Self Medication – Questionnaire Based Study for Information Gathering Amongst Community Pharmacists

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Abstract:
Background: For a growing population, pharmacy has become the first and often the only stop in the search for medicine/medical advice. Gathering sufficient information when handling self-medication requests in community pharmacies is an important factor in assisting patients to obtain appropriate health outcomes. Common types of information usually gathered will include patient identity, sign, symptoms, action taken, medical history and current medications being used.

Methodology: The primary aim of this study is to assess the opinions of pharmacy employees regarding self-medication, and to examine and summarize their views. The primary objective of this research is to evaluate the pharmacists’ views on self-medication, their perceptions of advertisements for OTC medicines, and their knowledge and awareness of people that purchase OTC medicine. A questionnaire based study was conducted. The questionnaire was distributed to a total of 50 pharmacists. Data was analyzed using number and percentage of total participants (mean ± and standard deviation)

Results & Conclusion: Population falling into the age group between 35yrs to 50 years is more into self-medication (49%, n=418) than any other age group. NSAIDs were the most common drugs that were asked for over the counter (39%, n=333). Previously prescribed by a doctor 384 (45.26) was the most commonest reason for self medication. Our results highlighted the need to strengthen communication between patients and pharmacists as well as pharmacist and doctors. This study is aimed to ascertain pharmacist’s opinions regarding the advertising of OTC medicines and its informational value.

Keywords Self-Medication, Over-The-Counter, Pharmacists.

Introduction
Self-medication is a practice by a pharmacist or lay person to treat minor health problem or symptoms without prescription. Gathering sufficient information when handling self-medication requests in community pharmacies is an important factor in assisting patients to obtain appropriate health outcomes [1]. Common types of
information usually gathered include patient identity, signs and symptoms, action taken, medical history, and current medications being used.\cite{2,3,4} Providing assistance in self-medication is perhaps one of the most important means of promoting the correct use of medicines. The factors influencing self-medication include: socioeconomic status; lifestyle; ready access to drugs; public health and environmental factors; greater availability of medicinal products; and demographic and epidemiological factors.\cite{5,6}

The role of the pharmacist has been changing over the past two decades. The pharmacist is no longer just a supplier of medicines and a concocter of medicinal products, but also a team member involved in the provision of health care whether in the hospital, the community pharmacy, the laboratory, the industry or in academic institutions.\cite{7,8}

Instead of merely selling medicines, pharmacists, with their knowledge, can provide consultations for the appropriate use of medicines and build “a responsible self-medication culture” \cite{9}. Among healthcare professionals, Pharmacists are with the greatest access to medications and also have adequate knowledge of prescription and OTC drugs and their use in the treatment of various conditions. These factors increase the potential of self-medication.

The study was conducted to evaluate the medication pattern, behavior, practice and attitude among pharmacists on self-medication. Interventions to promote rational self-medication among practicing pharmacists are required and pharmacists must be encouraged to enter the patient role.

**Methodology**

The aim of this study is to assess the opinions of pharmacy employees regarding self-medication, to examine and summarize their views on OTC medicine advertisements, people’s awareness of medicines and self-medication habits and to determine the progress required in order to provide more effect support for the practice of self-medication.

A questionnaire based study was conducted in 50 random pharmacies in Navi Mumbai, India. The pharmacists were told to recall their encounter with patients with illnesses who visited their pharmacies for medications without prescriptions. Data was collected from October to November 2015.

Three main aspects were considered when compiling the questionnaire. First, the required information had to be translated into specific questions that the respondents were willing and able to answer; second, we aimed to motivate respondents to answer all the questions; and third, we wanted to minimize the possibility of erroneous replies.

The study subjects were informed that the information collected would be anonymous; and participation would be totally voluntary. The information regarding the type of medication, illness for which the medication was used and the reason for not consulting a doctor was collected. Their attitude toward self-medication and source of information for those who practiced self-medication were also recorded.

