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ASSESSMENT OF SELF-MEDICATION PRACTICES AMONG NON-MEDICAL COLLEGE STUDENTS

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ABSTRACT

The aim of this study was to evaluate prevalence, knowledge and attitude towards self-medication practices among non-medical students for which a cross sectional survey was conducted in some non-medical colleges in Bhopal. After explaining the purpose of the study and taking informed consent, a questionnaire was provided to the students. We divided the questionnaire into three parameters, in first parameter, demographic characteristics of the students were noted, in another, the prevalence and practice of self-medication were noted, whereas the last section assessed the attitude of students towards self-medication. We collected the details about the medication utilized, ailments for which the drugs were consumed and reasons for self-medication. Accorging to the results of this study, the self-medication practices were very common among non-medical students in Bhopal. Further interventional studies are required to educate people and curb the self-medication practices in students as well as the general population.

KEY WORDS: Non-prescription medicine, students' survey, questionnaire, over the counter drugs

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INTRODUCTION

Self-medication or non-prescription drug use is a major problem worldwide which means obtaining and consuming drugs without the advice of a physician either for diagnosis, prescription or surveillance of treatment.[1] This includes acquiring medicines without a prescription, resubmitting old prescriptions to purchase medicines, sharing medicines with relatives or members of one's social circle or using leftover medicines stored at home.[1] Indiscriminate use of drugs in the form of self-medication can be potentially hazardous to the human beings. [2] Moreover, there is growing concern about irrational drug use that can be fostered by self-medication practices in the society as well as in health care workers. Previous studies have reported very high prevalence rates of self-medication in many countries like 68% in European countries 31% in India [2], 59% in Nepal [3], with rates going as high as 92% in the adolescents of Kuwait.[4] Self-medication practices are more common in women and in those who live alone, have a lower socioeconomic status, have more chronic ailments, have psychiatric conditions, are of younger age and in students.[5] Thirty six percent of the women reported herbal use during their pregnancy. [6] The prevalence of self-medication is not only high in the general population, but also it is very common in medical and non-medical university students. The majority of the students use at least one of the advertised products.[7] Potential risks of self-medication practices include: incorrect self-diagnosis, delays in seeking medical advice when needed, infrequent but severe adverse reactions, dangerous drug interactions, incorrect manner of administration, incorrect dosage, incorrect choice of therapy, masking of a severe disease and risk of dependence and abuse.[8] The adverse effects occur mainly with analgesic and anti-inflammatory drugs. Medication-overuse headache (MOH) is a clinically important entity and it is now well documented that the regular use of acute symptomatic medication by people with migraine or tension-type headache increases the risk of aggravation of the primary headache. [9] Further, antibiotics and potentially habit forming medicines are easily available to the common man. Antifungal self-medications for intra-vaginal use have been available in the United States for more than a decade. [10] This together with poor awareness leaves the layman uninformed about the potentially lethal effects of some of these drugs. There is paucity of literature regarding self-medication in India and no measures have been taken to address this problem. Drug surveillance studies of self-medication must be carried out that may permit a better analysis of the risk/benefit ratio of self-medication. [11] Hence, this study was undertaken to evaluate prevalence, knowledge and attitude towards self-medication practices among non-medical students.

MATERIALS AND METHODS

A cross sectional survey was conducted in some non-medical colleges in Bhopal. A self-administered, a semi-structured questionnaire was distributed amongst the participants after explaining the purpose of the study and taking informed consent. The study questionnaire was adapted from various similar studies conducted previously. [1,2,3,12] Any ambiguities in the questions or responses was removed before its implementation. The questionnaire was divided into three parts, one assessed the demographic details of the participants and other assessed the prevalence and practice of self-medication, while the last section dealt with the attitude of students towards self-medication. Information regarding the type of medication, illness for which the medication was used and reason for not consulting a doctor was collected. The questionnaire was formatted under the following headings.

1. Non-prescription medicine usage
2. Reasons for non-prescription medicine usage
3. When non-prescription medicine is used most recently
4. For which problem non-prescription medicine is used
5. Type of non-prescription medicine used widely
6. Form of obtaining non-prescription medicine
7. Status of reading prospectus prior to non-prescription medicine
8. How it is perceived

RESULTS

A total of 511 non-medical students participated in the study out of which 190 (37.18%) students agreed that they practiced self-medication. The socio-demographic characteristics are shown in Table 1 and the pattern of self-medication among non-medical students is depicted in Table 2, and Figure 1 shows the common types of Self-medication.

