



## PREVALENCE OF SELF MEDICATION PRACTICE AND ITS INFLUENCING FACTORS AMONG THE ADULTS : A DESCRIPTIVE STUDY

### Nursing

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### ABSTRACT

Self-medication is a human behavior in which an individual uses a substance or any exogenous influence to self-administer treatment for physical or psychological ailments. Inappropriate self-medication results in wastage of resources, increases resistance of pathogens and generally entails serious health hazards such as greater probability inappropriate treatment, pathogen resistance, increased morbidity, adverse drug reactions, prolonged suffering and drug dependence. This study was conducted to determine the prevalence of self medication practice and its influencing factors among the adults in urban community of Kamrup District, Assam. **Methods & Material:** The study adopted cross sectional descriptive design. 200 adults from urban community of Kamrup District, Assam were selected by purposive sampling technique. Pre validated Socio-Demographic datasheet and Structured Questionnaire were used to collect the data. **Results:** The findings revealed that prevalence rate of self medication was 59%. Pantoprazole was most commonly used drug. The ailments for which practice on self medication done were, heartburn (32.2%), headache (28%), and fever (27.1%). The common sources of knowledge were, mostly from pharmacists (61%), own previous experience (37.3%), taking advice from others (29.7%). Reasons were, mostly due to unaffordability of health care fee (45%), need quick relieve (39.8%), previous experience of similar symptoms (39%). A significant association was revealed between prevalence of self medication practice with age. **Conclusion:** The results shows that self medication is common among adults. There is a need to educate community regarding self medication practice and its consequences.

### KEYWORDS

Self Medication Practice, Influencing Factors

### INTRODUCTION:

Self-medication, as one element of self care, is the selection and use of medicines by individuals to treat self-recognized illnesses or symptoms.<sup>1</sup> The practice of self medication is widely prevalent worldwide, especially in developing countries like India where many drugs are dispensed over-the-counter without prescription.<sup>2</sup> The prevalence of self-medication has sharply increased throughout the world.<sup>3</sup> The practice of self-medication exists not only in the developing countries but also in the developed countries.<sup>4</sup>

According to WHO's definition, self-medication is the use of drugs to treat self-diagnosed disorders or symptoms, or intermittent or continued use of a prescribed drug for chronic or recurrent diseases or symptoms without prescription.<sup>5</sup> Medicines for self-medication are often called 'non-prescription' or 'over the counter' (OTC) and are available without a doctor's prescription through pharmacies.<sup>6</sup> In some developing countries, many medications are available to public without prescription, thus, self-medication, due to its lower cost, is a replacement for people who cannot afford medical services.<sup>7</sup>

People may practice self medication for a variety of reasons, like the urge for self-care, sympathy for family members in sickness, lack of health services, poverty, ignorance, misbelieve, excessive advertisements of drugs, and availability of drugs in establishments other than pharmacies.<sup>8</sup>

Self-medication practices cannot be considered as entirely harmful. Drugs classified as "over the counter" can be purchased without prescription and many a times might save time and money for the patients. In majority of the hill, tribal regions, and other hard to reach areas where there is a huge shortage of human health work force, patients are still dependent on self-medication practices for minor symptoms.<sup>9</sup>

Various studies reported that self-medication may lead to delay in care seeking which results in paradoxical economic loss due to delay in the diagnosis of underlying conditions and appropriate treatment.<sup>10</sup> Inappropriate self-medication results in wastage of resources, increases resistance of pathogens and generally entails serious health hazards such as greater probability inappropriate treatment, pathogen resistance, increased morbidity, adverse drug reactions, prolonged suffering and drug dependence.<sup>11</sup> Self medication has a broad impact and has its roots from two major contributors, i.e. economic reluctance and the socio cultural behaviour of the population.<sup>12</sup> It is common for

individuals to feel unwell at one time or the other and the innate survival instinct in humans produces a tendency to treat themselves.<sup>13</sup>

Antibiotics are commonly used self-medicated drugs worldwide with over 50% purchased and used without a prescription. In line with rather antibiotics, self medication constitutes internationally the most common and obvious contributing factor of antibiotic resistant pathogens.<sup>14</sup> The World Health Organization recently highlighted the need for country-level antibiotic resistance plans in May 2015 when it endorsed the "Global Action Plan on Antimicrobial Resistance", which calls on all countries to adopt national strategies within two years.<sup>15</sup>

