



## Prevalence and pattern of self medication amongst urban slum dwellers of Jorhat town of Assam.

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**ABSTRACT** Self medication is the issue of interest of researcher as the practice has advantage as well as disadvantage in general population.

**Objective :** to assess the prevalence and pattern of self medication of slum dweller of Jorhat town.

**Materials & Method:-** 148 slum dwellers were interviewed by using pre-tested pre-designed questioner.

**Result-** prevalence of self medication found to be 79.1% (35.8% in female & 43.3% in male). 70.3% practice self medication for adult and only 1.4% for children. Majority of study subject practice self medication for management of fever, cough and pain. Most of the respondent found use allopathic medicine for self medication and 65.5% of study subject has safe place for storing medicine. Main sources of collected information about drugs for self medication were chemist, neighbour and friends respectively. 86.5% respondent check expiry date of medicine.

**KEYWORDS :** Self medication, Urban Slum.

### Introduction:

Self medication is defined as the use of medication by a Patient on his own initiative or on the advice of a Pharmacist or a lay person instead of consulting a medical practitioner<sup>(1)</sup>. Patient empowerment is viewed as a positive step in the development of the relationship between patient and healthcare provider and is considered as an important health policy concept<sup>(2)</sup>. The concept of rational drug use is inherent to the issue of self medication. Herophilus, the Alexandrian physician in 300 B.C had famously said that "Medicines are nothing in themselves, but are the very hands of god if employed with reason & prudence."<sup>(3)</sup>

According to some authors self-medication can be practiced and they consider it appropriate for short-term relief of symptoms where accurate diagnosis is unnecessary, uncomplicated cases of some chronic and recurrent disease.<sup>(4)</sup>

The WHO has also recognized the validity of self medication in a variety of settings. In 1995 the WHO Expert Committee on National Drug policies stated: "Self-medication is widely practiced in both developed and developing countries. Medications may be approved as being safe for self-medication by the national drug regulatory authority. Such medicines are normally used for the prevention or treatment of minor ailments or symptoms, which do not justify medical consultation. In some chronic or recurring illnesses, after initial diagnosis and prescription, self-medication is possible with the doctor retaining an advisory role."<sup>(5)</sup>

There may be numerous reasons for self medication. The common reasons responsible for self-medication in developing countries are urge of self-care, feeling of sympathy toward family members in sickness, lack of health services, poverty, ignorance, misbeliefs, extensive advertisement, use of drugs from informal sectors such as open markets and quacks, illegal purveyors of drugs (no licensed sellers in the market), etc.<sup>(6)</sup>

Self medication is a major problem in today's health care system, especially in developing countries like India. The serious issues concerned with self medication are wastage of resources, microbial resistance, adverse drug reactions and drug-drug interactions. The World Health Organization has emphasized that self medication must be correctly taught and controlled.<sup>(7)</sup> Despite the growing research interest in self-medication, little information has been available about its major determinants especially in developing countries. Studies on prevalence and pattern of self medication practice should be of interest to public health practitioners due to its possible deleterious effects especially in societies with high levels of illiteracy.<sup>(8)</sup> Therefore, this research was carried out to provide practical insights into the issue of self medication in urban slum community, which represents socioeconomically and educationally deprived population.

The study objectives were:

1. To estimate the prevalence of self medication amongst urban slum dwellers in Jorhat town of Assam.
2. To study the pattern of self medication amongst study subjects.

### Materials and Methods:

Community based cross sectional study was conducted among general population in Urban Slums of Jorhat District to assess the prevalence of self medication among the population of the urban slum of the Jorhat District.

**Study Area:-** Jorhat Municipal Board has identified 5 slum pockets (Source: Municipal Record, 2001) of which 2 has been chosen randomly. They were, Harijon colony and Dhakaipatty.

**Study Universe:-** Adult males and females aged 18 years and above included as study participants.

**Study Period:-** 6 months, from 1/01/16 to 30/06/16

**Sample size:-** On the basis of prevalence of self medication practices of 73 %<sup>(9)</sup> and taking relative error of 10% the minimum sample size was calculated to be 148.

