

# **ORIGINAL ARTICLE**

pISSN 0976 3325 | eISSN 2229 6816 Open Access Article **3** www.njcmindia.org

# A COMPARATIVE STUDY ON THE REASONS FOR USE AND NON-USE OF SELF-MEDICATION AMONG STUDENTS OF A MEDICAL COLLEGE IN WESTERN UTTAR PRADESH

Shyam B Gupta 1, Danish Imtiaz2, Ved Prakash Shrotriya 3, Atul Kumar Singh4

Financial Support: None declared Conflict of interest: None declared Copy right: The Journal retains the copyrights of this article. However, reproduction of this article in the part or total in any form is permissible with due acknowledgement of the source.

#### How to cite this article:

Gupta SB, Imtiaz D, Shrotriya VP, Singh AK. A Comparative Study on the Reasons for Use and Non-Use of Self-Medication among Students of a Medical College in Western Uttar Pradesh. Ntl J Community Med 2015; 7(1):25-28.

## Author's Affiliation:

<sup>1</sup>Prof. & Head; <sup>2</sup>Assistant Professor, <sup>3</sup>Prof and Principal, <sup>4</sup>Asso. Prof, Department of Community Medicine, Shri Ram Murti Smarak Institute of Medical Sciences (SRMS-IMS), Bareilly, Uttar Pradesh

#### **Correspondence:**

Dr. Danish Imtiaz Email: dimtiaz09@gmail.com

Date of Submission: 20-10-15 Date of Acceptance: 17-01-15 Date of Publication: 31-01-16

# **ABSTRACT**

**Background:** Self-medication is selection and use of non-prescription medicines by individuals' own initiatives to treat self-recognized illnesses or symptoms. The objective of study was to assess the reason for use and non-use of self-medication among first and second year undergraduate students of a Medical College in western Uttar Pradesh.

**Methodology:** A cross sectional study was carried out among undergraduate students of Shri Ram Murti Smarak Institute of Medical Sciences (SRMS-IMS), Bareilly, Uttar Pradesh. First and second year medical students were included in the study after explaining to them the nature and purpose of study.

**Results:** The study included 97 students in first year and 69 students in second year. Awareness of knowledge of treatment was the most common reason given for self-medication among both first year (45.0%) and second year (46.9%) students. The most common reason for not taking self-medication was risk of adverse effects among both first (45.4%) and second year (33.4%) students.

**Conclusion:** The study emphasises that there is a need to create awareness by educational material designed to bring about correct decision making in relation to the practice of self-medication.

**Key words**: Self-medication, Medical students, Over the counter drugs

## INTRODUCTION

Self-medication is the treatment of common health problems with medicines especially designed and labeled for use without medical supervision and approved as safe and effective for such use. Medicines for self-medication are often called 'non-prescription' or 'over the counter' (OTC) and are available without a doctor's prescription through pharmacies. Self-medication is

now increasingly being considered as a component of self-care.<sup>2</sup> Encouragement of self-care is seen as giving patients' every opportunity to take responsibility and build confidence in their ability to manage their own health. Unlike other aspects of self-care, self-medication involves the use of drugs and drugs have the potential to do good as well as cause harm. This is particularly relevant in countries where there is lack of en-

forcement of regulations leading to availability of prescription medicines over the counter. This results in widespread use of such medicines which is associated with serious adverse effects. Several studies have reported that inappropriate self-medication results in wastage of resources and entails serious health hazards such as adverse drug reactions, prolonged suffering and drug dependence. When practiced correctly, selfmedication can save the time spent in waiting to see a doctor, may be economical and also offer savings for medical schemes and the national healthcare system. The WHO has also pointed out that responsible self-medication can help prevent and treat ailments that do not require medical consultation and provides a cheaper alternative for treating common illnesses.3 With self-medication, the individual bears primary responsibility for the use of self-medication products. All parties involved in self-medication should be aware of the benefits and risks of any self-medication product. Though several studies has been conducted to know the pattern of selfmedication among the general population, there has been paucity of studies concerned with exploring the reasons for use and non-use of selfmedication especially among the medical students.

## MATERIAL AND METHODS

The study is cross sectional in nature carried out among undergraduate students of Shri Ram Murti Smarak Institute of Medical Sciences (SRMS-IMS), located in Bareilly district in Western Uttar Pradesh. First and second year medical students were included in the study after explaining to them the nature and purpose of study.

Pre-designed and Pre-tested questionnaire comprising of both open and closed ended questions was used for the study. Students were informed briefly regarding the procedure for completing the questionnaire. Information was collected regarding reasons for use and non-use of selfmedication among both first and second year students.

