Abstract

Background: Medical professionals are nowadays facing an increased trend of their patients finding a cure to their illnesses by themselves. This has been on the rise since past few years with the advancements in technology and information available to all about everything. Self-medication, if practiced in an uncontrolled pace can cause serious ill-effects as well as fatalities in the population.

Objectives: To study the prevalence of the practice of self-medication in the rural and urban population of a small town in western Maharashtra and assess its features, frequency, etc. and also to correlate it with the patient’s education, occupation, opinion and reasons.

Study Design: A total of 100 participants with 50 each in the two groups - urban and rural population, were selected on a random basis from amongst the OPD visitors of Dr. Bhausaheb Sardesai Talegaon Rural Hospital, Talegaon Dabhade, Taluka Maval, Pune. Study questionnaire was distributed to them and collected back with their responses. Responses were recorded and analysed to obtain the results.

Setting: Out-Patient Department (OPD) of Dr. Bhausaheb Sardesai Talegaon Rural Hospital attached to MIMER Medical College, Talegaon Dabhade, Pune.

Data Sources and Analysis: Data was obtained from the questionnaire responses and tabulated in Excel 2010. Further, analysis was done to estimate the prevalence and other features of self-medication.

Results: 72.34 % of the urban participants and 70.73 % had the practice of self-medication. The various reasons for it include high fees charged in medical facilities, time-consuming visits, recurring minor illnesses and a lot more. Many considered this practice as a cheap, efficient and time-saving mode of treatment.

Conclusion: There is an increasing trend of self-medication. If not controlled adequately, this can lead to a further rise in adverse drug reactions and drug resistance among the growing population which poses a serious threat to the medical professionals as well as the human inhabitants all over the world.

Keywords
Self-medication, drugs, rural, urban

Introduction

Self-medication is the selection and use of medicines by individuals to treat self-recognized illnesses or symptoms. Being an element of self-care, it has been one of the commonest and preferred mode resorted by many patients. With the advancing technology and information available, patients are often able to diagnose their illnesses and find a cure on their own. Unaware of its future consequences, a great proportion of the human population is mesmerized by this cheap, time-saving and many of the times effective method of obtaining cure. Studies have shown that developing countries are facing the greatest burden of self-medication. The busy schedules, costly medication, freely available drugs at corner shops and lack of strict monitoring over sale of drugs are the major factors causing self-medication. This study was conducted in a town of western Maharashtra, India. Participants were selected from both rural and urban populations. The aim of the study was to estimate the prevalence of self-medication in these areas and the underlying reasons for the same. Self-medication, if practiced without proper guidance can cause significant harm and can lead to the development of drug resistance, dangerous drug interactions and adverse side effects. This practice is prone to affect the attitude towards pharmacotherapy in prescribing medicines in the future. This will pose a serious threat to the future generations.

MATERIALS AND METHOD

A Cross-Sectional Observational study was conducted among the patients who visited the Out-Patient Department of Dr. Bhausaheb Sardesai Talegaon Rural Hospital, Talegaon Dabhade, Pune during the time span of November 2017 to March 2018. 50 participants from each group – rural and urban, were chosen on random basis and willingness to participate in the study. All the participants were duly informed about the purpose and aims before carrying out the questionnaire-based study. A structured questionnaire with 10 questions was handed out and duly collected back with the responses. Demographic data such as name (optional),

1 Student II MBBS, MIMER Medical College, Talegaon Dabhade, Pune - 410507
2 Professor and Head, Department of Biochemistry, MIMER Medical College, Talegaon Dabhade, Pune- 410507
age, sex, education, occupation and residential status was also recorded.

The questionnaire comprised of:
1) Practice of self-medication
2) Frequency of health check-ups
3) Source of drug information
4) Reason for self-medication
5) Illnesses for self-medication
6) Cure obtained by self-medication
7) Awareness about ‘Schedule H’ drugs
8) Medicines kept at home
9) Opinion about self-medication
10) Effect of a drug on all people

The data obtained was recorded and analysed to obtain the results. Responses in vernacular language was converted and recorded appropriately.

RESULTS

A total of 100 participants were chosen and divided into the two groups – rural and urban population, and surveyed regarding their practices of self-medication. The participants were selected on a random basis to avoid any bias. 43 males and 57 females willingly volunteered to participate in the study. The prevalence pattern of self-medication amongst the study participants is shown in the table given below. [Table 1].

