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A Cross Sectional Study on Self Medication Practices in an Urban Population



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ABSTRACT

Background: self-medication practices are a major threat to the health and well-being of people worldwide. it can cause increased morbidity, adverse drug reactions, drug interactions, antibiotic resistance and wastage of health care resources. the objective of this study is to obtain baseline data on self medication practices in an urban population, to obtain information on the factors influencing self-medication, to note association of self-medication with adverse effects and to assess the general health status of the population using self-medication.

Methods: This is a cross sectional study conducted in Pudahupet residential area of Chennai. It included 100 participants and was conducted over a span of 2 months. This is a questionnaire based study and the subjects were asked to fill the questionnaire with the help of the investigators. Informed consent was obtained from the subjects participating in this study.

Results: Around 67% of the study population has taken self-medication sometime in the past. Headache – 40% is the most common ailment for which self medication is taken by the study population. 45% of the study population claims to have taken self medication rather than visiting a hospital because the pharmacy is nearby. Around 44% of the study population choose drug for self medication based on the recommendation of the pharmacist. Analgesics- 50% are the most common self medicated drugs. About 89% of the study population did not experience any adverse effects due to the self medicated drug.

Conclusion: The prevalence of self-medication practices is found to be high in the study population. This presses on a need to promote better health education regarding proper utilization of health care services and avoiding self-medication practices. Effective implementation of existing drug regulations and formulating new methods of monitoring will also be helpful in the long run.

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INTRODUCTION

The World Health Organization (WHO) has defined self medication as “the use of drugs to treat self-diagnosed disorders or symptoms, or the intermittent or continued use of prescribed drugs for chronic or recurrent disease or symptoms” [1]. It is an important public health problem, with a reported prevalence of 79% in India [2]. In developing countries like India many diseases are treated by self-medication because of easy availability of a variety of drugs in the commercial market [3].

It is highly important to study the prevalence of self medication among the general population as it can lead to risks such as adverse drug reactions, increased morbidity, drug interactions, wastage

of healthcare resources and antibiotic resistance [4]. On the other hand, drugs classified as “over the counter” can be purchased without prescription and many a times might save time and money for the patients with minor illness. Although these drugs have proved efficacy and safety, their improper use, due to lack of knowledge of correct dose, side effects, and interactions could have serious implications, especially in children and geriatric population [5, 6]. The effects are also varied in conditions like pregnancy.

Practicing self-medication for drugs like antibiotics might lead to drug resistance [7]. Pharmacists and pharmacy attendants play an important role in helping self-medication among the public [8]. Despite the existing rules and regulations, failures in proper regulatory practices in India have contributed to ease of access to various medications, So steps must be taken to change this scenario [9, 10].

Objectives:

- To obtain baseline data on self medication in an urban population.

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- To obtain information on the factors influencing self-medication.
- To note association of self medication with adverse effects.
- To assess the general health status of the population using self medication.

METHODOLOGY

Study Design: Cross sectional study.

Sample Size: 100

Study Centre: Pudhupet residential area, Chennai.

Period of Study: 2 months.

Inclusion Criteria:

Subjects residing in Pudhupet area who sign the informed consent form and can understand English or Tamil are included in this study.

Exclusion Criteria:

Subjects having communication problem, severe illness or mentally challenged are excluded in this study.

