



PRESENT SITUATION ABOUT SELF-MEDICATION AMONG GENERAL PEOPLE OF A METROPOLITAN CITY, DHAKA, BANGLADESH

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ABSTRACT

The aim of this study is to evaluate the prevalence and factors affecting self medication among the general population of one of the biggest metropolitan city, Dhaka, Bangladesh. The results of the study will focus on the data regarding reasons, public awareness and safety aspects of self medication in Dhaka, Bangladesh. It's a questionnaire based survey which were conducted on adult male and females. A total of 355 questionnaires were analyzed, among respondents, 83.10% were practicing self medication frequently. The reasons of self medication were quick remedy is known (48.43%), lack of time (26.21%) and high fee of doctors (18.52%). The most common diseases in which self medication are applied are fever (24.88%), gastric problem (24.42%), headache (17.21%), cough and cold (14.19%), pain (13.95%), diarrhea (3.95%).

Keywords: Self medication, prevalence, public awareness, OTC medicine, Metropolitan city.

1. INTRODUCTION

Self-medication is the use of drugs with therapeutic intent but without professional advice or prescription. It has also been defined as the use of nonprescription medicines by people on their own initiative. In recent years there has been increasing practice of using OTC drug, which means over-the-counter drug. OTC drugs are non prescription drugs found in pharmacies and retail outlet. It has also been defined as the use of nonprescription medicines by people on their own initiative Jamison AJ *et al.* [1]. Recently 'increase in the quantities and varieties of pharmaceuticals' and a number of 'prescription-only medications (POM)' drugs have been changed OTC products Bond C *et al.* and Ali SE *et al.* [2,3]. 'Thereby giving options for misuse' and promotes by the patients and promotes 'inappropriate use of medicines' which 'is a prominent constraint in ensuring the safe and effective use of essential medicines' Ali SE *et al.* [3] The WHO (1995) stressed that rational self-medication helps in the prevention and treatment of minor pathological conditions at an affordable cost WHO. [4] Self-medication is widely practiced worldwide Hughes CM *et al.* The practice of self-medication must be based on authentic medical information. Irrational use of drugs can cause wastage of resources, increased resistance of pathogens, and can lead to serious health hazards such as adverse drug reactions and prolonged morbidities Hughes CM *et al.* [5]. Self-medication trends in different regions of the world are high WHO and Bradley C *et al.* [6,7] like in India, it is 31% Deshpande S *et al.* [8] and 59% in Nepal Shankar P *et al.* [9] and it is alarming despite the efforts made to curb this problem Hsiao FY *et al.* [10] It increases day by day both in developing countries Geissler PW *et al.* and Sawair FA *et al.* [11-17] and developed countries Greenhalgh T and Grigoryan L *et al.* [18-24] In developing countries like Bangladesh, self-medication is a common practice as it provides a low-cost alternative for people who cannot afford

the high cost of clinical service and also as many drugs are dispensed OTC without prescription from a registered medical practitioner Hussain S *et al.* ^[25]. OTC medicines have emerged as drugs of serious misuse across Bangladesh, and other neighboring countries Mudur G ^[26]. Along with the common practices of self medication, almost every drug store salesperson is illegally involved in the recommendation and sells of prescription only medicines in Bangladesh Abu Syed Md *et al.* ^[27]. In this study evaluation of the prevalence and factors affecting self medication among the general people of Dhaka district, Bangladesh has been performed.

2. MATERIALS AND METHODS

2.1 Study Design

The study was a questionnaire based survey carried out from May 2016 to June 2016. The samples were selected randomly among the general population of Dhaka city including modern residential area as well as slums. A questionnaire was developed based on the parameters related to the awareness of adoption of self medication of drugs. The questionnaire consisting of both open ended and close-ended items was prepared. A briefing given about the nature of the study, and the procedure of completing the questionnaire was explained. For the purpose of the study, certain operational/medical terms were explained to the participants. Total 355 were given the questions among them 346 of them actively answered the questions. Rest of them answer incompletely hence data of 346 were considered and rest were excluded.