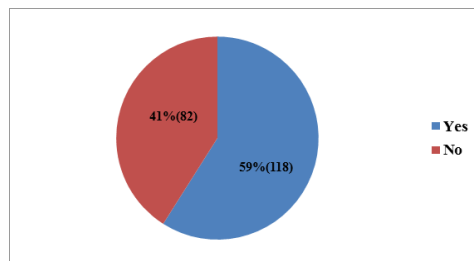
Without doctor consultation, it is easy to misdiagnose a condition for something else entirely. A wrong self-diagnosis can lead to wrong medicines which can cause the wrong effects on the body.<sup>16</sup> There are instances where the prescription for one member is passed on to another in the family without consulting the doctor, simply because the symptoms are similar can prove dangerous.<sup>17</sup> At community level, improper self-medication could result in an increase in drug induced disease and in wasteful public expenditure.<sup>18</sup> The current study aimed to assess the prevalence of self medication practice and its influencing factors among the adults in urban community.

### MATERIALS AND METHOD

A descriptive cross sectional design was employed in the present study. A total 200 adults were enrolled for the study from purposive sampling technique. The study was conducted in, Basistha area of Kamrup (Metro) District, Assam, under Basistha Urban Primary Health Centre, India. The study sample includes both male and female adults within the age group of 19 to 64 years. The Structured Questionnaire comprised of four components, i.e. practice of self medication in last 6 months, the common ailments, source of knowledge and reason for practice of self medication. The tool has been validated by experts and translated to Assamese language. Then Assamese tool has been back translated by a bilingual expert. The ethical clearance was obtained from the Ethics Committee of the Institute and permission from Joint Director of Health Service for urban, Uzan Bazar, Kamrup District, Assam, was taken. Written consents were taken from each study subject. The data were collected by using interview schedule. The statistical package for social science (SPSS) 20 versions was used for statistical analysis. Descriptive statistics were done for socio demographic data and Pearson's chi square test were used for inferential analysis.

**RESULT:****Fig1: Frequency and Percentage Distribution of Prevalence of Self Medication Practice**

N=200



The prevalence rate (Figure 1) of self medication practice was 59%.

**Table 1: Frequency and Percentage Distribution of Socio Demographic Variables of Adults practicing self medication (n=118)**

| Sl. NO | Demographic variables        | Frequency | Percentage |
|--------|------------------------------|-----------|------------|
| 1.     | <b>Age</b>                   |           |            |
|        | 19-35 years                  | 42        | 35.6%      |
|        | 36-55 years                  | 65        | 55.1%      |
|        | 56-64 years                  | 11        | 9.3%       |
| 2.     | <b>Gender</b>                |           |            |
|        | Male                         | 40        | 33.9%      |
|        | Female                       | 78        | 66.1%      |
| 3.     | <b>Educational status</b>    |           |            |
|        | Illiterate                   | 5         | 4.2%       |
|        | Primary School               | 9         | 7.6%       |
|        | Middle School                | 34        | 28.8%      |
|        | High School                  | 34        | 28.8%      |
|        | Higher secondary             | 23        | 19.5%      |
|        | Graduation and above         | 13        | 11.1%      |
| 4.     | <b>Occupation</b>            |           |            |
|        | Self employed                | 28        | 23.8%      |
|        | Government employee          | 5         | 4.2%       |
|        | Private employee             | 11        | 9.3%       |
|        | Daily wages                  | 5         | 4.2%       |
|        | Unemployed                   | 59        | 50%        |
|        | Student                      | 10        | 8.5%       |
| 5.     | <b>Religion</b>              |           |            |
|        | Hindu                        | 117       | 99.2%      |
|        | Muslim                       | 1         | 0.8%       |
| 6.     | <b>Marital status</b>        |           |            |
|        | Married                      | 91        | 77.1%      |
|        | Unmarried                    | 18        | 6.1%       |
|        | Others                       | 9         | 8%         |
| 7.     | <b>Monthly family income</b> |           |            |
|        | <Rs. 5000                    | 5         | 4.2%       |
|        | Rs. 5001-15000               | 62        | 52.5%      |
|        | Rs. 15001-25000              | 37        | 31.4%      |
|        | Rs. 25001 & more             | 14        | 11.9%      |
| 8.     | <b>Type of family</b>        |           |            |
|        | Nuclear                      | 110       | 93.2%      |
|        | Joint                        | 8         | 6.8%       |

The socio demographic data (Table 1) revealed that out of 118 adults 55.1% belonged to age group of 36-55 years, 66.1% were females, 28.8% studied up to middle school and also 28.8% high school, 50% were unemployed, 99.2% belonged to Hindu religion, 77.1% were married, 52.5% had a monthly family income of Rs. 5001-15000, 93.2% belonged to nuclear family.

