

Self-Medication Practices among Medical Students of Allama Iqbal Medical College

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Abstract:

INTRODUCTION:

Self-medication is the use of medication by people without prescription, orientation or supervision of physician or dentist using their own initiative. It includes acquiring medicines without prescription, taking medication on recommendation of relatives or consuming leftover medicines already at home.

Objective:

Our study focuses on the prevalence of self-medication among medical students of Allama Iqbal Medical College, Lahore and the effects that maybe caused by that.

Method:

A cross-sectional study was done and data was collected by the distribution of 300 structured questionnaires using the convenient sampling technique. The data was analyzed by using SPSS v17.0 and results were generated.

Results:

A total of 300 medical students were included in the study. Most of the students (75%) used self-medication to not to bother about minor illness. Males most commonly used antibiotics (63%), while females most commonly used pain-killers (91%).

Drugs were obtained mostly from the pharmacies (68.33%). (37%) used it for fever and pains while (42%) used it for flu, diarrhea and constipation in addition to fever and pains. Most of the students were well aware of the risks of self-medication and (66%) didn't complain of any complications.

Conclusions:

Self-medication is quite prevalent. Unauthorized use of drugs might cause complications. Thinking of ailments as minor mostly caused self-medication. Drugs are easily available without prescription.

Key words:

Self-medication, medical students.

INTRODUCTION:

Self-medication is the use of medication by people without prescription, orientation or supervision of physician or dentist using their own initiative^{1,2}. It includes acquiring medicines without prescription, taking medication on recommendation of relatives or consuming leftover medicines already at home³. When it comes to their own health, doctors and medical students behave irrationally towards self-medication⁴.

Self-medication is a global phenomenon. It is quite prevalent in both

developed and developing countries. Its incidence, however, is higher in developing countries. This trend is due to the educational background of the countries⁵. Medical students practice self-medication due to their increased medical knowledge⁴. The prevalence of self-medication in medical students globally is, 92.3% in Slovenia⁶, 86.4% in Brazil¹, 67.4% in Germany⁷, 76% in Greece⁴ and 70% in Ghana⁵.

The facts and figures in Asian countries show that self-medication is pretty common in these countries. Students consult their text-books facilitated by the easy availability of drugs⁸. It is also influenced by factors such as family, society, law and exposure to advertisements⁹. The main indications for self-medication was respiratory problems (73.3%), headache and fever, cough and cold, GIT infections and mouth and throat infections^{10,11}. Prevalence of self-medication in Egypt was 55%¹², 80.9% in Malaysia¹³, 47.8% in China¹⁴, 76.6% in Iran⁹, 92% in India⁸ and 86% in Sharjah¹⁵. Penicillins, especially amoxicillin, were most commonly used all over. Females practiced it more commonly^{7,16}. Drug resistance is being reported¹⁵. Acetaminophen and Codeine were most commonly used in Iran with Amoxicillin².

Use of self-medication in Pakistani students is alarmingly high. In Pakistan, the problem is magnified by the fact that almost all prescription only medications are also available over the counter without doctor's prescription². The prevalence in Islamabad students was 40%². Commonly used medicines were analgesics (88.3%), antipyretics (65.1%) and antibiotics (35.2%).

Eighty seven percent of students thought self-medication could be harmful and 82.5% students thought that it was necessary to consult a doctor before taking a new medicine³. WHO has stated that responsible self-medication can help prevent minor ailments and common illnesses^{3,17}. Self-medication was most commonly used for headache, flu and fever³. Pain-killers and sleeping-pills are commonly used²⁰. Prevalence of self-medication is high in the educated youth, despite majority being aware of its harmful effects¹⁷. Prevalence of self-medication in students of Karachi was 76%³. Although, resistant bacteria are increasing day by day and practice of self-medication should be discouraged, but, still an optimistic approach is not hazardous; when one knows for what complaint which medicine is to be used¹⁷.

OBJECTIVES:

The objective of this study is to explore the practices of self-medication prevailing among the medical students of Allama Iqbal Medical College and to determine different attitudes and behaviors of students regarding this practice. This study also aims at determining different sources of drugs and their complications and hazards found in the students.

OPERATIONAL DEFINITION:

Self-Medication: Self-medication is a human behavior in which an individual uses a substance or any exogenous influence to self-administer treatment for physical or psychological ailments.

Drug: A medicine or other substance which has a physiological effect when ingested or otherwise introduced into the body.

Minor Illness: It is any condition which is self-limiting and does not prevent the patient from carrying out their normal functions for more than a short period of time.

Pharmacy: A store where medicinal drugs are dispensed and sold.

