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A Study on Self Medication among College Students.

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Research Article

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ABSTRACT

The study was conducted to determine the extent of practice of self-medication among engineering students. A self administered questionnaire eliciting self-medication practices were distributed to one hundred engineering students, Bellary, Karnataka. Results are expressed in counts and percentages. Out of total One hundred students, 65% were males and 35% were females. Highest proportions of subjects belong to age 22 years (60%) and the proportion of subjects involved in self medication was found to be 38%. Practice of self-medication was highly prevalent among the students. Attitude of the students towards self-medication was positive. It should be emphasized that we must create awareness about appropriate use of self-medication and the adverse drug reaction arising from self-medication.

INTRODUCTION

"Self medication" is defined as the use of medications without prescription for self treatment. Self-medication is a well recognized topic of interest and is often discussed in medical literature. It is a well recognized form of inappropriate drug use. The implications of self-medication practices are increasingly recognized around the world. "Self medication is one of the most influential theories of causation of drug abuse & addictions"^[1]. Self-medication is an unfortunate tendency which a large number of people fall prey to.

Self-medication consists of the use of manufactured or homemade drugs without a medical prescription seeking to treat symptoms or self-diagnosed health conditions ^[2]. According to the World Health Organization (WHO), informed self-medication is a way to self-care. Qualified professionals, preferably pharmacists, should encourage the rational use of medication, provide information on drugs and complications that may result from their indiscriminate use and refer people to medical care when necessary, promoting responsible self-medication. The practice of self-medication must be based on authentic medical information otherwise irrational use of drugs can cause wastage of resources, increased resistance of pathogens, and can lead to serious health hazards such as adverse drug reaction and prolonged morbidity ^[3]. In developing countries like India, self-medication is a common practice as it provides a low cost alternative for people ^[4]. A large number of people, when they fall sick, do not consult the physician ^[5]. The youth is especially exposed to the media and the increased advertising of pharmaceuticals poses a larger threat to the young population ^[6,7].

There is paucity of studies conducted about the assessment of self-medication among college students, so this study was taken up with aim of assessment of knowledge, attitude and practice of self-medication among college students.

METHODOLOGY

A cross sectional study was conducted among 100 students of engineering college in Bellary to know the proportion and other factors of self medication. The sample size was based on convenience and the sampling technique adopted for the study was simple random sampling technique,

List of all the students studying in a college was obtained and numbers were given to them serially. Then by using random tables, 100 study subjects were selected for the study. After explaining the purpose of the study, informed consent was taken from each participant and data was collected using a pre tested semi structured questionnaire. The descriptive statistics were used for analysis of the data. Data was entered in Microsoft excel and analyzed using SPSS 20.0 The study tool consisted of self explanatory questions, which were administered to the participants. After the data collection, health education regarding self-medication was given.

RESULTS

Table 1: Base line characteristics of study subjects

Characteristics	Frequency	Percentage
Age group		
<i>20 years</i>	04	04.0%
<i>21 years</i>	30	30.0%
<i>22 years</i>	60	60.0%
<i>23 years</i>	06	06.0%
Gender		
<i>Male</i>	65	65.0%
<i>Female</i>	35	35.0%
Accommodation		
<i>Dayscholars</i>	42	42.0%
<i>Hostelites</i>	58	58.0%

Among the total study subjects, 65% were males and 35% were females. Highest proportions of subjects belong to age 22 years (60%) followed by 21 years (30%), 23 years (6%) and 20 years (4%).

There was no much difference in proportion between dayscholrs (42%) and hostelites (58%)

Table 2: Self Medication

Variables	Frequency	Percentage
Self medication		
<i>Yes</i>	38	38.0%
<i>No</i>	62	62.0%
Reasons for self medication		
<i>Time factor</i>	08	21.0%
<i>Availability of medicine</i>	10	26.3%
<i>Confidence</i>	06	15.7%
<i>Quick relief</i>	12	31.5%
<i>Others</i>	02	05.2%
Sources for self medication		
<i>Medical shop</i>	16	42.1%
<i>Previous prescription</i>	10	26.3%
<i>From media</i>	06	15.7%
<i>Following relative advice</i>	06	15.7%
Illness for self medication		
<i>Fever</i>	16	42.1%
<i>Cold</i>	12	31.5%
<i>Vomiting</i>	10	26.3%
<i>Headache</i>	18	47.3%
<i>Loose stools</i>	09	23.6%
<i>Myalgia</i>	19	50.0%

The proportion of subjects involved in self medication was found to be 38%. Among 38 subjects on self medication, most common reason for self medication was quick relief (31.5%) followed by easily

available of medicines (26.3%), time factor (21%), confidence (15.7%) and others (5.2%). Fever and head ache were the common illness for which they took self-medication.

DISCUSSION

Today here are advances in drug research and invention of a large variety of drugs causing drug explosion. Many of them released for general use & sold directly to the public as over the counter (OTC) remedies. A large number of potent drugs are thus available to individuals for self-medication. Availability of potent and dangerous drugs has increased considerably since the close of 19th century. This situation is further worsened in our country by slack implementation of drug control. The consumer has no way to judge the efficacy of a drug or its hazards, and therefore these judgments' have to be made for them by physicians.

In our study, we found that 38 % of respondents practiced self-medication it was less compared to study done by James H et al who found that 44.8 % of the respondents practiced self-medication in their study [8]. In other studies prevalence of self-medication varied widely ranging from 26.2% to as high as 92 % [9].

Frequency of self-reported medication is highly variable in different parts of the world; as low as 45% in Turkey to as high as 94% in Hong Kong [10]. This variation to report self-medication may be due to the differences in study subjects, working definition of self-medication and tool used to collect the response of the participants.

In this study Myalgia, headache, common cold and fever were the most reported complaints for which drugs were taken. Other complaints include loose stools, vomiting. To us the latter problems are by nature needs expert help and needed not to be self-medicated. The self-medication for similar pattern of ailments was experienced by the pupils in earlier reported published literature [11].

In our study the main reasons for favoring self-medication by the students were the nature of the disease (minor illnesses), quick relief, time saving & economical. Zafar et al also found similar results in their study on university students in Karachi [12].

A large number of people when they fall ill don't consult a physician. They either consult a chemist and obtain medications or consult his friend or neighbor who may be having some medications left over from his previous illness. As people vary greatly in their sensitivity to drugs, and appropriate dose to one can be overdose to another and can lead to toxicity, a drug effective in one may cause allergy in other. While persons self-medicate, they won't consider this biological variability and other dangerous drug interactions .Self-medication becomes harmful when some diseases unknown to the patient gets suppressed for the time being. Some drug doses can vary from time to time- ie safe at one time may cause harm at another time for the same person. Vigorous drug promotion by pharmaceuticals is a probable factor for drug misuse."One of the duties of physician is to educate masses when not to take medicines" .A probable factor for drug misuse is lavish prescribing & selling. A study conducted in US fund that people spend 2 billion dollars per year on self medication remedies. Drugs involved in self medication are those freely available and antibiotics purchased with a previous prescription. People consider only the symptoms when they prescribe for themselves. The temporary relief in signs may suppress the symptoms of grave illness. Two organs that normally get affected by abuse of drugs are kidneys and liver. With advancing age; the functioning of these organs deteriorates. Continued intake of drugs prescribed for an earlier period can thus prove harmful to the two organs.

CONCLUSION

There is a need to educate the youth to ensure safe practices. Strict policies need to be implemented on the advertising and selling of medications to prevent this problem from escalating.

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