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Research Article

Study on Self-medication Practices among Second Year MBBS Undergraduates

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Abstract

Prevalence of self-medication is common among medical students but they have superficial medical knowledge. Also in India, many drugs are dispensed over the counter (OTC) without prescription from a registered medical practitioner. Hence, this study was planned to assess the knowledge, source of information and rational usage of drugs among 2nd year MBBS students. Data was collected with prevalidated questionnaire consisting of 15 questions related to various aspects like demographic data, prevalence and pattern of use of self-medication. A total of 106 students, 76 (71.7%) Females and 30 (28.3%) Males completed the study. History of self-medication is present in 80 (75.47%) students, 58 (76.31%) females and 22 (73.33%) males. Parents are the main source of drug information (58.75%), analgesics are the most commonly used class of drugs (73.75%), mild-illness is the most common reason for self-medication (61.25%). Other reasons for self-medication include emergency, time-saving, cost-effective. Common cold was the most common indication (26.25%) for self-medication. Common adverse effects during self-medication include dyspepsia, headache, vomiting. Our study reveals that prevalence of self-medication is high (75%) among MBBS 2nd year students with majority restricting the use to treat minor ailments with over the counter (OTC) drugs. Among the OTC drugs used, analgesics are the most common (73%). Medical students should be educated regarding rational use of drugs and dangers of OTC drug usage from the beginning of their curriculum.

1. INTRODUCTION

Self-medication can be defined as the use of drugs to treat self-diagnosed disorders or symptoms, or the intermittent or continued use of a prescribed drug for chronic or recurrent disease or symptoms.[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.[2,3]

Such practice is common since years. It is common not only in developing countries but also in developed countries.[4] Self-medication is reported to be quite popular among Indian medical students.[5]

The World Health Organization (WHO) has appropriately pointed out that responsible self-medication can help prevent and treat diseases that do not require medical consultation, and provides a cheaper alternative for treating common illnesses.[6,7] But improper use of self-medication can lead to many problems like wastage of resources, adverse drug reactions, worsening of existing pathology, drug dependence and antimicrobial resistance.[8] On the other hand, if done appropriately, self-medication can readily relieve acute medical problems, can save the time spent in waiting to see a doctor, may be economical and can even save lives in acute conditions. It is now accepted that self-care in the form of responsible self-medication can be beneficial for patients, healthcare providers, the pharmaceutical industry and governments.[9] WHO is giving stress that self medication should always be taught correctly and it must be controlled.[6]

For medical undergraduates, self-medication has special significance since they have very superficial medical knowledge. Also in India, many drugs are dispensed over the counter (OTC) without prescription from a registered medical practitioner. Hence, the present study was planned to know the knowledge, source of drug information and rational usage of drugs in 2nd yr MBBS students of KIMS.

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2. MATERIALS AND METHODS

This cross sectional questionnaire-based study was carried out among 2nd Yr MBBS students of Kamineni Institute of Medical Sciences (KIMS), Narketpally, Nalgonda Dist., Telangana, India.

Data was collected through structured, validated questionnaire which was filled up by students after being explained about the aim of study and being assured about confidentiality of all information.[10] Written informed consent was obtained from each volunteer prior to the study. The questionnaire included questions pertaining to indications, type of drug usage, number of drugs used, sources of drug information, reasons for favouring self-medication and knowledge of possible adverse effects.

2.1 Inclusion and Exclusion Criteria

- Students → who were studying in the MBBS 2nd year and who took self-medication during last six months were included.
- Students → who were not willing to participate in the study and who filled forms incompletely were excluded.

2.2 Statistical Analysis

Data was analyzed using MS Excel spread sheet and percentage of observations was noted.

3. RESULTS AND DISCUSSION

A total of 106 students, 76 (71.69%) Females and 30 (28.3%) Males completed the study. History of self medication is present in 80 (75.47%) students, 58 (76.31%) females and 22 (73.33%) males. The nationality of the subjects was Indian. Their age ranged from 17-25 years.

Present Study shows that self-medication is a common practice (75%) among MBBS 2nd Year students of KIMS. This agrees with the Bashir et al. study 2013.[11]

Parents are the main source of drug information (58.75%), followed by previous prescriptions (46.25%), literature (25%), seniors (13.75%), co-students (13.75%) and internet (8.75%) [Fig.1]. Probably, they have less knowledge but aware about problems with advertisements and exaggerated or false information on internet, although TV sets are available in their hostels and free unlimited access to internet is also available. Analgesics are the most commonly used class of drugs (73.75%) (Paracetamol is included in this class only). Multi-vitamins (27.5%), cough suppressants (26.25%), Antibiotics (25%), others like anti-diarrheals, proton pump inhibitors, antacids, anti-malarials, bronchodilators etc (19%) are the other class of drugs used for self-medication [Fig.2]. Gupta YK study 2008 [3] also observed analgesics as most common OTC drugs used among Indian medical students.

58.75% of students preferred single drug for self-medication during study period. 20% of students preferred two drugs, 5% of them three drugs, 10% of them four drugs and 5% of them preferred five drugs for self-medication [Fig.3]. Common cold was the most common indication (26.25%) for self-medication, followed by Fever (25%), Headache (18.75%), cough (13.75%), diarrhoea (8.75%), others like acidity, pneumonia, gastritis, asthma etc. (7.5%). [Fig.4]

Mild-illness is the most common reason for self-medication (61.25%). Other reasons for self-medication include emergency (19.52%), time-saving (12.98%), cost-effective (6.25%) [Fig.5]. Incidence of adverse effects is very less. Common adverse effects during self-medication include Dyspepsia (5%), headache (2.5%), vomiting (1.25%). It indicates their fair knowledge regarding advantages of self-medication, since self-medication is a cost effective and suitable alternative for the management of minor and well known diseases. Henry J et al. study 2006 [12] and Olayemi OJ et al. study 2010 [13] also observed similar reasons for self-medication.