The data were entered and analysed using SPSS 20 version and results were expressed using descriptive statistics such as frequency and percentages. Questions exploring the reasons for use and non-use of self-medication received multiple responses.

#### **RESULTS**

The total number of study participants was 97 and 69 in first year and second year respectively. Out of the 97 first year students, almost equal male (49.5%) and female students (50.5%) were present, while among the 69 study participants, more female students(69.6%) participated in the study compared to males (30.4%).

In the first year, 66.6% of the males and 57.1% of the females practiced self-medication whereas in second year more number of female (52.1%) practiced self-medication compared to males (33.3%). (Table-1)

Table 1: Practice of Self-medication in Study Subjects

Self-Medication Practiced	First Year (%)	Second Year (%)
Male	32 (66.6)	07 (33.3)
Female	28 (57.1)	25 (52.1)
P value	p=0.33*	p=0.15*

<sup>\*</sup>Non-significant

Table 2: Distribution of respondents according to reasons given for Self medication

Reasons	First Year (n=60) (%)	Second Year (n=32) (%)
Mild nature of the illness	25 (41.6)	11 (34.4)
Quick relief	10 (16.6)	8 (25.0)
Saved a lot of time	8 (13.3)	2 (6.2)
Aware of knowledge of	27 (45.0)	15 (46.9)
Treatment		
Urgency	12 (20.0)	1 (3.1)
Convenient	7 (11.6)	2 (6.2)

<sup>\*</sup>Multiple responses

Table 3: Distribution of respondents according to reasons given for not taking Self medication

Reasons		Second Year (n=27) (%)
Lack of knowledge about	3 (13.6)	1 (3.7)
medicines		
Risk of adverse effects	10 (45.4)	9 (33.4)
Risk of using wrong drugs	1 (4.5)	1 (3.7)
Risk of misdiagnosing the	4 (18.2)	7 (25.9)
illness		
Risk of Drug Dependence	0(0.0)	8 (29.6)
Risk of using drugs wrongly	4 (18.2)	1 (3.7)

Table-2 shows the reasons given for selfmedication where the most common reason reported was awareness regarding the knowledge of treatment which was slightly higher in second year (46.9%) followed by first year (45.0%).Mild

nature of the illness was the second most common reason cited among both first (41.6%) and second year students (34.4%).

Table 3 shows the reason given for not taking self-medication where the most common reason was risk of adverse effects (45.4%) in first year students as well as in second year students (33.4%). Fear of drug dependence (29.6%) was also found as the other reason for not taking selfmedication.

#### DISCUSSION

The present study shows that males and females were present in equal proportions i.e. 49.5% and 50.5% respectively which is comparable to a study by Parakh et al<sup>4</sup> in Jaipur where males (51.5%) and females participation (48.5%) was nearly equal. Sex distribution of study subjects is contrary to the findings of James et al<sup>5</sup> in Bahrain where females (67.9%) outnumbered the males (32.1%). In the first year, 66.6% of the males and 57.1% of the females practiced self-medication which is high as compared to James et al<sup>5</sup> study in Bahrain where 44.2% of males and 45.1% of females practiced self-medication. The prevalence of self-medication among second year students in present study was 46.3% which is low compared to Thadani et al<sup>6</sup> study in Lucknow where 90.7% practiced self-medication. Study by Parakh et al<sup>4</sup> in Jaipur more females (81%) practicing self-medication compared to males (66%) which was in accordance with the findings of present study where also more females (52.1%) practiced self-medication compared to males (33.3%).

The most common reason given for taking selfmedication among the first and second year students was awareness regarding knowledge of treatment as reported by 45.0% and 46.9% of the students in first year and second year students respectively. Study in Bahrain by James et al<sup>5</sup> and Shah et al<sup>7</sup> in Karachi reported majority of the students of first year cited saving of time as the most common reason for practicing selfmedication. Studies by Omolase et al<sup>8</sup> in Nigeria and Thadani et al6 in Lucknow carried out among medical students reported the most common reason as not the necessity to visit the doctor for minor illnesses (54.7% and 43.3% respectively). Study by Gutema et al9 reported the most common reason for taking self-medication was having a prior experience of the previous illness followed by mild nature of the illness as reported by 39.1% and 37.5% of the health sciences students. Other studies have also reported mild nature of the illnesses as the most common reason for taking self-medication. 10,11,12,13

The most common reason for not taking selfmedication was risk of adverse effects as reported by 45.4% and 33.4% of first and second year students respectively. The findings are comparable to Bahrain study where also the same reason i.e. risk of adverse effects was reported by 32.8% of the subjects.<sup>5</sup> Studies by Henry et al<sup>14</sup> and Olayemi et al<sup>15</sup> have also reported risk of adverse effects as the most common reason against selfmedication. Study by Thadani et al<sup>6</sup> in Lucknow reported the most common reason for not taking self-medication was Lack of knowledge about medicines (25.8%) followed by risk of adverse effects (22.7%).

