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EVALUATION OF SELF-MEDICATION AMONG URBAN POPULATION OF PALDI AREA, AHMEDABAD

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ABSTRACT

Objective: The objective of this study is to assess the extent of self-medication practice among general community of Paldi area.

Methods: This was a cross-sectional, anonymous, questionnaire-based survey that included 156 community members. A pre-validated questionnaire with several open-ended and closed-ended questions was administered. Data were coded, entered, and analyzed and the results expressed as counts and percentages.

Results: Out of the 156 respondents, 52 (33.4%) were males and 104 (66.6%) were females; the mean age of respondents was 35.8 years. Ninety five percent of respondents reported practicing self-medication. About one third of respondents had good knowledge about medication but did not posses high self-care orientation. Most of self medication was involved with headache and fever, cough/ cold and gastrointestinal infection.

Conclusion: This study shows that the majority of respondents had some knowledge about appropriate self-medication; the practice of self-medication was common, but often inappropriate.

Key words: Self-medication, Knowledge, Drug.

INTRODUCTION

Self- medication is practiced significantly worldwide. It is common for people to feel unwell, and human beings have an inherent tendency to use herbs, potions, medications, etc. for treating themselves. 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[1].

Self-medication is defined as the use of medication, whether modern or traditional, for self-treatment. 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[1,2]. Internationally, self medication has been reported as being on the rise[3, 4].

In several studies it has been found that inappropriate self-medication results in wastage of resources, increases resistance of pathogens and generally entails serious health hazards such as adverse drug reactions, prolonged suffering and drug dependence[1, 5, 6].

On the other hand, if done appropriately, self-medication can readily relieve acute medical problems, can save the time spent in waiting to

see a doctor, may be economical and can even save lives in acute conditions. It is now accepted that self-care in the form of responsible self-medication can be beneficial for patients, healthcare providers, the pharmaceutical industry and governments[1]. The World Health Organization (WHO) has also pointed out that responsible self-medication can help prevent and treat ailments that do not require medical consultation and provides a cheaper alternative for treating common illnesses[6, 7].

However, it is also recognized that self-medication must be accompanied by appropriate health information. 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[8, 9].

Study on self medication shows that it is influenced by many factors such as education, family, society, low availability of drugs and exposure to advertisements[10, 11].

METHOD

This study was a questionnaire-based survey approved by the Research and Ethics Committee of the College. A pre-designed, pre-validated questionnaire consisting of both open-ended and closed-ended items were used. The study population comprised general community of Paldi area, Ahmedabad. The study was explained to each participant and verbal consent was taken. The study was carried out in a big society of Paldi area and those who were willing to participate in the study were enrolled. So, total of 156 participants were included in the study. Data was collected during day time. Therefore female preponderance is observed in the study. The questionnaire was administered by the interviewers to each subject. The survey was descriptive and data was summarized as counts and percentages.

RESULTS

It includes information on age, sex and literacy levels of respondents (Table 1). It shows that more than 96 % of respondents are on self medication in all age group upto 50 years, while in elder age group (> 50 years) 81.8% are practicing self-medication. Gender wise distribution shows that 96.2% female and 92.3% are practicing self medication. In case of educational status, as the education level increases, self medication also increases.

Most of respondents had a trust in Modern medicine system (95.5%) and percentage of respondents favouring Ayurveda and Homeopathy were 7.1% and 3.3% respectively (Table 2). Over two thirds (67.6%) respondents learned self medication from doctors' prescription provided during their previous illness. Pharmacist, advertisements, drug literature, books comprised 23.6%, 20.9%, 4.1% and 10.1% respectively, which provided/ guided respondents for self medication. However, interesting finding in our study was that 98% respondents got relief of symptoms after self medication.

Table 1. Demographic characteristics of the respondents

Variable	No. of subjects (n=156)	No. of subjects practicing self-medication
Age group (Years)		
11-20	29	28 (96.5)
21-30	43	42 (97.7)
31-40	26	25 (96.2)
41-50	36	35 (97.2)
> 50	22	18 (81.8)
Gender		
Male	52	48 (92.3)
Female	104	100 (96.2)
Education		
Upto Higher Secondary	41	37 (90.2)
Graduate and above	115	111 (96.5)

* Proportions are computed from total numbers of subjects in each age group.

Table 2. Perception of subjects regarding system of Medicine, source of information and relief of symptoms after self medication

Variable	No (%)
Trust in Medicine system (n=156)	
Modern	149 (95.5)
Ayurvedic	11 (07.1)
Homeopathic	05 (03.3)
Source of information about drugs used in self medication (n=148)	
Doctor	100 (67.6)
Pharmacist	35 (23.6)
Advertisement	31 (20.9)
Drug literature	06 (04.1)
Books	15 (10.1)
Relief of symptoms after self medication (n=148)	
Yes	145 (98)
No	03 (02)

While assessing knowledge regarding various aspects of self medication (Table 3), it was observed that only 37.2% and 35.8% respondents had knowledge regarding dose of drug and duration of drug respectively. However, it was seen that only 21.6% respondents consumed drug as per dose, while 76.4% respondents stopped consuming drug earlier either because of relief of symptoms or any other reason.

