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A SURVEY ON SELF MEDICATION PRACTICES AMONG PHARMACY STUDENTS IN SATARA COLLEGE OF PHARMACY, SATARA

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ABSTRACT

The study was aimed at assessing the magnitude and factors of self medication among pharmacy students of Satara College of Pharmacy, Satara. A study with six months illness recall was conducted. A questionnaire consisting of demographic questions and questions on illness in the last six months prior to the interview and treatment strategies was prepared and administered to the 100 students. All volunteers under study reported at least one episode of an illness and 95 (95%) of them practiced self medication. Most drugs for self medication were obtained from the pharmacy or retail medical store: and the most commonly used drugs were from NSAIDs group. Common reported illness were fever, headache and body ache (53%) followed by hyperacidity (22%). Non seriousness of the illness and prior experience were the top two reported factors for self medication. In conclusion, self medication was practiced with a range of drugs from the conventional anti-pains to antibiotics. Although the practice of self medication is inevitable; drug authorities and health professionals need to educate students about the pros and cons of self medication.

INTRODUCTION[1, 2, 3]

Self-medication is the selection and use of Medicines by individuals to treat self recognized illnesses or symptoms. Self-medication is defined as "obtaining and consuming drugs without the advice of a physician either for diagnosis, prescription or surveillance of treatment". In developing countries, most of the illnesses are treated by self medication.

According to WHO's definition, self- medication is "the selection and use of medicines by individuals to treat self- recognized illnesses or symptoms".

While talking with disadvantages of self medication; it will cause adverse drug reactions, wrong medication, risk of disease aggravation and drug interactions. .

In economically deprived countries most episodes of illness are treated by self-medication. In a number of developing countries many drugs are dispensed over the counter without medical supervision [Table no. 1]. In this case, self-medication provides a lower cost-alternative for people who cannot afford the cost of clinical service.

Table 1. Common drugs used for Self Medication

Sr. No.	Drug / drug group	Brand names
1	Analgesics	Saridon
		Disprin
2	Antipyretics	Calpol
		Crocin
3	Cough Preparations	D cold total
		Glycodin
		Corex
		Benadryl
4	Antibiotics	Amoxil
		Trimox
5	Anti-allergics	Levorid
		Cetzine
6	Antacids	Gelusil
		Rantac
		Zinetac

Studies revealed that the increase in self-medication was due to a number of factors. These included socioeconomic factors, lifestyle, ready access to drugs, the increased potential to manage certain illnesses through self-care, and greater availability of medicinal products.

METHODOLOGY[2-6]

Study site:

Study was carried out in Satara College of Pharmacy, Satara. It is the health professional training institute in Satara. It was established in 1999. The college is a pioneer in training Health Professionals. Since then, the college is expanding its scope of activities and currently it is training students in Pharmacy Profession.

Study population:

The cross-sectional study was conducted on 100 volunteers (students and teaching staff) taken as a sample from a total of 500 volunteers (students and teaching staff) in Satara College of Pharmacy Satara. A random sampling method was used to choose the respective number of volunteers (students and teachers).

Data collection and analysis:

The pre-tested, semi-structured questionnaire was prepared. Data was collected from January 15 to February 21, 2012. The study subjects were informed that the information collected would be anonymous; and participation would be totally voluntary. The age, sex, and year of study were noted. The information regarding the type of medication, illness for which the medication was used and the reason for not consulting a doctor was collected. The pattern of drug use over a six-month period preceding the study was noted. Their attitude toward self-medication and source of information for those who practiced self-medication were also recorded. Data were analyzed using Microsoft Excel and the results were presented using absolute figures and percentages.

Ethical issues:

To obtain the consent of students prior to data collection, a detailed explanation on the aim and objectives of the study was given; and confidentiality was ensured.

