

PREVALENCE OF SELF-MEDICATION AMONG RESIDENTS OF URBAN SLUM OF KOLKATA : A COMMUNITY-BASED, CROSS-SECTIONAL STUDY



Community Medicine

Dr Amal Kumar Sinha Roy	Associate Professor, Dept. of Community Medicine, Malda Medical College and Hospital, W.B, India.
Dr Samir Kumar Ray	Associate Professor, Dept of Community Medicine, Murshidabad Medical College, Berhampore, Murshidabad, West Bengal, India.
Dr. Debdutta Banerjee	Assistant Professor, Dept. of Community Medicine, IQ City Medical College Hospital, Durgapur, West Bengal, India.
Dr Abantika Bhattacharya*	Assistant Professor, Dept. of Community Medicine, Midnapore Medical College, West Bengal, India. * Corresponding Author
Dr Kishore P Madhwani	Occupational Health Consultant, Mumbai, Maharashtra, India.
Jitendra Kumar Singh	B.Sc., Sociologist, Kolkata, West Bengal, India.

ABSTRACT

Background: Self-medication is defined as medication taken on the patient's own initiative or on the advice of pharmacist or any other lay person. Self-medication can be described as a double edged sword for its users, because it has both beneficial and harmful effects. According to recent community based study in 2016 prevalence of self-medication in developing countries varies from 12% to as high as 73% in different communities. The objectives of the study were to assess the prevalence of self-medication among the residents of urban slum of Kolkata and to identify the factors associated with the practice of self-medication. **Methods:** A community based cross-sectional study was done in the Tangra urban slum area of Kolkata. All the residents of selected slum who >18 years of age were selected. A total of 200 participants were randomly selected. Data on socio demographic details (age, gender, education, occupation, and income), practice of self-medication, and reasons for use of self-medication were collected. **Results:** Majority of the respondents were females 118 (59%) and maximum of the study participants were in the age group of 31-60 years 96 (48%). The prevalence of self-medication was very high 138 (69%). Majority of the study participants preferred allopathy medicine 152 (76%). Pharmacist was the main source of information for practicing self-medication 118 (59%). **Conclusions:** Sessions of health education should be conducted to create awareness about side effects of self-medication. Govt should prepare and implement strict laws that without prescription of doctors no medicine should be given to anybody at the pharmacy.

KEYWORDS

Prevalence, Self-medication, Urban, Community-based

INTRODUCTION

Self-medication is defined as medication taken on the patient's own initiative or on the advice of pharmacist or any other lay person. The World Health Organization (WHO) has defined self-medication as the practice whereby individuals treat their ailments and conditions with medicines that are approved and available without prescription, and which are safe and effective when used as directed.¹ But self-medication can be described as a double edged sword for its users, because it has both beneficial and harmful effects.² Antibiotic resistances are rising to dangerously high levels in all parts of the world. New resistance mechanisms are emerging and spreading globally, threatening our ability to treat common infectious diseases.³ According to recent community based study in 2016 prevalence of self-medication in developing countries varies from 12% to as high as 73% in different communities and prevalence had increased from 31% in 1997 to 71% in 2011.² The prevalence among Asian countries, like Nepal 59%, Pakistan 51%, Sri Lanka 64%, Bangladesh 80%.³ In India self-medication is highly prevalent and it is one of the important factors attributed to the development of antimicrobial resistance and also serious health hazards such as adverse reaction and prolong suffering. In coastal regions of south India, the prevalence was 71%, while in Delhi the prevalence was 92.8%.^{4,5} Self-medication is associated with risks such as misdiagnosis, use of excessive drug dosage, mixing medications that are not safe to mix, which may result in legal cost or health concerns, risk of abuse, risk of developing addictions, masking symptoms of serious condition, delaying medical advice prolonged duration of use, drug interactions and poly pharmacy.⁶ In India, the most common reasons for self-medication were common cold (61.6%), and fever (51.8%). Analgesics and cough syrups were the most commonly used class of drugs in India which can be easily available over the counter.^{4,5} In addition, lax medical regulation has resulted in the proliferation of counter free drugs that are in high demand for the treatment of highly prevalent diseases.

Therefore, with an aim to find out the prevalence of self-medication and factors contributing in the increase to it, the present study had been carried out.

The objective of the study was to estimate the prevalence and pattern of self-medication among the residents and their source of prescription.

MATERIALS AND METHODS

It was a community based cross-sectional study. The present study was conducted in an urban slum area located in Tangra area of Kolkata. Duration of the study was November 2020 to January 2021. Sampling Technique was Convenient sampling. All the residents of selected slum who >18 years of age were selected. A total of 200 participants were randomly selected.

Self-medication was defined as the use of over-the-counter or prescription drugs, whether modern or traditional, for self-treatment, without prior consultation with a doctor. Medication was defined as any substance used for treatment or prevention of disease. It included modern scientific medications as well as medications from other healthcare systems.

Individual residing in the area and willing to participate in the study were included in the study. Severely ill Individuals, individual below 18 years of age were excluded.

