

## A STUDY OF SELF MEDICATION AMONG THE PEOPLE OF BHOPAL REGION MADHYA PRADESH, INDIA

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### ABSTRACT

The aim of study is to gather information on extent of self medication practice. The outcome of the study will provide data regarding reasons, public awareness and safety aspects of self medication in Bhopal city. It was a questionnaire based survey which was conducted on adult male and female population in Bhopal region. On a personal interview session questions were asked to the participants and responses were noted. Questionnaire include the variables like conditions, reason, system of medicine used, type of medicine consumed and source of information etc of self medication. Self medication is practiced mostly by males (58.6%) favoring the age group of 20-30 years. Out of 116 participants 56.8% said that they got information on self medication from chemist, 25% people got information by advertisements. Maximum participants (58.6%) considered that they use self medication for quick relief, 23.2% said that they have lack of time to go to doctors due to their busy schedule. Very common medicine used for self medication is paracetamol which was preferred by 34.4% of the participants and 18.9% like to have Disprin. Self medication for headache (25.8%), fever (36.2 %) and body pain (32.7%) are most common. Self medication is very common among the young male with high prevalence rate. Literacy and the economy are the major factors of self medication in the peoples. Although generally people have knowledge, but more awareness on self medication is needed.

**KEY WORDS:** Self medication, Self care, OTC Medicine, Self care management.

### INTRODUCTION

Self-medication can be defined as the use of drugs to treat self-diagnosed disorders or symptoms, or recurrent disease<sup>1</sup>. In the United Kingdom where on the average 50% of health care takes place within the realm of self-medication, the government encourages self reliance, while agencies like the World Health Organization (WHO) promote individual family and community participation in primary health care<sup>2</sup>. As with all drugs, the safety of non-prescribed medicines is dependent on appropriate use and appropriate dosage<sup>3</sup>. To ensure the optimal use of medicines, consumers should have timely access to quality information about their benefits, risks and appropriate usage<sup>4</sup>.

In country like India there is a wide range of disease occurrence coupled with inadequate health service resulting in increase proportion of drug used as it reduces the load on the medical services<sup>5, 6</sup>. 'Irrational' use of pharmaceuticals, in particular self-medication with antibiotics, has been widely reported leading the World Health Organization to call attention to the dangers of self-medication as a cause of antibiotic resistance<sup>7</sup>. However increasing availability of non-prescription medicines may encourage patients to believe that there is a over the counter (OTC) drug treatment available for every ailment<sup>8</sup>. It is now evident that self medication is widely practiced in both developing and developed country. India is also experiencing the problem of inappropriate use of self medication in significant number<sup>9</sup>. The increasing self medication readily requires more and better education of both the public and health professionals to avoid the irrational use of drugs<sup>10</sup>.

### MATERIAL AND METHOD

**Study Design:** A question based descriptive survey was carried out in Pharmacy Colleges and general adult male and female population of Bhopal city. Total 150 participants were given the questions out of which only 116 participants actively answer the question. Rest of them answered incompletely hence data of 116 participants were considered for the study and rest were excluded.

**Questionnaires:** A questionnaires was developed containing three sections. First sections include the question regarding the general demographic information such as age, gender, name, qualification etc. Second section of questionnaires consisted of questions related to the medical history, which includes reason for self medication and on the use of same prescription of any other family member. Other

questions of this section are the system of medicine under use like Allopathic, Homeopathic or Ayurveda and preference to generic or branded drugs. Third section contained the question regarding the condition in which people use the self medication. This section also includes the source of information about the drugs ex. from chemist, friends, advertisement, and parents or from internet and the type of drugs used for self medication.

### RESULT

From a total of 150 participants, questionnaires were completed by 116 people in which 58.6% were male and 41.3% were female aged above 18 years belonging to urban areas of Bhopal. The mean age of young participants was 23 years. Eighty seven persons (75%) were in age group of 20-30 years, Eighteen (15.5%) were in age group of 31-40 and eight were in age group of 41-50 (6.8%). There were 76 subjects of undergraduate level, 20 were of graduate level and 12 were post graduate level education.