**Table 2: Frequency and Percentage Distribution of Common Ailments**  
n=118

| Common ailments | Frequency | Percentage |
|-----------------|-----------|------------|
| Headache        | 33        | 28%        |
| Fever           | 32        | 27.1%      |
| Cold & cough    | 16        | 13.6%      |
| Body pain       | 5         | 4.2%       |
| Abdominal pain  | 18        | 15.3%      |
| Heartburn       | 38        | 32.2%      |
| Others          | 19        | 16.1%      |

**Table 3: Frequency and Percentage Distribution of Common Medications Used**  
n=118

| Common medications | Frequency | Percentage |
|--------------------|-----------|------------|
| Pantoprazole       | 42        | 35.6%      |
| Saridone/disprin   | 30        | 25%        |
| Paracetamol        | 25        | 21.2%      |
| Azithromycin       | 19        | 16.1%      |
| Cetirizine         | 16        | 13.6%      |
| Others             | 7         | 5.9%       |

**Table 4: Frequency and Percentage Distribution of Source of Knowledge for Self Medication**  
n=118

| Source of knowledge for self medication | Frequency | Percentage |
|-----------------------------------------|-----------|------------|
| Pharmacists                             | 72        | 61%        |
| Taking advice from neighbour/relative   | 35        | 29.7%      |
| Own previous experience                 | 44        | 37.3%      |
| Newspaper & magazine                    | 7         | 5.9%       |
| E-pharmacy                              | 0         | 0%         |
| Others, if any                          | 0         | 0%         |

**Table 5: Frequency and Percentage Distribution of Reason for Practice Self Medication**  
n=118

| Reason for practice self medication     | Frequency | Percentage |
|-----------------------------------------|-----------|------------|
| Unaffordability of health care fee      | 53        | 45%        |
| Previous experience of similar symptoms | 46        | 39%        |
| Needs quick relieve                     | 47        | 39.8%      |
| Unavailability of doctors               | 3         | 2.5%       |
| Others                                  | 0         | 0%         |

Most common ailments for self medication practice were heartburn (32.2%), headache (28%), followed by fever (27.1%) (Table 2). Pantoprazole (35.6%) and Saridone/Disprins (25%) were the most commonly used drugs followed by Paracetamol (21.1%), Azithromycin (16.1%) for self medication among the respondents (Table 3). The respondents practicing self medication got knowledge about the drugs mostly through pharmacists (61%) and own previous experience (37.3%) followed by taking advice from neighbour/relative (29.7%) (Table 4). Majority of participants practicing self medication for unable to afford health care fee (45%) as a reason for practice self medication followed by wanted quick relieve from symptoms (39.8%), previous experience of similar symptoms (39%) (Table 5).

**Table 6: Association of the Prevalence of Self Medication Practice with Selected Demographic Variables**  
N=200

| SI no | Demographic variables     | Use of self medication |    | Chi square | Df | P-Value | Significance |
|-------|---------------------------|------------------------|----|------------|----|---------|--------------|
|       |                           | Yes                    | No |            |    |         |              |
| 1.    | <b>Age</b>                |                        |    |            |    |         |              |
|       | 19-35 years               | 42                     | 33 | 6.175      | 2  | .046    | S*           |
|       | 36-55 years               | 65                     | 33 |            |    |         |              |
|       | 56-64 years               | 11                     | 16 |            |    |         |              |
| 2.    | <b>Gender</b>             |                        |    |            |    |         |              |
|       | Male                      | 40                     | 25 | .257       | 1  | .613    | NS           |
|       | Female                    | 78                     | 57 |            |    |         |              |
| 3.    | <b>Educational status</b> |                        |    |            |    |         |              |
|       | Illiterate                | 5                      | 5  | 5.323      | 5  | .378    | NS           |
|       | Primary School            | 9                      | 10 |            |    |         |              |
|       | Middle School             | 34                     | 29 |            |    |         |              |
|       | High School               | 34                     | 23 |            |    |         |              |
|       | Higher secondary          | 23                     | 8  |            |    |         |              |
|       | Graduation and above      | 13                     | 7  |            |    |         |              |
| 4.    | <b>Occupation</b>         |                        |    |            |    |         |              |
|       | Self employed             | 28                     | 15 | 6.010      | 6  | .422    | NS           |
|       | Government employee       | 5                      | 4  |            |    |         |              |
|       | Private employee          | 11                     | 6  |            |    |         |              |
|       | Health worker             | 0                      | 2  |            |    |         |              |
|       | Daily wages               | 5                      | 2  |            |    |         |              |
|       | Unemployed                | 59                     | 49 |            |    |         |              |
|       | Student                   | 10                     | 4  |            |    |         |              |
| 5.    | <b>Religion</b>           |                        |    |            |    |         |              |
|       | Hindu                     | 117                    | 82 | .698       | 1  | .403    | NS           |