2.2 Questionnaires

A questionnaire was prepared which contains three parts. The first part includes participant's demographic information like, name, age, sex and educational qualification. Second part of the questionnaire contains information about the reason behind self medication, conditions in which they adopt self medication, awareness of side effects of self medication, preference of any particular pharmaceutical company's medicine, source of the drug's information like from doctor, previous prescription, retailer seller etc. and effectiveness of self medication.

2.3 Ethical Considerations

Careful consideration was given to ethical issues in the design of the study. The objective of the study was explained and confidentiality ensured to the participants.

3. RESULTS

3.1 Demographic data of the participants

The total number of questionnaires distributed was 355 and 346 completed forms were collected. This resulted in a response rate of 97.46%. There were 46.48% male and 53.52% female. Demographic data including age, sex and level of education of the respondents are shown in Table 1.

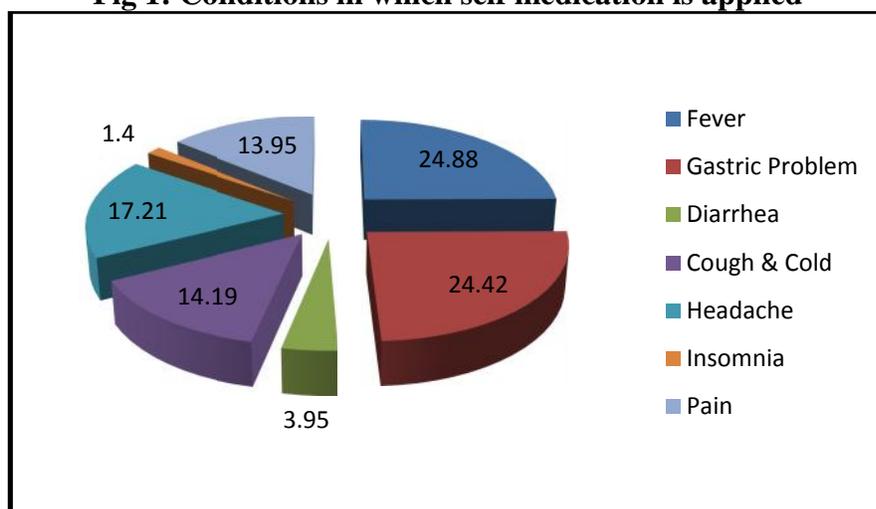
Table 1: Demographic characteristics of respondents

Sex	Number of Participants	Percentage
Male	165	46.48%
Female	190	53.52%
Age	Number	Percentage
10-20	67	18.86%
20-30	157	44.23%
30-40	46	12.96%
40-50	42	11.83%
50-60	29	8.17%
60-70	9	2.54%
70-80	4	1.13%
80-90	0	0%
90-100	1	0.28%
Education	Number	Percentage
Below Primary	19	5.35%
Primary	23	6.48%
Secondary	70	19.72%
Undergraduate	189	53.24%
Graduate	54	15.21%

It was also found that 18.86% were between the age group of 10 – 20 years, 44.23% were between 20-30 years, 12.96% were between 30 - 40 years, 11.83% were between 40-50 years and 11.84% were 50 years. The educational background reveals that, among the participants there were 5.35% of below primary, 6.48% of primary, 19.72% secondary, 53.24% of undergraduate level, 15.21% of graduate level.

