



RESEARCH ARTICLE

KNOWLEDGE, ATTITUDE AND PRACTICES OF 2ND YEAR MBBS STUDENTS ON OVER THE COUNTER DRUGS

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ABSTRACT

Background: Practice of using OTC drugs is very common among medical students. Since OTC drugs are more easily accessible to them, in this study we intend to analyze knowledge, attitude and practices of second year MBBS students.

Aims and Objectives: To assess knowledge, attitude and practices of second year MBBS students towards over the counter drugs, to determine most commonly used OTC drugs and to determine most commonly used over the counter drug.

Methodology: A cross-sectional questionnaire-based study was conducted among 2nd year medical students of J.N.M.C., Sawangi (Meghe), Wardha

Results: 1) Out of 150 subjects in the study 90% have used OTC drugs. Most commonly used OTCs were cough and cold medication (46 out of 150). Most common indications for use of OTCs is Cough and cold (41/150). 71% think the reason for using OTCs is familiarity with the disease. 59% use chose to use OTCs rarely. 88% of the subjects have not experienced any adverse reaction after taking OTCs. 71% subjects said they will suggest others to take OTCs. Source of information for OTCs out of 150 subjects is peers for 41%. 51% think they are aware of medico legal aspects of OTCs.

Conclusion: Self medication is a very common practice especially amongst medical students. It is of vital importance to create awareness regarding adverse effects and medicolegal aspects of OTC drugs.

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INTRODUCTION

Over the counter drugs (OTC) are the drugs that can be sold by the pharmacist without the prescription of registered medical practitioner (Nagaraj *et al.*, 2015). In India the term OTC is not used legally, the drugs which do not fall under list of prescription drugs can be sold over the counter, they are considered as non prescription drugs. The prescription drugs come under two schedules i.e. Schedule X and Schedule H. These drugs are only to be sold under the prescription by registered medical practitioner under the Drugs and Cosmetics Act 1945. Self medication is a common practice in India and around the world. Rise of sell of OTC drugs is rising worldwide and India is no exception. India stands on 11th position to consume OTC around the world and is expected to reach at 9th position in recent years. Several studies have shown that use of OTC drugs is twice as common as prescription drugs (Nagaraj *et al.*, 2015). In India use of OTC medication is very rampant despite presence of government regulations and rigorous campaigning by various national organizations (Yewale, 2014).

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In most cases, the pharmacies are run by businessmen rather than professional pharmacists (Dua *et al.*, 1994). It is very common in Indian local pharmacies to dispense medicines on demand even though valid prescription is not available with the patient (Shet *et al.*, 2015). This practice of self medication should be practiced after attaining in depth information about the drug, otherwise wasteful of valuable resources will continue to occur along with serious health hazard and morbidity. Practice of using OTC drugs is very common among medical students (Abay and Amelo, 2010). Medical students are the important part of any society, and high level of education and exposure to vast amount of knowledge make OTC drugs more accessible to them. Therefore in this study, we intend to analyze knowledge, attitude and practices of second year MBBS students since pharmacology is a core part of their curriculum.

Aim: To assess knowledge, attitude and practices of 2nd year MBBS students of over the counter drugs.

Objectives

- To determine most commonly used OTCs and Indication for use amongst 2nd year MBBS students.

- To assess awareness of medico legal aspects of OTCs.
- To evaluate occurrence of ADRs due to usage of OTCs.

MATERIALS AND METHODS

Study design: Cross-sectional study

Study Locus: Jawaharlal Nehru Medical College, Sawangi (Meghe), Wardha.

Study Population: Second year 5th semester students.