**Questionnaire**

1. Demographic data
2. Most common symptoms the patients had?
3. Which age group did they generally belong to?
4. Which gender preferred more?
5. Which sector of the society they belonged to more (educated/not)?
6. Are they usually employees/housewives/students/unemployed/retired?
7. What type of medicine(s) did they use?
8. Most common symptoms?
9. Reason for not consulting a doctor
10. Medication origin coming from?
11. What do they look for before buying the medication?
12. Do they check for / ask instructions before buying?
13. How much do they understand the instructions?
14. Do they ask for a particular dose/do u suggest?
15. What drugs are usually asked for with brand names?
16. How often do they seek advice from pharmacists?
17. What do they do if they develop side effects?
18. What opportunities exist to provide better assistance for OTC purchases?

**Statistical Analysis**
Data was analyzed using Microsoft Excel and the results were presented using absolute figures and percentages of total participants (mean ± and standard deviation).

**RESULTS:**

**Drugs commonly used**
This is as per shown in the figure no 1

![Figure 1: Drugs Usually Sought After For Otc Medications](image)

**Most common Symptoms:**
Most of the people (51%, n=435) who asked for OTC were suffering from fever/headache/body ache/URTI and UTI. 18%(n=154) had diabetes /hypertension and were asking for OTC medication based on their previous prescription. 12%(n=102) had cold/ cough.

11%(n=94) asked for weight loss /thyroid/insomnia. 8%(n=68) had insomnia

**Demography:**
It revealed that the majority of people reaching out to pharmacies for OTC’S are males (64%, n=546) as compared to females (36%, n=308).

**Opinions regarding OTC medicine advertisements**
The OTC medicine advertisements were approved and regarded as attention-grabbing by 37 % (n=18) of pharmacists. An average 34.4 %( n=17) of men expressed the view that most advertisements did not give precise information.

**Age group**
Population falling into the age group between 35yrs to 50years is more into self -medication (49%, n=418) than any other age group
Reasons for not seeing a doctor: the common reasons are depicted in table no 1:

**Table 1: Common Reasons For Not Seeing A Doctor**

<table>
<thead>
<tr>
<th>SYMPTOMS</th>
<th>N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior experience</td>
<td>418(49.47)</td>
</tr>
<tr>
<td>Non-serious illness</td>
<td>239(28.42)</td>
</tr>
<tr>
<td>Cost-Effectiveness</td>
<td>94(11.57)</td>
</tr>
<tr>
<td>Emergency use</td>
<td>85(10.52)</td>
</tr>
</tbody>
</table>

How informed are patients regarding self-care?
More than 70% observed that patients only have a basic understanding of OTC medicines. Nearly half (45.3%) believed that some patients are very well-informed, while others are ill-informed.

What proportion of the population request OTC medicines by name?
According to 74.5% of respondents, a high proportion of patients ask for OTC medicines by symptoms. On average, 25.5 % (n=213) of patients request medicines by name.

What might be the most important factors that guide patient choices of OTCs?
60% (n=512) of the population seeks information regarding the side effects, and 51 %(n=435) seek the correct administration of the medicine.

Source of information: as shown in table no 2

**Table 2: source of information**

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Information source</th>
<th>N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Previously prescribed by a doctor</td>
<td>384(45.26)</td>
</tr>
<tr>
<td>2</td>
<td>Prescribed to a friend or family member</td>
<td>290(33.68)</td>
</tr>
<tr>
<td>3</td>
<td>Advice from Pharmacist</td>
<td>128(14.73)</td>
</tr>
<tr>
<td>4</td>
<td>Internet / Advertisements</td>
<td>51(6.31)</td>
</tr>
</tbody>
</table>

What opportunities exist to provide better assistance to customers in OTC purchases?
Introduction of pharmacist care programs would be of great assistance to the population. 12.9 % (n=6) stated that the creation of an advice counter would be very useful; and 48.3 %(n=24) said that the best way to help the population would be through advice and communication. 41.1 % (n=20) held the opinion that more time should be devoted to each patient; and 46.6 % (n=23) said a greater emphasis must be placed on prevention.

