

Original article

Evaluation of Over-the-Counter Counselling Practices by Libyan Community Pharmacists

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ARTICLE INFO

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Received: 06-05-2021 **Accepted:** 26-06-2021 **Published:** 30-06-2021

Keywords: Pharmacy, Community Pharmacists, Patients, Customers, OTC, Patients Counselling.

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ABSTRACT

Background and objectives: Community pharmacy is a unique hybrid of professionalism and business and dealing with dispensing medicines to outpatient. The pharmacist in community pharmacies plays a crucial role in promoting, maintaining and improving the health of the community; since he/she answers questions about prescription and Over- The- Counter (OTC) drugs and gives advice about home health care supplies and durable medical equipment. Involvement of pharmacists in Over- The- Counter (OTC) counselling will increase the patient ability to understand the risks and benefits of (OTC) drug. The primary aims of this study to assess knowledge, attitudes and perceptions of Libyan community pharmacists and patients toward Over-The-counter (OTC) counselling. Secondary to identify the problems that hinder OTC pharmacy practice. **Methods:** Two different questionnaires were designed; the first one was distributed to 100 patients and the second designed to pharmacists (n=103) surveyed their knowledge, basic skills, focusing on patients` reasons for visiting community pharmacies and for self-medication. All participants were selected randomly. **Results:** The results showed that 62% of the community pharmacists assured that they counsel patients before dispensing OTC medication and 59% of them were focused on symptoms and sings of minor ailments. Social and cultural differences among the patients, heavy work load lack of time was the most barriers hindering the pharmacist- patient communication. On the other hand, 29% of pharmacy customers answered that time saving and 11% of them said cost saving were the most reasons for visiting community pharmacies but 8% of them for seeking medication information. **Conclusion:** The study showed the awareness of Libyan pharmacists towards delivering effective communication skills about OTC was not satisfactory and sufficient knowledge on OTC was still lacking. In addition, the public had negative attitude towards the pharmacists and low expectations from the pharmacy profession. The study recommends a need for training programs for pharmacists in order to nurture the relationships they have with patients.

Cite this article: Alseid S, Elmahjoubi E, Rghebi N. Evaluation of Over-the-Counter Counselling Practices by Libyan Community Pharmacists. *Alq J Med App Sci.* 2021;4(2):126-136. <http://doi.org/10.5281/zenodo.5046338>

INTRODUCTION

Medicine's dispensing is a constituent of pharmacy practice, and its degree of complexity has evolved by increasing responsibilities to patients. A large number of people with symptoms of illness come first in a community pharmacy, looking to purchase over-the-counter (OTC) medicines for self-medication and/or seeking for pharmacists' advice the increasing tendency to self-medication sustains the importance of patient's counselling for the proper use of medication [1]. Community pharmacists have always played a role in promoting, maintaining and improving the health of the communities they serve [2,3]. They are medicine experts, providing professional advice and counselling on medications, including their use and effects, as well

as general health care [4]. Pharmacist in community pharmacy is placed in a position of trust, especially in how they relate directly to patients and are readily available to provide advice and information [5]. The area where they can involve may be drug and nutrition counselling, use of over-the-counter and prescribes medicines, family planning, sexually transmitted disease, pregnancy and infant care, immunization, toxic agent control and control of accidental injuries, health and safety, prevention of smoking and prevention of alcoholism and drug abuse, weight control program. Patients visit community pharmacy for many reasons for such as patient with new prescription, patient requests over-the-counter drugs (OTC), patient requests herbal medicinal product, and patient requests counselling on the current treatment [6].

Non-prescription or over-the-counter (OTC) medicines, which are defined as medicines that can be supplied without a prescription. OTCs are considered to be safe and effective if they are used according to the guidelines available on the package or the label. Self-medication is an element of self-care that has traditionally been defined as "the taking of drugs, herbs or home remedies on one's own initiative, or on the advice of another person, without consulting a doctor" [7].

Over the years, the pharmacists' role has changed from that of a compounder and dispenser to one of medicine therapy manager. The skills and attitude which pharmacists need to master for this new role, affords challenges. Whereas self-care is becoming increasingly popular among patients today the availability of OTC medications makes it possible for patients to treat several conditions on their own but still under the supervision of a healthcare provider. During the pharmacist-patient encounter, the pharmacist's obligation is to evaluate the patient's medical condition, provide proper advice and counsel the patient on the proper course of treatment to be taken [8].

