(RESEARCH ARTICLE)

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A study of self-medication practice among Libyan patients in Tripoli city

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Abstract

Background: Self-medication practicing is continuously increasing in the world as a cause of its importance in curing minor symptoms.

Aim: This study aimed to assess self-medication factors coupled with Libyan respondents residing in Tripoli city.

Methods: A descriptive cross-sectional study was performed from May to July 2018 in Tripoli city. Data was collected using a previously prepared questionnaire from 160 respondents from different age groups. A descriptive analysis was used for data analysis using SPSS version 20.

Results: A self-medication practice of a total of 160 respondents were in this study whose ages ranged from 15 to 60 years. Female was the majority of respondents (58.8%). About 51% of the studied population was at the university level while (31.2%) were literate, and a very small portion of the studied population was illiterate (11.9%). Most of the respondents (46%) practiced self-medication each 6 months once or even longer; however, a small portion of respondents (14.4%) stayed on practiced self-medication weekly.

In this study the major reasons why participants practiced self-medication without a prescription were previous experience with the condition (45%), high treatment cost (5.6%) of respondents was the reason for self-decision. The source of information of medicines used for self-medication (37.5%) has information from the previous prescription, while (27.5%) received information from community pharmacy.

Conclusion: Our results confirmed that self-medication practice is a fairly frequent problem in our community; therefore, the community should be educated regarding the adverse effects of drugs to avoid complications arising regarding self-medication. Therefore, Pharmacists can play an important role to make people informed about self-care choices.

Keywords: Self-medication; Prescription; Medicines; Libya

1. Introduction

Self-Medication can be defined as the use of medicines to treat symptoms of self-recognized illnesses; taking medicines on the advice of pharmacists, relatives, or friends without consulting medical professionals, participating in drugs with family Members /friends, or consuming remain drugs stored at home. Self-medication also involves the use of herbal medicines and the prescription of only drugs such as antibiotics (1, 2).

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These practices have a huge variation in their prevalence worldwide due to inherent differences in socioeconomic factors and cultural disparities in health care systems (3).

Different factors at the individual level such as age, sex, self-care, income, orientation, education level in general and medical knowledge in particular, reaches to drugs, and exposures to advertisements also affect the practice (4).

Self-medication with Over-the-counter (OTC) drugs is a worldwide public health problem (5). Correctly practicing self-medication decreases medical services load, saves cost especially in countries with restricted healthcare resources, and minimizes the waiting time to see the physician (6).

Self-medication treatment does not require medical consultation but may help treatment of minor diseases. However, prescription drugs can misstep towards self-medication and/or inappropriate drug use such as misdiagnosis, decrease or high doses, and/or time of treatment. This practice may result in being unreasonable drug use (7), delayed sought of medical advice, and increased unwanted effects as well as an increase in resistance of pathogens that result in wasting of resources (8). Therefore, the prognosis by the physician is highly important for conventional treatment. Pharmacists in a community pharmacy have a major role in recommending drugs for self-medication. The pharmacist should discriminate between patients for whom pharmacists could recommend the drugs and patients who should be repromoted to consult physicians. World Health Organization (1998) addressed that the pharmacist is an adviser to the public on everyday health-care and is a key figure in the supply and delivery of medicines to the consumer; he is a partner of the manufacturer of non-prescription medicines (9). The pharmacist in his professional capacity and direct contact with patients is appropriate to provide sound advice on the medicines he supplies. Increasingly, people are managing a large proportion of their illness without consulting either a physician or pharmacist.

This study aimed to estimate the self-medication practice and to evaluate a common type of illness, and to identify frequently used drugs and determinants to identify potential factors that could influence self-medication practices.

2. Material and methods

2.1. Study site

A cross-sectional study was performed from May to July 2018 in Tripoli city to determine the behavior of self-medication among the general population. Data was collected using a previously prepared questionnaire using direct interviews with respondents.

2.2. Study population

The study was conducted on 160 respondents from different age groups. This study involved interviewing the patients in these community pharmacies.

The patients were ≥ 15 years old and were included in the study after they gave the pharmacists verbal consent.

2.3. Data collection and analysis

2.3.1. A semi-structured questionnaire was used to the following data

The first part included age, gender, marital status, employment status, and educational level.

The second part covered the practicing of self-medication frequency. The third part looked for reasons for taking self-medication. The fourth section determined the source of information about the drugs used in self-medication. The fifth and sixth parts, included questions were asked respondents to report the disease to be managed with self-medication and medicines used for this purpose. About 5-10 minutes took each interview. The questionnaire consisted of six sections included close- and open-ended questions.

