

## SELF-MEDICATION AMONG PHARMACY STUDENTS- A THREATENING TREND

P. B. Birari<sup>1</sup>, S. S. Jalihalkar<sup>2\*</sup>, A. Gaykhe<sup>3</sup>, R. H. Mishal<sup>4</sup> and H. B. Mishal<sup>5</sup>

<sup>1,2,3,4</sup>Sir. Dr. M. S. Gosavi College of Pharmaceutical Education & Research, Prin. T. A. Kulkarni Vidyanagar, Nashik-422005.

<sup>5</sup>MET's Institute of Pharmacy, Bhujbal Knowledge City, Adgaon, Nashik-422003.

Received on: 28/04/2020

Revised on: 18/05/2020

Accepted on: 08/06/2020

\*Corresponding Author

S. S. Jalihalkar

Sir. Dr. M. S. Gosavi College  
of Pharmaceutical Education  
& Research, Prin. T. A.  
Kulkarni Vidyanagar, Nashik-  
422005.

### ABSTRACT

**Background:** This survey examined the paradigm of self-medication and the effects caused due to this practice among Pharmacy students in Nashik. **Methods:** The study was done using a self-prepared questionnaire. The questionnaire was developed considering different parameters that are directly or indirectly linked to human health and also those that encourage people to self-medicate. The questionnaire was distributed in various Pharmacy colleges through Google forms and around 200 students responded to it. The data collected was analysed and graphs processed and the results were obtained. **Results:** The survey revealed that in most cases due to existing information about various medicaments, students avoided visiting the physician and getting professional help. Instead they frequently self-medicated. The study further revealed that most of them who self-medicated promoted the practice to others. **Conclusions:** The overall result showed that being in the pharmacy field and having knowledge of medicines the students generally opt for self-medication more frequently. This practice of self-medication is not limited to Over the Counter drugs but also has extended to the use of antibiotics, anti-bacterials and also sometimes Oral Contraceptive Pills too. The online pharmacy system and cyber doctor consultation obviously may add to and promotes self-medication. Students who obtain these medications may suffer drug-drug interactions and adverse effects, about which they may have no/inadequate prior warning or counseling.

**KEYWORDS:** Self-medication, pharmacy, online pharmacy, medicines, survey, knowledge.

### INTRODUCTION

Self-medication according to World Health Organization (WHO) is defined as the use of drugs for the treatment of self-diagnosed condition or symptoms, or the use of drug without proper prescription from health care professional or continued use of drug for severe or recurrent disease or condition. It can be also defined as the use or consumption of drugs on suggestion from another person without consulting doctor.<sup>[1]</sup> Self-medication practice is used frequently for minor illnesses, allergic conditions, or some other symptoms. The most self-medicated products are OTC drugs and dietary supplements. But now adays this practice is not only limited for OTC drugs but also to other prescribed drugs like analgesics, antibiotics, antacids, syrups etc. Although the intention of Self-medication is for self-care, it can be harmful. It may be beneficial when a person has a complete knowledge of drug/ medical intervention. It is harmful in most of the situations as it may lead to irrational use of drugs, can cause resistance to some drugs, adverse drug reaction or sometimes even death. Self-medication practice is more serious than the original disease itself. Many scientific studies have shown that there are many

factors/reasons which may lead people to self-medicate or adapt this practice like high cost of drugs, family or friends support, long hours waiting at clinics, easy accessibility, sufficient knowledge of drugs/ medicaments, at times unavailability of health professionals.

Of such vulnerable population, college going undergraduate student practice self-medication due to influencing advertisement media or social media. This is a threatening trend in young generation leading to improper diagnosis, drug interactions, adverse effects, poly pharmacy etc. and tends to endanger their lives because of these practices.