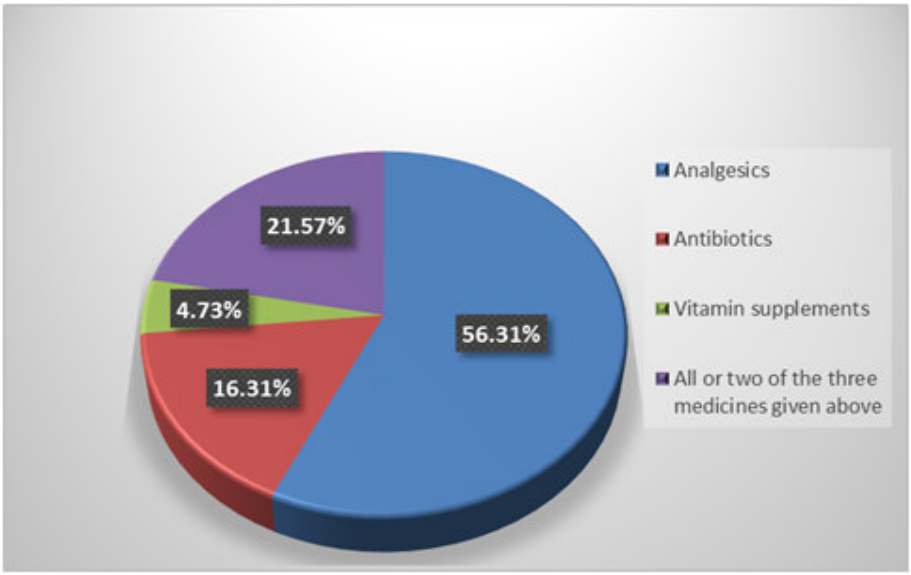
Table 1
SOCIO-DEMOGRAPHIC CHARACTERISTICS OF STUDY POPULATION

Socio-demographic characteristics		No. of students (n=511)	Percentage (%)
GENDER	Males	339	66.34%
	Females	172	33.65%
EDUCATION	BSc	401	78.47%
	MSc	110	21.52%
AGE	16-18 Years	228	44.61%
	19-21 Years	212	41.48%
	22-24 Years	71	13.89%

Table 2
PATTERN OF SELF-MEDICATION AMONG NON-MEDICAL COLLEGE STUDENTS

CHARACTERISTICS	RESPONSES	
	No.of students (n=190)	Percentage (%)
Reasons for Self-medication		
Not being in need for doctor in diseases widely seen	101	53.15
In urgent situations	73	38.42
Not having faith on the treatment of the doctor	03	1.57
Health organizations are crowded	11	5.78
Conditions prompting Self-medication		
Headache	69	36.31
Common cold	51	26.84
Menstruation ache	04	2.10
Stomach ache	03	1.57
In problems more than one	62	32.63
Type of Self-medication used commonly		
Analgesics	107	56.31
Antibiotics	31	16.31
Vitamin supplements	09	4.73
All or two of the three medicines given above	41	21.57
Form of obtaining non-prescription medicine		
Purchasing from pharmacy by asking pharmacist	101	53.15
Purchasing from pharmacy with recommendation of a friend	07	3.68
Purchasing the medicine prescribed previously by a doctor with the same complaint	30	15.78
Taking from among the medicines at home	06	3.15
Two, or more of the above forms	43	22.63

Figure 1
Types of Self-medication



A significant number of students in the study group (49.47%) used a non-prescription medicines within the past one month, 32.10% students used it within the past 6 months, while 17.89% used it within the past one year. Eighty-two percent students agreed that they used to read the prospectus prior to use of a non-prescription medicine, whereas 11.57% students did not read the prospectus. Thirteen percent students agreed that they get influenced by the advertisements for taking medicines, whereas 21.52% said that they do not get influenced by these kind of advertisements. Out of the 13% students who get influenced by these advertisements, 61.76% said that they confirm it with a health care personnel, whereas 35.29% students told that they do not confirm it. Sixty-two percent students agreed that they feel afraid of the side-effects of drugs if they take them without prescription of a doctor, while 26.84% said that they do not feel afraid of the side-effects of drugs on taking them without prescription.