The mean age of the study participants was 34.44 ± 18.23 years in males and 33.67 ± 16.17 years in females. The level of education and frequency of health check-ups is illustrated in the figure below. [Figure 1]. The students have been incorporated into various levels according to their present class of study.

![Figure 1. Educational levels of the study participants.](image)

In India, sale of medicine included in the Schedule H by a chemist or without a valid prescription is banned according to the Indian Drug and Cosmetics Act, 1945. However, about 78.72% of the urban participants and 95.12% of the rural participants were unaware about these Schedule H drugs. This points to the lack of awareness about proper medicine usage and indicates the fault in dispensing medicines in the right fashion. Also, 43.90% of the rural participants and 55.31% of the urban participants had kept few medicines in their home and used it without consulting a physician. This leads to indiscriminate drug use that is a potent cause of various adversities.

On enquiry about the health check-up patterns, it was found that most of them paid a visit to a medical practitioner only on attack by illnesses. The details are given below. [Figure 2].

![Figure 2. Pattern of Health Check-Ups.](image)

The participants were further asked about the cure obtained by the practice of self-medication under the following heads: Always, many of the times, not often, never. The results are shown in the figure below. [Figure 3].

![Figure 3. Cure obtained by self-medication.](image)

On enquiring about the opinion of the participants who had self-medicated their illnesses, a wide variety of replies were obtained. These are represented in the table given below. [Table 2].

DISCUSSION

A significant proportion (73%) of the participants do the practice of self-medication. Earlier studies have shown that self-medication is a widely prevalent practice in developing countries. Over-the-counter drugs are the medicines available at a pharmacy without a doctor’s prescription. These are the main contributors to the practice of self-medication. Various reasons as reported by the participants in response to practice self-medication are: high consultation fees charged by doctors, lack of time for a check-up, practice of home remedies, minor and recurring illnesses which can be easily cured, fear of unnecessary tests and medicines, distant hospital or health-care facilities.

The most commonly enlisted sources of drug information were family, previous prescriptions and chemist. Fever, cough, cold, pain and stomach upset were the common illnesses for which the participants took medicines without consulting a medical practitioner.

When asked about the effect of same medicine on different people, the participants responded quite differently. 57.14% of the participants firmly agreed that the results would not be the same and a small 7% of them had the opposite answer. 35.86% of the participants were puzzled and did not give a response.
Table 1. Prevalence of the practice of Self-Medication amongst the study population.

<table>
<thead>
<tr>
<th>Practice of Self-Medication</th>
<th>Urban Population (Total = 50)</th>
<th>Rural Population (Total = 50)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>36 (72.00%)</td>
<td>37 (74.00%)</td>
</tr>
<tr>
<td>No</td>
<td>14 (28.00%)</td>
<td>13 (26.00%)</td>
</tr>
</tbody>
</table>

Table 2. Opinion about self-medication.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Urban Population (n=50)</th>
<th>Rural Population (n=50)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sometimes a good practice</td>
<td>15 (30%)</td>
<td>10 (20%)</td>
</tr>
<tr>
<td>Time saving and cheap</td>
<td>2 (4%)</td>
<td>3 (6%)</td>
</tr>
<tr>
<td>Good for minor illness</td>
<td>3 (6%)</td>
<td>6 (12%)</td>
</tr>
<tr>
<td>Not a good practice</td>
<td>18 (36%)</td>
<td>17 (34%)</td>
</tr>
<tr>
<td>Harmful due to side-effects</td>
<td>7 (14%)</td>
<td>5 (10%)</td>
</tr>
<tr>
<td>Don’t know</td>
<td>5 (10%)</td>
<td>9 (18%)</td>
</tr>
</tbody>
</table>

CONCLUSION

From this study, it could be concluded that there is a great difference among the rural and urban populations in this aspect. The urban sector considered it to be time-saving and avoided unnecessary tests. However, the rural sector had the opinion of cheap and efficient method than visiting a faraway medical facility with a loss of the wages of that day. But, care should be taken that this practice is limited and illnesses do not get worsened by the self-medicated drugs. Moreover, the risk on physicians should also be of due concern.

CONFLICT OF INTEREST

None.

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