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## Self-Medication practices among II M.B.B.S medical students in a tertiary care hospital – A cross sectional study

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#### Abstract

**Background:** Self-medication is 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. Many studies have also found self-medication is common in medical graduates. To this reason we evaluated the use of OTC drugs as self-medication practices among 2nd MBBS medical students in a tertiary care teaching hospital.

**Methods:** A cross-sectional questionnaire based study was conducted at tertiary care hospital, Andhra Pradesh. 100 participants with 2<sup>nd</sup> year MBBS students were the study group and study was conducted over the period of 3 months between June 2012 to August 2012. Institute Ethical Committee has approved the study protocol. Objectives and procedure of the study was explained to the participants and those who were willing to fill the informed consent form were included in the study. A feedback questionnaire covering various aspects of OTC drugs was distributed among the participants. The information pertaining to the pattern of OTC drugs use, reason and indication for use, list of drugs commonly used for self-medication were also included in the questionnaire. The filled questionnaire feedbacks were retrieved from the participants and analysed. Results were expressed in the form simple percentages.

**Results:** There was 100 students participated in this study, 73 were females and 27 males, all were in the age group of 18 – 22 years. Majority (88 %) of the participants were aware of OTC drugs and 86 % of participants knew the name of some drugs which fall under this category. 38% of the participants use OTC drugs rarely and 48% of participants once a month. Fever (50%) and headache (30%) are the most common ailments for using OTC drugs following for cold/cough (10%) and acidity (10%). the classes of commonly used drugs which were analgesics (60.30%), antacids (10.37%), vitamins (5%), anti-allergens (10.75%), anti-diarrhoeal agents (10.15%) and anti-emetic drugs (5.87%).

**Conclusion:** Majority of the medical students use OTC drugs in our study. Analgesics, antacids, and antihistaminic were the most common group of drugs used as OTC drugs. Easy availability, confidence in self-medication and information from internet, text books and seniors were the most common reasons for their self-medication.

**Keywords:** Self-medication, OTC Drugs, Medical Students

#### Introduction

Self-medication (SM) 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]. SM can be widely practiced worldwide both in urban and rural population including India, because various drugs are dispensed over-the-counter (OTC) without prescription which provides a low cost alternative for people [2]. A major shortfall of SM is the lack of clinical evaluation of the condition by trained medical professionals, which could result in missed diagnosis and delays in suitable treatments [3]. It is an essential issue as far as the health of an individual is concerned. The custom of SM must be based on authentic medical information to avoid irrational use of drugs which, in turn can cause wastage of resources, augmented drug resistance of pathogens and can lead to grave health hazards like prolonged sufferings, drug reaction and drug dependence. SM is now increasingly being considered as a component of self-care [4]. In recent years there has been an increasing trend in self-medication with over-the-counter (OTC) medicines available in pharmacies and in retail outlets. Self-medication assumes an exceptional significance among the medical students as they are the future medical practitioners and have a potential role in counselling the patients about the advantages and disadvantages of self-medication. Medical students vary from common public because they are well-exposed to the knowledge about drugs and diseases.

Prevalence of Self-medication was found to vary in medical students of different countries in earlier studies <sup>[5-9]</sup>. Many studies have also found self-medication (SM) is common in medical graduates <sup>[10-11]</sup>. To this reason we evaluated the use of OTC drugs as self-medication practices among 2<sup>nd</sup> MBBS medical students in a tertiary care teaching hospital.

### Methods

A cross-sectional questionnaire based study was conducted at Alluri Sitaramaraju Academy of Medical Sciences, Eluru. The overall participants were 100 2<sup>nd</sup> MBBS students. The study was conducted over the period of 3 months between June 2012 to August 2012. Institute Ethical Committee has approved the study protocol. Objectives and procedure of the study was explained to the participants and those who were willing to fill the informed consent form were included in the study. A feedback questionnaire covering various aspects of OTC drugs was distributed among the participants. The information pertaining to the pattern of OTC drugs use, reason and indication for use, list of drugs commonly used for self-medication were also included in the questionnaire. The filled questionnaire feedbacks were retrieved from the participants and analysed. Results were expressed in the form simple percentages.

### Results

Out of 100 students participated, 73 were females and 27 males, all were in the age group of 18 – 22 years. Majority (88 %) of the participants were aware of OTC drugs and 86 % of participants knew the name of some drugs which fall under this category. 38% of the participants use OTC drugs rarely and 48% of participants once a month. Fever (50%) and headache (30%) are the most common ailments for using OTC drugs following for cold/cough (10%) and acidity (10%). the classes of commonly used drugs which were analgesics (60.30%), antacids (10.37%), vitamins (5%), anti-allergens (10.75%), anti-diarrhoeal agents (10.15%) and anti-emetic drugs (5.87%). The reasons for using OTC drugs are different, majority (70%) confident in their treatment and 14% participants felt that they can save the time.

### Discussion

It would be more secure, those people using OTC drugs as self-medication practices, have sufficient knowledge about its dose, time of intake, side effect on over dose.

Dispensing pharmacy methods has to improve through patient education, managerial strategies. Health professionals have to expend some extra time in educating patients regarding the same. Improved knowledge and understanding about self-medication may result in rationale use and thus limit emerging microbial resistance issues.

These students have easy access to information from internet search, medical books, literature, drug indices and from other senior medical students, so they use drugs irrationally more commonly than general population and also being medical students, they can have more easily the medications than other general people from pharmacy.

Health professionals have to spend some extra time in educating patients regarding the same <sup>[13]</sup>. Our study results were also similar to Aritra Ghosh *et al.*, study <sup>[14]</sup>.

### Conclusion

Majority of the medical students use OTC drugs in our study. Analgesics, antacids, and anti-histaminics were the most common group of drugs used as OTC drugs. Easy availability, confidence in self-medication and information from internet, text books and seniors were the most common reasons for their self-medication. Majority of students are unaware of the adverse effects of the medications that they take themselves and suggest others. Proper medical education about the self-diagnosis and its medication along with implementation of stringent rules and regulations on their use should be made mandatory.

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