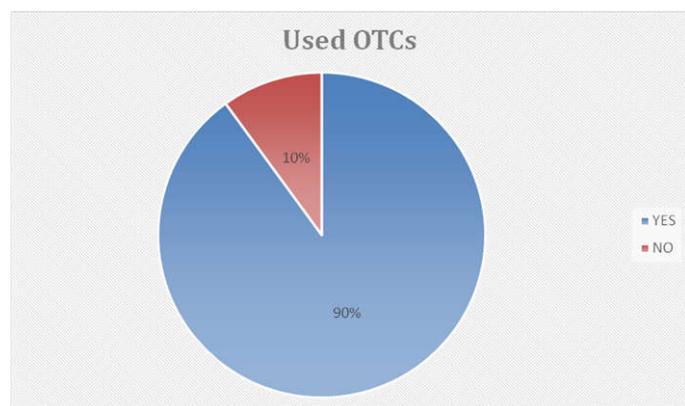
Sample size: 150

Data collection procedure

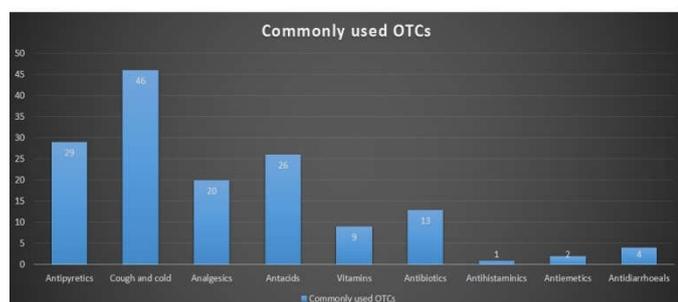
A questionnaire based cross sectional study was conducted in Department of Pharmacology at Jawaharlal Nehru Medical College, Sawangi (Meghe) among 2nd year MBBS students after the approval of institutional ethics committee. Two overlapping batches of 75 students were recruited. All participants were briefed about nature of the study. Written consent for participation in the study was obtained and a pre-tested semi-structured questionnaire administered to them. The information pertaining to the pattern of OTC drugs use, reason and indication for OTC drugs use, list of drugs commonly used for self-medication were included in the questionnaire. Investigators of the study were present all the time to provide assistance if needed. The data was collected from students in a pre structured format and was entered in excel sheet for proper statistical analysis.

Results

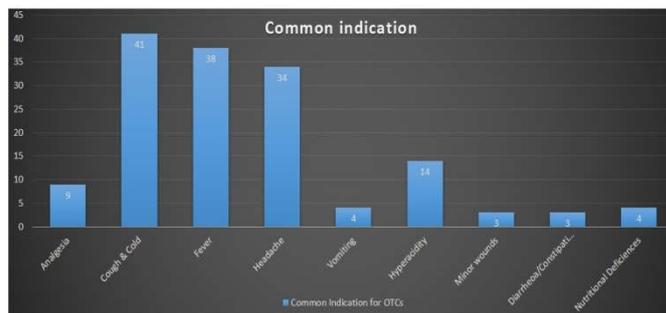
Out of 150 subjects in the study only 10% i.e. 15 people have never used OTC drug in last one year.



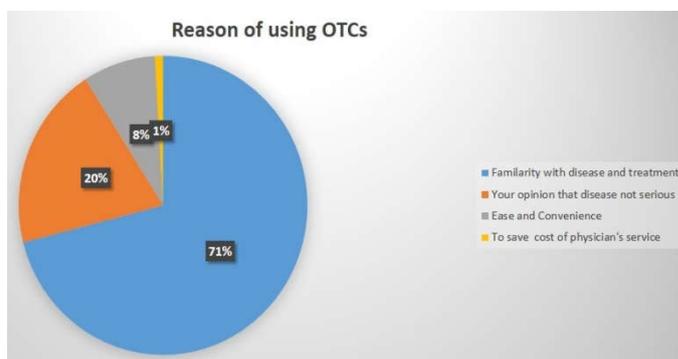
Most commonly used OTC drug out of 9 given options of commonly used drug 46 out 150 have chosen cough and cold medication, 29 have chosen antipyretics, 26 have chosen antacids and 20 have chosen analgesics and only other 19% have chosen other five options.