3. Results

As shown in table 1 a total of 160 respondents with the practice of self-medication were included in this study whose ages ranged from 15 to 60 years.

There were 58.8% (n=94) female and 41.2 % (n=66) male. Ages of 71 respondents (44.4%) were between 15-30 years, 58 respondents (36.2 %) were aged 30 -60 years and 31 respondents (19.4%) were older than 60 yrs.

Most of the respondents were married 97 (60.6%) regarding marital status.

About 34.4 % (n=55) of respondents their monthly income ranked between 450-800 lD and 800-1000 LD about 36.9%, 28.8% their monthly income was ≥1000 lD respectively.

Only (19 respondents 11.9%) of the studied population were illiterate, while the other individual (50 respondents 31.2%) were literate at a secondary level or (83 respondents 51.8%) were at the university level.

Employed respondents were 89 (55.6%), 45 (28.1%) were unemployed respondents, and 26 (16.2%) were retired respondents.

Table 1 Socio-demographic characteristic of respondents (n=160)

Age	Number (%)
15-30	71(44.4%)
30-60	58(36.25%)
>60	31(19.4%)
Gender	Number (%)
Female	94(58.8%)
Male	66(41.25%)
Marital status	Number (%)
Married	97(60.6%)
unmarried	53 (33.1%)
Widowed /divorced	10(6.25%)
Income per month	Number (%)
450-800 LD	55(34.4%)
800-1000 LD	59(36.9%)
≥1000 LD	46(28.8%)
Level of education	Number (%)
University	83(51.8%)
Illiterate	19(11.9%)
Primary	8(5%)
Secondary	50(31.2%)
Employment	Number (%)
Employed	89(55.6%)
unemployed	45(28.1%)
Retired	26(16.2%)

Table 2 showed that about (34.4%) 55 respondents self-medicated at a monthly interval, while 19.4% (31 respondents) weekly practiced as self-medication and 74(46%) of the remaining respondents practiced as self-medication for every 6 months or even longer.

Table 2 Frequency, reason, and source of information about self-medication

Frequency of practicing self-medication	Number (%)
Weekly	31(19.4%)
Monthly	55(34.4%)
≥6month	74(46.25%)
Reason of self-medication	Number (%)
Previous experience	72(45%)
High treatment cost	54(33.7%)
Self-decision	9(5.6%)
Simple disease	25(15.6%)
Lack of near health care centres	0(0%)
Source of information	Number (%)
Previous prescription	60 (37.5%)
Other medical staff	21(13.1%)
Family or friends	25(15.6%)
Community pharmacy	44(27.5%)
Drug direction	3(1.9%)
Advertisement	7(4.4%)

Table 3 Indication of self-medication

Disease	Number (%)	Disease	Number (%)
Common cold	26(16.25%)	Different skin condition	7(4.4%)
Headache	35(21.9%)	Sexual dysfunction	
Back or muscle pain	18(11.25%)	Toothache	2(1.25%)
cough	11(6.9%)	Fever	17(10.6%)
Dyspepsia	14(8.8%)	General weakness	21(13.1%)
Diarrhea	2(1.25%)	Constipation	4(2.5%)
Sore throat	29(18.12%)	Sneezing	3(1.9%)
Dysuria	4(2.5%)	Eye redness	5(3.1%)
Abdominal pain	2(1.25%)	Hemorrhoids	1(0.625%)
Hypertension	11(6.9%)	ischemic heart disease	5(3.12%)
Glaucoma	3(1.9%)	Diabetes mellitus	6(3.8%)
irritable bowel syndrome	3(1.9%)		10(6.25%)

For self-medication, the comments reason was that previous experience 72(45%), and about 54(33.7%) of respondents was the reason of high treatment cost in private clinics and another reason of self-medication was that illness perceived as minor 25(15.6%) and about 9 (5.6%) of respondents was the reason of self-decision. Furthermore, the absence of nearby health care centers was not the reason for self-medication among respondents. This recent study investigated

that the source of information about the medicines used for self-medication, 60 respondents (37.5%) knew about these drugs from the previous prescription, while 44 (27.5%) got information from community pharmacies. About 25(15.6 %) of participants received their information from family and friends, another source of information was another member of health staff 13.1 % (n=21), Advertisement was the least common 4.4% (n=7), finally was drug direction 1.9 % (n=3).