Pharmacists as health professionals can help the public to maintain good health, to avoid ill health and make the best use of medicines [9]. The role of the pharmacists has become not only to educate patients on medication use, but also monitor their patient's health to ensure that the patient is getting the full benefits of the drug which makes the pharmacist's role in the healthcare team even more important, that is, a checkpoint in medical care [10].

Involvement of pharmacists in OTC medication counselling will increase the patient's ability to understand the risks and benefits of OTC drugs. It has been well documented those interactions by pharmacists through consultation and effective assessment strategies can enhance patient outcomes. Counselling patients about self-care and non-prescription drugs cannot follow the same format as for prescription drugs. This counselling requires much more details and probing questions on the part of the pharmacist [11]. A process developed by the American Pharmacists Association (APhA) to help community pharmacists to counsel patients about non-prescription medications is the (QuEST) communication process. The (QuEST) process helps the pharmacist to quickly and accurately assess the patient, establish that the patient is an appropriate self-care candidate, suggest appropriate self-care strategies to the patient, and talk with the patient about those strategies [12].

The World Health Organization's (WHO) suggestion to spend at least 3 minutes, which is 180 seconds, with each patient [7,12]. Although self-medication with OTC is common practice among consumers in developing and developed countries and have been widely studied at national and international levels, to our knowledge; this study represents the first evaluation of community pharmacists and patient perspectives on over-the-counter medication counselling in Libya. This study aimed to investigate the knowledge, perceptions and attitudes of community pharmacists and pharmacy customers about OTC and to assess their expectations of OTC pharmacy practice.

METHODS

Study design and setting

This study was approved by the faculty of pharmacy at University of Tripoli and approval consent was obtained from all the participants. A prospective, structured face-to-face was conducted during the period of 13th Jan to 10th May 2016 on a random sample of community pharmacists (n=103) and patients (n=100) selected from 108 community pharmacies located in Tripoli areas, Libya. Training on the data collection method was provided to all researchers.

Data collection procedure

Two different questionnaires were designed after reviewing literature for similar studies [12,13,19]. The first questionnaire was written in Arabic and consisted of 8 items and distributed to patients focusing on their knowledge, attitudes toward patient counselling provided by a community pharmacist. The inclusion criteria were patients who are literate and aged 18 to 65 years and over. The second questionnaire was given to the community pharmacists in English version and surveyed their knowledge, awareness and basic counselling skills on OTC and the barriers that may obstacle them to deliver an effective counselling. Inclusion criteria for community pharmacists were as follows: 1) Community pharmacists licensed to work in their own pharmacies. 2) Community pharmacists registered by the Libyan pharmacy syndicate in the city of Tripoli working in community pharmacies. Exclusion criteria for community pharmacists were: The pharmacy staff graduated from other medical schools rather than pharmacy schools.

Both questionnaires consisted of questions with closed- and open-ended responses; in addition to the demographics section, participants were asked to provide their age, gender and educational level. The survey also included questions on the type of OTC medication counselling, the indication for OTC medication use, sources of medications information and reasons for visiting medications community pharmacies. Open-ended questions were used to provide in-depth information. Consumers buying cosmetics and medical equipment were also approached.

In 2001, a research had carried out on self-medication with OTC medicines in Tripoli city and revealed that analgesics, cough/cold products and antacid medications were the most frequently used self-medications [13,14]. Based on this, we have chosen Ibuprofen tablets Bp 400mg (Each coated tablet contains Ibuprofen 400mg, also contains lactose, sucrose, starch, Hypromellose, sodium starch glycollate, colloidal anhydrous silica, magnesium stearate. Bristol) as a model for evaluation the communication skills of the community pharmacists. Data collectors gave a brief introduction to the consumers and pharmacists by explaining the aims and significance of the study. Verbal consent was obtained from all participants and confidentiality of data was maintained throughout the study. Data obtained from the questionnaires were collected and entered Microsoft Excel software 2010, and descriptively analyzed by means of counts and percentages.