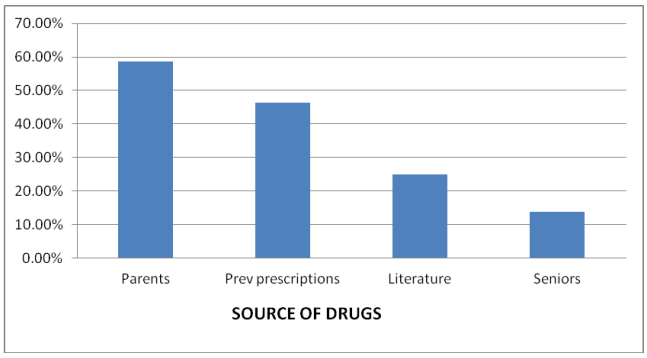

Fig.1: Analysis with respect to source of drug information used

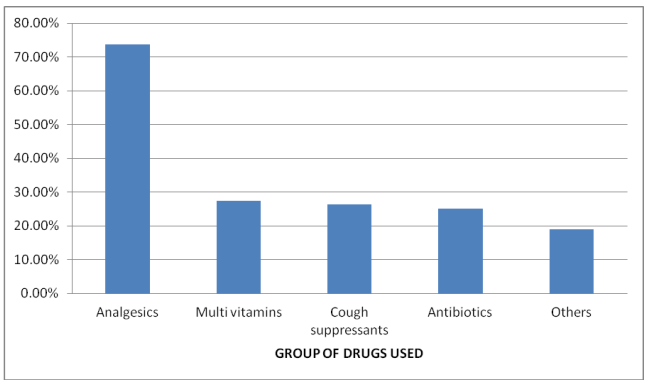

Fig. 2: Analysis with respect to group of drugs used for self-medication

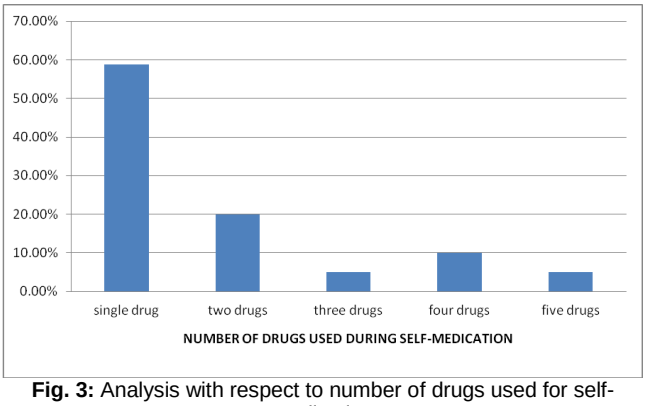

Fig. 3: Analysis with respect to number of drugs used for self-medication

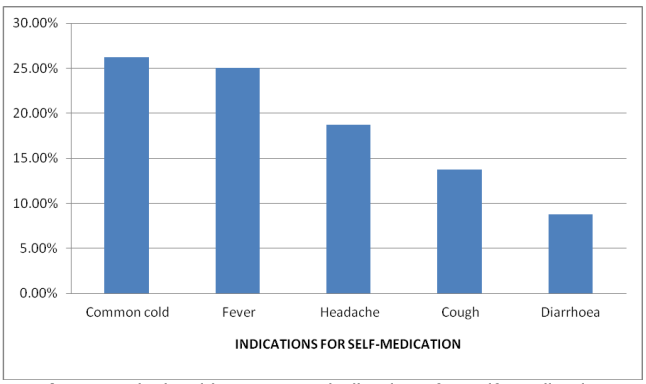

Fig.4: Analysis with respect to indications for self-medication

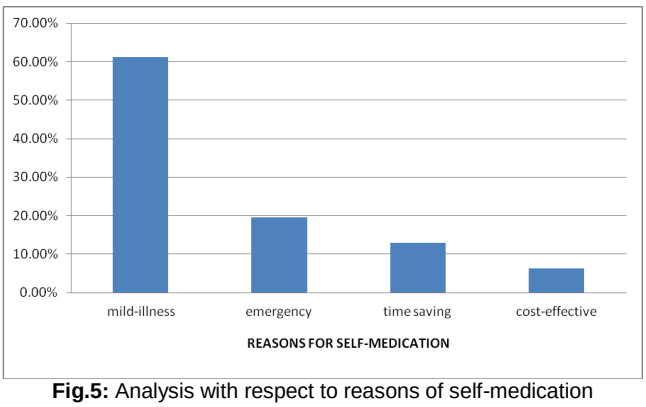

Fig.5: Analysis with respect to reasons of self-medication

4. CONCLUSION

Our study reveals that prevalence of self-medication is high (75%) among MBBS 2nd year students with majority restricting the use to treat minor ailments with over the counter (OTC) drugs. Among the OTC drugs used, analgesics are the most common (73%).

Medical students should be educated regarding rational use of drugs and dangers of OTC drug usage from the beginning of their curriculum. Hence, present study emphasizes the need for special guidance to be given to medical students with respect to self-medication.

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