

Practice of self-medication among 2nd year medical and dental students**Lakshmi Deepika Patchva*, Sowmya, Supriya Priyambada, Jagadeesh, Dwaraka**

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ABSTRACT

Background: Self-medication is the use of medicines by individuals to treat self-recognized symptoms and illness. It assumes a special significance among medical students as they are the future medical practitioners. Main purpose of this study was to determine the pattern of self-medication among 2nd year medical and dental students and to evaluate the factors associated with self-medication.

Methods: This was a cross-sectional study of self-developed, pretested questionnaire related to various aspects of self-medication. Study population which consists of 2nd year medical and dental students. Data was analyzed using MS-Excel and the results were expressed as frequency and percentages.

Results: A total of 180 students were assessed regarding their practice about self-medication, of which 37.7 % (n=68) were males and 73.3 % (n=132) were females. The mean age of the respondents was 19-21years. Among the participants practicing self-medication, majority (n=89, 49 %) followed allopathic system of medicine, followed by Homeopathic (n=39, 22%) and ayurvedic system of medicine (n= 51, 28 %).

Conclusions: Out of 180 respondents, the prevalence of self-medication among the study participants was 43.3% (n=78). Self-medication was proportionately more practiced by dental students. The preference pattern for self-medication was allopathy (49%), ayurveda (28%), and homeopathy (23%). 67% of the students were of the opinion that there was no need to consult the physician for simple ailments. Knowledge about appropriate self-medication was adequate, attitude towards self-medication was positive and the practice of self-medication was common and often inappropriate.

Keywords: Self-medication, Medical students, Dental students

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.¹ Self-medication consists of the use of manufactured or home-made drugs without a medical prescription seeking to treat symptoms or self-diagnosed health conditions.² Medicines for self-medication are often called 'non-prescription' or 'over the counter' (OTC) drug.

Self-medication is now increasingly being considered as a component of self-care.³ The prevalence rates are high all over the world; up to 68% in European countries, while much higher in the developing countries 31% in India, 59% in Nepal, in Pakistan around 51%.⁴ Studies revealed that there is an increase in trends of self-

medications particularly among the youth. Self-medication is the selection and use of medicines by individuals to treat self-recognized illnesses or symptoms.

WHO gives importance responsible self-medication, where individuals treat their ailments and conditions with medicines which are approved and available without a prescription, and which are safe and effective when used as directed. Responsible self-medication requires that, (a) Medicines used are of proven safety, quality and efficacy, (b) medicines used are indicated for conditions that are self-recognizable and for some chronic or recurrent conditions (following initial medical diagnosis).⁵

A cross sectional study done by Nitish Kumar et al, showed that out of 220 medical students included in the study, the prevalence of self-medication was 78.6% and

39.3% of the participants perceived that the supply of medicine without prescription by the pharmacist can prevent the growing trend of self-medication. Antipyretics were the most common drugs used for self-medication (74.8%).⁶

There are many factors influencing self-medication like socio-economic factors, life style, increased potential to manage certain illnesses through self-care, greater availability of medicinal products, and availability of healthcare and health professionals, exposure to advertisement; education and professional status.⁷

Self-medication has both advantages and disadvantages. Appropriate, self-medication relieves acute problems, time saving, economical, relieves the burden on the health care professional and therefore can provide time for more serious ailments which require more attention. Inappropriate self-medication can result in failure of therapy, adverse drug reactions, side-effects, prolonged suffering, development of bacterial resistance, drug dependence, economic loss, wastage of resources.⁸

Compared to general public many factors influence practice of self-medication among medical and dental students. They have easy access to information from various sources to self-diagnose and self-medicate.⁹ As they will be the future clinicians and health prescribers of the community, it is important to know and assess the level of their knowledge regarding different aspects of self-medication.

METHODS

The study was carried out after approval from the Institutional Ethics Committee. This was a study in which a self-developed, pretested questionnaire was designed to assess the practice of self-medication in students. Study population consisted of 2nd year medical students of Dr. PSIMS and RF, and 2nd year dental students of Dr. Sudha Nagaswarao Institute of Dental sciences, Chinnaoutpally, A.P. India.

