# Prevalence and Pattern of Self-Medication Practices of Attenders in a Private University in Chennai

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Abstract: <u>Introduction</u>: Consumption of non-prescription medicines is widely practiced in both developed and developing countries. It has been recognized that inappropriate and uncontrolled self-medication results in wastage of resources, increase resistance to pathogens, adverse drug reactions and drug dependence. <u>Aim and Objectives</u>: To study the prevalence and pattern of self-medication over the past 1 year among attenders above 18years in a private university in Chennai and to study the factors associated with self-medication. <u>Material and Methods</u>: A cross sectional study was conducted for a period of 2 months among attenders in a private University in Chennai. 200 individuals aged 18years were randomly selected from the list of attenders working in the university and were interviewed using orally administered structured questionnaire. <u>Results</u>: Out of the 168 attenders who fell sick 123(73.2%) had used self-medication within 1year recall period. The practice of self-medication was more common among females and those having higher secondary education and above (p<.05). Most common symptoms warranting self-medication were fever(85.3%) and headache(41.4%).Most common reasons for self-medication were doctor fees (26%) and to save time(17.1%) as perceived by the participants. <u>Conclusion</u>: Rising prevalence of self-medication is a matter of seriousconcern. IEC activities should be strengthened among general population to minimize the practice of self-medication.

Keywords: Self-medication, attenders, private university

#### 1. Introduction

Self-medication is defined as the consumption of nonprescription medicines by people on their own initiative. Self-medication is widely practiced in both developed and developing countries. Medications may be approved by the national drug regulatory authority as being safe for selfmedication. These medications are normally practiced for the prevention or treatment of minor ailments or symptoms, which usually do not justify medical consultation. In chronic illness or recurring illness, self-medication is possible with the doctor retaining an advisory role after initial diagnosis and prescription. Urge of self care, lack of health services, inaccessibility to health services, poverty, ignorance, misbelieve, extensive advertisement and availability of drugs in other than medical shops are responsible for rising trend for self-medication. It has been recognized that inappropriate and uncontrolled self-medication results in wastage of resources, increase resistance to pathogens, adverse drug reactions and drug dependence. It also masks the signs and symptoms of underlying diseases, hence complicating the problem, creating drug resistance, and delaying diagnosis. Factors influencing frequency of selfmedication are age, educational level, family attitudes, advertising of drug manufacturers, legislation regulating dispensing, sale of drugs, previous experiences with the symptoms or disease, home-kept prescription drugs. This study was done to assess the prevalence and pattern, factors associated with self-medication over the past 1 year among attenders above 18 years in a private university in Chennai.

#### 2. Materials and Methods

This was a cross-sectional study done from January 2019 to May 2019. This study was conducted in a private universitySaveetha University. This study included the attenders working in the above mentioned university. The sample size of the study is 200. It was estimated using the formula  $Z^*pq/l^*(p-50, l-20 \text{ percent})$ . After obtaining permission from the ethics committee, a list of all the attenders working in the university were obtained. The participants aged 18years and above were selected randomly from the list. The study tool was an orally administered structured questionnaire. The data collected were entered in a Microsoft excel sheet and analysed using SPSS software.

#### 3. Results

Out of total 200 study participants, 168 fell sick out of which, 123(73.2%) had used self-medication within 1year recall period. The practice of self-medication was more common among female gender (52%) and higher levels of education. There was significant association between education level and practice of self-medication, where participants having higher secondary and graduate were practicing self-medication more compared to participants having education less than secondary (Table 1). Most common symptoms warranting self-medication were fever (85.3%) and headache (41.4%) (Table 2). Most common reasons for self-medication were doctor fees (21.13%) and to save time (26.82%) as perceived by the participants. The criteria for drug selection were based on price (58.53%) and type of medicine (32.5%). Majority of the participants practicing self-medication reported using Allopathic drugs (80%). The participants got information about drugs through pharmacist(57.7%) and previous experience(22.76%). The source for the drug was from pharmacy shop (94.3%) and friends/family(4.1%). Majority of the participants never check for prescribing information before self-medication (65.04%) and (35%)check the prescribing information.

Volume 8 Issue 11, November 2019 www.ijsr.net

10.21275/ART20202724

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(62.8%) fully understood and (34.88%) partially understood the prescribing information. (17.07%) of the participants reported adverse events following self-medication. The participants practicing self-medication had no insurance(96.7%).

**Table 1:** Distribution of study subjects education status to<br/>self-medication practices (n = 123)

Levels of education	Self- medication		D voluo
	Yes	No	P value
Illiterate, primary, secondary	49(40%)	7(15.6%)	P<.05
Higher secondary, graduate	74(60.16%)	38(84.4%)	

 Table 2: Symptoms reported for Self-medication (n=123)

Symptoms	Frequency (%)	
Headache	51(41.46%)	
Running nose	44(35.8%)	
Cough	36(29.26%)	
Acidity	25(20.32%)	
Body pains	58(47.15%)	
Fever	105(85.36%)	
Others	39(31.7%)	

### 4. Discussion

This is a cross sectional study conducted in a private university regarding the prevalence and practice of selfmedication among attenders. In this study it was found (73.2%) had used self-medication, compared to (40.5%) of the participants in a study done by Hajira Saba I et al[12]. In this study, self-medication practices were significantly more among graduates. This is similar to findings of studies by Varun Kumar et al [2]. In present study, females(52.03%) were practicing more than males(47.96%) in contrast to study by Zardosht M et al [1]. The most common symptoms warranting self-medication were fever(85.36%) and headache(41.46%) in this study. Other studies consistent with the results were [3, 7]. In present study reasons for selfmedication were to save time(26.82%) and high fees of doctors(21.13%) similar to study by A.Abdi et al [4] while in contrast to study by Subhashini et al [5] in which high fees was the major source. In this study Allopathic drugs(80%) were used more similar to study by Selvaraj K et al [10]. In this study pharmacist(57.72%), previous experience(22.76%) were the major sources of information similar to study by Pankaj Gupta et al[6]. In this study the participants with no insurance practiced self- medication more similar to study by Shah et al [8].

## 5. Conclusion

In the present study, the prevalence of self-medication was high and it showed no significant difference in terms of age and gender. Health education of the public and regulation of pharmacies may help in limiting the practices. People must be made aware about side effects and its importance. IEC activities should be strengthened among general population to minimize the practice of self-medication.

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