Present study was undertaken to evaluate the self-medication practices amongst college going pharmacy undergraduates of Nashik region with an objective of evaluating knowhow of practices, nature of drugs that are frequently used by pharmacy students, reasons for self-medication. A questionnaire-based cross-sectional, survey was conducted.<sup>[4]</sup>

**OBJECTIVES**

The objective of the present study is to determine the details of self-medication practices by undergraduate pharmacy students and reasons for self-medicating as they are the upcoming drug professionals and health educationalists.

**MATERIALS AND METHODOLOGY**

A questionnaire-based cross-sectional, survey was conducted from October 2018 to Jan 2019 to evaluate the self-medication practices amongst college going

pharmacy undergraduates of Nashik region.<sup>[3]</sup> The study population consisted of 225 B. Pharm students of both sexes (First to Final year) (17-22 years old) and D. Pharm students (17-20 years old) from different colleges of Nashik region, out of this, 200 students responded to questionnaire and filled out questionnaire. Among the respondents 53% were females and 47% were males. A simple and easy to understand questionnaire consisting of demographic questions like age, sex, name of college and other questions related to self-medication in Google form (open ended and closed ended) was given to the respondents.<sup>[2]</sup> (Table 1).

**Table 1: Questionnaire With The Percentage Of Responses.**

Sr. No	Gender	% male	% Female
		47	53
1	Have you ever self medicated ?		
	YES	34	36.5
	NO	13	16.5
2	Do you know what self medication is?		
	YES	41.5	47
	NO	5.5	6
3	What/who encourages you to self medicate?		
	Family and friends	13.5	18
	Social media	1.5	1.5
	Pharmacist	22.5	19
	Advertising Media	7.5	13
	others	2	1.5
4	Do you read and understand the label/leaflet with drug before consumption?		
	YES	43	51.5
	NO	4	1.5
5	Were there any side effects seen after taking particular medication?		
	YES	5	4
	NO	42	49
6	Have you ever recommended self-medication to others from personal experience?		
	YES	24.5	31
	NO	22.5	22
7	From where did/do you buy the medicaments?		
	Pharmacy store	43	49
	Online Pharmacy	1	0.5
	Left over from previous prescription	0.5	2
	Any other	2.5	1.5
8	How many times did you self medicate in the past 6 months?		
	Once	20.5	20.5
	Twice/Thrice	10.5	16.5
	Frequently	5.5	11
	Never	10.5	5
9	What were the medicaments that you took frequently for?		
	HEADACHE	46.5	53
	COLD	42	57.5
	COUGH	45.5	54.5
	HYPERACIDITY	46.5	53.5