|    |                              |     |    |       |   |      |    |
|----|------------------------------|-----|----|-------|---|------|----|
|    | Muslim                       | 1   | 0  |       |   |      |    |
| 6. | <b>Marital status</b>        |     |    |       |   |      |    |
|    | Married                      | 91  | 58 | 2.509 | 2 | .285 | NS |
|    | Unmarried                    | 19  | 13 |       |   |      |    |
|    | Others                       | 8   | 11 |       |   |      |    |
| 7. | <b>Monthly family income</b> |     |    |       |   |      |    |
|    | <Rs. 5000                    | 5   | 11 | 6.240 | 3 | .101 | NS |
|    | Rs. 5001-15000               | 62  | 40 |       |   |      |    |
|    | Rs. 15001-25000              | 37  | 25 |       |   |      |    |
|    | Rs. 25001 & more             | 14  | 6  |       |   |      |    |
| 8. | <b>Type of family</b>        |     |    |       |   |      |    |
|    | Nuclear                      | 110 | 74 | .582  | 1 | .445 | NS |
|    | Joint                        | 8   | 8  |       |   |      |    |

Significant association has been observed with age of adults and prevalence of self medication practice (Table 6).

## DISCUSSION:

The prevalence of self medication was found 59% in the present study which is comparable to the study carried out by Patel AA et al (2014)<sup>19</sup> in which prevalence of self medication was 50%. Prevalence rate of the present study is also similar with the study conducted by Ezzatabadi MR et al (2016)<sup>20</sup> in which prevalence of self medication was 53.4%. Prevalence rate of the present study was higher than the study by Selvaraj K et al (2014)<sup>8</sup> in coastal region of Puducherry, in which they had shown prevalence of self medication 11.9%. But some other study result was found higher prevalence rate than the present study, Kumar V et al (2015)<sup>21</sup> reported that prevalence of self medication 92.8% in an urban area Delhi.

Heartburn (32.2%) followed by headache (28%) and fever (27.1%) were the common ailments where self medication practice were used. These are consistent with the result of study conducted by Chauhan R (2017)<sup>22</sup>.

Present study revealed that, Pantoprazole and analgesics like Disprin, Saridon were most commonly used drugs among the adults for self medication practice. These are consistent with the result of other study conducted by Jain M et al (2015)<sup>23</sup>.

In the present study the common sources of information for self medication practice are from Pharmacists 61%, own previous experience 37.3%, advice from neighbor/relative 29.7%, it is similar to the study findings reported by study conducted by Arora H et al (2017)<sup>24</sup>.

In the present study, main reasons for self medication are unaffordability of health care fee 45%, need quick relieve 39.8%, previous experience of similar symptoms 39%, similar findings has been reported by Borah H et al (2016)<sup>25</sup>.

The present study revealed significant association of prevalence of self medication practice with age. The findings of the present study support a study conducted by Jawahir S et al (2017)<sup>26</sup>. While in contrast to study by Garla BK et al (2017)<sup>27</sup> significant association of prevalence of self medication practice with gender.

**CONCLUSION:** The study concluded that self medication is quite prevalent among the adults. Mostly practice of self medication is done for heartburn, headache and fever. Pharmacists are the major source of knowledge for practice of self medication. unaffordability of health care fee is the main reason for practice self medication. Self medication may leads to many serious health problem like adverse drug reaction, antibiotic resistance etc. Therefore there is a need to educate community regarding the ill effect of self medication practice.

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