# SELF MEDICATION PATTERN, INCIDENCE AND FACTORS ASSOCIATED WITH IT, AMONG FIRST YEAR MBBS STUDENTS OF MEDICAL COLLEGE JAMMU

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**ABSTRACT:** Self-medication is quite common practice in general and particularly among medical students. Self-medication can be defined as obtaining and consuming medication without the advice of a clinician for treatment of an ailment. There can be many reasons for increased likelihood of selfmedication among the medical students like easy access and senior medical student's advice, easy access to physician's samples, because of the white coat, from pharmacist/chemist shops.1 However self-medication can be quite harmful and can be associated with significant morbidity and mortality. It could lead to various complications and side effects like-habituation and addiction, poisoning, hyper vitaminosis, antibiotic resistance and incorrect and delayed diagnosis, over diagnosis or under diagnosis, at times really serious and fatal consequences can occur. It results in wastage of resources, increase resistance of pathogens and can causes serious hazards like adverse drug reaction, prolonged suffering and drug dependence. This study was performed to assess and evaluate the incidence and awareness of self-medications among the medical students of first professional MBBS in medical college Jammu. A study on one hundred medical students of Jammu medical college was conducted to assess and evaluates the pattern of self-medication among these students. This study was done to know the frequencies and reasons and the pattern of self-medication among young medical students of Jammu region. A detail questionnaire was prepared and each student was asked to fill up the Performa and then the data was analyzed. It was found that self-medication is very common (90 %) and is comparable to studies from other parts of the world. For most of them the reason for self-medication was common cold. The result emphasizes the amount of problem in the society about self-medication and lack of awareness about side effects. Hence more strict regulations are needed to avoid more healthcare problems and have a responsible pattern of self-medication. **AIMS AND OBJECTIVES:** To determine the prevalence and pattern of self-medication among medical students of Jammu. To assess and evaluate the reasons, factors and problems related to selfmedications.

**KEYWORDS:** Self-medication, medical students, medical college Jammu, pattern and incidence.

**INTRODUCTION:** Self-medication is an age old problem prevalent world-wide. It is defined as the use of any medication or drug by the patient for the treatment of commonly self-diagnosed ailments without proper consultation and prescription by a clinician. Taking medications without consulting doctor for common ailments like fever, common cold, cough, allergy, as infection, acidity, headache, diarrhea, constipation etc.<sup>1</sup> These medications are generally available over the counter (OTC). Essentially use of medication by a patient on his own initiative or on the advice of chemist or any other layman instead of consulting a medical practioner, is called as self-medication.

The prevalence of self-medication depends on many factors like nature of disease process, educational qualification of person, non-availability of the health care professional and facility. Chronicity of disease, poverty ignorance about the side effects and misbelieves, easy availability and supply of drugs from informal sectors like open pharmacies and quacks, illegal purveyors of drugs (non-licensed sellers in the market) etc.<sup>2</sup> There can be many reasons for increased likelihood of self-medication among medical students like easy access and senior student's advice, easy access to physician samples, from pharmacist/chemist shops.<sup>3</sup>

Though responsible self-medication can be beneficial to some extent and can be helpful but people should be properly educated about the practice of self-medications to avoid the serious harmful effects caused by such practice.<sup>2</sup>

Inappropriate, irrational and irresponsible use of medication can result in wastage of resources serious adverse reaction and prolong sufferings.<sup>2</sup>

Despite of growing interest of research in this area little is known about self-medication among various regions especially in the developing countries.

There are not many systemic research studies available about this part of the world especially in Jammu.

Therefore we believe that this research study will show the impact of this problem in medical students in particular and hence will reflect the amount of this problem in general population as well. Therefore the necessary precaution, control and awareness can be initiated by the concerned authorities as well as the people at large.

**MATERIAL AND METHODS:** 100 medical students of first professional MBBS of Govt. Medical College Jammu were involved in the study, they were in the age group of (18-20 years) a preprepared questionnaire Performa comprising of open and close ended questions was given to each student.

Prior to answering the questionnaire the students were briefly explained about the intention of this study and their verbal consent for participation in this study was taken, also the definition of self-medication was told to them.

The choice of questions was based on various previous studies. Questions were objective and structural in nature.

There were total 10 of questions.

Students were asked not to write their name or roll number on the questionnaire sheet to ensure full anonymity.

On completion of the questionnaire the data was organized, tabulated and analyzed.

Descriptive analysis of various aspects of self-medication was done.

