



**Original Article**

**ASSESSMENT OF SELF-MEDICATION AMONG  
MEDICAL STUDENTS**

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**ABSTRACT:**

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. The most widely self-medicated substances are over-the-counter drugs used to treat common health issues at home, as well as dietary supplements. These do not require a doctor's prescription to obtain and, in some countries, are available in supermarkets and convenience stores. This cross-sectional study was conducted in different medical colleges of Punjab and one hundred and thirty-two medical students from different classes residing in

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the hostels were included through a convenience sampling method. A total of 132 students participated in the study. Mean age was  $22.23 \pm 1.89$  years with an age range of 20 to 26 years. Fifteen (11.36%) students never had self-medication. A total of 117 (88.64%) students experienced self-medication due to different reasons. Regarding the frequency of self-medication 70.23% responded that they do it frequently. When asked about the adverse effects of self-medication 69.62% students never experienced any side effects after self-medication.

**Keywords: Self-medication, medical students.**

#### **INTRODUCTION:**

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. The most widely self-medicated substances are over-the-counter drugs used to treat common health issues at home, as well as dietary supplements. These do not require a doctor's prescription to obtain and, in some countries, are available in supermarkets and convenience stores.

Products are marketed by manufacturers as useful for self-medication, sometimes based on questionable evidence. Self-medication is often seen as gaining personal independence from established medicine, and



it can be seen as a human right, implicit in, or closely related to the right to refuse professional medical treatment. Self-medication can cause unintentional self-harm. It is a routine socio-economic issue increasing day by day. It includes the usage of medicines which have prescribed earlier for a similar kind of diseases or symptoms, keeping additional medicines at home or sharing medicines with friends or relatives. Self-medication is also increasing in the young generation with the passage of time. It may be due to media campaigns or advertisement of pharmaceuticals. According to a survey majority of the young students have experienced one or more medications themselves advertised in particular media campaigns without consulting with a registered health professional (1-2).

The rates of self-medication are higher all over the globe. In Europe, it is around 68% in Kuwait around 92%, in India around 31% and in Nepal around 59%. This higher rate of self-medication imposes serious concerns regarding irrational medication usage. Pakistan also has a prevalence rate of 51% in self-medication. Higher rate of this prevalence may be associated with low socio-economic status, elder patients because they suffer more from illness and patients who experience chronic illness. In the United States, 13% of the elder patients were admitted due to hazards after self-medication



leading to deaths approximately 106000 deaths imposing a great burden on the health system (3-8).

Medical students are also vulnerable to this serious issue. Despite adequate knowledge, they are also involved in self-medication. This study was conducted on medical students to see the prevalence of self-medication among them.

#### **MATERIAL AND METHODS:**

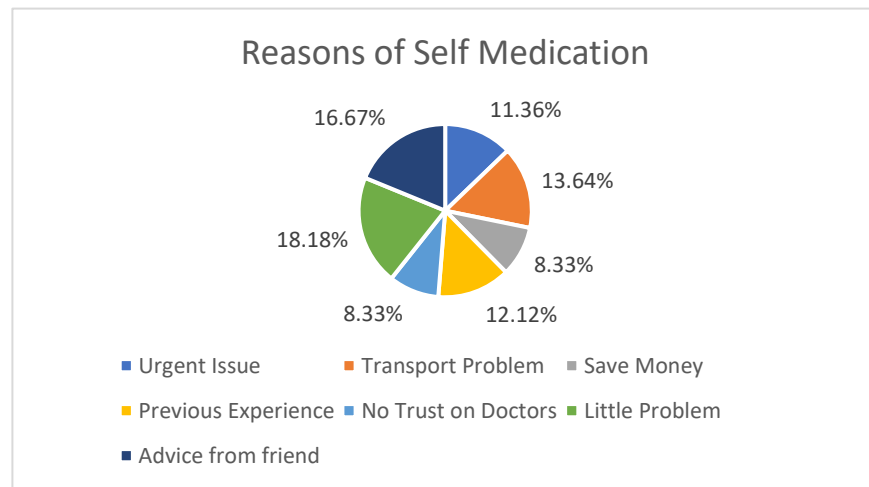
This cross-sectional study was conducted in different medical colleges of Punjab and one hundred and thirty-two medical students from different classes residing in the hostels were included through a convenience sampling method. A predesigned questionnaire was given to the students after explaining the purpose of the study and taking informed consent. Data were analyzed in SPSS Ver. 25. Number and percentages were given for categorical variables and mean were used for quantitative variables.

#### **RESULTS:**

A total of 132 students participated in the study. Mean age was  $22.23 \pm 1.89$  years with an age range of 20 to 26 years. Seventy-eight (59.09%) female students and 54 (40.91%) male students participated in the study. 15 (11.36%) students never had self-medication. Among the students who never experienced self-medication, 9 were females and 6 were males. A total of 117 (88.64%)

students experienced self-medication due to different reasons. Regarding the frequency of self-medication 70.23% responded that they do it frequently. When asked about the adverse effects of self-medication 69.62% students never experienced any side effects after self-medication.

When asked about the diseases or symptoms in which they preferred self-medication 18% students responded diarrhea, 22.0% acid peptic disease, 21.4% insomnia, 18.2% headache and fever and 16% responded menstrual pain.



**DISCUSSION:**

Self-medication in regard to antibiotics is reported as being highly prevalent and common in developing nations in Asia, Africa, the Middle East, and South American. While being cited as an important alternative to a formal healthcare system where it may be lacking, self-medication can pose a risk to both the patient and



community as a whole. The reasons behind self-medication are unique to each region and can relate to health system, societal, economic, health factors, gender, and age. Risks include allergies, lack of cure, and even death. Self-medication with antibiotics is commonplace in other countries too such as Greece. Such use is cited as a potential factor in the incidence of certain antibiotic resistant bacterial infections in places like Nigeria (9-11).

According to a study at Agha Khan, this ratio was 76% among the students of different universities in Karachi. Another study by Jafri et al. 83.1% of the population experienced self-medication. According to a few studies rates of self-medication in Nepal was reported to be 59% and in Europe, it was reported to be 68% (3,6,7,10).

Among the common reasons of self-medication previous experience of the disease, little problem or symptoms and no trust on doctors or urgent issue have higher prevalence. This is in accordance with Karimy et al., and Jafri et al., who also described these reasons for self-medication among the patients. Among the common diseases for which they self-medicated were insomnia, acid peptic disease, diarrhea, headache/fever and menstrual pain. These are the most common problems which a student living in hostel experiences due to life far away from home, stress, and improper diet (11-13).



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