Perception of Self Medication Style and Related Logistics of Rural Peoples in Bangladesh

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Abstract
This is a descriptive type study based on data collected from two hundred respondents from a village of Mirsharai sub district of Chittagong district, Bangladesh. Selection of the sites and number of respondents were done purposively. Data were collected with the help of pre structured questionnaire. Frequency and percentage were tools for analyses. The study presented that 94.5% of the respondents practiced self medication at least once in life which was more common among the illiterate (32.5%) and people from age group of 30-40 years (33.5%). The study proved that literacy and socio-economic status has great influence on idea of self medication as illiterate and lower middle class people practiced it mostly by their own idea. It is found that modern medical treatment is the most popular (81%) for self medication among the respondents. Besides, many mixed outcomes are visible from the study. But the one thing has been proven that self medication is being practiced widely presently in the rural community especially among the illiterate and lower class people and the people are still unaware about the hazards of self medication. It seems to be appearing as a great problem of Bangladesh day by day.

Keywords
Self Medication, Logistics Support, Rural People, Bangladesh

1. Introduction
Self medication is a treatment of common health problems with medicines specially designed and labeled for use without medical supervision and approved as safe and effective for such use. Medicines for self medication are often called nonprescription, over the counter drugs and are available without a doctor prescription through pharmacist [12]. The people in rural as well as in the urban area who suffers from illness, many of them do not go to doctor specially the poor and more useful to the terminal user. Their ideas are different about their sufferings. They start self medication either by own idea or other persons. In this context, they prefer to take modern or traditional medications [1].

The disease for which people prefer self medication are fever, cough, cold, peptic ulcer, cut, skin disease, pain and others. So they visit pharmacist or traditional village doctors for treatment by drugs. Everyday everywhere they reach for self medication drugs to help them through their common health problems. They do this because it is easier for them no expense of consultation fee and not necessary to visit a doctor chamber [2]. They read labels and they generally take drugs for less than the maximum period of time indicated on the label about the disease or other health related problems. In parallel to interests of the people, health information explosion, made possible by technological advances that improve access to information that is more relevant and more useful to the terminal user. The safety profile
has typically been established and documented through years of experience and an extensive number uses a prescription [8]. Commonly used drugs by them are paracetamol, antibiotics or steroid and others like over the counter drugs without any little knowledge. Some of them read the literature with the medicine to know the side effects. Some of them become aware from the pharmacist or others usually do not continue the drug improperly than the course of the drug. By this self medication, they are satisfied but when adverse effects are seen they stop or continue according to the degree of effects. Those who take off medication think that this type of medication is effective and they are satisfied [9-10].

It is assumed that a good number of studies regarding self medication and associated logistics have been carried out at home and abroad [3, 6, 10-11]. Despite this study has been performed to get an idea about the socio-economic status of the rural peoples including their education and knowledge on self medication and the cause that prefer them to adopt and justify it.

2. Objective of the Study

The objective of the study is to assess the styles of medication and justification of the people for this purpose in a rural area of Mirsharai in Bangladesh. The study will also assist to

a. find out the types of self medication adapted by the rural peoples,
b. evaluate age group, disease type, treatment type for self medication and
c. assess knowledge on side effects of drugs, treatment duration & influence for medication and determine the socio-demographic features of the respondents.

3. Methodology

This is a descriptive type study by taking two hundred respondents from Koilachara village of Mirsharai sub district which is about 60km distant from the Chittagong Medical College, Chittagong, Bangladesh. Respondents were interviewed with the help of pre structured questionnaire.

Selection of the sites and respondents were done purposively in order to conduct experiment under the Resident Field Site Training (RFST) program of 4th year students of MBBS (Batch 49-B) of group C2 which has been administered by the Department of Community Medicine, Chittagong Medical College. Data analyses were done as per tabular format through frequency and percentage.

General variables of the study are age, sex, occupation, education, socio-economic status and type of family while specific variables are type of medication, first measure of medication, type of drug used, idea of self medication and type of disease.