Questionnaire[2]

1. Demographic data:

- Gender
- Age
- Class

2. How many minutes of walking does it take for you to reach the nearest health post or medical store?

3. How many episodes of illness have you had in the preceding six months?

4. What were the main symptoms of your illness?

5. Were there any associated complaints?

6. Have you used medicines on your own without consulting a doctor in the preceding six months?

7. What type of medicine(s) did you use? Please give their Brand name(s).

8. What was your main reason for not consulting a doctor?

9. If you were not recovered by above medicine, have you consulted a Physician in the preceding six months?

RESULTS AND DISCUSSION

Demographic characteristics of volunteers:

One Hundred volunteer (students and teachers) were covered during the study period and all of them had faced health-related problems within the last six months prior to the study. Twenty three (23%) of 100 were aged between 18 and 20 years, fifty seven (57%) students were aged between 21 and 24 years, and the rest(20%) were above twenty five years of age. Fifty three (53%) were males and forty seven (47%) were females. The respective number of students from each year of study is also given in Table 2. Twenty six (26%) were first year students (included Degree and Diploma Students), 13 (13%) were second year students (included Degree and Diploma Students), 12 (12%) were third year students, 15(15%) were teachers and 45 (45%) and ten (10%) were fourth year and M. Pharm. students respectively [Table no. 2].

Table 2. Demographic characteristics of volunteers who reported illness in the last six months in Satara College of Pharmacy, Satara

Sr. No.	Variable	Frequency	Percentage (%)
1	Sex		
	Male (n = 53)	53	53
	Female (n = 47)	47	47
2	Age		
	18-20	23	23
	21 – 24 (n = 57)	57	57
	25 and above	20	20
3	Year		
	B. Pharm I year (n = 2)	02	02
	B. Pharm II year (n = 6)	06	06
	B. Pharm III year (n = 12)	12	12
	B. Pharm IV year (n = 45)	45	45
	I year Diploma(n=3)	03	03
	II year Diploma(n=7)	07	07
	M. Pharm (n=10)	10	10
	Teaching staff(n = 15)	15	15

N = 100

3.2 Frequency of reported symptoms / disease:

Fever/ headache/ Body ache were the most frequently reported causes of morbidity; Hyperacidity and Common cold were the second and third most common causes of morbidity, with a frequency of 53 (53%), 27 (27%), and 12 (12%), respectively. Other episodes of illness included diarrhea 4 (4%), Eye/ Ear/ Skin related infections 4 (4%) [Table no.3].

Table 3. Frequency of reported symptoms / disease

Sr. No.	Type of symptoms /diseases	Frequency	Percentage (%)
1	Fever / Headache / Body ache	53	53
2	Cough and Common cold	12	12
3	Hyperacidity	27	27
4	Diarrhea/ Dysentery	4	4
5	Eye/ Ear/ Skin infections	4	4

Measures taken by students who reported an illness:

Ninety-five of the 100 volunteers (95%) had practiced self-medication during the six months period preceding the study. Among 95 students who practiced self-medication, 92 (92%) obtained drugs from the pharmacy or drug shop without prescription, 3 (3.15%) from drugs left over from prior use. 5 volunteers (5%) obtained drugs by visiting physician/with prescription.[Table no.4].

Table 4. Measures taken by students who reported an illness

Sr. No.	Measure taken	Drug source	Frequency	Percentage(%)
1	Visiting physician	Pharmacy or drug shop with prescription	5	5
2	Self-medication	Pharmacy or drug shop without prescription	92	92
		Drugs left over from prior use	3	3

N=100

Drugs or drug groups used by the volunteers for self-medication:

Drugs or drug groups commonly used for self-medication among 95 students is shown in Table 5. The most common drugs used in self-care were NSAID's, that is, 39 (41.05%) of 95 respondents used NSAID's for self-medication in the preceding six months, followed by antacids 22 (23.15%), Anti-allergies 17 (17.89%), Anti-biotics 9 (9.47%), Anti-tussives 4 (4.21%), Eye/ Ear drops 2 (2.10%), Anti-amoebics 2 (2.10%) [Table no.5].