Sample questionnaire Performa for the study. Students are supposed to encircle the answer appropriately

- 1. Age.....
- 2. Sex....Male/female.
- 3. Have you ever taken any of medication of your own without a prescription from doctor ....Yes/No

- 4. Where did you get these medications from....Chemist/pharmacy,
- 5. Are you aware of the side effects of these self-medications... .... Yes/No
- 6. Do you always read the information leaflets before taking any of these medications...Yes/No
- 7. Do you take any advice from anyone before taking such medications......Yes/No
- 8. Why do you take self-medications...... Cost saving/Convenient/Time saving
- 9. What was the common reason for use of these medications............. Headache/Pain abdomen/Acidity/Fever/Common cold/Cough/Vomiting/ Diarrhoea/Backache/Sore throat/Skin problem/allergy/toothache/motion sickness
- 10. Most common type of self-medications used.......Paracetamol/analgesics/antacids/muscle relaxant/cough syrup/anti-cold/anti-emetics/anti-allergic/anti-diarrhoeal/anti-spasmodic/antibiotics/calcium/multivitamin

**RESULTS:** A total of 100 medical students of first year voluntarily participated in this study, out of which 52 were males and 48 were females. Their age range was (18-20 years).

Out of 100 participants 88 students (88%) confessed taking self-medication at some stage and the most common source of self-medication was the chemist shop. Majority of these students (95%) were not aware of any side effects of the self-medications and almost all of them have never read the information leaflet before using these self-medications.

However, one important positive aspect about this study was that 60% of them have asked for senior's advice before taking self-medications. Most common reason 90% for taking self-medications and not going to the doctor was convenience of self-medication and because of lack of time and not the cost saving. In this study it was found that most common reason for taking self-medication was common cold, followed by acidity and then fever and most common medication was ant-cold (OTC) medicine, followed by antacids and then paracetamol.

**DISCUSSION:** Self-medication is becoming an important area within healthcare. Self-medication is defined as use of drugs or medication without proper prescription, guidance or follows up by clinician.<sup>4</sup>

The pattern or type medication used is an important health indicator of any population. The knowledge about the medication pattern helps to determine the prevalence of a particular disease pattern in a particular population and hence knowledge of self-medication is quite important. Excessive or inappropriate use of self-medication may lead to delay in diagnosis, leads to antibiotic resistance; drug induced illness, more drug interactions and so will affect quality of life.

The common reasons for self-medication can be readily availability of medicines over the counter (OTC), convince, no waiting time at clinic or hospital.

There are various factors which influence such practice including education level, family background, society, and legalities, availability of drug and health care facilities as well as advertisements.

Self-medication is a significant problem, the prevalence of self-medication in this study was found to be quite common (%), compared to 30% in Mexico,97%in Hong Kong, 26.3% in Portuguese people.<sup>5</sup>

In another study it was found that prevalence of self-medication was higher among educated class<sup>9</sup> as compared to uneducated class. It also showed that one of the major reasons for self-

medication is use of previous prescriptions; another reason is of television advertisements.<sup>6</sup> Friend's suggestions were responsible for good 17% cases. Most common reason for self-medication is the people's belief that they can take good care of themselves.

In this study prevalence of self-medication among the medical students of first professional of Jammu medical college was found (90%). The data and results of study demonstrated that self-medication is quite common among medical students of Jammu region. Our study didn't reveal significant difference of self-medication among male and female students. Thus results of this study are in agreement with other studies.<sup>3,4,7,8,9</sup>

In our study though the most common cause of self-medication was common cold.

The most commonly used medication was found to be anti-cold followed by, antacids and then paracetamol. Topical application still form an important part of self-medication. The commonest condition that led to self-medication was common cold Followed by acidity and then fever, similar results were also found in this study conducted in the Hong Kong.<sup>9</sup>

In a another study the reason for use of self-medication it was found that because they felt that repeated consultation proves costly, rest of them didn't have adequate time to consult doctor. So consultation of doctor or going to hospital is only when the patient is serious or not getting better by self-medication.<sup>10</sup>

However there are certain advantages of responsible self-medication as being promoted by WHO (World health organization) for trivial diseases to save time and resources.

**CONCLUSION:** The questionnaire used to evaluate self-medication was quite useful to know the pattern of medication used.

Though it has been found that self-medication among medicos of Jammu medical college is quite common but yet this is within the range as reported from other studies in literature about this topic.

Anti-cold medicine was most commonly used for self-medication.

This study shows that self-medication is quite prevalent among young medicos in this part of the world. Majority of them were not aware of the adverse effects.

There was inadequate knowledge regarding the appropriate medication choice, the correct dosage and the associated side effects.

A significant number of students were unaware of the potential side effects and harm caused by these medications.

So better education is needed for public at large and students in particular to avoid complications arising from this practice. More over better legislation and there true execution is needed as well.

Therefore the potential problems of self-medication should be emphasized to all the students' especially medical students.

Self-medication is highly prevalent among medical students, and we believe it could well represent the incidence and pattern among general population of the Jammu region.

However we suggest a larger study about this problem should be conducted in this region to know the exact prevalence, pattern of self-medication.

We also suggest that population should be made aware of the problems and dangers associated with it.

People should also be made aware of the responsible self-medication through proper education, advertisement (Print and electronic media).

More strict and stringent laws are needed to avoid the problems associated with self-medication.

**LIMITATIONS OF THIS STUDY:** Small sample of only one age group and only medical students were involved in this study. Larger randomized controlled study of whole population involving various cross section of the society are needed to know exact incidence of self-medication pattern among Jammu region.

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