Table 3, showed the most common sign for self-medication was headache countered by 35(21.9%) of study participants, sore throat was responsible for 18.1% of all indication (29 respondents) followed by common cold 16.25%, fever 13.1%, back or muscle pain 11.25%, toothache 10.6%, cough 6.9%. And least common indication was eye redness accounted for 0.625% was represented by one patient only. The chronic indication included diabetes mellitus 6.25%, hypertension 6.9%, and 3.8% ischemic heart disease.

Table 4 demonstrates the drugs used for their self-medication. Paracetamol represented the commonest type of drug requested by 61(38.1%) participants, antibiotic about 20% (32 respondents), followed by antihistamine 30 (18.7%), non-steroid anti-inflammatory drugs (15% or 24 respondents), cough preparation (6.8% or 11 respondents), skeletal muscle relaxant (7.5% or 12 respondents).

Table 4 Medication used for self-medication

Type of drugs	Number (%)	Type of drug	Number (%)
Antibiotic	32(20%)	Antacid	4(2.5%)
Paracetamol	61(38.1%)	Anti-diarrhea	2(1.25%)
Anti-histamine	30(18.8%)	Urine alkalinizer and antiseptic	4(2.5%)
NSAID	24(15%)	Omeprazole	10(6.25%)
Cough preparation	11(6.8%)	Multi vitamin and mineral	4(2.5%)
Anti-spasmodic	5(3.1%)	Biscodyl	3(1.9%)
Skeletal muscle relaxant	12(7.5%)	Chloramphenicol eye drops	1(0.6%)
Steroid	5(3.1%)	Lozenges	3(1.9%)
Low dose aspirin	10(6.25%)	Sildenfil	2(1.25%)
Anti-diabetic	10(6.25%)	Topical skin preparation	7(4.4%)
Diazepam	0(0%)	Statin	6(3.8%)
ACE inhibitors	8(5%)	Prostaglandin eye drops	3(1.9%)

4. Discussion

Always there is an unwanted interaction between prescription drugs and active ingredients of OTC drugs, as well as increased risk of existing disease. Self-medication is widely exercised in both developed and developing countries. The results detected several interesting findings for the knowledge, attitudes, and perceive of self-medication among consumers attending private pharmacies in Tripoli city. This recent study demonstrated that self-medication in female 58.8% was more popular than the male which is consistent with the result of a study done in Egypt (10), and klang valley (11), as well as Abahusain et al. (2005) indicated the differences in self-medication between male and female (12), also, our findings were contraindicated with the study done in Bagdad city (13) as well as in Saudi Arabia (14). Many studies showed that the prevalence of self-medication in children and adolescents was high such as in Sudan (15) and in Germany (16) which are agree with our present study.

Most of the surveyed respondents practiced self-medication for six months or more followed by 34.4% of respondents stayed for a month. A study conducted by Sharif et al. 1919, found that most respondents used self-medication for one week; however, 8% of participants practiced self-medication for more than a month. This is not in agreement with this study (17).

Swetha and Usha R (2016) detected that the most common reason for adopting self-medication among the Indian population was a long wait at clinics, the mild nature of the illness, and financial problems (18). Whoever, the present study indicates that the previous experience (45%) and high treatment cost in private clinics 33.7% are the most common reasons for supporting self-medication among Tripoli city population.

The most imported source of information about self-medication was previous prescriptions and community pharmacy followed by family, friends, and other medical staff. This result is similar to the result of a study done in Iraq (13). The most common condition treated by self-medication was headache followed by the common cold. This is different from another study done in Iraq (13), and Egypt (19), and Indian (20).

The most common drug used by respondents were paracetamol which is could be administered either alone or in combination with other medicines for treating various types of illness such as headache, muscular pain, flu, dental pain, secondly the most commonly used drug was antibiotic, these results were similar in the study conducted in Tumkur city, India and Nigeria (18, 20, 21). Whoever, Chua S and Sabki N (2011) showed that central nervous system (CNS) medications especially oral analgesics were the most common type of non-prescription medication used by the general public. Respiratory medications were the second most commonly used, followed by skin preparations (11).

The role of community pharmacists is important in guidance consumers to ensure suitable medication use.

5. Conclusion

Self-medication practicing is a relatively frequent problem in our community; therefore, the community should be educated regarding the appropriate use of drugs and their adverse effect. That's why this requires massive health education aimed at strict precautions about the mindless use of antibiotics.

Compliance with ethical standards

Disclosure of conflict of interest

We have not got any conflict of interest.

Statement of informed consent

Informed consent was obtained from all individual participants included in the study.

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