Section: Community Medicine

Original Research Article

AWARENESS & PRACTICES RELATED TO SELF MEDICATION WITH OTC DRUGS IN AN URBAN COMMUNITY: A CROSS SECTIONAL STUDY

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ABSTRACT

Background: Self-medication is becoming a common practice in many developing countries like India mainly due to lack of access to health care, easy availability of OTC (Over The Counter) drugs in market and poor drug regulatory practices. Unaware of the appropriate drugs for the particular illness, their doses and adverse effects, the misuse of medications as prescribed by the pharmacist or a family member or influenced by the social media becomes an important health issue specially as drug resistance. The aim of the study was to determine awareness & practices related self-medication in urban community. The objective is to determine the knowledge & extent of Self Medication & attitude towards OTC drugs. To determine factors related to self-medication & to create awareness about demerits of self-medication.

Materials and Methods: An observational, cross sectional community based study was conducted in Kolhapur. 348 participants were selected based on the inclusion and exclusion criteria. Predesigned, pretested, structured questionnaire was used based on survey in urban community of Kolhapur city. Mean, percentage and other statistical analysis was conducted using SPSS version 24.0.

Results: Out of total 348 study participants, 285 had practiced self-medication at least once out of which maximum 208 had tried for Respiratory illness. 181 participants selected medications depending on their cost. 90 subjects experienced vomiting as most common side effect.

Conclusion: More than two third among study participants had tried self-medication. Awareness regarding self-medication hazards needs to be created & promoted.

Keywords: OTC, Self-medication, side effects.

INTRODUCTION

Self-medication is the treatment of common health problems with medicines that are taken on patient's own initiative or on advice of a pharmacist, without professional supervision.[1] It is now becoming a common practice in many countries mainly due to lack of access to health care, easy availability of OTC (Over The Counter) drugs in market and poor drug regulatory practices. It thus forms an integral part of self-care, which can be defined as the primary public health resource in health care system. It includes self-medication, non-drug self-treatment, and social support in illness and first aid in everyday life.[2]

Unaware of the appropriate drugs for the particular illness, their doses, and adverse effects the misuse of medications as prescribed by the pharmacist or a family member or any one in general may lead such people playing with their lives at their own mercy. But with illiteracy, there is no end to this. On the contrary, the youth are highly influenced by the media, the internet which promotes the self-medication. Thus it becomes an important health issue especially in developing countries.[3]

Self-medication practices may lead to delay in care seeking which results in paradoxical economic loss due to delay in the diagnosis of underlying conditions and appropriate treatment. Also, it leads to interaction between drugs which would be prevented, had the patient sought care from a licensed medical practitioner. Such practices might lead to drug resistance and hence, there needs to be a check on these patients.[4]

Self-medication was practiced with a range of the drugs from the conventional anti-pains to antibiotics. Although the practice is inevitable people around the globe must educate themselves about the pros and cons of self- medication.[5]

Self-medication is becoming an important component in both developed and developing countries unlike other aspects of health care it involves the use of drugs, which have the potential to do good as well as cause harm.[6]

Over the counter (OTC) drugs are also known as non-prescription drugs. OTC drugs require no prescriptions from medical practitioners and hence are available to the public as they so wish. On the other hand, Prescription only medicine (POM) can only be dispensed to the public as per the prescriptions from licensed medical practitioners.[7]

Over-the counter (OTC) medicines are used commonly for treating minor illnesses. These drugs have been assumed to be safe and appropriate for the use without the supervisor of the healthcare professionals, these drugs can be purchased by the consumers and supervisor from the local nearby pharmacies at their disposal.[8]

Misuse and abuse of OTC products is quite common in India,[9] and the objective of this study is to ascertain the extent and identify the underlying causes and to create spread awareness & practices related to self-medication with OTC drugs in an urban community.

The aim of the study was to study awareness & practices related to self-medication with OTC drugs in an urban community.

MATERIALS AND METHODS

An observational cross sectional community based study about self medication was conducted amongst adults residing in E ward of Kolhapur, Maharashtra. Mean, Percentage and other statistical analysis was calculated using Microsoft excel.

Study design - An observational, cross sectional

Tools used - Predesigned, pretested, structured questionnaire

Study population – Male-female Adults residing in selected study area.

Inclusion Criteria

i) Adults (> 18 years of age) present at their house during data collection period.
ii) Adults who were willing to participate in study.