About 95% respondents committed that they were involved with self medication practices. Drugs which were taken by self medication in various diseases states are given below:

Drug used in pain, headache and fever (Table 4): Maximum respondents 84.5% used paracetamol for fever, pain and or headache. Combiflam and Crocin were used by 41.2% and 21% respondents respectively.

Drugs used in cough and cold (Table 5): Cetrizine was used by 18.9% respondents. D- Cold was second drug of choice for 10.1% respondents and third drug of choice was Avil (8.8%).

Drug used in Gastro- Intestinal Tract infections/ conditions (Table 6): Metrogyl 8.1% was the most common drug of choice reported in this study. Domperidone 6.1%, Lopamide 5.4%, Ranitidine 5.4%, Isabghul 5.4% were considered as other drugs of choice for Gastro- Intestinal Tract conditions.

Table 3. Knowledge regarding the self administered drugs

Variable	No (%)
Indication for self medication	
Fever	112 (75.7)
Pain	86(58.1)
Headache	61 (41.2)
Cough, cold	81 (54.7)
Allergy	20 (13.5)
Vomiting	7 (4.7)
Diarrhoea	8 (5.4)
Constipation	3 (2.0)
Weakness	3 (2.0)
Other	10 (6.8)
Knowledge regarding dose of drug used	
Yes	55(37.2)
No	93(62.8)
Knowledge regarding duration of drug usage	
Yes	53(35.8)
No	95(64.2)
Duration of usage of drug	
As per dose	32 (21.6)
Till symptom relief	113 (76.4)
Other	03 (02.0)

Table 4: Self-medication drugs used in pain, headache and fever

Drug used in pain, headache and fever	No (%)
Paracetamol	125 (84.5)
Combiflam	61 (41.2)
Crocin	31 (20.9)
Diclofenac	19 (12.8)
Brufen	13 (8.8)
Calpol	4 (2.7)
Voveran	2 (1.4)
Dolo 650	2 (1.4)
Disprin	1 (0.7)
Nimesulide	1 (0.7)

(Multiple answers)

Table 5: Self medication drugs used in cough and cold

Drug used in cough and cold	No (%)
Cetrizine	28 (18.9)
D-cold	15 (10.1)
Avil	13 (8.8)
Vicks Action 500	8 (5.4)
Corex	6 (4.1)
Actified Plus	5 (3.4)
Glycodine	4 (2.7)
Sinarest	2 (1.4)
Azithral	2 (1.4)

(Multiple answers)

Table 6 Self medication drugs used in G.I. infection/ complication

Drug used in G.I. infection/ complication	No (%)
Metrogyl	12 (8.1)
Domperidone	9 (6.1)
Lopamide	8 (5.4)
Ranitidine	8 (5.4)
Isabghul	8 (5.4)
Norflox TZ	5 (3.4)
Avomine	5 (3.4)
Dulcolax	4 (2.7)
ORS	4 (2.7)
Sporolac	3 (2.0)
Electral	3 (2.0)
Ciplox	2 (1.4)

(Multiple answers)

DISCUSSION

The study population in this survey consisted of urban population of a big society of Paldi ward of Ahmedabad. In a study carried out among professional students in North India, most of the students (82.9%) had a trust in Modern medicine system, 80.8% students learned self medication from

doctors' prescription and 87% respondents committed that they were involved with self medication practices [12].

In our study nearly two third respondents learned self medication from previous prescription of doctor, while few respondents consulted pharmacists for information on the drug. Respondents with previous experience and with mild illness were more likely to practice self medication. This has implication, because many diseases have similar symptoms and a person using previous experiences may be exposed to the dangers of misdiagnosis and consequently wrong treatment. Most of the respondents were not aware of the dose of drug, duration of therapy, indication and side effects of commonly used medicine like Paracetamol used in self medication. Another alarming observation was that combiflam was also used by respondents to treat headache and fever, while this was considered as an Analgesic. In a study reported by professional students of North India[12], 61.3% used crocin for fever and headache, while 22.2% students used D- cold tablets for treating cough/ cold and metrogyl 27.6% was the drug of choice for diarrhea or dysentery related symptoms.

Most of respondents has positive attitude in self medication in minor illness. However, minor illness symptoms may cause major illness if not diagnosed and treated properly. Moreover, fatal diseases have symptoms like fever, bodyache and headache.

CONCLUSION

This descriptive survey shows that the majority of respondents had some knowledge about self medication. Thus, to avoid or minimize the danger of self medication, firstly community should be educated about the danger of indiscriminate use of drugs. Also patients' education regarding the safe and effective use of over-the-counter medications, herbals, and vitamins is desirable. Secondly, the physician 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 incidence of drug- related mishaps and help in maintaining good health of the individuals and society.

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