**Study Design:-** Out of the five Urban Slums, two urban slums were selected by Simple Random Sampling technique. Equal number (74) of study subject was interviewed from each selected slum. Every consecutive house was visited starting from one end of the locality. In each house an adult respondent was interviewed for obtaining data.

**Data Collection:-** All the study individuals were clearly explained the purpose of the study and their written informed consent was taken. The data for the study was collected through house to house visit and an adult respondent was interviewed for obtaining data by using pretested predesigned questionnaire. If no adult member is found in the household the next household was taken for study.

**Inclusion Criteria:** All the adult members of households in study area who gave informed consent to participate in the study were included.

### Exclusion Criteria:

1. Subjects belonging to health sector were excluded
2. Subjects who did not give informed consent were excluded.

### Study Variables :-

1. Socio-demographic information: Age, gender, education, occupation and income.
2. Practice and pattern of self medication.
3. Reasons for use of self-medication.

### Terminology and definition

**Self medication:-** “Self-medication is the selection and use of medicines by individuals to treat self-recognised illness or symptoms.” (WHO 1998)

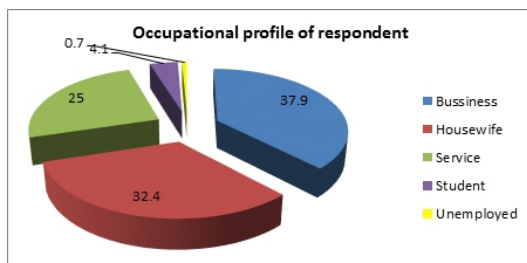
For the purpose of this definition, medicines include herbal and traditional products

**Over The Counter Drugs:-** Over the counter (OTC) or non prescription medicines refer to medicines that can be purchased legally without the prescription from the doctor.<sup>(8)</sup>

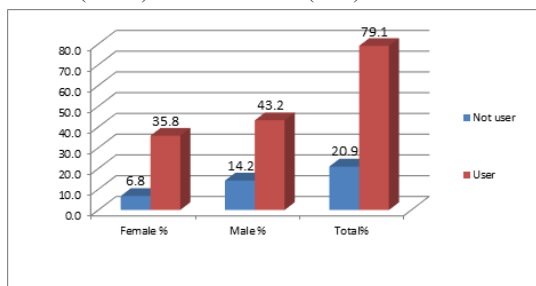
### Results

Out of 148 study participants, 85(57.4%) were male and 63(42.6%) were female. Most (28.4%) of the study participants belonged to the age group of 25 to 34 years. 39.9% of respondent were illiterate and 60.1% were found literate ranging from primary education up to graduate.

**Figur 1: Distribution of study subjects according to occupation**



Most of the study subjects were business men (37.9%) followed by house wives(32.4%) and service holder (25%).



**Figur 2. self medication practise amongst study subject**

It was found that 83.1% of study subject keep medicine in their house and 79.1% study subject use medicine without prescription of doctor or authorised health adviser. Most subjects practices self medication to be used for adult (70.3%) followed by for all ages(7.3%) . Use of self medication was found lowest for children(1.4%) .

**Table 1.Educational level & self medication practice Cross tabulation**

Educational status	Do you use medicine without advise of Doctor		Total	Chi-squar result
	No	Yes		
Illiterate & Primary school	14	95	109	.000
High school, HSLC, HSSLC& graduate	17	22	39	
Total	31	117	148	

The practice of self medication was found significantly high( $P < .000$ ) amongst illiterate and subjects having primary school level education than the respondent having High school, HSLC, HSSLC and graduate level of education

**Table 2. Health event where self medication is practiced (based on multiple response analysis)**

SL No	Symptom	Frequency(%)
1	Fever	26.5
2	Cough	17.5

3	Pain	17.5
4	Common Cold	14.5
5	Headache	10.2
6	Diarrhoea	7.8
7	Rash	4.8
8	Acidity	0.6
9	Dizziness	0.6

From the present study it was found that most practice self medication were in case of fever (26.5%) followed by cough (17.5%) and pain (17.5%)

65.6% subjects has safe place for storing medicine and 34.4 % subjects did not have safe place for storing drugs. The respondent who have safe place for storing medicine use box(18.2%),Bag(14.9%) Cupboard(8.1%) almirah(4.1%),Basket (2%) for preserving drugs. Only 18.6 % study subject store medicine in classified manner at home.