### **CONCLUSION**

There is dearth of studies of this nature being conducted to find out the reasons for use and non-use of self-medication among medical students. Though mild nature of the illness came out to be the most common reason among both first and second year students for taking selfmedication, vet there is a need to create awareness about the pros and cons of the commonly used drugs so that students can make an informed choice regarding its use. Also, imparting knowledge regarding the OTC drugs can help them to alleviate the fear of experiencing adverse effects as observed in this study besides getting relieved from ailments. The most practical solution seems to be incorporating the knowledge about safe use of drugs in the curricula preferably during the orientation programmes as and when the student enters the MBBS course.

Acknowledgement: The author is thankful to SRMS-IMS administration for providing the opportunity to conduct the study

### REFERENCES

- Abdelmonein SA, Eman R, Hussain A. Self-medication practices among Diabetic patients in Kuwait. Medical principles and practices. 2008; 17: 315-320.
- Hughes CM, McElnay JC, Fleming GF. Benefits and risks of self-medication, Drug Saf, 2001; 24: 1027-1037.
- World Health Organization: Report of the WHO Expert Committee on National Drug Policies. 1995. Available http://www.who.int/medicines/library/dap/who-

dap-95-9/who- dap- 95.9.shtml. (last accessed on 09/4/2015)

- 4. Parakh R, Sharma N, Choudhary V, Parakh KK, Parakh R, Gour P. A Comparative study of Self-Medication Practice among Medical and Engineering students in a private university in North India.World J Pharmacy and Pharmaceutical Sciences 2014;3(5):933-944.
- James H, Handu S,Khaja K, Otoom S, Sequiera R. Evaluation of the Knowledge, Attitude and Practice of Self-Medication among First Year Medical Students. Med Princ Pract 2006; 15:270-5.
- Thadani S, Salman MT, Ahmad A.Knowledge, Attitude and Practice of Self-Medication among Second year undergraduate Medical students. J Rational Pharmacother Res 2013;1 (3):131-134.
- Shah SJ, Ahmad H, Rehan RB, Najeeb S, Mumtaz M, Jilani MH et al. Self-medication with antibiotics among non-medical university students of Karachi: a crosssectional study. BMC Pharmacology and Toxicology 2014 15:74.
- Omolase CO, Adeleke OE, Afolabi AO, Afolabi OT. Selfmedication amongst General Outpatients in a Nigerian Community Hospital. Annals of Ibadan Postgraduate Medicine 2007;5(2):64-67.
- Gutema GB, Gadisa DA, Kidanemariam ZA, Berhe DF, Berhe AH, Hadera MG,et al. Self-Medication practices among Health Sciences Students: The case of Mekelle

- University. Journal of Applied Pharmaceutical Science 2011; 10(1):183-189.
- Hughes CM, McElnay JC, Fleming GF. Benefits and risks of self medication, Drug Saf, 2001; 24: 1027–37.
- Shankar PR, Partha P, Shenoy N: Self-medication and non-doctor prescription practices in Pokhara valley, Western Nepal: a questionnaire- based study. BMC Family Practice 2002; 3: 17.
- Mehta RJ, Sharma S. Knowledge, Attitude and Practice of Self-Medication among Medical Students. IOSR Journal of Nursing and Health Science 2015; 4(1): 89-96.
- Bannerjee I, Bhadury T. Self-Medication practice among undergraduate medical students in a tertiary care medical college in West Bengal. J Postgrad Med 2010; 58: 127-131
- Henry J, Handu SS, Khalid AJ, Khaja ASO, Sequeira RP. Evaluation of the Knowledge, Attitude and Practice of Self-Medication among First-Year Medical Students. Med Princ Pract. 2006;15:270–275.
- Olayemi OJ, Olayinka BO, Musa AI. Evaluation of Antibiotic Self-Medication Pattern amongst Undergraduate Students of Ahmadu Bello University (Main Campus), Zaria. Research Journal of Applied Sciences Engineering and Technology. 2010; 2(1): 35-38.