EVALUATION OF THE PERCEPTION, ATTITUDE AND PRACTICE OF SELF MEDICATION AMONG BUSINESS STUDENTS IN 3 SELECT CITIES, SOUTH INDIA

S. KAYALVIZHI and Dr. R. SENAPATHI

[1]Research Scholar, Manonmaniam Sundaranar University, Thirunelveli, Tamil Nadu.
E-mail : Kayal2001@yahoo.com

[2]Head, MBA Department, Adhiparasakthi Engg College, Melmaruvathur, Tamil Nadu.
E-mail : rsenapathi@sify.com

ABSTRACT

Objective : This study was undertaken to determine the knowledge, attitude and practice of self-medication among first-year under graduate business students of 3 universities in South India. Subjects and Methods: Out of the 1017 respondents, 605 (59.48 %) were male and 412 (40.52%) were female respondents. This was an anonymous, questionnaire-based, descriptive study. Questionnaire, containing open-ended and close-ended questions, was administered to the subjects. Data were analyzed and the results expressed as counts and percentages. Results: Of the 1017 respondents, 815 (80.13%) practiced self medication. The respondents' knowledge about appropriate self-medication was poor, but knowledge of the benefits of self-medication was adequate. The respondents found self-medication to be time-saving, economical, convenient and providing quick relief in common illnesses. The majority (85%) of the respondents had a positive attitude favoring self-medication. The most common indications for self medication were headache (35%), fever (36%), and cough, cold and sore throat (20%). Conclusion: Knowledge about appropriate self-medication was poor, attitude towards self-medication was positive and the practice of self-medication was quite high and often inappropriate. Educating students in particular and the public at large, about the dangers of indiscriminate use of drugs; the physicians being more judicious in prescribing and also insisting on drugs being supplied by the chemist only on a valid prescription; implementation of a proper statutory drug control rationally restricting the availability of drugs to the public are the three measures suggested by the study.

Key Words - Self-medication . Business Students . Self-care . Health policy

****This study is part of the Research Thesis of the Scholar.***

I. INTRODUCTION

Every day people throughout the world act on their own for their health; they practice self-care. In some instances, they do so through self-medication, which is now increasingly being considered as a component of self-care (Hughes CM, 2001). Self medication is defined as the use of medication by a Patient on his own initiative or on the advice of a Pharmacist or a lay person instead of consulting a medical practitioner (WHO guidelines, 2000). Studies done on self-medication reveal that it is a fairly common practice, especially in economically deprived communities. It is a growing trend of 'self-care' which has its positive and negative aspects (Geissler PW et al., 2000) Unfortunately, especially in developing countries, professional health care is relatively expensive and in some cases not readily available thereby making self medication an obvious choice of healthcare service (Chang, 2003) Furthermore, it has been noted that purchase of drugs and many drugs that can only be purchased with prescription in developed countries are OTC in developing countries. Also, lax medical regulation has resulted in the proliferation of counter free drugs that are in high demand for the treatment of highly prevalent diseases (Shakoor, 1997)

Some governments are increasingly encouraging self-care of minor illnesses, including self-medication. While responsible self medication, which is limited to over the counter (OTC) drugs, may generate substantial net benefit flows to economies through saving in travel and consultation time and the direct financial cost of treatment (Porteous, 2005). Major problems related to self medication is wastage of resources, increased resistance of Pathogens, and generally entails serious health hazards such as adverse reaction and prolonged suffering. Antimicrobial resistance is a current problem world wide particularly in developing countries where antibiotics are often available without a prescription (Pagane, 2007). Self-medication is an area where governments and health authorities need to ensure that it is done in a responsible manner, ensuring that safe drugs are made available over the counter and the consumer is given adequate information about the use of drugs and when to consult a doctor (World Health Organization,1995)

The reasons for self medication mentioned in the literature are mild illness, previous experience of treating similar illness, economic considerations and a lack of availability of healthcare personnel. The most common medications used for self medication are analgesics and antimicrobials (Hughes, 2001 & Shankar et al., 2002). Another study on self medication shows that it is influenced by many factors such as education, family, society, law, availability of drugs and exposure to advertisements (Monastruc JL, 1997 & Habeed, 1993). A high level of education and professional status has been mentioned as predictive factor for self medication (Martins, 2002).