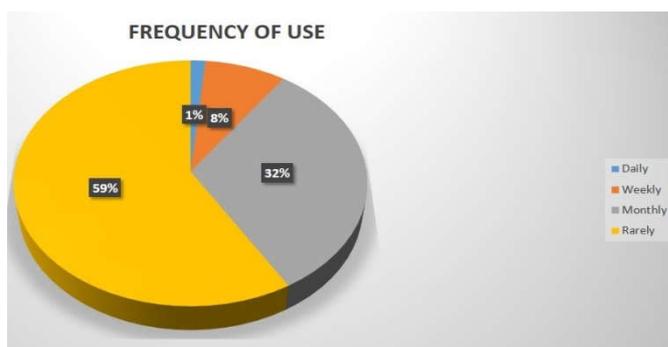
Most common indications for use of OTCs are 41 chose cough and common cold, 38 chose fever and 34 subjects's chose headache .Other 24% approx. chose other six out of nine options.



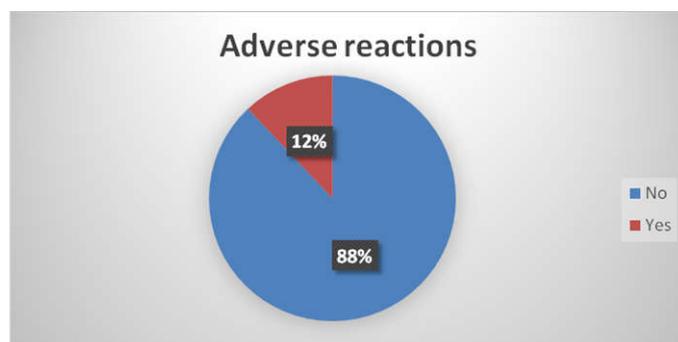
Out of 135 subjects who said they use OTCs 71% think the reason for using OTCs is familiarity with the disease, 20% have opinion that disease is not serious, 8% chose OTCs for ease and convenience and only 1% think of saving cost of physician's money.



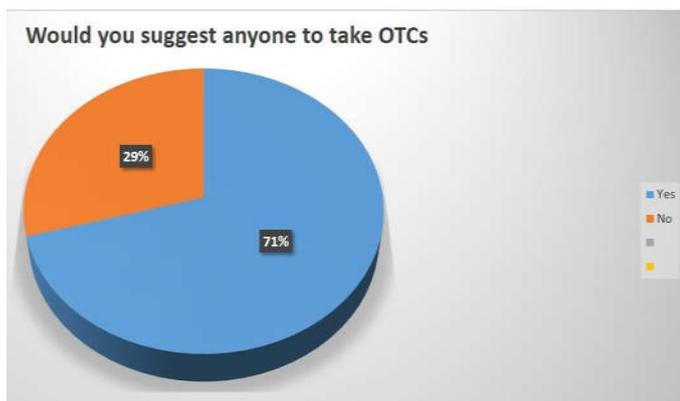
Out of 135 subjects 59% use chose to use OTCs rarely, 32% use it monthly and only 1% use it rarely.



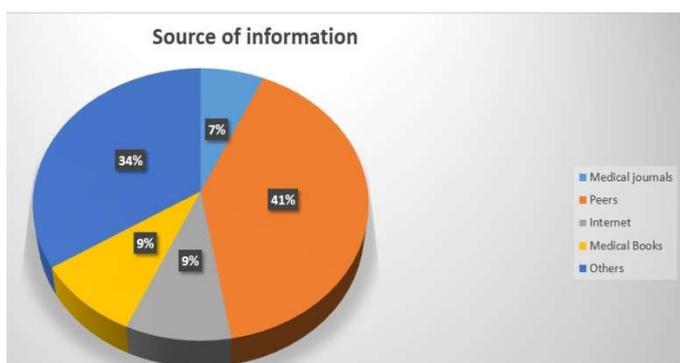
88% of the 135 subjects have not experienced any adverse reaction after taking OTCs and 12% experienced some kind of known adverse reaction.



