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# PREVALENCE OF SELF-MEDICATION AMONG THE MEDICAL STUDENTS

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**Abstract:**

*Self-medication is among the most common socio-economic heath issue all over the globe and is increasing day by day. Objective: To see the prevalence of self-medication among the medical students. Material and Methods: This cross-sectional study was conducted on 161 medical students. A predesigned questionnaire was served. Results: Mean age of the students was 23.54±1.73 years. 89 (55.3%) female students and 72 (44.7%) male students participated in the study. 12 (7.5%) students never had self-medication. Among the most common reasons for self-medication previous experience, little problem and no trust in doctors were highest. Conclusion: According to this study prevalence of self-medication was higher in female students than male students and there is a need to implement some educational programs among the students for increasing the awareness about self-medication. Keywords: Self-medication, medical students, prevalence.*

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## INTRODUCTION:

Self-medication is a routine socio-economic issue increasing day by day. It is defined as the collection and consumption of medicine without the advice of any health practitioner. This can be done either for treatment purposes or diagnostic purposes [1]. 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 [2].

The rates of self-medication are higher all over the globe. In Europe, it is around 68% [3], in Kuwait around 92% [4], in India around 31% [5] and in Nepal around 59% [6]. This higher rate of self-medication imposes serious concerns regarding irrational medication usage. Pakistan also has a prevalence rate of 51% in self-medication [7]. 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[7]. 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 [8].

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 [9].

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 Lahore general hospital Lahore and 161 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 22. Number and percentages were given for categorical variables and mean were used for quantitative variables.

## RESULTS:

Total of 161 students participated in the study. Mean age was 23.54±1.73 years with an age range of 21 to 26 years. 89 (55.3%) female students and 72 (44.7%) male students participated in the study. 12 (7.5%) students never had self-medication. Among the students who never experienced self-medication, 2 were females and 10 were males. Rest of the 149 (92.5%) students experienced self-medication due to different reasons (Table-I).

When asked about the diseases or symptoms in which they preferred self-medication 36 (22.4%) students responded insomnia, 35 (21.7%) acid peptic disease, 31 (19.3%) diarrhea, 30 (18.6%) headache and fever and 29 (18%) responded menstrual pain. Regarding the frequency of self-medication 96 (59.62%) responded that they do it frequently. When asked about the adverse effects of self-medication 122 (75.77%) students never experienced any side effects after self-medication.

**Table-I: Reasons for self-medication among medical students**

| Reason | Frequency | Percentage |
|---|---|---|
| Previous Experience | 26 | 16.1% |
| Little Problem | 23 | 14.3% |
| No Trust on Doctors | 22 | 13.7% |
| Urgent Issue | 22 | 13.7% |
| Advice from friend | 20 | 12.4% |
| Save Money | 19 | 11.8% |
| Transport Problem | 17 | 10.6% |
| **Subtotal** | **149** | **92.5%** |
| Never done self-medication | 12 | 7.5% |
| **Total** | **161** | **100%** |

**DISCUSSION:**

According to this study, 92.5% of the medical students experienced self-medication in their hostels. According to a study at Agha khan, this ratio was 76% [7] among the students of different universities in Karachi. Another study by Jafri et al. 83.1% [10] of the population experienced self-medication. According to a few studies rates of self-medication in Nepal was reported to be 59%[6] and in Europe, it was reported to be 68%[3]. In our study, female students were predominantly involved in self-medication. This is in accordance with the study by Olivveira et al., [11] and Sarahroodi et al., [12], which also state higher rates of self-medication among the female population. Reason to this might be the fact that females' students usually encounter more medical problems than male students, for example, menstrual pain. In menstrual pain, most of the female students take medicines on their own due to previous experience or shyness to go to the doctor.

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., [13] and Jafri et al., [10] 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. Most of the students think that it may be harmful to self-medicate but 122 (75.77) students never experienced any side effect or adverse event. This needs to be questioned and needs more research.

**LIMITATIONS:**

Limitations of this study were that only students living in the hostel were included. This factor may be a reason for self-medication for insomnia, headaches and acid peptic diseases due to stress, homesickness or improper meals at hostels. Another limitation is that we didn't enquire about most commonly self-medicated drugs. This may give extra knowledge about the reasons of self-medication and needs to be questioned.

**CONCLUSION:**

This study suggests that the prevalence of self-medication was higher in female students than male students. Among the most common reasons for self-medication previous experience, little problem and no trust in doctors were highest. According to these results, it is necessary to implement some educational programs among the students for increasing the awareness about self-medication.

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