Risk: A situation involving exposure to danger.

Complications: A secondary disease or condition aggravating an already existing one.

Allopathy: The treatment of disease by conventional means, i.e., with drugs having opposite effects to the symptoms.

MATERIAL AND METHODS:

STUDY DESIGN:

It is a cross-sectional study.

STUDY SETTING:

Allama Iqbal Medical College and Jinnah Hospital, Lahore

DURATION OF STUDY:

Three months

SAMPLE SIZE:

300 students

SAMPLING TECHNIQUE:

Non probability convenient sampling

SAMPLE SELECTION:

Inclusion criteria:

- Medical student of AIMC
- Both genders
- Both boarder and day-scholars

Exclusion criteria:

The students absent at the time of data collection and the students already taking prescribed medication.

DATA COLLECTION PROCEDURE:

The data was collected from 300 medical students of AIMC through the distribution of a structured questionnaire.

DATA ANALYSIS PROCEDURE:

Data was analyzed using SPSS v17.0 and frequency tabulation and percentages were generated for variables.

RESULTS:

A cross-sectional study was conducted amongst the medical students of Allama Iqbal Medical College (AIMC), Lahore. The number of students participated in our study was 300. All the students participated were 18-25 years of age. They included from 1st year to final year medical students.

Students when asked about why they used self-medication answered by saying mostly ((75%) males and (73%) females), they did so to not to bother about minor illness followed by to save time ((39%) males and (30%) females). More of the male students did it to save money (21% in comparison to 8% of females). Nearly equal proportion did it to avoid seeing a doctor.

When asked about what type of drugs they used commonly the results were quite amazing among males and females. Most of the males admitted using pain-killers (55%) in comparison to (91%) of the females. Antibiotics use was (63%) in males while (22%) in females. Use of anti-allergics was more in males (30%) than in females (11%).

A small percentage of students also admitted using anti-depressants (7% in males while 5% in females).

Most of the students got those drugs from pharmacy (68.33%), while (14.33%) of students admitted getting the drugs from their friends followed by (9.67%) from street shops and (7.67%) of students got their drugs from relatives.

On inquiring about for what they used self-medication, students had varying replies. (37%) used self-medication for fever and pains, (15.67%) of students used self-medication for flu, diarrhea and constipation, while (42%) of the students said they used self-medication for all the above indications. (5.33%) of students admitted using drugs for anxiety and depression.

This study indicates (37%) students were well aware of risks of self-medication, (32.7%) knew a little bit about risks, (19.7%) were not sure about the risks and (11.00%) did not know about the risks corresponding to Table 1.

It was indicated in our study that (66%) students didn't complain of any complication, (18%) said that it caused complications sometimes, (7.3%) often complained of complications, while (8.7%) always had complications corresponding to Table 2.

Table 1:

Are you aware of the possible risks of self-medication?

Construct	Frequency	Percentage
Yes	111	37.0

A little bit	97	32.3
Not sure	59	19.7
No	33	11.0
Total	300	100.0

Table 2:

Does self-medication cause you any complications?

Construct	Frequency	Percentage
No	198	66.0
Sometimes	54	18.0
Often	22	7.3
Always does	26	8.7
Total	300	100.0

DISCUSSION:

Our study explored the practices of self-medication among the medical students of Allama Iqbal Medical College, Lahore. It is indicated in our study that students preferred doing self-medication on advice of friends and relatives (17.32%) in comparison to (16%) indicated in a study done in Islamabad. Students preferred treating themselves when they thought of their problem as minor ailment (74%) in comparison to (34%) as indicated in the study done in Islamabad. Most commonly used mode of self-medication was allopathic (72%) in comparison to (94%) in the study done in Islamabad. So, our results were quite

consistent with the study done on medical students in Islamabad.

The most common symptoms that led students get indulged in self-medication were (fever and pains 37%), (flu, diarrhea and constipation 15.67%), while (42%) responded with self-medication involving any of the above symptoms. Two different studies done in Karachi also show consistency with our study, with majority of the students using self-medication in a relatively consistent number indicated in our study for the given ailments.

Our study also indicates that most of the students use self-medication when they think that the ailment is minor (74%), to save time (35%) and to save money (15%). Two studies done previously in Karachi also give quite consistent results.

CONCLUSION:

The practice of self-medication is alarmingly high in medical students. Pharmacies remain the biggest source of drugs. Painkillers and antibiotics are most commonly used drugs. A majority of students use self-medication to not to bother about minor illness and to save time. Most of the time self-medication does not cause complications in students according to our study. Proper check and balance is needed to avoid any complications and to avoid the excessive use of drugs.

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