TRENDS OF SELF-MEDICATION AMONG MEDICAL STUDENTS OF A PRIVATE MEDICAL COLLEGE OF LAHORE

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Abstract

\textbf{Objective:} To find the frequency of self-medication practice and the factors influencing self-medication practices among the undergraduate medical students of a Private Medical College of Lahore.

\textbf{Materials and Methods:} A descriptive cross-sectional study conducted from July 2015 to September 2015. Sample size was estimated to be 117 simple random sampling techniques was used. Data was collected by self administered questionnaire containing close ended questions. Informed verbal consent was taken and those willing to participate and present on day of interview were included in study population. Data was analyzed using descriptive statistics.

\textbf{Results:} Self-medication is mostly commonly practiced by the female medical students (69\%). Reason for self-medication was high consultation fee (27\%), busy schedule (25\%), quick relief (28\%) and distant medical facilities (20\%). 65\% students use unbranded medicines. Conditions for which self-medication most commonly used were headache (27\%), body pain (24\%), fever (17\%), acidity (16\%), common cold, cough and flue (16\%). Source of information was mostly family members and advertisements. Most common category used was pain killer followed by antibiotics. 22\% percent of respondents experienced adverse effects due to self-medication.

\textbf{Conclusion:} An increased pattern of self-medication practices were found among the young female medical students. It’s a serious threat for medical students with limited knowledge and lack of awareness about drug inter-actions.

\textbf{Keywords:} Self medication, Medical students, reason

INTRODUCTION

Self-medication is, “the desire to take medicine” without prescription and is obtaining and consuming drugs without the advice of a physician either for diagnosis, prescription or surveillance of treatment.\textsuperscript{1} It is the selection and use of medicines by individuals to treat self-recognized illnesses or symptoms by the use of nonprescription medicines by people on their own initiative. Drugs that are prone to self-medication include analgesics, anti-malarial, antibiotics and cough syrups. Self-medication is being practiced in many developing countries where over the counter drugs and prescription are not well-regulated hence making it easier for individuals to access the drugs without prescription.\textsuperscript{2}

Inpatient care provides high quality of care but
self-medication is a convenient and low cost treatment. Data on self medication is generally lacking but it treats minor ailments by large with low cost drugs. The role of self-medication should not be ignored, as its prevalence is quite high, in China it was reported to be 27% while in Pakistan, 82% of the subjects chose self-medication for headache. In general the cost of treatment is low in per episode but in long run frequent attack of disease has high financial implication on the individuals. Another reason without the involvement of trained professionals, the effect of self-medication are generally temporary and poses a huge public health burden by creating multiple drug resistance.

As there is a steady increase in the practice of self-medication, it has been associated with high medical morbidity and mortality causing a growing for the health professional and policy makers. The medical students who practice self-medication do not have enough knowledge about course of disease and mis-diagnosis can lead to economic burden on the healthcare system by frequent hospitalizations and visits to OPD and private clinics. Also as medical students are more likely to diagnose themselves wrongly resulting in taking inappropriate drug they may be unaware of drug interactions or would be unable to recognize adverse drug reactions but still it has been observed that medical students are most likely to practice self-medication. Hence this study was conducted to find the frequency of self-medication practice and the factors influencing self-medication practices among the undergraduate medical students of a Private Medical College of Lahore.

MATERIALS AND METHODS

A descriptive cross-sectional study was carried out on the medical students of Avicenna Medical College, Lahore from July 2015 to September 2015. Sample size was estimated to be 117 with 5% margin of error, 95% CL with 90% response rate. Simple random sampling technique was used, after selecting first student randomly then every fifth student of selected. Those students who were present on day of the interview were included and those students who refused to participate were excluded from the study.

Ethical approval was taken from the ethical review committee of the institute, informed verbal consent was taken from the participants and confidentiality of the participants was ensured.

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A self-administered questionnaire containing close ended questions was used to collect data from the participants after pretesting of the questionnaire.

Variables which were studied included information about gender, age, have they ever practice self medication in last one year, reason for self medication i.e. high consultation fee, quick relief, distance from health facility, busy schedule of the students. Type of drugs used by the students branded or unbranded. Medical condition for which self medication was used i.e. headache, gastric acidity, fever, body aches and common cold/flu, source of information of medicine and type of medical system used for self medication. Data was analyzed using descriptive statistics.