4. Results and Discussion

It shows that female and male respondents were 61% and 39% respectively (Table 1). Study by [13] found female (43.8%) and male (56.2%) while it was observed [4] female (63.6%) and male (36.6%) respectively. The result of the present study almost closes to [4].

In case of educational status, 33.5% respondents were illiterate, primary level education was 30%, secondary level education was 17% and SSC qualified 7%, HSC qualified 5%, graduate and above was 7% (Table 2). It is found in [13] that primary level completed 11%, secondary level (19.6%), diploma (6.3%) while degree level qualification was attained by 63.1% respondents. In the study, 61% respondents were housewife followed by 17.5% businessman, 10% farmer, 5% both service holder & labourer. It is observed that employed, unemployed and students are 31.7%, 36.6% and 31.7% respectively in [13]. A total employed respondent other than housewife in the present study is similar to [13]. Forty three and half percent came from middle class where nine and half percent were belonged to upper class as it is seen in the respondents. It is found [14] that upper 32.6%, upper middle class 61%, lower middle 5.1%, upper lower class 0.8% and lower class 0.4% respondents respectively.

| Sex     | Number (%) |
|---------|------------|
| Male    | 78(39)     |
| Female  | 122(61)    |
| Total   | 200(100)   |

*Author’s calculation from survey data.

Table 1. Number of respondents according to sex.

| Education       | Number (%) |
|-----------------|------------|
| Illiterate      | 67(33.5)   |
| Primary         | 61(30)     |
| Secondary       | 34(17)     |
| SSC             | 14(7)      |
| HSC             | 10(5)      |
| Graduate and above | 14(7)    |
| Total           | 200(100)   |

*Author’s calculation from survey data.

It is also found that 37% and 1% suffered from fever and malaria respectively (Table 3). Most common perceived illness for self medication is common cold (90.6%) which is followed by headache (71.1%), cough (69.5%), sore throat (68.5%), toothache (38.9%) and others (50.3%) [5].

It is evident that 52.5% were got medication as a first measure of disease and 7% received medication from others (Table 4). It is also observed that 81% respondents got modern medical treatment while homeopath, herbal, hamdard and other type of medication were received by 7%, 3% and 2% respondents respectively (Table 5). In his study [3] it is reported that 28.3% used proprietary medicine, 20% herbs and 32.8% has used both. Another study [7] found that 90.66% students took allopathic medicine as self medication.

It is documented that in among 200 respondents of the current study, 56% usually used paracetamol, 13% antibiotic, 20% ORS, 0.50% steroid and 10% more than one type of drugs (Table 6). The one study showed [10] that main groups of self prescribed drugs were analgesics/antipyretic and nonhormonal anti-inflammatory drugs (52%), drugs act on respiratory tract (15.4%) and systematic antibiotics (8.6%).

![Table 1. Number of respondents according to sex.](image)

![Table 2. Number of respondents by education.](image)
Drugs were used paracetamol (76.2%), cough syrup (58.9%) and antibiotics (23.7%) in [14] as a part of self medication.

Table 3. Respondents by type of disease.

| Type of disease   | Number (%) |
|-------------------|------------|
| Fever             | 74(37)     |
| Cough and cold    | 48(24)     |
| Diarrhea          | 36(18)     |
| Skin disease      | 4(2)       |
| PUD               | 6(3)       |
| Cut and wounds    | 10(5)      |
| Pain              | 16(8)      |
| Malaria           | 2(1)       |
| Others            | 4(2)       |
| Total             | 200(100)   |

*Author’s calculation from survey data.

Table 4. Respondents by 1st measure of disease.

| 1st measure of disease | Number (%) |
|------------------------|------------|
| Observation            | 105(52.5)  |
| Medication             | 81(40.5)   |
| Others                 | 14(7)      |
| Total                  | 200(100)   |

*Author’s calculation from survey data.