DISCUSSION
This study aimed to ascertain pharmacist’s opinions regarding the advertising of OTC medicines and its informational value. Majority of people reaching out to pharmacies for OTC’S are males (64%, n=546) as compared to females (36%, n=307) the reason for this might be the ease of access to media and awareness by advertisements more among men than women. 49 % (n=418) belonged to age group of 35yrs to 50 years in our study. Compared to older patients, younger patients are more likely to receive information from their parents, advertisements and the internet. The young patients might be
more open and receptive than older patients. In contrast, the over-65 age group is likely to have far more difficulty in gaining access to information.

NSAIDs were the most common drugs that were asked for over the counter (39%, n=333) the reason being lack of knowledge about the benefits and possible side effects of the drugs, the promotion of most of the drugs in advertisement.

We found that more than 70% of pharmacy professionals observed that patients only have a basic understanding of OTC medicines. Some 50-70% of the population request OTC medicines by name. Nearly half (45.3%) believed that some patients are very well-informed, while others are ill-informed. With increasing age brackets of the respondents, there was an increasing prevalence of the view that patients do not possess a sound knowledge of the medicines, and are uninformed.

Previous prescriptions were common source in this study. People usually tend to ask for medicines that have been previously prescribed to them or their family members over a long period of time without going to see a doctor and getting rechecked under the assumption that once if a drug is prescribed for one particular condition it can be used again if the same problem arises without the awareness that it might need a change in dose etc.

In general, people do not have a deep understanding of OTC medicines, but tend to make decisions in response to advertisements, with the result that the desired effect is not necessarily achieved. The population needs to be made aware of the need to seek professional advice when purchasing OTC medicines, and to exercise caution in making purchasing decisions based purely on advertising. In addition, effective algorithms need to be formulated that can adequately guide self-medication.

Internet technology developments are also needed to create links between the databases of pharmacies and those of doctors; this would make it possible to gain an accurate picture of a given patients overall medication program. In other words, pharmacists need to be excellent communicators, must be familiar with the advertisements, and must understand the psychology of persuasion.

Pharmacist plays an important role as a communicator between the doctor and the patient. Initiate dialogue with the patient and the patient's physician (when necessary) to obtain a sufficiently detailed medication history. Adequate attention should be provided when explaining the effects and side-effects of medicines, great care must be taken to establish the correct dosage and an effort should be made to forge positive relationships with patients. However, it is important that pharmacy staff still take an adequate history so that the product requested is appropriate for the patient’s condition. Without gathering adequate information, a community pharmacy does not have the added value of a health care provider, but is little more than business entity akin to a supermarket or other retail outlets.

Partnership programs can be developed between doctors and pharmacists in the community so that patients can consult pharmacists when they are not able to make their appointments with doctors. In addition, it is also necessary for the government to enhance the involvement of pharmacists in primary care and promote the roles of pharmacists through patient education, so that people can have more opportunities to communicate and contact with pharmacists.

Limitations:
As many pharmacists declined to participate in this anonymous survey, the sample size was rather small and the study was conducted in limited time period of two months.

CONCLUSION:
The incidence of Self-medication is high. Our results highlighted the need to strengthen communication between patients and pharmacists as well as pharmacist and doctors. This study is
aimed to ascertain pharmacist’s opinions regarding the advertising of OTC medicines and its informational value. The population needs to be made aware of the need to seek professional advice when purchasing OTC medicines, and to exercise caution in making purchasing decisions based purely on advertising. Self-care programs provided by pharmacists should be gradually developed with the support of the Government. We recommend that pharmacists keep individual records detailing patient experience and use of OTC medicines[10]

REFERENCES
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