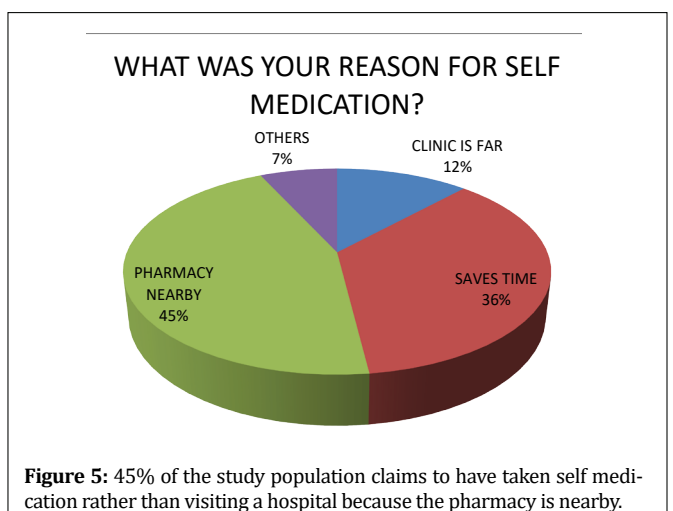
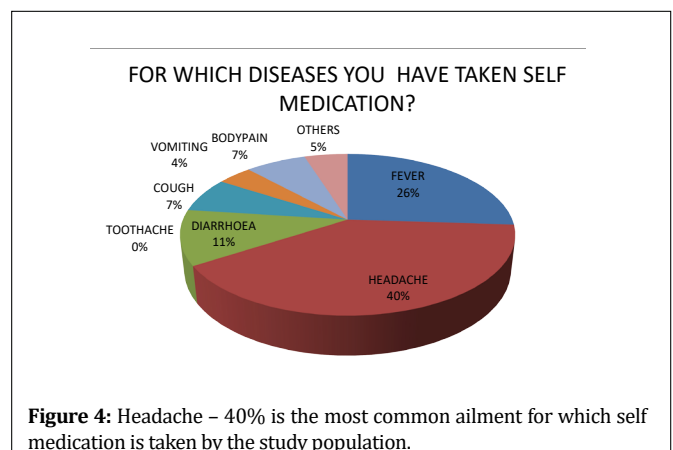
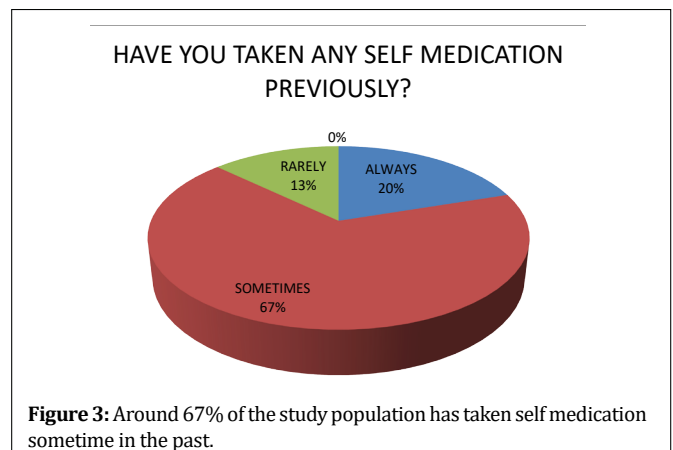
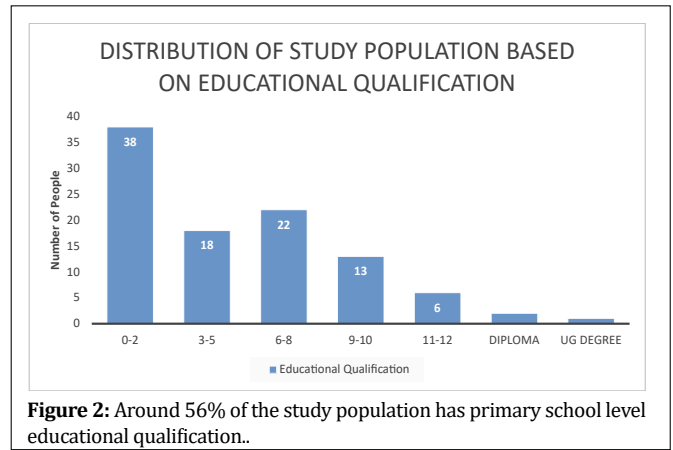
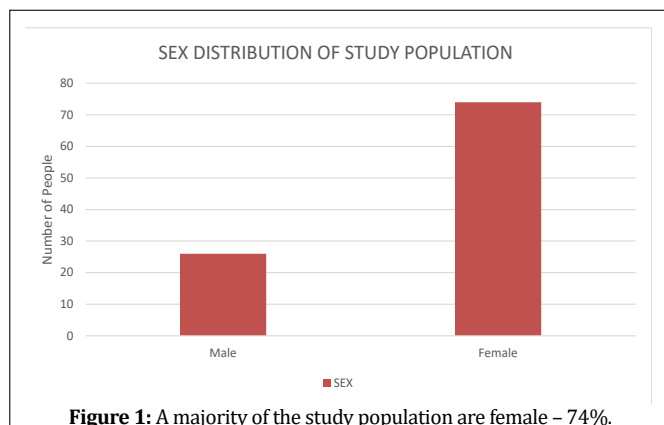
This is a questionnaire based study and the subjects will be asked to fill the questionnaire with the help of the investigators.