Exclusion Criteria

i) children, adolescents who were less than 18 years of age.
ii) Adults who were not willing to participant in study.

Data collection: Study instrument was a Questionnaire developed by reviewing relevant literature & previously used standardized instruments & protocols based on WHO questionnaire 10. Questionnaire had two parts. In initial part, collecting data regarding people information [age, sex, educational status, family and social background]. Second part about the details of OTC drugs usage [type of drug, frequency of use, purpose of use, cause of continuation, monetary source, influence, role of family members]. Questionnaire was composed of number of multiple choice questions. Participants were assured about anonymity. Questionnaire was prepared in English and local language Marathi as well for better understanding. Total study duration was 6 months from which data collection was done for 3 months. In course of data collection total 348 participants were interviewed & included in study.

Operational definition: Over the counter drugs - drugs which are taken without prescription of a medical practitioner and are available for people directly in pharmacy.

The Over The Counter (OTC) drug abuse will be classified as follows:[11]

Never Used- never used any drug.

Experimental users- not used drug on regular basis but have tried it once.

Occasional Users- used the drug few times in a year.

Frequent Users- used the drug few times in a month.

Regular users- used the drug few times a week.

Daily users- used the drug daily.

RESULTS

In the present study, total 348 adults were interviewed with the help of predesigned questionnaire. Amongst them, 285(82%) had practicised self medication atleast once in their life. Amongst them 134(47%) were females & 151(53%) were males. Out of 285 participants, 60(21%) were from above 60 years age group (TABLE NO1). In total 179(63%) preferred self medication only for the reason of convenience. [Figure 1]

[Table 2] shows that, 208(73%) study subjects, 117 males and 91 females, preferred self-medicating themselves mainly for respiratory diseases. 218(76%),111 men and 107 women participants from the study group mainly used drugs from NSAID mainly Paracetamol for self medication [Figure 2]. 90 (32%) participants experienced vomiting as side effect of self medication [Table 3].

In [Table 1], it was seen that, out of 285 participants, 60(21%) were from above 60 years age group. 45 (16%) were from 36 to 40 and 41 to 45 years of age group each and 7(2%), 12(4%), 40 (15%), 26(9%), 24(8%), 26(9%) were from 18-25 years, 26-30 years,

31-35 years, 46-50 years, 51-55 years and 56-60 years age group respectively.

As per [Figure 1], the study conducted showed that 98 males and 81 females, total 179(63%) preferred self medication only for the reason of convenience, while only 7(2%) had chosen self medication as an option because of lack of trust in doctors. Almost 44(15%) participants found self medication as a cost saving method.

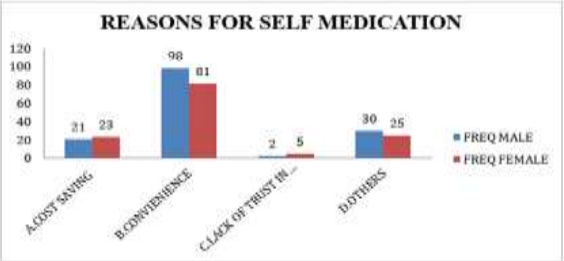

Figure 1: Reasons For Self Medication.

Table 1: Self medication in different age group

Age group (years)	Frequency (percentage)
18-25	7(2%)
26-30	12(4%)
31-35	40(15%)
36-40	45(16%)
41-45	45(16%)
46-50	26(9%)
51-55	24(8%)
56-60	26(9%)
Above 60	60(21%)
Total	285(100%)

Table 2: Causes for self-medication

Causes for self-medication	Frequency		Total
	Males	Females	
Respiratory diseases	117(77%)	91(68%)	208(73%)
G.i.t diseases	27(18%)	20(15%)	47(16%)
Painfull menses	0(0%)	16(12%)	16(6%)
Skin problems	4(3%)	4(3%)	8(3%)
Others	3(2%)	3(2%)	6(2%)
Total	151(100%)	134(100%)	285(100%)

As per Table no. 2, out of 285, in total 208(73%) study subjects, 117 males and 91 females, preferred self medicating themselves mainly for respiratory diseases followed by G.I.T. diseases by 47(16%). Of all 134 females, 16(12%) of them used self medication for painful menstruation. Only total 6(2%) used self medication for other causes.

