



KNOWLEDGE ATTITUDE AND PRACTICES AMONG SELF MEDICATION USERS IN A RURAL AREA OF BHOPAL

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ABSTRACT

Introduction: Self medication is an important health issue specially in developing country like India. Practicing self-medication for drugs like antibiotics might lead to drug resistance; and hence, there needs to be a check on these practices.

Methodology: It was a cross-sectional study conducted in the field practice area of Rural Health and Training Center, CMCH, Bhopal. for a period of 3 months between August 2016 and October 2016. A sample size of 325 was calculated using formula $Z^2P(1-P)/d^2$. House to house survey was conducted and data was collected using a questionnaire method based on memory recall of a period of one month.

Results: Major reason for practicing OTC drug in self medication practitioners was high cost of consultation (136-41.8%), followed by mild illness/Doctor's advice not needed (21.5%). Painkillers were the most common group of medicine used by 180 (55.3%) subjects and bodyache/joint pain was most common symptom for which almost 156 (48%) subjects sought OTC.

Conclusion: Though the awareness level regarding over-the-counter drugs was quite good, but the attitude was in favor of self medication.

Keywords: Awareness, Attitude, Self medication, Over the counter drugs.

INTRODUCTION

Self medication is defined as the use of medication by a patient on his own initiative or on the advice of a chemist or druggist or pharmacist or a lay person instead of consulting a medical practitioner.¹ Self-medication involves acquiring medicines without a prescription, resubmitting old prescriptions to purchase medicines, sharing medicines with relatives or members of one's social circle or using leftover medicines stored at home.² Self-medication is associated with risks such as misdiagnosis, use of excessive drug dosage, prolonged duration of use, wastage of resources, and increased resistance to pathogens.³ Further there is an increase in the promotion of self-medication products, which has enhanced consumer and patient awareness of the availability of products.⁴

Self medication is an important health issue specially in developing country like India.^{5,6} Practicing self-medication for drugs like antibiotics might lead to drug resistance; and hence, there needs to be a check on these practices.⁷⁻⁹ As per drug laws applicable to India, self-medication are permitted for over-the-counter (OTC) drugs, but in India there is no specific list of OTC drugs. The OTC Committee of the Organization of Pharmaceutical Producers of India is working toward the promotion of responsible self-medication and creating awareness in the general public as well as the government.¹⁰

Few studies were conducted at community level in India to assess the magnitude of self-medication practices. Studies of such nature will provide useful insight on the reasons for which patients resort

to this practice and might help the policy makers and regulatory authorities to streamline the process of drug regulations, updating the list of essential medicines, and safety issues of over the counter drugs.¹¹

With this background, we plan to conduct a study to identify the knowledge, attitude and practices among self medication users in rural area of Bhopal.

MATERIAL AND METHODS

It was a cross-sectional study conducted in the field practice area of Rural Health and Training Center, CMCH, Bhopal for a period of 3 month (August 2016 and October 2016).

Sample size: A sample size of 325 was calculated using formula $Z^2P(1-P)/d^2$, where prevalence of 55.9% was taken from a similar type of study.¹² α was taken as 5% and relative precision as 10%, thus a total of 325 adolescent were included in the study sample.

Procedure: House to house survey was carried out and all the adult persons in the house who have taken self medication in last one month (even a single dose) was selected, house having no person over the age of 18 years were skipped and house having more than one person, the male candidate was selected. The survey was continued until the desired sample size of 325 was achieved. Verbal Informed consent was taken from the study subject before the collection of data. Interviews were conducted by oral questionnaire method. A memory recall period of one month was used to obtain the relevant information regarding the self medication practices and verbal consent was taken before administering the questionnaire.

Statistical analysis: The data collected was entered in the Microsoft office excel 2007, 10% of the data will be re-entered to check for the data entry errors. The data will be analyzed using Epi-info software. The categorical data was summarized as percentage and proportions and continuous variable as mean and standard deviation.

RESULTS

In our study, there were 325 total subjects out of which 224 (68.9%) were male & 101 (31.1%) were females. Range of age was 18 to 64 yrs. Maximum no. of subjects were in the age group 31-40 yrs. Maximum no. of subjects 155 (47.6%) were having education up to primary level. Distribution of subjects according to sex, age & education has been shown in **table 1**.

Table 1: Demographic data of the respondents n=325

Demographic Variables	Respondent (%)
Sex	
Male	224 (68.9)
Female	101 (31.1)
Age in years	
<20	67 (20.6)
21-30	85 (26.1)
31-40	112 (34.4)
41-50	42 (12.9)
>50	19 (5.8)
Education	
Illiterate	48 (14.7)
Primary	155 (47.6)
Middle school	57 (17.5)
High school	34 (10.4)
Higher secondary	22 (6.7)
Graduate and above	9 (2.7)

Table 2: Reason for practicing over the counter drug in self medication practitioners (n=325)

Reasons for self medication	Freq (%)
High cost of consultation	136 (41.8)
Convenience	42 (12.9)
Lack of time	55 (16.9)
Due to emergency	22 (6.7)
Mild illness/ doctors advice not needed	70 (21.5)

Maximum number of subjects (230-70.7%) sought self medication (OTC) from medical shop followed by known person (50-15.3%) & other shop (45-13.8%).

Major reason for practicing OTC drug in self medication practitioners was high cost of consultation (136-41.8%), followed by mild illness/Doctor's advice not needed (21.5%). Distribution of the subjects according to the various reasons for using over the counter drugs or self medication is shown in **table 2**.