RESULTS

Results of the pharmacists' questionnaire

Demographic characteristics of the pharmacists in the study sample are summarized in (Table 1). About 68% (n=70) of pharmacists had a bachelor degree of pharmacy while 4.8% (n=5) had a post graduate degree. 64% (n=66) of pharmacist with one and four years of work experience and 31% (n=32) of them had enrolled in a continuing education program since they have been graduated. The vast majority of pharmacists 88% (n=91) had access to current and reliable source of information.

Table 1: Socio-demographic characteristics of the community pharmacists.

Characteristic	N (%)
The level of academic qualification for pharmacy	
PhD	5 (4.8)
Masters	0 (0)
Bachelors	70 (68)
High Diploma	28 (27)
Years of working experience	
0-1	26 (25)
2-4	40 (39)
5 or more	37 (36)
Have you enrolled in the continuing education course since you have been graduation?	
Yes	32 (31)
No	71 (69)
Do you try to access to current and reliable information about the drug?	
Yes	91 (88)
No	12 (11.6)

When community pharmacists were asked about roles of the pharmacist in community pharmacy, three quarters 75% (n=77) of the pharmacists answered that the pharmacist has other responsibilities rather than a drug dispenser such as patient counselling, communication with other health care team, adjusting the dose of OTC medication, providing other health services such as measuring blood pressure, measuring blood-glucose level and giving information about drug interactions.

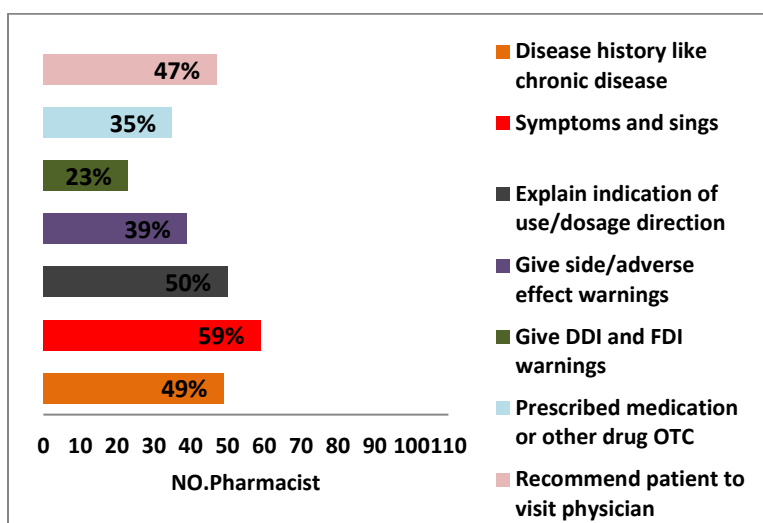
Our research team investigated the depth of pharmacists' knowledge, awareness and their practicing on OTC medications counselling; the findings indicated that more than half of the pharmacists 71% (n=73) had knowledge on OTC, 78% (n=80) of them were aware about patient counselling for OTC medication. Furthermore; 62% (n=64) of pharmacist's counsel patient before dispensing OTC medication as shown in (Table 2).

Table 2: Knowledge, awareness, and practicing of community pharmacists about OTC counselling.

Characteristic	N (%)	
	Yes	NO
Knowledge about Patient-counselling.	73 (71)	30 (29)
Awareness about patient counselling for OTC medication.	80 (78)	23 (22)
Pharmacists – patient counselling before OTC medication dispensing.	64 (62)	39 (38)

When pharmacists were asked about what types of information, they provide for patients during drug dispensing; approximately 59% of them counsel patient about symptoms and signs of illness and 50% of them explained the purposes of medications and the dosage regimen. Approximately, 39% of the community pharmacists answered that they provide information about side effects or adverse actions of drugs whereas 35% of them counsel patient about prescribed or OTC medication only upon request of patients. The results showed that only 23% of the respondents answered patients' questions about drug-drug or drug-food interactions as described in (Figure 1).