The study included 180 students and were divided into 2 groups: Group 1: 2nd year medical students, Group 2: 2nd year dental students.

A brief description on the nature of the study and procedure to complete the questionnaire was explained. Consent was obtained before start of the study. Statistics was done by using MS Excel. Data was expressed as frequency and percentages.

RESULTS

A total of 180 students were assessed regarding their practice about self-medication, of which 37.7% (n=68) were males and 73.3% (n=132) were females. The mean age of the respondents was 19-21 years. Among the participants practicing self-medication, majority (n=89, 49

%) followed allopathic system of medicine, followed by homeopathic (n=39, 22%) and ayurvedic system of medicine (n= 51, 28%).

Table 1: Characteristics of the study population (n=180).

Questions	Yes N (%)	No N (%)
Is self-medication entirely safe	13 (7%)	168 (93%)
Do you prefer to take self-medication	79 (44%)	101(56%)
Do you suggest self-medication for non-medical people	19 (11%)	161 (89%)
Have you practiced self-medication	112 (62%)	68 (38%)
Were your symptoms relieved by taking self-medication	155 (86%)	25 (14%)
Did you experience any side-effects by taking self-medication	37 (21%)	143 (79%)

Among 180 students, 13 students (7%) think that it is safe to take self-medication. 44% of the students preferred to take self-medication. Only 19 students (11%) preferred to suggest self-medication for other non-medical people and 161 students (89%) did not preferred to suggest. The idea of relieve of symptoms by self-medication among the students was 155 (86%).

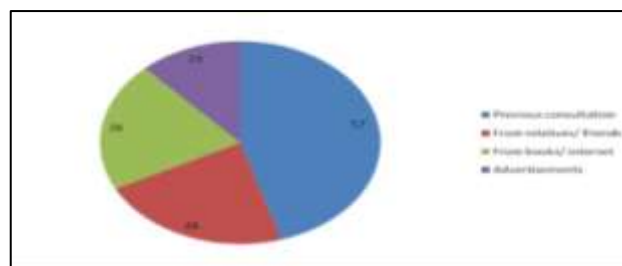


Figure 1: Source of information about drugs.

Table 2: Characteristics of the study subjects included in self-medication.

Reasons for self-medication	N (%)
Physician consultation fee expensive	14 (8%)
Lack of time to Consult	40 (22%)
No need to consult for simple ailments	120 (67%)
Unavailability of the health care professionals	8 (1%)

In this figure, it was observed that source of drug information 57% by previous consultation, 28% from friends/relatives, 26% from books/internet and 15% by advertisements.

In reasons for self-medication, 67% of the students were of the thought that there was No need to consult physician for simple ailments and 22% chose the option lack of time to consult as their reason.

Table 3: What are OTC (Over the counter) drugs.

Over the counter drugs	N (%)
Dispensed by the pharmacist on physician order	24 (13%)
Always dispensed by the pharmacist himself	34 (19%)
Procured by the patient himself without prescription	87 (48%)
Procured from relatives and friends	5 (3%)
No idea	31 (17%)

Table 4: Demerits of self-medication.

Demerits	N (%)
ADRs	27 (15%)
Lack of knowledge about dose	102 (57%)
Wrong medication can be fatal	100 (56%)
Disease aggravation	20 (11%)
Drug addiction	35 (19%)
Drug resistance	57 (32%)
Drug interactions	44 (24 %)

Table 5: Methods to prevent the growing trend of self-medication.

Perception	N (%)
Prevent the supply of medicines without prescription	77 (43%)
Awareness and education regarding implications of self-medication	89 (49%)
Enforcing strict rules regarding misleading pharmaceutical advertising	21 (12%)
Working towards making health care facilities easily available	15 (8%)
No opinion	18 (10%)

48% of students were of the opinion that over the counter drugs means drugs procured by the patients without prescription, 19% they are always dispensed by the pharmacist himself, 17% have no idea about over the counter drugs.

In this study, 56% of students thought lack of knowledge about dose, 56% wrong medication can be fatal, 32% drug resistance, 24% drug interactions etc were the demerits of self-medication.