Twenty one participants (18.1%) considered high consultant fee as the reason of self medication. Twenty seven (23.2%) and sixty eight (58.6%) persons explained the reason as lack of time and quick relief respectively. Nowadays there are different sources of information by which people can get the details regarding the drugs. Advertisements of drugs are Very common in which 25.8% participants considered it as source of information, 56.8% of participants favored the chemist as a source of information. There are also other common sources like friends (18.9%), family (18.9%) and internet (6.8%). Some of the participants got information for self medication from more than one source.

Generally self medication is used in some clinical conditions like fever (36.2%), pain (32.7%), headache (25.8%), cough (24.1%), cold (20.6%) and acidity (12%). Some of the most commonly used drug categories are analgesic (80.2%), antipyretic (49.7%), cough & cold medications (31.7%) and antibiotics like ciprofloxacin (8.6%) for respiratory and enteric infections. Generally OTC drugs are used in self medication. In general practice mostly used system of medicines are Allopathic, Ayurveda and Homeopathic Currently allopathic system is used much more as compared to any other system. Out of 116 participants, 77% used Allopathic, 14% Homeopathic and 9% used Ayurvedic drug in self medication. Most of the participants preferred use of branded drug as compared to the

generic one. Out of 116 participants 90 (77%) respondents commonly checked the expiry date and rest never try to check it.

**DISCUSSION**

This is a questionnaire base descriptive survey on self medication which was completely based on the information given by the respondents of Bhopal city. The prevalence of self medication was found to be 77.3% in Bhopal region which is almost similar to the prevalence of self medication in North India region (87%). The commonest illnesses that lead to self medication in this study (fever, headache, cough etc) were also reported in foreign countries<sup>5</sup>. These commonly occurring illnesses brought the people to follow the self medication. This survey explores that practice of self medication is most common between the youngsters. Maximum of the respondents used self medication for treatment of fever and headache which are the common problem therefore participants directly purchased the medicine from drug store without any prescription. The percentage of the people using drug as paracetamol and disprin was reported to be higher than any other category as most of the people preferred to use self medication for fever and body pain. Out of 116 respondents some of the people do not have knowledge about the dose, duration and precaution regarding the medicine which they were taking. It was found that most of the respondent preferred to use branded drugs. Most of the respondents consider self medication as a choice due to high consultant fee, lack of time and for quick relief. Most of the people are also aware of expiry date and check it before purchase. People update their self by getting the information regarding the drugs from the source like advertisement, chemist, friends, family and internet. Most of the peoples preferred to have information from chemist as they save the time and money both. Though some of the people preferred the advice from friends and from family members, wide spread advertisement of drugs now-a-days is one of the important reasons behind increase in self medication practice. In India people use the same prescription of the family member for same illness. We found that maximum number of the people preferred to use Allopathic drugs of medicine as compared to Homeopathic and Ayurvedic drugs, which may be due to quick relief offered by allopathic drugs.

**CONCLUSION**

This report revealed that self medication is commonly practiced for minor ailments to get quick relief and most prevalent in young males. People prefer to use medicine of allopathic system requiring education to understand the susceptibility of drug profile for particular ailments. Pharmacist should be more attentive towards the people who take the medicine without the prescription. Helping the peoples to know about the drugs very clearly can reduce the incidence of any adverse effect in future due to indiscriminate and unnecessary self medication. This is an alarming sign as indiscriminate use of allopathic drugs can come out with drug interaction and adverse reaction if the person concerned is using some other drugs on regular basis. This type of practice can be hazardous to pregnant ladies, children and geriatric patients. Public awareness need to be encouraged about the drugs safety.