**RESULTS AND DISCUSSION**

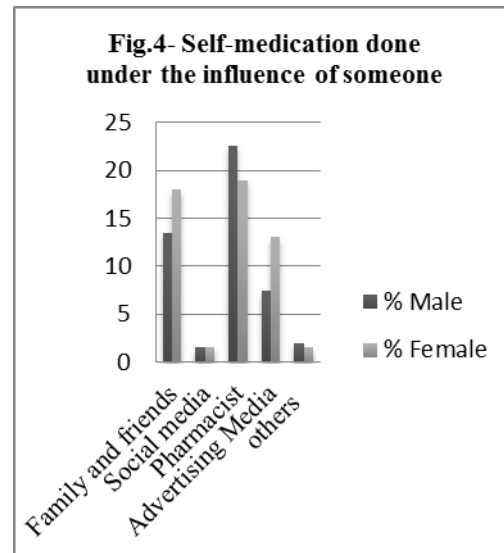
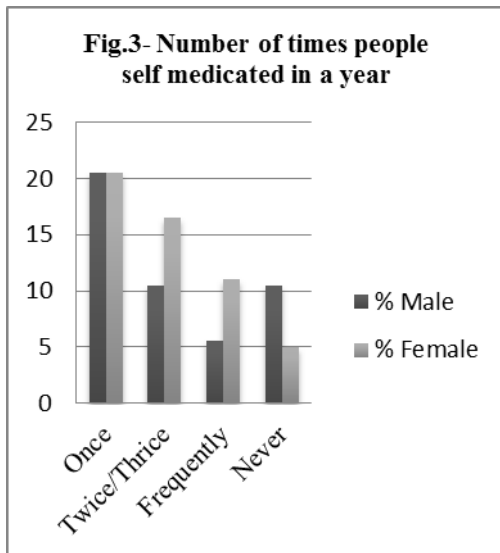
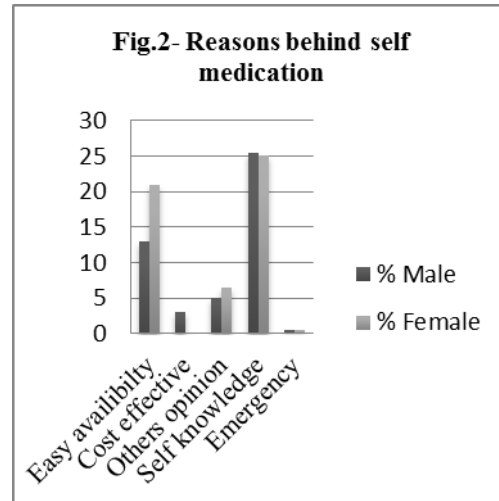
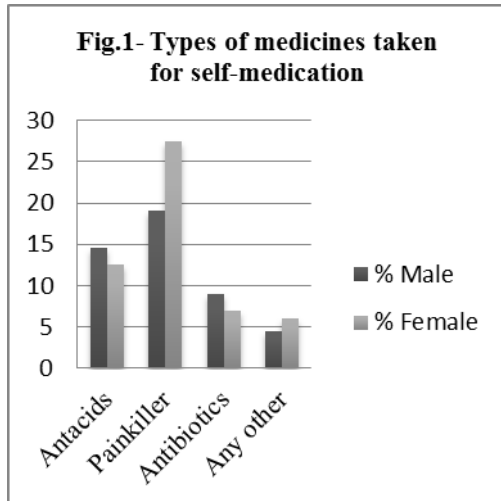
The response rate of the survey was 88% of which percentage of female (53%) was more as compared to male (47%) respondents. The total percentage of students