II. SUBJECTS AND METHODS

This study was an anonymous, questionnaire-based survey, undertaken between September to November 2010. A self-developed, pre-validated questionnaire consisting of both open-ended and close-ended items was used. The study population comprised of first-year Under Graduate Business students of University of Madras, Chennai, Thiruvalluvar University, Vellore and Bharathiar Univeristy, Coimbatore. Students pursuing B.Com., and B.B.A., in 10 colleges affiliated to each of the 3 universities were the respondents of the study. These were young men and women who had recently joined the Arts & Science College. All first-year business students who were willing to participate in the study were enrolled. A briefing was given about the nature of the study, and the procedure of completing the questionnaire was explained. Consenting participants anonymously completed the questionnaire in the classroom.

For the purpose of the study, certain operational terms were defined. Self-medication was defined as the use of over-the-counter or non prescription drugs, whether modern or traditional, for self-treatment, without prior consultation with a doctor. A doctor was defined as any person who is medically qualified to prescribe medications. It included practitioners of modern scientific medicine as well as practitioners of other healthcare systems. Medication was defined as any substance used for treatment or prevention of disease. It included modern scientific medications as well as medications from other healthcare systems.

Samples of 1189 students were selected randomly from the colleges affiliated to the three institutions of South India. The inclusion criteria for the selection of students was 17 years and above. Out of all, 172 students were excluded in accordance with the exclusion criteria like incomplete information. The questionnaire consisted of questions on reason for self medication, indications of self medication, source of drug information etc. The results are based upon the data obtained from 1017 (85.5%) students. The prevalence of self medication was reported as percentages. The survey was descriptive and data was summarized as counts and percentages, some of the questions had multiple options to choose from.

III. RESULTS

(A) Baseline characteristics of participants

All the students (n=1189) responded to the questionnaire, of whom 172 were excluded in accordance with the exclusion criteria like incomplete information. Remaining 1017 (85.5%) students' questionnaire were considered for evaluation.

Perception

The respondents perceived several advantages of self-medication (**Table 1)**. The most important advantages were saving time (56.63%), being economical (17.69%) and providing quick relief (12.58%).

Table 1
Reason for self-medication

Reasons stated by the respondents	Respondents, %
Time-saving	56.63
No need to visit doctor for minor illness	3.44
Economical	17.69
Quick relief	12.58
Ease and convenience	8.09
Crowd avoidance	1.57

Attitude

The majority (85%) of the respondents had a positive attitude towards self-medication and favored self-medication saying that it was acceptable, while 15% felt it was unacceptable. When asked about the influence of pharmacists on their attitude towards self-medication, 64.2% felt that the pharmacists played a major role in the self medication of the non-prescribed medicines purchased over the counters.

Practice

Of the 1017 respondents, 815 (80.13%) practiced self medication, which included 45.1% of females and 44.2% of males. The remaining 202 respondents preferred consulting a doctor by going to a private clinic (20.2%), a primary healthcare center (31.3%), a referral hospital (48.5%). The most important reasons quoted for not consulting a doctor were previous experience (45.5%), mild illness (40.3%) and shortage of time (32.1%); rarely, it was advice from a friend (5.2%) and non availability of a doctor (4.5%). There were several indications for self-medication **(Table 2)**: the most common indications were headache, fever, and cough, cold and sore throat.