If no participant above 18 year of age is found during the time of survey in the house. The next adjacent house was selected for the survey. Data was collected by interview using semi-structured pretested questionnaire which was administered to the participant from each of the households available at the time of the visit. Data on socio demographic details (age, gender, education, occupation, and income),

practice of self-medication, and reasons for use of self-medication was collected.

Data entry and analysis were using SPSS 20.0 software and MS Excel 2007 software.

RESULTS

Majority of the respondents were females 118 (59%) followed by male 82 (41%). Maximum of the study participants were in the age group of 31-60 years 96 (48%). Study shows that 8 (4%) of the participants were in social class V, 48 (24%) in social class IV, and 58 (29%) in social class I. About 42 (21%) were illiterate and 56 (28%) studied till high school and only 6 (3%) were post graduate. (Table 1).

Table 1: Socio-demographic profile of study participants.

	Frequency	
	No	%
Gender		
Male	82	41
Female	118	59
Age		
18-30 years	88	44
31-60 years	96	48
>60 years	16	8
Social Class		
Class 1	58	29
Class 2	40	20
Class 3	46	23
Class 4	48	24
Class 5	8	4
Total	200	100
Education		
Illiterate	42	21
Primary school	12	6
Middle school	38	19
High school	56	28
Intermediate	16	8
Graduate	30	15
Post graduate	6	3

Majority of the respondents were practicing self medication (69%) (Table 2).

Table 2: Majority of the study participants practicing self-medication.

Self-medication	Frequency	
	No	%
Yes	138	69
No	62	31
Total	200	100

The common conditions for which they practiced self-medication was fever (34%), common cold (19%), cough (15%) and headache (12%). It was observed that majority of the study participants preferred allopathy medicine (76%) followed by Ayurvedic (17%) and homeopathy (7%). Pharmacist was the main source of information for practicing self-medication (59%), previous consultation (18%), Internet (14%) and Television (9%). (Table 3).

Table 3: Distribution of study participants as per practices related to self medication.

Common Conditions	Frequency	
	No	%
Fever	68	34
Cold	38	19
Cough	30	15
Body pains	14	7
Head ache	24	12
Diarrhoea	14	7
others	12	6
Total	200	100
Type of medicine		
Allopathy	152	76
Ayurvedic	34	17
Homeopathy	14	7

Total	200	100
Source of information		
Pharmacist	118	59
Previous consultation	36	18
Television	18	9
Internet	28	14
Total	200	100

Majority of the study informed that time saving (48%) is the main reason to take self-medication because of their busy routine schedule they don't time to go sit for long for consultation in doctors chamber of hospital. Near about 31% said as they suffer with mild illness so doctor consultation not required. Monetary constraints was 23%. (Table 4)

Table 4: Distribution of participants as per reasons for using self-medication.

Reasons	Frequency	
	No	%
Time saving	96	48
Mild illness	58	29
Monetary constraints	46	23
Total	200	100

DISCUSSION

In present study maximum of the study participants were in the age group of 31-60 years (48%). In another studies participants were in the age group of 26-35 years, (61%), 35-45 years (32%), 21-40 years (40%) respectively.⁹⁻¹¹ Majority of the respondents were females (59%) which was similar to study conducted by Gupta P et al where females were 65%.¹⁰ Near about 21% were illiterate in present study which was similar to study conducted by Aqeel T et al where it was found to be 23%.¹² In a study done by Kulkarni PK et al it was observed to be more (33.33%).⁷ In the present study majority of the respondents were practicing self-medication (69%), in another study conducted by Kulkarni PK et al, Gupta P et al and Aqeel et al prevalence of practicing self-medication is less than present study where it is 30.5%, 55.9% and 68.3%.^{9,10,12} In the present study Allopathy medicine was practiced by majority of the study participants (76%) which was similar with other studies where allopathy medicine was the first preference by the study participants (77.77%), (15.2%).^{9,12} The participants informed that pharmacist was the main source of information for practicing self-medication (59%) and previous consultation (18%) which is similar in study done by Gupta P et al where (42.1%) said pharmacist was main source of information followed by previous consultation (25.4%).¹⁰ Gupta P et al mentioned that in there study doctor was the main source of information (61%).⁹ In the present study common conditions for which they practiced self-medication was fever (34%), common cold (19%), cough (15%) and headache (12%). In study done by Gupta P et al, pain (88%) was the main complaint for which they were using self-medication followed by cough and fever (89%).¹⁰ In another study pain was the main reason to practice self-medication (31%).¹¹

The results in the present study showed time saving (48%) was the main reason to practice self-medication which was not similar with present study such as financial constraints (49%), was the main reason, and it was observed same in another study (19.3%).^{10,11}

CONCLUSION

Self-medication is highly prevalent in the studied slum area. People residing in slums prefer using self-medication than consulting a physician despite of their vicinity to tertiary health care center and medical college which provides free drugs and health services.

Over the counter drugs available through pharmacists are preferred due to abundance of medical shops nearby. Easy availability of over the counter (OTC) drugs is a major factor responsible for irrational use of drugs in self-medication. So, strict legislation is required to prevent drug distribution without prescription.

Community awareness programs, educational interventions should be conducted about side effects of self-medication. Periodic studies on knowledge, attitude of people may give an insight towards self-medication.

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