Figure (1): Types of OTC Counselling



Participants were asked if they had identified the barriers that might obstacle delivering of an effective communication; 25% (n=24) of them believed that social and cultural differences of patients were the main barrier facing them to counsel their patients, 20% (n=19) thought that the crowded pharmacy, 18% (n=17) answered that insufficient time to do counselling.

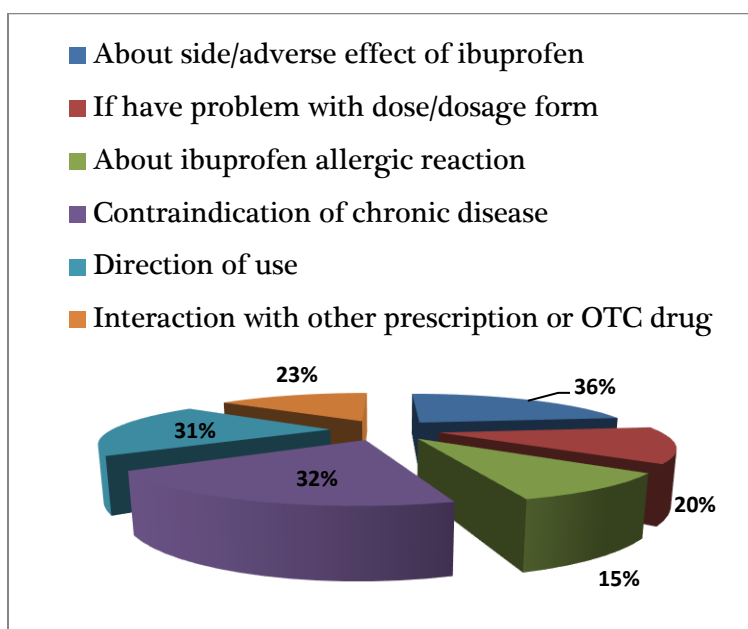
About 11.3% (n=11) of the respondents answered that large work load is another problem faced pharmacist-patient counselling but 8.2% (n=8) of them said the lack an adequate source of information. The various barriers to pharmacist-patient counselling are listed in (Table 3).

Table 3: Barriers hindering to pharmacist-patient counselling.

The barriers of OTC counselling	N (%)
Large work load	11 (11.3)
Lack of time to do counseling	17 (18)
Inadequate drug information sources	7 (8.2)
Different social and culture of patient	24 (25)
Crowded pharmacy	19 (20)
Lack information about patient counselling	8 (8.2)
Lack of supportive personnel	10 (10.3)

With respect to dispensing of Ibuprofen as an example of OTC medication, analysis of our data revealed that the percentages of community pharmacists who would prefer to counsel their patients were 60% (n=62), 36% (n=30) of them counsel about side/adverse reactions of ibuprofen and 32% (n=28) of them were asked patients about their medical history (Figure 2).

Figure (2): Pharmacist-Patient Counselling on Ibuprofen



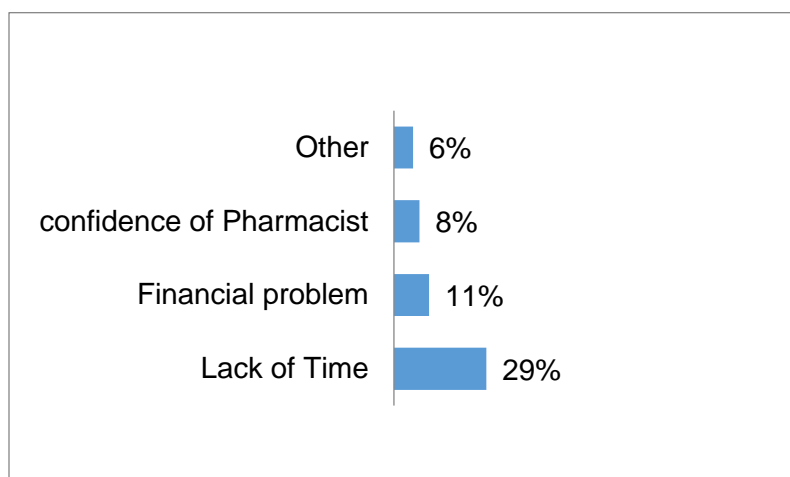
Results of the patients/ pharmacy customers questionnaire

General features of the population sample are presented in (Table 4). Out of 100 of the general public who participated in this study; 43 (43%) were males and 57 (57%) were females. The distribution of all 100 participants upon their ages was: 18-35 (43%), 36-45(25%), 46-55 (18%), 55-65 (11%) and ≥ 66 (3%). More than half of population sample 60% had completed university while 40% of them had either a primary or secondary level of education.

