# A descriptive study of self-medication practices among patients in a public health care system in Tabuk City

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#### **ABSTRACT:**

*Objective*: This study investigates the prevalence and the reasons of Self-medication practices among patients in Tabuk city /KSA.

**Methods:** A cross-sectional descriptive study was conduct by 300 questionnaires were distributed randomly to 300 adult in different age group ,sex and level of education at PHC in Tabuk city one of the largest cities in KSA.

**Result**: the results of this study showed a high percentage of people who had practiced self-medication..The mean age of respondents was the adolescent. While the common source of self-medication was the private pharmacy.

*Conclusion:* this study demonstrated that the self medication is common in Tabuk City of Saudi Arabia. Highlight the important and the most reasons of self-medication practice.

Keywords: PHC, self-medication, Tabuk University, Tabuk City.

## I- INTRODUCTION

Self-medication is a worldwide problem and it is a common practice in developing countries [1, 2]. Self-medication can be defined as the use of drugs to treat self-diagnosed disorders or symptoms, or the intermittent or continued use of a prescribed drug for chronic or recurrent disease or symptoms without prescription [3].

In several studies, it has been found that inappropriate self-medication causes wastage of resources, increases resistance of pathogens and generally causes serious health hazards such as adverse drug reactions, prolonged suffering and drug dependence [4].

The World Health Organization (WHO) stated that, It has become widely accepted that self-medication has an important place in the healthcare system. Recognition of the responsibility of individuals for their own health and awareness that professional care for minor ailments is often unnecessary has contributed to this view. Improvements in people's general knowledge, level of education and socioeconomic status in many countries form a reasonable basis for successful self-medication.[5].Several factors could affect the self medication practice and that includes sex ,age ,race, educational & economic status [6].

In Saudi Arabia, it could be considered as a common complicated problem due to the multiplicity of their causes in addition to their implications on patient health and therefore on the kingdom economy.

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One previous study conducted in Saudi Arabia has shown that about 35% of patient attending PHCs have some experience with self-medication [7]. The most common prescription medication dispensed without prescriptions were antibiotics and analgesics/antipyretics. [8].The most common reasons for buying medication without prescription was that the symptoms were perceived to be too minor to seek consultations and time saving according to recent study[5,6].However, To protect the patient health by preventing the health complication of self-medication that may carry economic burden on the kingdom ,the real extent of the problem need to be assessed to find solutions or at least limit its extension to help prevent the unwanted sequel and due to deficient in the research that related with .

This study aiming to determine the prevalence of self-medication, find the sources of information and reasons for self-medications.

## II- MATERIALS AND METHODS

#### Study Population

This cross-sectional descriptive study was carried out at PHC in Tabuk city, one of the largest cities in Kingdom of Saudi Arabia. Approximately 300 adult are enrolled at different level of education and socioeconomic status. A revalidated questionnaire containing open-ended and closed-ended questions.

A total of 300 questionnaires were distributed in March 2015. The questionnaire was distributed to all patients attending randomly at PHC. Permission to carry out this project was obtained from the University administration and the medical research ethics committee.

#### Study tool: the questionnaire

The questionnaire consisted of 5 sections. The first section contained questions regarding demographic information such as age, sex, nationality, level of education, marital status, employment status, health status, In addition: whether they have health insurance, or if they have ever practiced self-medication in general particularly in the past 6 month. The second section focused in source and information of the self-medication within pharmacists, family/friends, leftover prescription medication or other. The third section focused in the most common symptom to used self medication and the most common therapeutic classes of medication .The last section of questionnaire used to assess the reason of people to practice self medication.

#### Data analysis:

The outcome of the study was the practice of self-medication in one month. Respondents were classified into 2 groups: those who practiced self-medication and those who did not (yes/no).

The questionnaire was used to determine the differences between these two groups who visited two PHC clinics in one month according to specific characteristics, which included the sex, age, educational level, marital status and employment status; and health-related aspects which included respondents' self-reported health status, whether they had a chronic illness, perceptions about access to health care and satisfaction with the quality of health care they receive.

## III. RESULTS

#### 1. Characteristics of the study population:

A total of 258 out of 300 questionnaires were giving randomly to the people who visited primary health care in one month, the respond of 205 people who had practice self-medication are in rate 83.3% and 41

who not practice self medication in rate 16.8% and we excluded 44 people who didn't complete the answers . The mean age of respondents was 20 - + 5 years, with a range of 15- 25 years.