Table 5. Respondents by type of medication.

| Type of medication | Number (%) |
|--------------------|------------|
| Modern             | 162 (81)   |
| Homeopath          | 14 (7)     |
| Herbal             | 14 (7)     |
| Hamdard            | 6 (3)      |
| Others             | 4 (2)      |
| Total              | 200 (100)  |

*Author’s calculation from survey data.

Table 6. Respondents by the type of drugs.

| Types of drugs | Number (%) |
|----------------|------------|
| Paracetamol    | 52 (26)    |
| Antibiotics    | 2 (1)      |
| ORS            | 35 (17.5)  |
| Steroid        | 1 (0.5)    |
| >1 type        | 110 (55)   |
| Total          | 200 (100)  |

*Author’s calculation from survey data.

It is also found that 33.5% respondents were in 30-40 years and 5% were >60 years old got self medication (Table 7). Lowest number of practicing self medication is found 13% person who is <20 years and the highest number of practicing self medication is found in 33.4% between the age bracket of 20-30 years [5]. It is seen that 32.5% respondents were illiterate and 16% were belonged to secondary level received self medication (Table 8). About 87.5% respondents belong to > high school education while 14.3% respondents < high school education prescribed self medication [5]. It is seen that 21% lower middle class induced to get self medication by own idea and 0.50% from upper class by senior member idea (Table 9). It was found in [14] that respondents who practiced self medication, among them, 92.2% belonged to upper class, upper middle class 93.8%, lower middle class 91.7%, upper lower class 50% and lower class 100%. Evidence shows that 31% respondent prefer to MBBS doctor as first preference of medical personnel while 3% preferred specialist and others in the present study.

Table 7. Respondents by age and self medication.

| Age         | Self medication (Yes) | Self medication (No) | Total (%) |
|-------------|-----------------------|----------------------|-----------|
| 20-30       | 50 (25)               | 2 (1)                | 52 (26)   |
| 30-40       | 67 (33.5)             | 4 (2)                | 71 (35.5) |
| 40-60       | 62 (31)               | 3 (1.5)              | 65 (32.5) |
| >60         | 10 (5)                | 2 (1)                | 12 (6)    |
| Total       | 189 (94.5)            | 11 (5.5)             | 200 (100) |

*Author’s calculation from survey data.

Table 8. Respondents by education and self medication.

| Education   | Self medication (Yes) | Self medication (No) | Total (%) |
|-------------|-----------------------|----------------------|-----------|
| Illiterate  | 65 (32.5)             | 2 (1)                | 67 (33.5) |
| Primary     | 58 (29)               | 3 (1.5)              | 61 (30.5) |
| Secondary   | 32 (16)               | 2 (1)                | 34 (17)   |
| SSC         | 13 (6.5)              | 1 (0.5)              | 14 (7)    |
| HSC         | 9 (4.5)               | 1 (0.5)              | 10 (5)    |
| Graduate and above | 12 (6) | 2 (1) | 14 (7) |
| Total       | 189 (94.5)            | 11 (5.5)             | 200 (100) |

*Author’s calculation from survey data.
5. Conclusion

It is documented that only thirty one percent of respondents use to go MBBS doctor for their medication. Rural people should be more encouraged to go to MBBS doctor instead of traditional village doctor.

It reveals that thirty six and half percent of the respondents have no idea about the side effects of drugs they use for self medication. So, proper knowledge about side effects of drugs should be given to them by pharmacist and health extension workers.

It is evident that practice of self medication is more among the illiterate and less among the literate. So, literacy rate should be increased to reduce the practice of self medication.

Appraisal of consciousness about complications, side effects of medicines and restriction of taking too much medicine are the most important steps that need to be taken in order to reduce practicing self medication. Proper education regarding common diseases is needed to provide to avoid indiscriminate use of medicine. By doing so, it will able to reduce the frequency of self medication. From this study, researchers can gather experience and practical knowledge about the field application of academic knowledge.

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