Evaluation of Self-Medication Practices and Awareness among Students in Al Qassim Region of Saudi Arabia

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Abstract

Objective: The aims of this study were to evaluate the students’ knowledge, awareness and the reasons behind self medication in two higher education institutions in Al Qassim region of Saudi Arabia.

Subjects and method: This pre-validated anonymous questionnaire was used in English and Arabic language that contained both open ended and close ended questions and it was distributed among students of two higher education institutions of Al Qassim region i.e. Buraydah Private Colleges and Qassim University. A total number of 61 students from Buraydah Private Colleges studying in different levels belong to pharmacy, dentistry and nursing college participated in this study and 71 students of final year medical college in Qassim University participated in the study. The data has been analyzed by descriptive statistics and summarized in frequencies and percentages.

Results: Self medications were very common among students of Qassim University (QU) and Buraydah Private Colleges (BPC) and about more than two third students have practiced self medication in past year prior to this study. Majority of participants in our study self medicated for one week to treat self-recognized or self-diagnosed conditions and most of them obtained their medication from pharmacy. About one half of BPC students and slightly more than one half QU students used antibiotic as self medication. The awareness of rational use of medicine was found 63.3% among QU students and 45 % in BPC students. The highly significant difference (p< 0.05) was observed between the students of QU and BPC about the rational use of medication. The main reason for self medication in our study was found to be non serious health problems and quick relief.

Conclusion: The self medication practice among students of two higher educational institutions of Al Qassim region was high and often inappropriate. There was an alarming self medication of antibiotics among students that was obtained from local pharmacies without prescription.

Keywords: Self-medication; Al Qassim; Saudi Arabia; Nonprescription drugs

Introduction

Self medication is the use of medication without professional supervision to alleviate an illness or condition [1,2,3]. Over the counter drugs or non prescription drugs are dispensed without prescription for minor conditions [4]. Self medication may be economical and time saving if practiced properly. Moreover, it provides cheaper alternative to treat common illnesses [5].

Self medication is not restricted to OTC drugs only [6]. The prescription drugs like antibiotics are commonly used as self medication in many countries where the regulations are not strict [7,8]. It is suspected that the prevalence rate of self medication is high in Saudi Arabia and only few studies have been done in Saudi Arabia [9,10,11]. Furthermore, the poor implementation of drug policies in developing countries makes prescription medication accessible as non prescription product [12]. The world health organization stressed upon the strict and controlled use of self medication [5]. The wastage of resources, serious health hazards such as adverse drug reactions, prolonged suffering and drug dependence are due to inappropriate use of self-medications [13,14]. The aims of the study were to evaluate the students' knowledge, awareness and the reasons for self medication in two higher education institutions of Al Qassim region.

Subjects and Methods

This study was pre-validated anonymous questionnaire based survey approved by the research and ethical board of Buraydah Private Colleges. It was undertaken from November 2013 till April 2014.

This pre-validated anonymous questionnaire was used in English and Arabic language that contains both open ended and close ended questions taken from other studies [15,16]. The study population included students from two higher education institutions in Al Qassim region i.e. Buraydah Private Colleges (BPC) and Qassim University (QU). A total number of 61 students from Buraydah Private Colleges belong to pharmacy, dentistry and nursing college studying in various levels and 71 final year students of medical college in Qassim University participated in the study. All students were briefed about the purpose of study and the procedure to complete this questionnaire was explained. The questionnaire included six questions on self medication practices in the past year, duration of use, source of obtaining self medication, rational use of self medication, antibiotic used as self medication and reasons for self medication (Table 1).

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Results

The questionnaire was completed by 100% participants i.e. 132 students. Of the total 132 students 44% (n=61) were from Buraydah Private Colleges (BPC) and 53% (n=71) belonged to Qassim University (QU) have participated in this study.

Figure 1 shows self medication practice in the past year among BPC and QU students. 47 (77.05%) respondents from BPC and 58 (81.63%) from QU practiced self-medication in the last year.

Majority of participants i.e. 59% QU and 70.5% BPC have practiced self-medication in the last year. The respondents of BPC and QU self medications by one week (Table 2). Table 2 shows similar results (BPC=80%; QU=79%) regarding pharmacy as a choice for obtaining self medications by majority of respondents from BPC and QU. The street markets were least preferred for obtaining self medications by almost 98.5% of total participants. Furthermore, about one half of BPC students (49.18%) and slightly more than one half QU students (59.15%) obtained antibiotic as self medication (Figure 2). Figure 3 shows that most of participants self medicated for one week (QU=61.97%, BPC=77.05%). Figure 4 shows that final year medical students of QU were more aware (n=45, 63.38%) of rational use of self medication than pharmacy, dentistry and nursing students of BPC (n=10, 16.39%). The highly significant difference (α < 0.05) was observed between the students of Qassim University and Buraydah Private Colleges about the rational use of medication.