It was observed that among the study population, 49% of respondents thought that awareness and education regarding implication of self-medication could prevent the growing trend of self-medication. 43% thought preventing

the supply of medicines without prescription could be a measure.

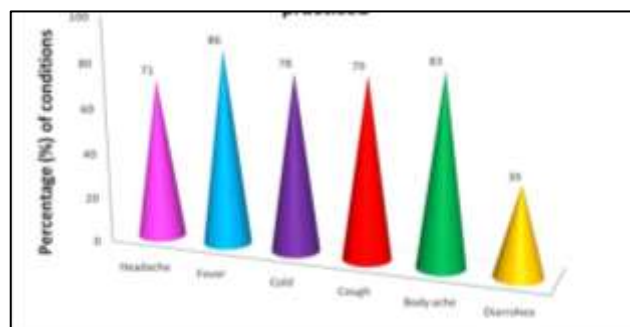


Figure 2: Common Conditions for which self-medication is practiced.

It was observed that, most common conditions for which self-medication is practiced was 86% for fever, 83% body aches, 79% cough, 78% cold, 71% headache and 39% diarrhea.

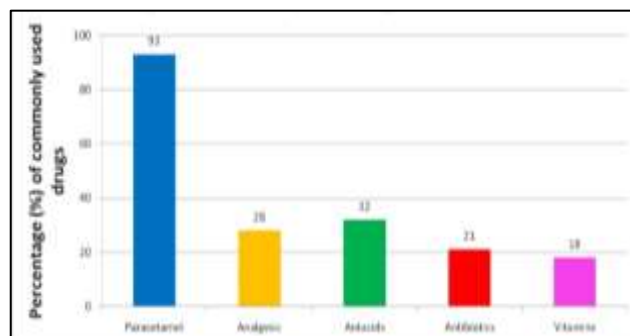


Figure 3: Commonly used drugs for self-medication.

Here was observed that, drugs most commonly used for self-medication are 93% paracetamol, 32% antacid, 28% analgesics, 21% antibiotics and 18% vitamins.

DISCUSSION

In the present study, the mean age group was 19-21years, when compared to similar study done by Jagadeesh et al. The age group was 19-21. The female participants in our study was 73.3% and male participants were 37.7%. In thadani et al study female participants were 68% & male participants were 32%.

In these study 86% were relieved of symptoms and only 21% experienced side-effects which can be compared with other studies like Jagadeesh et al.

In our study, 57% of the students said that source of drug information is by previous consultation. 7% of students think self-medication is safe, 11% preferred to suggest self-medication to non-medical persons. This might be due to knowledge of students about pharmacology.

In our study, 67% of the students were of the thought that there is no need to consult a physician for simple ailments. Compared to Jagadeesh et al where 72% preferred self-medication for the same reason.

In our study, 48% of the students had a knowledge about OTC drugs, when compared with similar study done by Kumari et al 38% of individuals had knowledge of OTC drugs.

Previous studies (like Nithin kumar et al Rashmi Kumari et al) reported that the most common conditions for self-medication is fever, body ache, cough and cold, headache etc., and the most commonly used drugs used for self-medication are paracetamol, analgesics, antacid's, antibiotics, etc.

According to our study, the various reasons for not favouring the self-medication, were lack of knowledge about dose, adverse drug reactions, drug addiction and drug resistance etc.

CONCLUSION

According to our study, among 2nd year medical and dental students most of them are practicing self-medication for common ailments. Most commonly used drugs for self-medication are paracetamol, analgesic, and antacids. Fever, body pains, headache, cough are the most commonly reported conditions for self-medication.

So, it is important for students to know about drugs, their uses, adverse effects and contraindications for their self-medication practice. It is only, then that responsible self-medication prevails to promote health.

Prevalence of self-medication is high in the educated youth, despite majority being aware of its harmful effects. There is a need to educate the youth to ensure safe practices. Strict policies need to be implemented on advertising and selling of medications to prevent this problem from escalating.

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Conflict of interest: None declared

Ethical approval: The study was approved by the Institutional ethical committee of Dr. PSIMS and RF

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