



SELF MEDICATION PRACTICES AMONG URBAN SLUM DWELLERS IN SOUTH INDIAN CITY

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ABSTRACT

In developing countries like India most episodes of illnesses are treated by self-medication because of easy availability of a wide range of drugs commercially. Inadequate health services results in increased proportions of drugs used as self-medication compared to prescribed drug. A cross-sectional study comprising 118 households was carried out in an urban slum community to know the knowledge, awareness and perception of self-medication practices by house to house survey. Self-Medication was practiced by 30.5% of respondents and was more prevalent among 26-35 age group. Allopathic drugs were commonest mode of self-medication (77.7%). The commonest reason for self medication was high cost of consultation of private doctors (61.1%). Majority of the study population(90%) respondent that they don't know the type of drugs given by the pharmacist. When asked about antibiotic usage 96% of study population replied their ignorance.

KEY WORDS : *Self medication, Urban Slum dwellers, over the counter drugs, Aspirin.*



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INTRODUCTION

Self-Medication can be defined as obtaining and consuming drugs without the advice of a physician either for diagnosis, prescription or surveillance of treatment ⁽¹⁾. There is a lot of public and professional concern about the irrational use of drugs.

In developing countries like India most episodes of illnesses are treated by self-medication ^(2,3) because of easy availability of a wide range of drugs commercially coupled with inadequate health services result in increased proportions of drugs used as self-medication compared to prescribed drug⁽⁴⁾. . Pharmacists and pharmacy attendants play an important role in fostering self-medication among the public ⁽⁵⁾. Although, OTC (over the counter) drugs are meant for self-medication and are of proved efficacy and safety, their improper use due to lack of knowledge of correct dose, side effects, and interactions could have serious implications, especially in extremes of ages (children and old age) and special physiological conditions like pregnancy and location^(7,8)

There is always a risk of interaction between active ingredients of hidden preparations of OTC drugs and prescription medicines, as well as increased risk of worsening of existing disease pathology. Combination preparations containing 'hidden' classes of drugs and food supplements or tonics of doubtful value were commonly used in India ⁽⁶⁾. Very few studies have been published regarding self medication pattern in our community, therefore, we conducted this cross sectional

study to know the extent of OTC drug use in an urban slum area.

METHODOLOGY

The Study population was urban slum area (Bhavani Nagar), a field practice area of the urban health training centre under the Department of Preventive and Social Medicine of Deccan College of Medical Sciences, Hyderabad.

The slum is divided into 6 communities, one of which was selected randomly. A cross sectional study was done including 118 households.

A simple questionnaire was prepared and each family was interviewed only once in the local language. At least two members of the family (including head of the family and excluding children below 12 years and mentally sick persons) were interviewed, after obtaining their consent. The questionnaire was filled by the interviewer. The questionnaire contained the questions pertaining to identification data (name of head of family, no of children, adults, address, qualifications, employment, income), Practice of self medication by the family, symptoms for which drugs used, knowledge of family regarding dose, duration, side effects, attitude towards allopathic, ayurvedic and homeopathic medicines. All the information was collected as per recall period of one year. In end of the study all the data was collected and analyzed.

The formula for estimation of sample size is

$n = pq / (E/1.96)^2$ where

n=the minimum sample size required.

p = prevalence of self medication practices according to study conducted by Gupta et al in slum of Mumbai it was found that prevalence of self medication practices was 55.92%

q= 100-p (100-55.92%)
= 54.08%

E = The margin of the sampling error tolerated(%)
=10% i.e. 90% confidence level.

This implies that if the prevalence of morbidity is around 55.92%, then it would be 90% certain that the prevalence measured in the sample would be between 45.92% and 65.92% (that is 55 + or -).

$$n = \frac{55.92 \times 54.08}{(10/1.96)^2} = \frac{3024.15}{26.04} = 116.12 \approx 117$$

RESULTS

The prevalence of self medication in the study population was 30.5%, among which majority twenty two respondents (61.1%) were aged between 26-35 years. (Table-1)

Table-1
Demographic data of the respondents

Demography	Number (n=117)	Percentage (%)
Sex		
Male	97	83.33
Female	20	16.66
Age (years)		
15-25	32	27.36
26-35	71	60.68
36-45	14	11.96
Formal Education		
Nil	39	33.33
Primary School	33	27.77
Secondary School	33	27.77
Tertiary Education	12	11.13

Majority of the respondent were male (83.3%) Most of the respondents had no formal education (33.3%), and ten respondents each (27.7%) had primary and secondary education respectively (Table-1).