Majority (76.4%) of study subjects used Allopathic system of medicines, followed by 4.7% study subjects used both Allopathic and Ayurvedic system of medicines for self medication. It was found that most (67.9%) of study participants gathered information from Chemist followed by 7% used old prescription, 3% collected information from neighbour 1.7% collected information from friends about medicine for self medication. Amongst all the study subject 86.5% study subjects check expiry date while 13.5% did not check expiry dates.

### Discussion:

The study was conducted on self medication practices amongst urban slum dwellers in Jorhat town of Assam. Out of 148 study participants, 85(57.4%) were male and 63(42.6%) were female. Most (28.4%) of the study participants belonged to the age group of 25 to 34 years. Most of the subjects (37.9%) were occupied in business followed by housewives (32.4%).

The prevalence of self medication in the present study was found to be 79.1% compared to that of 57.6% in a study done in Dibrugarh town of Assam.<sup>(9)</sup> Gupta et al. in a study conducted in slum community of Mumbai found the prevalence of self medication practice to be 55.9%<sup>(3)</sup> while Kaushal et al in a study conducted in Rothak reported the prevalence of self medication practice to be 73%<sup>(6)</sup>

In our study we have found that most subjects practiced self medication for adult (70.3%) followed by for all ages (7.3%) and 1.4% for children.

From the present study it was found that most practice self medication in case of fever (26.5%) followed by cough (17.5%) and pain (17.5%). Gupta et al. in a study conducted in slum community of Mumbai reported that 30.8% practiced self medication for headache/bodyache followed by for fever (22.8%) and respiratory disease (18.4%)<sup>(3)</sup>. Kulkarni et al. in study done in Hyderabad reported that subjects practiced self medication for pain(83%), cough(82.9%) and fever (82.9%).<sup>(10)</sup>

In the present study self medication was found significantly more prevalent( $P < .000$ ) amongst illiterate and people with primary level of education than the study subject having High school, HSLC, HSSLC and graduation level of education.

A study conducted by Saritha Susan Vargese<sup>(11)</sup> reported prevalence of self medication as 68% amongst slum dwellers where 68% of resident are illiterate and 28% had primary level of education.

65.6% subjects has safe place for storing medicine and 34.4 % subjects did not have safe place for storing drugs. Only 18.6 % study subject store medicine in classified manner at home

From the present study it was found that majority (76.4%) of study subjects used Allopathic system of medicines, followed by 4.7% study subjects used both Allopathic and Ayurvedic system of medicines for self medication. These findings are somewhat similar to Kaushal et al, who reported that 100% subjects used Allopathic medicines, 27% used Homeopathic medicines and 21% used Ayurvedic medicines for self medication in a study conducted in Rothak<sup>(6)</sup>.

It was found that most (67.3%) of study participants gathered information from Chemist, 7% used old prescription, 3% collected

information from neighbour and 1.7% from friends for self medication. Gupta et al. reported that in Mumbai subjects gathered information from pharmacist (42.1%), previous prescription (25.4%) and friends(13.2%)<sup>(3)</sup>

In our study, we found that 86.5% study subjects check expiry date while 13.5% did not check expiry dates. Kaushal et al reported that 80% subjects checked expiry dates before self medication in a study conducted in Rothak .(6).

We found that 96.6% thought that self medication is unjustified while 3.4% thought that it is not unjustified while Kaushal et al reported that 71% subjects believed that self medication is not justified in Rothak.

### Conclusion:

From the present study it can be concluded that self medication is a prevalent in this part of the country as in rest of India which is an alarmingly rising risky health related practice. This study throws light on the high prevalence of self medication in an urban slum community where majority are illiterate. This study indicates scope of health education sessions on hazards of self medication especially amongst the urban slums dwellers.

Conflict of interest: There is no conflict of interest in the present study.

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