Painkillers were the most common group of medicine used by 180 (55.3%) subjects. Other commonly used groups of medicine were flu/cough remedies (46.7%) and indigestion/heart burn /acidity used by 102(31.3%) subjects. Distribution of the subjects according to the group of medicines used for self medication is shown in **table 3**.

Body ache/Joint pain was most common symptom for which almost 156 (48%) subjects sought OTC. Other symptoms were headache 90 (27.6%) and cough 81 (24.9%). Distribution of the subjects according to the various symptoms for which over the counter drugs or self medication is used is shown in **table 4**.

Table 3: Group of medicines used in self medication (n=325)

Group of drugs	Respondent (%)
Painkillers	180 (55.3)
Indigestion/heart burn /Acidity	102 (31.3)
Laxative for constipation	18 (05.5)
Flu/cough remedies	152 (46.7)
Sore throat products	65 (14.1)
Allergy relief medicine	88 (27.0)
Herbal medicine	12 (03.6)
Tetanus injection	09 (02.7)
Antipyretic	62 (19.0)
Antibiotic	116 (35.6)
Antidiarrheals	48 (14.7)
Sleep aids	02 (0.06)
Supplements/vitamins	18 (05.4)
Sexual performance enhancers	06 (01.8)

* Multiple Response Table

As far as the awareness regarding self medication is concerned, 16.3% subjects consider OTC drugs as better option compared to prescribed drugs.

Table 5: Awareness (Knowledge and Attitude) regarding over the counter drugs (n=325)

Variables	Yes (%)	No (%)	Don't Know (%)
OTC Drugs better option compared to prescription medicines	53(16.3)	254(78.1)	18(05.5)
I consume OTC drugs as per recommended dosage and duration	32(09.8)	182(56.0)	111(34.1)
I usually follow the instruction on the label of OTC drugs packaging	12(03.6)	313(96.4)	00(0.0)
I obtain the desired outcome from the usage of OTC drugs	126(38.7)	80(24.6)	119(36.6)
I had experienced adverse effects from the usage of OTC drugs	56(17.2)	195(60.0)	74(22.7)

DISCUSSION

In our study, maximum number of subjects were in the age group 31-40 yrs. Maximum no. of subjects 155 (47.6%) were having primary education. Similarly findings was reported by Marak A and Borah M et al in a study conducted in 2016 in Meghalaya, where 64.8% of the respondents were in the age group of 18-36 years and 40.5% of the respondents were having primary education.¹¹

In our study, maximum no. of subjects (230-70.7%) sought self medication (OTC) from medical shop followed by known person (50-15.3%) & other shop (45-13.8%). Similarly findings was reported by Keche Y, Yegnanarayan R et al in a study conducted in rural area of Pune, Maharashtra in 2012.¹² This shows that medical shop are not following the rule that they need to give medicine only on producing a valid prescription. Thus medical shops have become an easy source of OTC for self medication. In our study, major reason for practicing OTC drug for self medication was high cost of consultation (136-41.8%), followed by mild illness/Doctor's advice not needed (21.5%). In study by Pankaj Gupta et al monetary constraints was reported by 4.5% of the total study subjects and in a study by Jain M, Prakash R et al, mild illness/Doctor's advice not needed is reported by

56.3% of subjects don't consume OTC drugs as per recommended dose/duration. Very few (3.6%) of them follow the instruction on the label. 38.7% of users obtained desired outcome from OTC drugs. Importantly 17.2% of users/subjects experienced adverse effects from the usage of OTC drugs **table 5**.

Table 4: Symptoms for which self medication practiced (n=325)

Symptoms	Respondent (%)
Headache	90 (27.6)
Bodyache/Joint pain	156 (48.0)
Abdominal pain	24 (07.3)
Fever	46 (14.1)
Diarrhoea	37 (11.3)
Urinary burning	16 (04.9)
Cough	81 (24.9)
Runny nose	20 (06.1)
Medicated eye care/Ear care/ Foot care	74 (22.7)

* Multiple Response Table

39.51% of the study subjects.^{13,14} Due to high cost of medical consultation, the patients are finding easy ways of getting the treatment, which they find through medical shop or through some known person. People are happy to spend the same high consultation money in procuring OTC drug.

In our study, painkillers were the most common group of medicine used by 180 (55.3%) subjects and bodyache/joint pain was most common symptom for which almost 156 (48%) subjects sought OTC. As pain being the most common symptom which brings a patients to the doctor/chemist, it is evident that pain killer were the most common sought OTC. Similar findings were reported by Phalke V, Phalke D and Durgawale P in a study conducted in rural area of Maharashtra in 2006, in which 80.49% respondents used self-medication mainly for the treatment of minor illness such as headache, cough, and fever and analgesics, antipyretics and anti-diarrhoeals were most commonly used drugs.¹⁵

In our study, 16.3% subjects consider OTC drugs as better option compared to prescribed drugs. 56.3% of subjects don't consume OTC drugs as per recommended dose/duration. Very few (3.6%) of them follow the instruction on the label. 38.7% of users obtained desired outcome from OTC drugs.

Importantly 17.2% of users/subjects experienced adverse effects from the usage of OTC drugs. Similar findings were reported by Ahmed A et al in a study conducted in north India in 2015.¹⁶ In our study, socio-economic background of the subjects could be the reason for the low to moderate level of awareness regarding OTC drugs in the subjects.

CONCLUSION

Majority of the individuals were procuring over-the-counter drugs from medical shop, pain being the most common symptom for which painkillers were used by majority of the subjects. Economic constraint was the main reason for practicing self medication. Though the awareness level regarding over-the-counter drugs was quite good, but the attitude was in favor of self medication.

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