Table-2
Table of Medicine in Respondents

Type of Medicine	Number of Respondents	Percentage (%)
Allopathy	91	77.77
Homeopathy	13	11.11
Ayurvedic	13	11.11
TOTAL	117	100

Allopathic drugs used by 28 (77.7%) respondents (Table-2). There was trend towards use of ayurvedic and homeopathic drugs for chronic illnesses like joint pains, acid peptic disease, bronchial asthma, hypertension. The symptoms for which medicines were used are mostly pain, cough, fever (Table-3).

Table-3
Conditions for which self-medication practiced

Condition	users (n=117)	Percentage (%)
Pain	103	88.03
Cough	97	82.9
Fever	97	82.9
Diarrhea	49	41.88
Respiratory Complaints	32	27.35

In the present study doctors were found to be the most common source of drug information (61.1%) followed by chemist (41.6%) and advertisements (27.7%) (Table-4).

Table-4
Source of information about medication

Source	users (n=117)	Percentage (%)
Doctor	71	60.68
Chemist	48	41.02
Advertisement	32	27.35

Majority of the respondent practiced self-medication due to various reasons like high cost of consultation of private doctors (61.1%), followed by poor quality of care in government hospitals (47.22%) (Table-5)

Table-5
Reasons for Self Medication

Reasons	No. of Respondents (n=117)	Percentage (%)
Poor quality of care in government hospitals	55	47.08
High cost of consultations of private doctors	71	60.68
Doctors advice not needed for common illness	49	41.88

Analysis of their monthly experience revealed that 50% of the respondents spend less than 5% of their income on self medication (Table-6). Present study also indicated lack of knowledge about dose/duration & side effects of commonly used drugs.

Table-6
Average expenditure on self medication

Proportion of expenditure to total income (%)	users (n=117)	Percentage (%)
1-5	60	51.28
6-10	32	27.35
11-15	19	16.25
16-20	3	2.56
21-25	3	2.56
Total	36	100

Practices and attitudes regarding self medication

Majority of the study population(90%) respondent that they don't know the type of drugs given by the pharmacist. When asked about antibiotic usage 96% of study population replied their ignorance regarding the drug. 4% are aware of antibiotic usage

but unaware of the dosage and the days to be used.

None are aware of drug resistance.95% of the study population said they buy the medicine for 1 day.92% of the subjects said they will stop the medicine when symptoms subside

Table 7
checking expiry date on drugs by the study population

Checking expiry date of drugs	Number	Percentage(%)
Yes	5	4.2
No	20	17.09
Don't know	92	78.63

Only 4.2% of the study population checked expiry date before using medicine.

In the study population 4 (3.4%) were pregnant women and when asked about the knowledge regarding the drugs to be avoided in pregnancy, all women expressed their ignorance.

None were aware of generic drugs. Majority of the study population (63%) expressed financial constraint as the reason for not going to doctor for the ailments.

DISCUSSION

Self-medication is more likely to be inappropriate if used by poorly informed people. The extent of depth of knowledge regarding OTC use in a community need to be assessed. Previous studies have shown the prevalence of self medicate as 37% in urban population and 17% in rural population in India⁽⁹⁾, where as 12.7% to 95% in other developing countries^(4,11) in contrast to 30.5% in the present study. The wide variations amongst these studies are likely due to educational, socio-cultural and regional conditions. The higher prevalence within the age group 26-35 years was consistent with the results reported by Shanker et al⁽⁴⁾. Inability to afford medical care by professionals was one of main reasons for self medication. Most of the respondents used allopathic medicines, a finding which was consistent with the results of study by R. Sharma et al⁽¹²⁾. Paracetamol and analgesics were the most commonly used class of drugs, which is found to be similar to Arrias et al study⁽¹⁶⁾ In the present study doctors were

found to be the most common source of drug information followed by chemists and advertisements. These are in concordance with earlier reports^(12,13,14). Advertisements about drugs were also an important source of drug information. Many advertised products are 'Life style drugs', Symptomatic treatments and may relieve only the discomfort and are likely to result of uncontrolled disease complications and hospital admissions as a result of uncontrolled disease pathology. Our study conducted in urban slums presented self medication patterns among urban population, but the condition could be worse in rural population because of scarce health facilities. In the present study, 77.7% of respondents spend upto 10% of their income on use of OTC drugs. This calls for a need to improve public health facilities in government settings, so that this income can be utilized for better nutrition & family welfare.

CONCLUSION

There is need to ensure community education, safety and efficacy of OTC drugs, so that even after its improper use, they prove to be safe. Easy availability of OTC drugs is a major factor responsible for consequences like antimicrobial resistance and increase load of morbidity. There is a need for concerned authorities to make existing laws regarding OTC drugs more stringent for their rational use. Periodic studies on the knowledge, attitude and practice of self-medication may give an insight into the pattern of drug use.

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