DISCUSSION

This study was undertaken to evaluate prevalence, knowledge and attitude towards self-medication practices among non-medical students. A lot of previous studies have shown high prevalence of self-medication practices among medical students and general population [1,2,3,4,14,15]so we decided to carry out similar study in non-medical college students. According to this study, the most common reason of self-medication was not being in need, for a doctor in diseases widely seen and the most common form of obtaining medication was directly from pharmacist without prescription. In a developing country like India, pharmacists play a major role in fostering self-medication practices among the general population.[13] There is rampant use of drugs and food supplements or tonics of doubtful value that have easy access over the counter.[14] The conditions prompting self-medication in our study were headache, common cold, menstrual ache, stomach ache while many students opted non-prescription medicine for more than one problem. The classes of drugs that commonly used were analgesics, antibiotics and vitamin supplements. These findings are in accordance with the previous studies [1,3] in which it was found that headache was the most common symptom for which analgesics were used without a prescription. Although, the maximum number of participants agreed that they used to read the prospectus prior to use of a non-prescription medicine and very few get influenced by the advertisements, educational intervention is needed to curb the self-medication practice to avoid the

deleterious effects and risks associated with it. Furthermore, according to results of this study, it can be said that non-prescription medicine usage is widespread. About every third person.visiting the medical shop, was taking self-medication, which can be hazardous in case of drugs that cannot be dispensed without the prescription of registered medical practitioner.[2] Hence it is recommended that only "over-the counter" sale drugs can be sold without prescription while "prescription-only drugs" should not be allowed to buy or sale without prescription and also the use of self-medication be permitted only for minor ailments and in case of major diseases, a registered medical practitioner must be consulted. The limitation of this study was that it was not an interventional study, further interventions are needed in the form of education or counselling of students regarding the risks of self-medication. Another limitation was that the study population included only science students which can be overcome by including engineering, management and other university students as well.

CONCLUSION

The prevalence of self-medication practices is very high in the educated youth of India. It is the need of time to undertake certain measures to overcome the problem of self-medication which may involve awareness and education regarding the implications of self-medication and strategies to prevent the supply of medicines without prescription by pharmacies.

CONFLICT OF INTERESTS: Declared None.

REFERENCES

1. Syed Nabeel Zafar, Reema Syed, Sana Waqar, Akbar Jaleel Zubairi, Talha Vaqar, Mehrine Shaikh, et al, Self-medication amongst University Students of Karachi: Prevalence, Knowledge and Attitudes. J Pak Med Assoc, 58: 214, (2008).
2. Deshpande SG, Tiwari R, Self medication--a growing concern. Indian J Med Sci, 51: 93-6, (1997).
3. Shankar PR, Partha P, Shenoy N, Self-medication and non-doctor prescription practices in Pokhara valley, Western Nepal: a questionnaire-based study. BMC Fam Pract, 3: 17, (2002).
4. Abahussain E, Matowe LK, Nicholls PJ, Self-reported medication use among adolescents in Kuwait. Med Princ Pract, 14: 161-4, (2005).
5. Figueiras A, Caamaño F, Gestal-Otero JJ, Sociodemographic factors related to self-medication in Spain. Eur J Epidemiol, 16: 19-26, (2000).
6. Nordeng H, Havnen GC, Impact of socio-demographic factors, knowledge and attitude on the use of herbal drugs in pregnancy. Acta Obstet Gynecol Scand, 84: 26-33, (2005).
7. 7.Burak LJ, Damico A, College students' use of widely advertised medications. J Am Coll Health, 49: 118-21, (2000).
8. Ruiz ME, Risks of self-medication practices. Curr Drug Saf, 5: 315-23, (2010).
9. Calabresi P, Cupini LM, Medication-overuse headache: similarities with drug addiction. Trends Pharmacol Sci, 26: 62-8, (2005).
10. French L, Horton J, Matousek M, Abnormal vaginal discharge: what does and does not work in treating underlying causes. J Fam Pract, 53: 890-4, (2004).
11. Montastruc JL, Bagheri H, Geraud T, Lapeyre-Mestre M, Pharmacovigilance of self-medication. Therapie, 52: 105-10, (1997).
12. Gülbu Tanrıverdi, Filiz Kaplan, Selma Atay, RN, Non-Prescription Medicine Usage Prevalence in College Students Receiving Education in Branch of Medical Sciences. International Journal of Caring Sciences, 3: 22- 28, (2010).
13. Kamat VR, Nichter M, Pharmacies, self-medication and pharmaceutical marketing in Bombay, India. Soc Sci Med, 47: 779-794, (1998).
14. Greenhalgh T, Drug prescription and self-medication in India: an exploratory survey. Soc Sci Med, 25: 307-318, (1987).
15. Dr.Pavan Kumar Kulkarni, Dr.Maseer Khan* And Dr.A.Chandrasekhar, Self-medicationpractices among urban slum dwellers in south Indian city. Int J Pharm Bi o Sci (3): 81-87, (2012).