. Klemenc-Ketis Z, Hladnik Z, Kersnik J. Self-medication among healthcare and non-healthcare students at University of Ljubljana, Slovenia. *Med Princ Pract*. 2010; 19:395–401.
10. Banerjee I, Bhadury T. Self-medication practice among undergraduate medical students in a tertiary care medical college, West Bengal. *J Postgrad Med*. 2012; 58:127–31.

11. Sawalha AF. Assessment of self-medication practice among university students in Palestine: Therapeutic and Toxicity implications. *The Islamic university journal* 2007; 15:67-82.
12. 10.Sontakke SD, Bajait CS, Pimpalkhute SA, Jaiswal KM, Jaiswal SR. Comparative study of evaluation of self - Medication practices in first- and third-year medical students. *Int J Biol Med Res* 2011; 2:561-4.