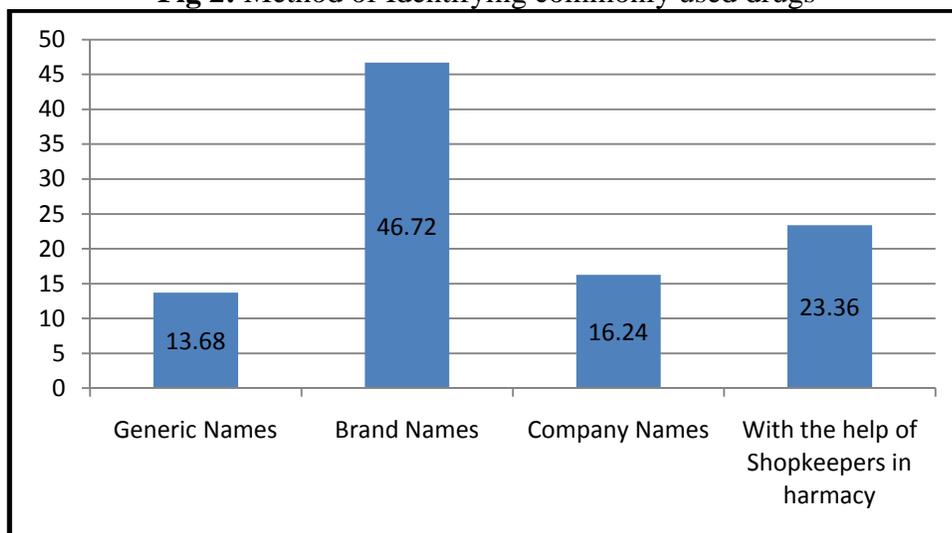
3.2 Self medication Information

The conditions in which self medication is applied are fever (24.88%), gastric problem (24.42%), headache (17.21%), cough and cold (14.19%), pain (13.95%), diarrhea (3.95%), insomnia (1.40%). The reasons for self medication identified are “remedy is already known” (48.43%), “not enough time” (26.21%), “high fee of doctors” (18.52%) and “fear about doctor chamber” (6.84%).

Fig 1: Conditions in which self medication is applied

The sources of drug information are family members (34.47%), previous prescription (27.64%), retail pharmacy (19.94%) and friends (6.55%).

Fig 2: Method of Identifying commonly used drugs



Generally people are acknowledged with these drugs by “brand name” (46.72%), “with the help of shopkeepers” (23.36%), “company names” (16.24%) and “generic names” (13.68%). 48.41% of the participants think self medication is really effective and 39.71% think it is not effective for all diseases. 18.67% of the participants prefer a particular manufacturing company. Only 9.67% of them told about some side effects like heartburn, dizziness etc after taking self medication.

4. DISCUSSION

In this study 346 people take part and 55.94% people very frequently practice self medication. Among the participants 46.48% are male and 53.52% are female. Shankar *et al.* (2002)^[9, 21] and Parimi *et al.* (2002)^[29] also supported the findings in this study that gender was not significantly associated with self-medication. People between the ages of 20-30 years (44.23%) are the major group taking self medicine. 53.45% undergraduate participants practice self medications. Education identified to be a factor influencing self medication which contradicts with the findings of Hafeezullah *et al.* (2014)^[30]. 50.33% of the respondents check the expiry date of the medicine which must be checked before taking a medicine. Common conditions identified are fever (24.88%), gastric problem (24.42%), headache (17.21%), cough and cold (14.19%) and pain (13.95%). Self medication is mostly practiced because major of the participants think that the remedy of the diseases (fever, pain, allergy, headache, heartburn etc) are already known (56%). Another reason which plays an important role in self medication practice are found to be high fee of doctors (18.53%) and the people are finding it difficult to go to the doctors for some common diseases as they have not enough time (26.21%). Major people have come to know about the drugs by the previous doctor’s consultation, previous prescription, friends and relatives and retail seller. Most commonly taken drugs are found to be analgesics, antipyretics, antihistamines, anti-ulcerative and anti-infective drugs. 29.67% of the people are practicing self medication believe that it effective. 18.67% of the people prefer a particular manufacturing company which is famous and has good reputation in the country. Only 9.67% of the participants has reported side effects like acidity, dizziness etc.

5. CONCLUSION

From the study it is evident that self medication is adopted only for the minor ailments as drugs are known to the people from various sources and people use drugs for the quick relief or sometimes doctor's high fee is an obstacle or sometimes people don't have enough time from their busy schedule. But people must be careful before taking drugs without knowing the adverse side effects or reaction in the body. 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 kind of practice may be perilous to pregnant ladies, children and geriatrics patients. Public awareness need be increased about the drug safety.

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