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TABLE 1: Socio-demographic characteristics of participants N=116

Characteristic	No. of Participants (%)
<b>Age Group</b>	
20-30	87 (75%)
30-41	18 (15.5%)
41-50	8 (6.8%)
>50	3 (2.5%)
<b>Education</b>	
School level	8 (6.8%)
UG level	76 (65.5%)
G level	20 (17.2%)
PG level	12 (10.3%)
<b>Gender</b>	
Male	68 (58.6%)
Female	48 (41.3%)
<b>Reason for Self medication</b>	
High consultant fee	21 (18.1%)
Lack of time	27 (23.2%)
Quick relief	68 (58.6%)
<b>Source of information</b>	
Advertisement	30 (25.8%)
Chemist	66 (56.8%)
Friends	22 (18.9%)
Family	22 (18.9%)
Internet	8 (6.8%)
<b>Clinical conditions</b>	
Headache	30 (25.8%)
Fever	42 (36.2%)
Cough	28 (24.1%)
Cold	24 (20.6%)
Acidity	14 (12.0%)
Pain	38 (32.7%)

UG= undergraduate, G=Graduate, PG= Post Graduate

TABLE 2: Preference of drug categories used in self medication

Category of drugs	No. of participants	Total %
<b>Antipyretics</b>		
Paracetamol	40 (34.4%)	80.2 %
Crocin	30 (25.8%)	
<b>Analgesics</b>		49.7%
Diclofenac	16 (13.7%)	
Disprin	22 (18.9%)	
Combiflem	6 (5.1%)	
Nise	14 (12%)	
<b>Cough &amp; Cold</b>		31.7%
Cough syrup	11 (9.4%)	
Vicks action 500	12 (10.3%)	
D-cold total	14 (12%)	
<b>Antibiotics</b>		
Ciprofloxacin	10 (8.6%)	8.6%

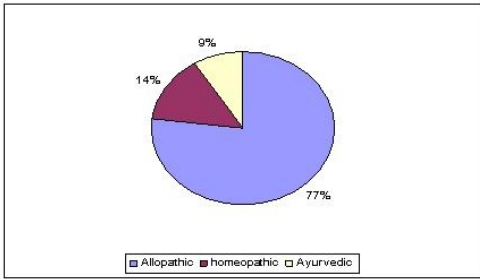


Figure 1: System of Medicine preferred by the people in practice of self medication

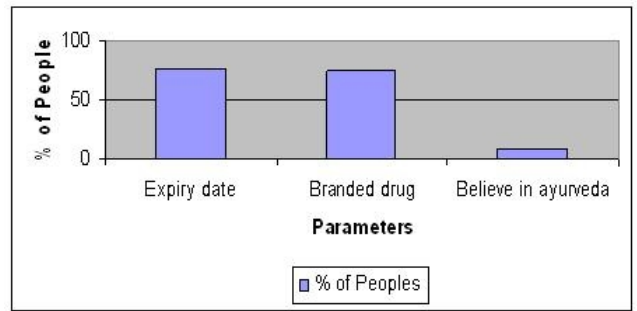


Figure 2: Percentage of people and parameters

**QUESTIONNAIRE**

**Section I**

Name.....  
 Qualification.....  
 Location.....  
 Age.....  
 Gender.....

**Section II**

Q. What is the reason for self medication?

- 1) High consultant fee
- 2) Busy Schedule.
- 3) Quick relief.
- 4) Believe in Ayurveda.

Q. Do you use same prescription of your family member?

- 1) Yes
- 2) No

Q. Which type of drug you use?

- 1) Branded drug.
- 2) Generic drug.

Q. Which type of system of medicine do you use?

- 1) Allopathic system.
- 2) Homeopathic.
- 3) Ayurveda.

Q. Do you check expiry date of medicine?

- 1) Yes
- 2) No

**Section III**

Q. In which condition do you use self medication?

- 1) Headache
- 2) Fever
- 3) Cough
- 4) Acidity
- 5) Body pain
- 6) Cold

Q. Source of information about the drug?

- 1) Advertisements
- 2) Chemist
- 3) Friend
- 4) Parents
- 5) Internet

Q. Which Drug do you use for self medication?

- 1) Paracetamol
- 2) Diclofenac
- 3) Disprin
- 4) Antibiotics
- 5) D-cold total
- 6) Ciprofloxacin
- 7) Combiflem
- 8) Nise
- 9) Crocin
- 10) Vicks action

500

Signature.....

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