The study also examined the reasons for self medication among students of these institutions. According to majority of participants (QU: n=31, 43.6%; BPC: n= 24, 39.3%) the reason of self medication included health problem being not serious while embarrassed of discussing own symptoms was found to be the reason of self medication among least number of participants (QU: n=2, 3.2%). Seeking quick relief was the second major reason for self medication among final year medical students (n=28, 39.4%) of QU but pharmacy, dentistry and nursing students (n=11, 18.03%) of BPC ranked avoidance of long waiting at clinics as second most important reason of self medication. The respond on reason of self medication by participants of BPC and QU is shown in Table 3.

Statistical Analysis

The data has been analyzed by descriptive statistics and summarized in frequencies and percentages. A statistical significance level of 0.05 was used to determine the association between the study groups at Qassim University and Buraydah Private Colleges for awareness of rational drug use. A p<0.05 was considered statistically significant.

Ethics approval

This study was approved by research and ethical board of Buraydah Private Colleges, November 2013.
Discussion

Our study showed that more than two thirds of the respondents (BPC=77%, QU=81.6%) have practiced self medication in the past year. The findings support the prevalence of self medication in previous studies [10,11] done at Saudi Arabia. It is worth noting that prevalence rate in another study [15] at Bahrain University students is 86% and almost similar results were found in one study [17] at Kuwait i.e. 92%. The prevalence rate of self medication mainly depends on demographics and socioeconomic profiles of countries.

Most of participants (QU=59%, BPC=70.4%) in our study have used self medication for one week duration however few respondents (QU=4.2%, BPC=3.2%) have used for more than month. These findings have similarity with one study [15] among university students at Bahrain that shows majority of participants (63%) have used self medication for one week and only 8% practiced self-medication for more than one month. The probable reason for less number of participants using medication for more than one month could be the chronic therapy for an undiagnosed condition or chronic disease like asthma, arthritis.
etc. Further studies are required to find the causes of long term self medication among patients.

It is evident from many studies [11,18,12] that pharmacy is the major source of getting self medications. Similar results (QU=78.87%, BPC=80.33%) have been found in our study. Herbal stores (QU=4.2%, BPC=4.9%) and street markets (QU=1.4%, BPC=1.6%) are least used source for obtaining self medication. The availability of wide range of medications makes pharmacy as most important choice of getting medications [20].

Our study indicated that self medication with antibiotic was used among nearly half percent (QU=59.1%, BPC=49.1%) of respondents. One study from Saudi Arabia [12] has reported the use of antibiotic as the counter drug by students. The strong likelihood is that any individual can buy prescription drugs in Saudi Arabia except for few drugs that require special prescription for dispensing [12]. Some examples of prescription drugs in Saudi Arabia according to Saudi food and drug authority [21] include antibiotics like amoxicillin, levofloxacin, and cefazolin. The list of prescription and non prescription drugs in Saudi Arabia is available at Saudi food and drug authority website [17]. Saudi food and drug authority should be strict and organise awareness campaigns for proper use of medications in general population and healthcare professionals. Almost similar results have been found in many studies conducted among students in various countries i.e. 35.2% among university students in Pakistan [22], 32% among Sharjah University students [15], 42.2% of the medical and 48% of the non-medical students in Iran used antibiotic as self-medication [7]. Amoxicillin was most commonly used antibiotic [6,7,23] and throat symptoms were the major reason for antibiotic use as self-medication [24].

The awareness of rational use was found 63.3% among QU students and 45 % in BPC students. A total of 53% of respondents in one study at Sharjah university students have found to be aware of rational drug use [15]. The main reason for self medication in our study was found to be non serious health (QU=43.6%, BPC=39.3%) problems and quick relief (QU=39.4%, BPC=44.7%). Various studies have supported these reasons for most frequent self medication among participants [15, 16, 22]. The least common reason for self medication was feeling of embracement while discussing own symptoms (QU=5.6%, BPC=3.2%). The finding was of some similarity to study in Sharjah University students that indicate 7% participants use self medication due to embracement of discussing their symptoms [15].

Conclusion and Recommendations

The high use of self medication was found among students in higher education institutions of Al Qassim region of Saudi Arabia. The inappropriate practices of self medication such as use of antibiotics as self medication among these students were alarming. The health authorities in Saudi Arabia should take strict measures to stop the dispensing of prescription drugs for self medication.

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