As per [Figure 2], amongst participants 218(76%),111 men and 107 women participants from the study group mainly used drugs from NSAID mainly Paracetamol for self medication, while 26(9%) and 27(10%) used anti-histaminics and antacids respectively. The use of antifungal drugs was less used as compared to antibiotics.

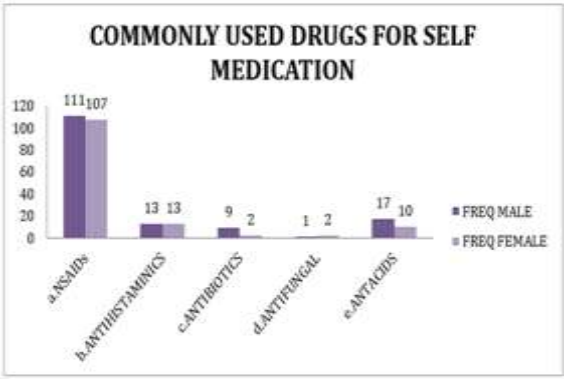

Figure 2: Commonly used drugs for self medication.

Table 3: side effects of self medication

Side effects of self medication	Frequency		Total
	Male	Female	
Vomiting	44(29%)	46(34%)	90(32%)
Diarrhea	20(13%)	23(17%)	43(14%)
Skin rash	36(24%)	28(21%)	64(24%)
Headache	32(21%)	12(9%)	44(15%)
Others	19(12%)	25(19%)	44(15%)
Total	151(100%)	134(100%)	285(100%)

In above table, 90(32%) participants experienced vomiting as side effect of self medication was which accounted for 44 in males and 46 in females. Followed by skin rash which was found in 64(24%) and headache & other non specific side effects were noticed in 44(15%) each. The incidence of diarrhea was seen in 43(14%) amongst which it was higher in females than in males.

DISCUSSION

In present study, out of interviewed participants huge percentage i.e. 82% had practicised self medication atleast once in their life. Amongst them more than half 53% were males. Maximum 21% were from above 60 years age. 63% preferred self medication

only for the reason of convenience. More than two third 73% study subjects preferred self medicating themselves mainly for respiratory diseases. 76% used NSAID mainly Paracetamol for self medication. Almost half, 48% practicised self medication cause they had used same drugs for same illnesses previously. Almost one third 32% participants experienced vomiting as side effect of self medication.

In one similar study was carried out by Kalaiselvi Selvaraj et al. in urban Puducherry, it was observed Prevalence of self medication was found to be 11.9%. Males, age >40 years and Fever (31%), headache (19%), and abdominal pain (16.7%) are most common illnesses where self medication is being used.[12]

In another study conducted by C. Maria et al. in a town of western maharashtra about self medication, it was seen, the mean age of the study participants was 34.44 ± 18.23 years in males and 33.67 ± 16.17 years in females. 43.90% of the rural participants and 55.31% of the urban participants had kept few medicines in their home and used it without consulting a physician. 72.34 % of the urban participants and 70.73 % had the practice of self-medication. The various reasons for it include high fees charged in medical facilities, time-consuming visits, recurring minor illnesses and a lot more. Many considered this practice as a cheap, efficient and time-saving mode of treatment.[13]

Similiar study carried by Varun Kumar et al. showed that drugs for self medication were mostly used for respiratory diseases followed by G.I.T diseases. Paracetamol (76.2%) was most commonly used drug followed by cough syrup.(58.9%).[14]

The results obtained in our study are in contrast to the results obtained from study by Badiger Sanjeev et al. where the common side effects were diarrhea followed by vomiting.[15]

CONCLUSION

Present study was conducted in an urban community of E ward, Kolhapur. to assess awareness & practices related to self medication with OTC drugs. It was noted that, majority of participants practicising OTC drugs for self medication. Maximun reason observed was for respiratory illnesses. NSAIDS drugs such as paracetamol was most commonly drug used. Many participants experienced mild to moderate side effects of self medication as vomiting which was experienced by majority followed by skin rashes, diarrhea, headache and non specific symptoms.

Instead of allopathic approach to self-medication it is recommended that people practice home-made medications which are both safe and effective. Holistic approach includes proper awareness and education regarding the self-medication and strictness regarding pharmaceutical advertising. Health professionals must spend extra time in educating patients regarding the same. Improved knowledge and understanding about self-medication may result in rationale use and thus limit serious effects. Public awareness, street plays and conferences can be conducted to educate the people in taking proper treatment instead of taking self-medication.

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