Most respondents (73.9%) unmarried Saudi females who were studying at high school and college who have good health status and, (45.3%) unmarried Saudi male who were studying at high school and college with good health status.



Figure 1: Gender Distribution among Patients

#### 2. Source of self medication

Patients who practiced self-medication were asked about the source of the drugs they used for self-medication. (**Figure 2A-B**) shows that the common source of self medication was the private pharmacy (including pharmacists), which reported by (63.8%). This was followed by (21%/) for the family and friends and (13.8%) for previous prescription.



Figure 2A: Source of self medication

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Figure 2B : Source of information about self medication

#### 3. Most common symptom and therapeutic classes that used:

The study ask the patient about the most symptom used self medication were report headache was the commonest (65.6%) and fever (53.3%) and common cold (45.8%), sore throat (41%), cough (38.3%), back pain (23.8%), stomach pain (21.6%).

The most therapeutic classes report were used as self medication was headache relieving medication (73.2%) ,then antipyretic (59.6%) and antibiotic (45.2%), herbs (32%),topical creams (30.7%) ,eye drop (29.8%) , sedatives (25%).nose drops (24.1%) and cosmetic medication (21.1%) and other medication with low report were show in (**Figure 3 A-B**).



Figure 3A: Most common symptoms to use self medication.



Figure 3B: Therapeutic classes reported in self medication practice.

## 4. Reasons for self-medication practices:

The study identified patients reasons for self-medication (Figure 4). The commonest reasons reported was the illness was minor (52.2 %) and (16.8%) report that long waiting time in health care facilities ,were (13.3%) lack of the time to visit health care facilities. Other reasons for self-medication were show n in (Figure 4).



Figure 4: Reasons of using self medication.

## **IV- DISCUSSION**

Self-medication practices are very common among Tabuk population despite that the public health services are free in Saudi Arabia .This study showed that more than two thirds of respondents (83%) had practiced self-medication at least once in the last 6 months and over the counter drugs purchased from private www.ijasrjournal.org 131 | Page

pharmacies was the most commonly used source of self-medication, reported by the majority of self-medicated patients.

A Similar studies conducted in Saudi Arabia supported the prevalence of self –medication such as Riyadh Region[1] showed that 35.4% of respondents had used self-medication over a period of 2 weeks. A recent study conducted in Qassim Region ,[2], showed that more than two thirds of the respondents have practiced self -medication in the past year. Another study conducted in AlKhobar , Western Region ,[3], showed that 38% of school students have used over-the-counter medications .

Other studies conducted in the Middle East, for example in Kuwait, the prevalence rate among the high school students was 92% [4], while in Bahrain, the prevalence rate in the University students was 86%[5], one study in United Arab Emirates[6] showed a prevalence rate of 63% in male and 36% in females,[7], Oman[8], Jordan [9,10], Palestine [11], Egypt [12], others were conducted in different parts of the world, in Unites States [13], The United Kingdom[14], Malaysia [15], Turkey [16] and many more that confirmed the widespread use of self –medication among the general population. Further studies needed to find the causes of using self-medication instead of seeking medical advice.

In this current research, the data showed that (63,8%) of the respondants who use self medication reported that private pharmacies were their source of the medications this was expected because in Saudi Arabia most of the drugs can be bought over the counter without prescription.

This is consistent with the data in a study done in Saudi Arabia in the central region [1] and in other countries like Egypt[17] and Jordan [18] And also the fact that there are no strong laws limiting buying medications without prescription from private pharmacies had helped a lot in self-medication. The study showed that the commonest reported symptom leading to self medication is Headache (65.6%) and the medication class mostly reported was headache relieving medication (73.2%). This is explained by the finding that shows that the reason most respondents have reported is that the illness was minor (52.2%).

This is consistent with the other studies like one done in Egypt [17] and in Sudan [19] while in other study ,the reasons for practicing self medication were that it was less expensive compared to medical care in the hospital [20].There were several limitations that should be considered our study was limited to Tabuk city but it has different sociodemographic inhabitants and then the study results was at risk of bias recall and subjectivity since it was about self reported medications.

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