About 22 of them (22%) reported that they are visiting the community pharmacy to purchase OTC medication. The most common reasons for seeking self-medication were that time saving 29% (n=29) followed by the symptoms were perceived to be too minor to consult a physician 12% (n=12) and 11% (n=11) stated that they were unable to pay for physician (Figure 3).

Table 4: Socio-demographic characteristics of the pharmacy customers.

Characteristic	N (%)
Sex	
Male	43(43)
Female	57 (57)
Age	
18-35	43 (43)
35-45	25 (25)
45-55	18 (18)
55-65	11 (11)
≥ 66	3 (3)
Education	
Primary	8 (8)
Higher secondary	32 (32)
Graduated or Postgraduate	60 (60)

Figure (3): Pharmacist-Patient Counselling on Ibuprofen

The current study indicated that pharmacists were not the main sources of information for pharmacy customers to learn about OTC medicines since only 8% of them relied on pharmacist's advice on purchasing of non-prescription medicines. The results revealed several interesting findings among consumers attending community pharmacies in Tripoli city. 11% of the consumers bought medications from community pharmacies without a prescription were actually prescription-only medications while 21% of them bought cosmetics from community pharmacies. About 19% of the consumers presented to pharmacies with a new prescription while 12% of them presented with minor symptoms or minor illness. Table 5 summarizes different reasons for patients' visiting community pharmacy.

Table 5. Reasons for patients` visiting community pharmacy

Variables	N (%)
Minor symptoms and signs / minor illnesses	12 (12)
New prescription	19 (19)
Over- The- Counter drugs	22 (22)
Herbal or Complementary Medicines (CMs)	15 (15)
Purchase of a POM drug without a prescription	11 (11)
Purchase of cosmetics	21 (21)

The pharmacy customers asked what action they would take if an OTC medicine did not work within the recommended period of time, near to half of the population (48%) reported that they would stop and go to seek a medical advice from a physician.

DISCUSSION

Overall, this survey revealed that three-quarter of community pharmacists were knowledgeable about the roles of pharmacists beyond dispensing of medications and they emphasized the importance of community pharmacists and knew that the pharmacy profession experienced a change from traditional drug-oriented services, such as drug distribution and preparation toward patient oriented services. These findings were previously documented in other publications [15-17].

Although more than seventy-percent of the pharmacists knew about pharmacist- patient counselling and were aware about OTC medications (78%), few pharmacists deliver good counselling skills before dispensing of OTC medicines. This was clear with dispensing of Ibuprofen since only 15% of community pharmacists explained to patients allergic or adverse effects that Ibuprofen might cause and 23 % of them asked their patients about using of other POM or other OTC drugs. Our findings may differ from those established in other studies [18, 19].

Outcomes of the current study found that the most common barriers that obstacle patient in community pharmacy were the cultural and social differences among patients, lack of time and crowded pharmacy. This corroborates the results obtained from elsewhere in the region (Saudi Arabia and Kuwait) and from Northern Ireland [17,18,19,20]. Lack of time was also identified as a main barrier to providing advice by pharmacists in Scotland and for health promotion activities by the majority of pharmacists (75%) in a study in Malaysia [21-23].

In contrast to mentioned studies, our data demonstrated that (8%) of pharmacists they were lacking of accurate and easily accessible information to adequately instruct their patients about OTC medicines. This may be attributed to only 31% of the participating community pharmacists have attended to continuing education activities after their graduation.

The awareness of the surveyed pharmacists about OTC interactions with other POM or food was 23%, although several studies have been conducted on interactions between prescribed medication and OTC products worldwide [24]. A large survey has carried out in the US revealed that high levels of concurrent prescription and non-prescription drug use in the respondents led to concerns about unintended interactions [25].

Possible explanations to our findings, more than half of community pharmacists in this study were juniors and have been recently graduated.