Informed consent will be obtained from the subjects participating in this study.

The questionnaire will include:

- Demographic details.
- Anthropometric measurements.
- Details on general examination of the subject.
- Questions regarding:
 - Habit of self medication.
 - Reason for self medication.
 - Factors considered while choosing the drug.
 - Mode of procurement of the drug.
 - Any adverse effects experienced.
 - Chronic intake of self medicated drugs.
 - Infections acquired.
 - Self medication with antibiotics.
 - Dosage of antibiotics.
 - Frequency of usage of antibiotics.
 - Use of multiple antibiotics.
 - Factors influencing the usage of antibiotics
 - Source of information regarding the self medication of antibiotics.

RESULTS



Dr.Uppili Venkat Ragavan.M, Dr.Kavitha.V,Dr.Lokesh.R, Dr:Lokesh.S, Dr:Madhumita.S, Dr:Madhurika Kumar,i, Dr:Mahendran.K, Dr:Malini.M (2023) A Cross Sectional Study on Self Medication Practices in an Urban Population. Int J Fam Med Pub Health, 2(2):1-4

WHAT DO YOU CONSIDER WHILE SELECTING THE DRUG FOR SELF MEDICATION?



Figure 6: Around 44% of the study population choose drug for self medication based on the recommendation of the pharmacist.

FOR HOW MANY DAYS DID YOU USE THE SELF MEDICATED DRUG?

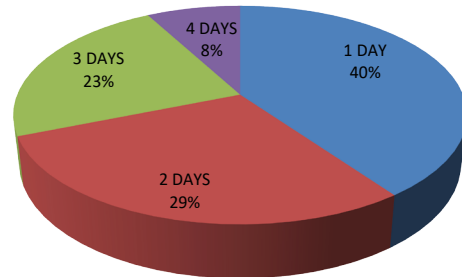


Figure 10: Most of the study population, around 40% use the self medicated drug for one day only.

WHERE DO YOU OBTAIN THE DRUG FOR SELF MEDICATION?

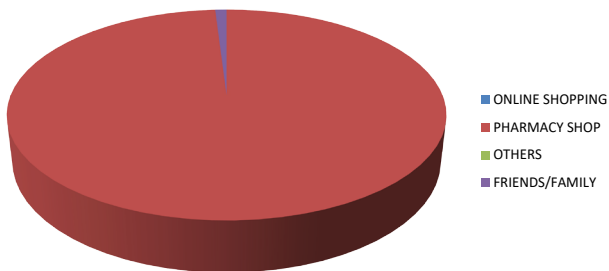


Figure 7: Most of the self medicated drugs are obtained from the pharmacy shop – 99%.

WHEN DID YOU STOP TAKING THE DRUG?

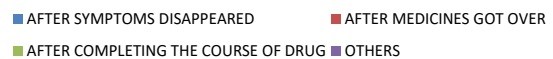


Figure 11: Around 54% of the study population stop taking the drug after symptoms disappear.

WHICH DRUG ARE YOU USING COMMONLY?

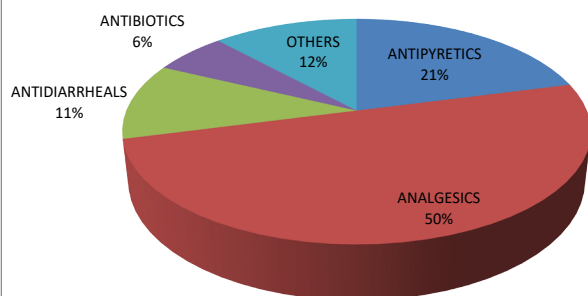


Figure 8: Analgesics- 50% are the most common self medicated drugs.

