Research Briefs

Self medication among university students of Islamabad, Pakistan – a Preliminary Study

Azhar Hussain1, Asifa Khanum2

1Hamdard Institute of Pharmaceutical Sciences, Islamabad, Pakistan
2Independent Consultant, Islamabad, Pakistan.
E-mail: azhar_26@yahoo.com

Key words: Pakistan, self medication, students

Introduction

Self-medication is the use of nonprescription medicines by people through using their own initiative1. It has also been defined as obtaining and consuming medication without professional supervision, which comprises of acquiring medicines without a prescription, purchasing drugs by resubmitting/ reutilizing an old prescription, taking medicines on advice of relative or others, or consuming left–over medicines already available at home2. Recent development of the pharmaceutical industry contributes to a widespread availability of over-the-counter (OTC) medications – which in turn promote self–medication. The most commonly available OTC medications are pain–killers, cough and cold remedies, anti–allergy medicines, vitamins and energy tonics. Although these medications are considered risk–free and useful for the treatment of common health problems, their excessive use can also lead to serious side–effects and unfavorable reactions.

In Pakistan, the problems of OTC use outlined above are magnified by the fact that almost all prescription–only medications are also available OTC without a doctor’s prescription. However, very few studies addressing the issue of self–medication have been carried out in Pakistani context.

Study background:

The objective of this study was to evaluate the prevalence of self–medication among under–graduate students in Islamabad. A cross sectional study was designed and a convenience sample of 50 students was selected from (1) Comsats University, (2) Baharia University, (3) Air University and (4) Shaheed Zulfikar Ali Bhutto Institute of Science & Technology (SZABIST). Students representing the departments of engineering and management sciences, willing to participate and who used at least two doses of any medicine during the last six months were included in the study.

A questionnaire was developed to collect data on self–medication, type of medicines used, source of information...
about the drugs, and reasons of self medication.

Results

It was found that out of total 200 students (females: 41, males: 159), self-medication among female students was 41.5% and males was 42.1% with an overall average of 42%. The prevalence of self-medication among engineering students was 43% whereas it was 41% in the students of management sciences.

Amongst 84 students who self medicated, the most common source of drug information was advertisements (35.7%). Previous history of the use of the same medication (23.8%) and advice by salesman (other than qualified pharmacist) at drug store (23.8%) were the other main sources. Advice from family, friends or relatives influenced 16.7% students to self-medicate. In case of minor ailments, nearly 34.7% students prefer treating themselves.

Twenty six percent (26%) of the students mentioned that they consume the same medicines for the same illness (without referring to the physician) if they have previously been satisfied with the outcome. Among reasons to self medicate were lack of time (24%) and self medication as a cheaper source of treatment (14.7%). Most commonly consumed medicines were modern drugs (93.5%), homeopathic drugs (4.5%) and herbal medicines (2%).

Discussion

On the one hand self-medication gives more freedom to patients in taking care of minor ailments. Self medication makes consumer more health conscious, reduces treatment burden on health care facilities and curtails the cost and time of gaining access to treatment. On the other hand, self medication increases risks such as excessive use of medication, extended duration of consumption, incorrect diagnosis, drug interactions and polypharmacy.

The prevalence of self-medication among university students has been reported as 45% in Turkey 3, 88% in Croatia 4 and 94% in Hong Kong 5. A study undertaken in 1995 6 in Pakistan determined that the prevalence rate of self-medication was 51% and a recent survey calculated the prevalence of self medication among university students in Karachi as 76%2.

Prevalence of self-medication among university students from Islamabad is not as high as that reported for students from Karachi; however 41% prevalence rate still signals the need for policy and regulatory interventions.

A previous history of using the same medication or adequate past experience with the medicines for any particular symptom were the most commonly reported drivers for self-medication in Pakistan2,6. Wide advertisement of medicines and consulting with nonqualified salespersons at pharmacy carries the risk of erroneous judgment which ultimately can increase the possibility of experiencing different after-effects of medicines.

Conclusions & Recommendation
The prevalence of self medication among university students was found to be around 40% which is quite high.

Strict measures are needed to monitor advertisements of medicines both in print and electronic media. The possibility of having access to medicines not listed as OTC drugs should be minimized by taking appropriate monitoring measures including implementing effective legislation.

There is also a need to explore the possibility of developing partnerships between physicians, pharmacists and consumers to educate and disseminate information on self-medication so that threats can be minimized.

Also, this is a preliminary study and more in-depth studies are required to evaluate the situation.

References:


Acknowledgment
We thank Mr. Taimoor Fazil who was a student at the Hamdard Institute of Pharmaceutical Sciences, Hamdard University, Islamabad, Pakistan.