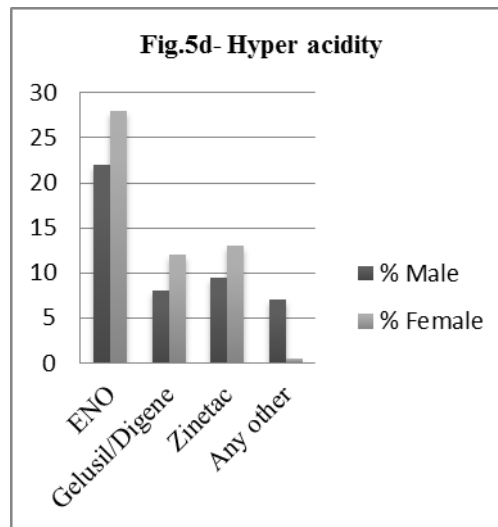
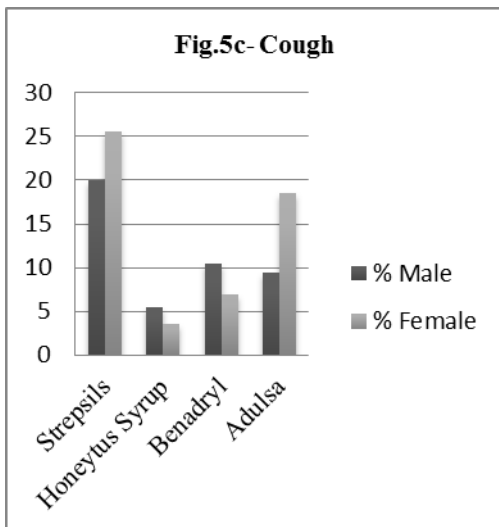
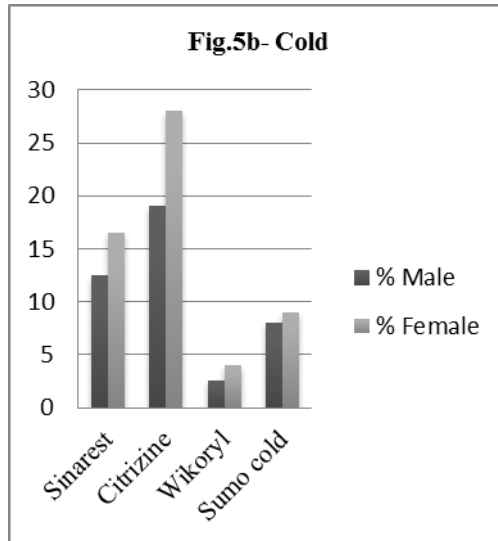
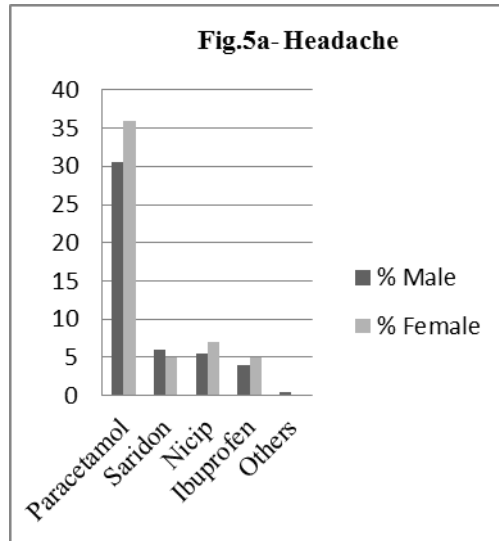
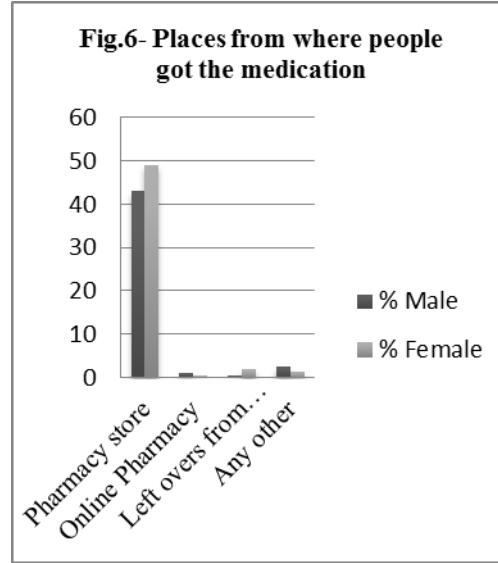
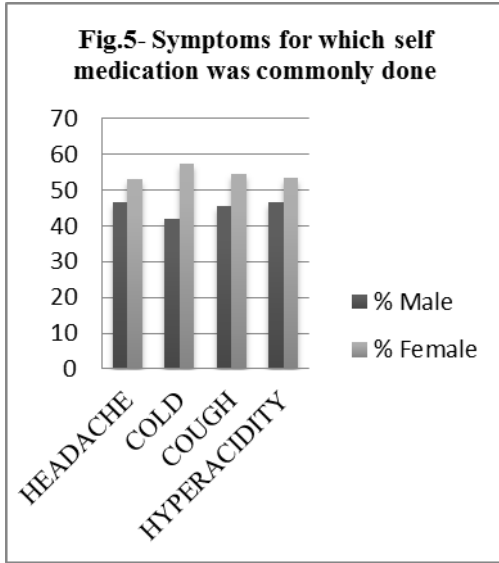
who practiced self-medication was 70.5% out of which 88.5% students knew what self-medication meant. In a year around 27% students self-medicated for 2 to 3 times while 16.5% students practiced it frequently (Figure 3). Students used different types of medicines for the same