Table 2

Indications for self medication

INDICATIONS	RESPONDENTS, %
Headache	35
Cough, cold, sore throat	20
Stomach ache	3
Fever	36
Vomiting	1
Skin symptoms	0.27
Eye symptoms	0.73
Ear symptoms	2
Diarrhea	2

Drug information

80.82% students learned self medication from doctors' prescriptions provided during their prior illness. Friends, pharmacist, advertisements and books comprised 36.98%, 31.2%, 13.11% and 7.0% respectively, which provided/guided students for self medication **(Table 3)**

Table 3
Drug information

Sources of Drug information	RESPONDENTS, %
Doctors' prescriptions provided during prior illness	80.82
Friends	31.2
Pharmacist	36.98
Advertisements	7
Books	13.11

IV. DISCUSSION

Perception

The respondents had a fairly good knowledge of the advantages and disadvantages of self-medication. Many of them correctly perceived self-medication as time-saving and economical, doing away with the need to go to a doctor for minor illness and providing quick, easy and convenient relief. These perceptions are similar to those reported by the WHO that self-medication provides a cheaper and convenient alternative for treating common minor illnesses [WHO Report, 1995 & Kafle, 1993). These are important factors favoring self-medication and have been reported in other studies [Hughes, 2001 & Shankar, 2002]. However, this could also mean that health services need to be improved so that treatment becomes more accessible and the patient's waiting time is minimized. Length of waiting time for medical consultation has been identified as one of the predictive factors for self-medication [Martins, 2002]. The most important deterrents for self-medication were fear of adverse drug reactions, risk of making a wrong diagnosis and risk of using a wrong drug (fear of the unknown), similar to an earlier study [Hughes, 2001] .

Attitude

The majority of the respondents had a positive attitude towards self-medication, saying that it was acceptable. Unlike other aspects of self-care, self-medication involves the use of drugs, and drugs have the potential to do good as well as cause harm. In this context, the pharmacist has an important role (Hughes CM &WHO Report, 1998)

Practice

In this study, more than 80% of the respondents practiced self-medication. Those with a previous experience and with mild illness were more likely to practice self-medication. This has implications, because many diseases have similar symptoms, and a person using previous experience may be exposed to the dangers of misdiagnosis and consequently wrong treatment. The commonest illnesses that led to self-medication in this study were usually self-limiting 'minor illnesses' that have been widely reported in studies on self-medication as the most common indications (Shankar, 2002).

It is acknowledged by the researcher that this type of study, using a self administered questionnaire, is largely dependent upon information given by respondents. Although students were encouraged to complete the questionnaire independently, mutual influence between pupils could not be entirely ruled out. However, given the high level of response, the results should closely approximate the behavior of the adolescent students in South India. Few students consulted pharmacists for information on drugs. The pharmacist's role is mainly seen as that of a drug salesman rather than that of a healthcare provider. Patient education and awareness campaigns are necessary to promote the role of the pharmacist in India. Students with a previous experience and with mild illness were more likely to practice self medication. This has implications, because many diseases have similar symptoms and a person using previous experience may be exposed to the dangers of misdiagnosis and consequently wrong treatment.

Major reasons of self medication at student level were time saving, perception that there was no need to visit/get advice from the prescriber for minor illness, self medication found to be economical and fear about the crowd at clinic. Most of the respondents had positive attitude in self medication for minor illness. However, minor illness symptoms may cause major illness if not diagnosed properly as most of the fatal diseases have symptoms like fever, body ache, and headache.

V. CONCLUSION

This descriptive survey shows that the majority of the students had poor knowledge about appropriate self-medication while the knowledge of the benefits and risks was not adequate. Thus, to avoid or minimize the dangers of self medication, the students should be educated about the dangers of indiscriminate use of drugs. Secondly, the physicians should be more judicious in prescribing and must insist on drugs being supplied by the chemist only on a valid prescription. Thirdly, a proper statutory drug control must be implemented, rationally restricting the availability of drugs to the public. These three measures would definitely reduce the incidence of drug-related mishaps and help in maintaining good health of the individual and society.

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