Table 5. Drugs or drug groups used by the volunteers for self-medication

Sr. No.	Drugs/drug groups	Frequency	Percentage (%)
1	NSAIDs	39	41.05
2	Anti-allergies	17	17.89
3	Anti-tussives	4	4.21
4	Antacids	22	23.15
5	Eye/ Ear drops	2	2.10
6	Anti-amoebics	2	2.10
7	Anti-biotics	9	9.47

N = 95

Factors for self-medication:

Among the reasons given for self-medication, 27 (28.42%) respondents felt that they had previous experience of treating a similar illness. Forty seven (49.47%) respondents felt that the illness was mild and did not require the service of a physician. Eleven respondents (11.57%) reported that cost-effectiveness was their major reason to practice self-medication, and 10 (10.52%) stated emergency use [Table no.6].

Table 6. Factors for self-medication

Sr. No.	Reason	Frequency	Percentage (%)
1	Prior experience	27	28.42
2	Non-serious illness	47	49.47
3	Emergency use	10	10.52
4	Cost-effectiveness	11	11.57

N = 95

Information source for those who practiced self-medication:

Information sources to practice self-medication were also analyzed and are shown in Table 7. Respondents who practiced self-medication because of advice from a pharmacist were 32 (33.68%). Respondents who practiced self-medication within the last six months prior to study because of advice from their friends constituted 14(14.73%) and a majority of self-medicators who reported that they did it following information obtained from reading material and others constituted 43(45.26%) and 6 (6.31%) respectively.[Table no.7]

Table 7. Information source for those who practiced self-medication

Sr. No.	Information source	Frequency	Percentage (%)
1	Reading material	43	45.26
2	Advice from pharmacist	32	33.68
3	Advice from friend	14	14.73
4	Others	6	6.31

N =95

Attitude of volunteers toward self medication practice:

Data regarding attitude toward self-medication was collected from 100 volunteers.91 (91%) volunteers agreed on the practice of self-medication. On the other hand, 5(5%) volunteers disagreed with this practice. [Table no.8]

Table 8. Attitude of volunteers toward self medication practice

Sr. No.	Attitude	Frequency	Percent
1	Agree	91	91
2	Disagree	05	5
3	Others (no comment)	04	4

N =100

Self-medication refers to using drugs that have not been prescribed, recommended or controlled by a licensed healthcare specialist. Generally people are not only using non-prescription drugs but also prescription drugs, as self-medication products, without supervision. The most common reported factors for self-medication were low severity of symptoms and prior knowledge about the medicines. Fever/ headache/ body ache were the most commonly reported symptoms in the six-month period prior to the study that led to self-medication, followed by hyperacidity and common cold. Of the respondents, 95% had taken some form of self-medication during the specified period while, the percentage of persons who consulted Physician was relatively lower i.e. 5%. This difference clearly shows the degree to which people perceive their health-related problems and knowledge about the medicine. 96.84% of the individuals who practiced self-medication reported that they obtained drugs from a pharmacy or drug shops. This indicated that most of the self-medicated persons had obtained drug-related information (at least when to take, and what should never be taken with the drug) from the dispensers.

NSAIDs were the most commonly used class of drugs. Antimicrobials were not commonly used for self-medication and were obtained mostly by prescription. Prior experience and non-seriousness of the illness were the two major reasons of self-medication in this study. What makes this study different is that the majority of volunteers who practiced self-medication reported that they practiced self-medication because of their prior experience. The major information source for most of those who practiced self-medication was reading material. The result of the present study supported the impact of medical education and knowledge on self-medication practice.

Among the total respondents, 91% agreed, 5% disagreed and 4% were not willing to comment on self-medication practice.

CONCLUSIONS

Students in Satara College of Pharmacy Satara, 95%, practiced self-medication. Drugs from the NSAIDs group were the most commonly used. Prescription drugs such as antibiotics were involved in self-medication practice. Prior experience and non-seriousness of the illness were the most common reasons for self-medication. Although self-medication is inevitable;drug authorities and health professionals need to educate students about the pros and cons of self medication.

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