(Figure 1) which included Antacids (27%), Painkillers (46.5%), Antibiotics (16%) and other classes of drugs (10.5%). The reasons behind students opting this practice were (Figure 2) easy availability of medicines (34%), self-known information of drugs (50.5%), suggestions from friends and family (Figure 4) (11.5%), cost effectiveness and to avoid long hour waiting at clinics (3%), etc. It was seen that almost 92% of students purchased their medicines from pharmacy stores, 2.5% took from the left over medicine and only 1.5% ordered from online pharmacy stores for practising self-

medication. The common symptoms for which they self-medicated (Figure 5) were Viral (23%), Headache and Body aches (55%), menstrual cramps in females (4%), Allergic conditions (2.5%), and other symptoms (15.5%). The most frequently taken medicines for headache, cold, cough, hyperacidity were Paracetamol (66.6%), Cetrizine (47%), Strepsils (45.5%) and ENO (50%) respectively. It was also seen in the study that students not only self-medicated but also 55.5% of respondents promoted the practise to others over personal experience.

**FIGURES**





**CONCLUSION**

Although the online pharmacy system and cyber doctor consultation is believed to contribute and enhance self-

medication practice, paradoxically our study results do not support the above statement. The pharmacy students of Nashik region are still unaware of the recent online techno trends. Although this provides some sort of relief

yet the practice of self-medication of prescribed drugs amongst pharmacy students is considerably high.

The findings of the survey based research should form the basis for future interventional plans that will educate pharmacy students and will make them aware of the potential consequences of self-medication. In addition, strict policies from health authorities should be applied to prohibit the provision of medicine without a valid prescription. Self-medication practice is highly prone to inappropriate use and has its own drawbacks resulting in wastage of resources, increased resistance of pathogens and adverse reactions.

#### ACKNOWLEDGEMENT

The authors wish to acknowledge Dr. S. V. Amrutkar, Principal, Sir Dr. M. S. Gosavi College of Pharmaceutical Education and Research, Nashik for his valued support & co-operation.

#### CONFLICT OF INTEREST

We wish to confirm that there are no known conflicts of interest associated with this publication and there has been no significant financial support for this work that could have influenced its outcome.

#### ABBREVIATIONS

ADR- Adverse Drug Reaction; OTC- Over the Counter; WHO- World Health Organization.

#### SUMMARY

It was observed from this survey that most of the pharmacy students who self-medicated promoted the practice to others too. The study further reveals that being pharmacy students the knowledge of medicines prompt them to self-medicate. This practice of self-medication is not limited to Over the Counter drugs but also has extended to the use of antibiotics, anti-bacterial and also sometimes Oral Contraceptive Pills too. The online pharmacy system and cyber doctor consultation obviously may add to and promote self-medication. Students who obtain these medications may suffer drug-drug interactions and adverse effects, about which they may have no/inadequate prior warning or counseling. Thus, the practice of Self-medication among pharmacy students may result in wastage of resources, increased resistance of pathogens and adverse reactions and definitely is a threatening trend which should be abolished.

#### REFERENCES

1. Alsous Mervat et al; Evaluation of Self-Medication Practice among Pharmacy Students in Jordan; Jordan Journal of Pharmaceutical Sciences, 2018; 11(1): 15-24.

2. Sharif SI et al; Evaluation of self medication among pharmacy students; American Journal of Pharmacology and Toxicology, 2012; 7(4): 135-140.
3. Pahuja R et al; An online exploratory study of self medication among pharmacy graduates in India; Int. J. Drug Dev. & Res, 2011; 3(4): 200-207.
4. Shah VS et al; A Community Based Survey on Self-Medication in Amalner Tehsil of Khandesh Region of Maharashtra; IJPI's Journal of Hospital and Clinical Pharmacy, 2011; 1(4): 26-33.