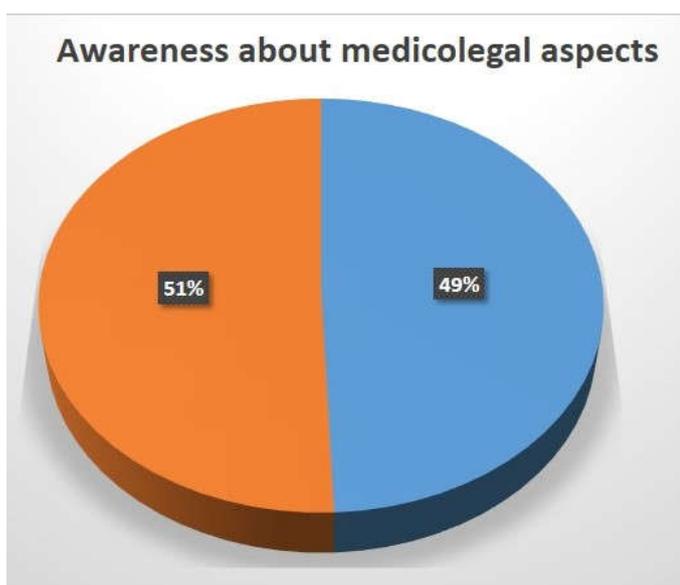
6)71% subjects out of 150 said they will suggest others to take OTCs and only 29% would never suggest others to take OTCs.



Source of information for OTCs out of 150 subjects is peers for 41%, Internet 9%, Medical books for another 9% Medical journals for 7% and other resources for 34%.



Out of 150 subjects 51% think they are aware of medico legal aspects of OTCs and 49% think they are not.



DISCUSSION

WHO considers self-medication as a part of self-care which helps efficient use of the burdened health care system with guidelines for the regulatory assessment of medicinal products for use in self-medication. Self medication has becoming an

interesting area of discussion in health care system. This cross sectional study found out that, Out of 150 students only 10% have never used OTCs other 90% have used it. This shows high prevalence of self medication among medical students. Previous study conducted by patil and et all in Karnataka has also shown similar results (Patil). Cough and cold medication was found to be most common drugs used over the counter while another study conducted by Ghosh et al at Burdwan Medical College and Hospital, Burdwan has found that antipyretics are commonest drug. 71% of the subjects who used OTCs are aware of the disease and the treatment for which they are using it, this is unique with this group of subjects as they are medical students and knowledge about drugs is easily available to them.12% of the subjects have experienced some kind of adverse reaction after taking OTC yet 71% subjects encourage use of OTCs. Despite the fact that 49% subjects are unaware of medico legal aspects of OTC drugs. Source of information was found to 41% by peers and 34% by medical journals, which is interesting as medical books are most easily accessible medium for information for medical students only 9% chose the option while study conducted by manu et al at AIMS B.G. Nagar has shown that media advertisements is the commonest source of information.

Limitations

This study is conducted over small sample size, no comparative groups are taken in consideration like students from different fields and this is not an interventional study as no information about medicolegal aspects and hazards of OTC drugs is provided.

Conclusion

Self medication is a very common practice amongst medical students, cough and cold medication, antipyretics and antacids are commonly used drugs, cough and cold, fever and headache are common indications. Many of the students are unaware of the medicolegal aspects of over the counter drugs but majority of them use it and would suggest others to use. Majority of students depends on knowledge of colleagues when it comes to self medication. Proper education and awareness about rational use of OTCs and knowledge about medicolegal aspects, hazards and adverse effects is the need of the hour, as these medical students are future practicing doctors of our community, and if they themselves have frivolous approach towards use of OTCs, they cannot serve the community effectively.

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