RESULTS

The total response rate was 100(85.47%) off which 69(69%) of the population practicing self-medication were females and 21(21%) were males. 37(37%) of students were in age group 20-22 years, 22-24 years were 37(37%) and 24-26 years were 26(26%) who had practiced self-medication. All medical students have practiced self medication in last one year.

In 28(28%) the reason for self medication was to get quick relief from symptoms followed by high consultation fee 27(27%), busy schedule was reported in 25(25%) least being distant of medical facility 20(20%).

Majority 65(65%) in order to get relief from their symptoms used unbranded medicines. Most common medical symptoms for which self-medication was sought was 27(27%) for head ache followed by generalized body aches 24(24%), fever for 17(17%) and 16(16%) for acidity and common cold each.

Another reason for self medication was majority 78(78%) did not experience any adverse effect. 64(64%) of the population used allopathic system followed by 27(27%) of the population used homoeopathic system and 9(9%) of the population uses hikmat.

82(82%) of the population were hospitalized for
their symptoms for which they took self-medication.

Table 1: Reason, source and common illness for which self medication was done by the medical students (n=100)

<table>
<thead>
<tr>
<th>Medical condition for which self medication used</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Headache</td>
<td>27</td>
</tr>
<tr>
<td>Gastric acidity</td>
<td>16</td>
</tr>
<tr>
<td>Fever</td>
<td>17</td>
</tr>
<tr>
<td>Body ache</td>
<td>24</td>
</tr>
<tr>
<td>Common cold/ Flue</td>
<td>16</td>
</tr>
</tbody>
</table>

Source of information about the medicine

| Advertisement                                   | 23        |
| Family members                                  | 23        |
| Chemist                                        | 15        |
| Internet                                       | 19        |
| Friends                                        | 20        |

DISCUSSION

Globally self-Medication is a common practice in both rural and urban communities in both developed and developing countries like Bangladesh, India and Pakistan as over the counter prescription practices provide cost effective treatment to the general population. The frequency of self medication found in this study was among 21% males and 69% among females, which showed the increase trend of self medication in female gender when compared with their counterpart which is consistent with the study conducted on medical students in Nepal. Another reason for high frequency in female population is that every year they get admitted in medical colleges on open merit and in these colleges quota for male and female is not fix. In our study the age group range from 20-26 years as students get admitted in medical college at the age of 19-20 years which are consistent with other studies and also some students also re appear in the entrance exam to improve their marks.

Studies have reported that female do self-medication more as respect to their counterpart to treat problems such as headache, flu and fever. As these medicine are easily available at home or they were prescribed for some other reason or could be easily bought at the pharmacy without prescriptions. World Health Organization considers self-medication as part of the self-care that helps efficient use of the health care system this provide liberty and more options to the people to take informed treatment decisions. As these illnesses occur frequently in an individuals and because of self limiting and mild nature of these illnesses prevent them from seeking help from expert and may result in complications which would require admission in hospital. Another reason is self medication is less costly and less time consuming as theses students have busy schedule lack time to visit the physician and economic problems are the main reason to use self-medication.

In our study the main source of information about drugs were family, chemist, friends and through advertisements by the pharmaceutical companies and internet these findings are consistent with the other studies. As information on social media is readily available to them and they trust the information given on these sites. We need to focus on them and create awareness that they should follow the rules and regulation of drug control authorities and reframe from dispensing and advising about the drugs.

As regards reason for self treatment with antibiotics is concerned, (33.85%) participants had good previous experience of using antimicrobial drugs, (24.61%) involved in self treatment of antibiotics as suggested by friends, (16.93%) medical students had adequate knowledge of medicines, (13.85%) wanted to avoid doctor’s consultation fee whereas remaining (10.76%) participants have no confidence in doctor’s prescription.

CONCLUSION

Our study revealed that frequency of self-medication practice in medical students is high especially for self limiting minor problems. Self-medication is a serious problem, especially among medical students who have inadequate knowledge regarding drug interactions and idiosyncratic reactions which can prove to be hazardous. It is to make them aware about the ill effects of self-medication and need of the day is having of strong health system to prevent irrational use of drugs.

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