HAVE YOU EXPERIENCED ANY ADVERSE EFFECTS DUE TO THE SELF MEDICATED DRUG?

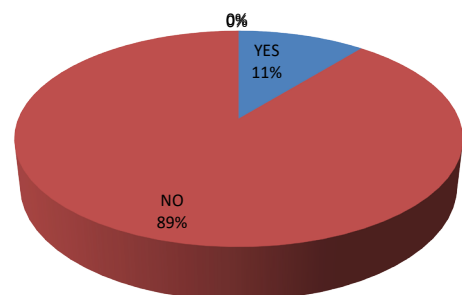


Figure 12: About 89% of the study population did not experience any adverse effects due to the self medicated drug.

HOW DID YOU KNOW THE DOSAGE OF THE DRUG?

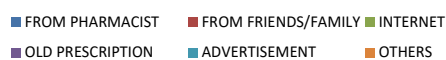


Figure 9: The dosage of the self medicated drugs is mostly based on the pharmacist's recommendation- 60%.

Most of the study population was female around 74% (Figure 1). Around 56% of the study population has completed their primary school level educational qualification (Figure 2). A majority of 67% of the study population has taken self medication previously (Figure 3). Headache (40%) was the most common ailment for which self medication was taken followed by fever and diarrhea (Figure 4). Around 45% of the study population claim that the major reason for self-medication rather than visiting a hospital was that the pharmacy was nearby and 36% believe that it saves time (Figure 5). 44% of the study population choose drug for self medication based on the recommendation of the pharmacist and 15% based on their previous experience and prize (Figure 6). Most of the self medicated drugs were obtained from the pharmacy shop (99%) (Figure 7). Analgesics (50%) were the most common self medicated drugs followed by antipyretics (21%) (Figure 8). The dosage of the self medicated drugs was mostly

based on the pharmacists recommendation (60%) followed by old prescription (14%) and advertisement (13%) (Figure 9). Most of the study population, around 40% use the self medicated drug for one day only and around 29% use it for two days (Figure 10). Around 54% of the study population stops taking the drug after symptoms disappear and only 9% complete the course of the self medicated drug (Figure 11). About 89% of the study population did not experience any adverse effects due to self medication (Figure 12).

DISCUSSION:

The prevalence of self- medication practices in the urban population is 67% (Figure 3) which is higher compared to other studies [11, 12] which show a prevalence of around 40 to 60 %. This may be attributed to differences in educational status and socio economic status. In this study, headache (Figure 4) is found to be the most common ailment for which self medication is taken and the reason is found to be the ease of accessing nearby pharmacies rather than visiting a health care professional (Figure 5). This is comparable to similar studies which showed fever, headache and abdominal pain to be the most common ailments [13]. Analgesics were obtained over the counter by majority of the population (Figure 8) and the dosage was based on the recommendation of the pharmacist (Figure 9) [14]. This can lead to complications like analgesic induced nephropathy. Most of the study population took the self medicated drug for one day only (Figure 10) and stopped the drug as soon as the symptoms disappear (Figure 11). This can lead to widespread antibiotic resistance if antibiotics are used for self-medication [15]

CONCLUSION:

As the prevalence of self medication practices is high, health education is important in creating awareness among the general public regarding proper utilization of health care services and avoiding self-medication practices. Pharmacists must be educated regarding the regulations for dispensing drugs and quality control monitoring has to be done. Prescriptions must be made mandatory to dispense drugs by pharmacies. Pharmacovigilance has to be done and all adverse drug reactions must be reported. Availability and accessibility of health care services must also be improved and the population has to be educated regarding the same.

Ethical Approval: The study was approved by the Institutional Ethics Committee

Conflict of Interest: None declared

Source of Funding: No funding sources

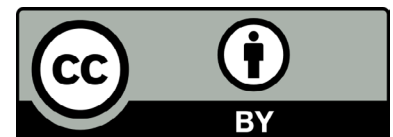
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