Many of the questions in this survey also addressed consumers' views of self-medication and their knowledge about non-prescription medications in Tripoli city, Libya. Data showed 29% of respondents in our study sought self-medication due to time constraints and long waiting queues at clinics or hospitals and 11% of them due to financial difficulties. This was similar to a study from Bahrain found that the most common reasons for seeking self-medication were time saving and cost saving [26]. As did in a survey from Jordan reported self-medication with OTC drugs described the perception of benign symptoms, and the prolonged time and increased cost of physician consultation as self-medication decision factors [27].

The survey indicated that unless and otherwise asked by the customers, pharmacist do not deliver instructions on their own, hence 8% of pharmacy customers were not satisfied with the skills and gathering OTC information from the community pharmacists. In fact, this reflects what another Libyan report documented [14]; and supports the findings of other studies have carried out on consumer views of community pharmacy services in India and Australia [28,29].

The reason could be the private pharmacies in Libya are still lacking counselling areas therefore the pharmacies are still issuing with privacy, particularly at the pharmacy counter.

The existing research showed that only 15% of the Libyan public visited community pharmacies in order to buy complementary medicines (CMs) such as probiotics, co-enzyme Q10 or fish oil. Unlike a 2007 study in Australia found 68.9% of Australians bought at least one form of CM from community pharmacies [30].

It was found that almost 11% of patients made purchase for POM medicines from community pharmacies without a prescription. This was in consistent with the results that the authors obtained from a study has conducted on self-medication with antibiotics which showed 48% of patients bought antibiotics without a prescription to treat symptoms such as that sore throat fever and common cold [31]. Other reports reinforced the findings of the current survey from the Middle East and Tanzania [17,18,32].

The results revealed several interesting findings regarding the reasons for visiting of community pharmacies in Tripoli city by consumers. 21% of the participants requested cosmetics from community pharmacies such as hair shampoos, hair dyes, hair formulas, hand and body creams and lotions or sun screens. This perhaps many of pharmacy customers expected the pharmacists to be able to advise on which cosmetic products were effective, considered pharmacies to be trustworthy for providing good quality products and good places for maintaining the storage conditions of keeping the cosmetics.

It is interesting to find only 19 % of the patients have presented at community pharmacies with a new prescription. The remaining 91% of patients could try to obtain their POM free of charge either from the governmental pharmacies or hospital pharmacies.

None of the participating people had visited the community pharmacies for renewal a prescription. This was not surprising to the authors due to the fact that a minority of the community pharmacists in Libya use patient medication record (PMR) systems to store information relating to POM or OTC sales. Our findings suggested the practice of pharmacy profession in Libya has not changed yet over the past 3 decades, although the concept of Pharmaceutical Care is sweeping over the pharmaceutical world but not much of it has been implemented.

In addition, several specific courses devoted to Pharmaceutical Care (PC), interpersonal communication skills, medication adherence and MTM have been introduced into undergraduate pharmacy curriculum. The pharmacists' attitudes such as the lack of understanding of the concept, misconception such as patients' unwillingness to pay, fear of changing roles and lack of personal motivation [33]; lack of appropriate setting such as lack of counseling areas [34] and non-availability of space in premises to consult with patients are

among the numerous constraints identified in the other parts of the world where PC practice has gained acceptance [35].

CONCLUSION

From the outcome of the study, conclusion can be viewed from two angles. One, from pharmacists' point of view and another from public point of view. This study showed that although the pharmacists include essential information that patients desire during OTC dispensing; critical elements of OTC medication counselling were omitted and their knowledge was lacking in specific areas such as OTC interactions with other POM drug or OTC–food or disease interactions.

This analysis also demonstrated the negative attitudes towards pharmacist roles in guiding self-care in our sample population. Nevertheless, there is the need for continuing education program for practicing pharmacists in order to improve their basic knowledge, interpersonal communication skills and improve their public image. In addition, educational campaigns should be created among the public on self-care, and awareness about the roles of pharmacists and their professional guidance.

Disclaimer

The article has not been previously presented or published, and is not part of a thesis project.

Conflict of Interest

There are no financial, personal, or professional conflicts of interest to declare.

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