

Attitude of Consumers Towards Community Pharmacists and Their Interest in Expanding Community Pharmacist Services in Basra, Iraq:

A pilot study

Adheed Khalid Sharrad

Department of Clinical Pharmacy, Pharmacy College , Basrah University, Basrah /Iraq

Email: adheedkhalid@gmail.com

Abstract:

The public only views a few pharmacists as the foremost health care professionals who are responsible for the utilisation of medicines to prevent or treat disease. The study aims to explore the attitude of patients towards the practice and roles of community pharmacists and to evaluate the services offered by community pharmacists working in Basra city. A total of 150 cross sectional surveys were given to patients who were visiting the community pharmacies. SPSS version 17 was used to conduct the descriptive analysis. There was a 71.3% response rate, and 71% were males. 58% of the participants believed that the pharmacists were businessmen.

Furthermore, 64.49% stated they first communicate with the physician to obtain answers to a drug-related problem or question. A majority of the respondents (66%) stated that they consulted their pharmacist in the case of minor health problems. Positive view regarding the expanded role of the community pharmacists. Thus, to improve the practice of community pharmacy and to implement pharmaceutical care successfully in community pharmacies in Iraq, efforts should be concentrated towards addressing and identifying issues and promoting the roles that community pharmacists have in monitoring drug therapy and in working as a public drug information resource.

Key words: Community pharmacy, Attitude, Public, Health service

موقف المستهلكين تجاه الصيدليات المجتمعية والاهتمام بتوسيع الخدمات الصيدلانية المقدمة في البصرة، العراق: دراسة تجريبية

الخلاصة:

لا ينظر الجمهور إلا إلى عدد قليل من الصيادلة بوصفهم أهم العاملين في مجال الرعاية الصحية الذين يتحملون مسؤولية استخدام الأدوية للوقاية من الأمراض أو علاجها. وتهدف الدراسة إلى استكشاف موقف المرضى تجاه ممارسات وأدوار الصيادلة في الصيدليات المجتمعية وتقييم الخدمات المقدمة من قبل الصيادلة العاملين في مدينة البصرة. وقد تم إعطاء ما مجموعه 150 دراسة استقصائية قطاعية للمرضى الذين يزورون الصيدليات المجتمعية. وقد استخدم برنامج (SPSS) (v.17) لإجراء التحليل الوصفي. كان هناك معدل استجابة 71.3%، حيث أن 71% كانوا من الذكور. من هذا اعتقد 58% من المشاركين أن الصيادلة كانوا من رجال الأعمال. 64.49% من المشاركين ذكروا أنهم يتجهون أولاً إلى الطبيب للحصول على إجابات لمشكلة أو سؤال ذات صلة بالأدوية. وذكر أن 66% من المشاركين استشاروا الصيدلي في حالة المشاكل الصحية البسيطة. كانت هناك وجهة نظر إيجابية بشأن توسيع دور الصيادلة. وبالتالي، لتحسين دور الصيدلي وتنفيذ الرعاية الصيدلانية بنجاح في الصيدليات المجتمعية في العراق، ينبغي أن تتركز الجهود نحو معالجة وتحديد القضايا وتعزيز دور الصيادلة المجتمعيين في متابعة العلاج وفي العمل كمصدر معلومات عن الأدوية للمستهلك.

الكلمات المفتاحية: الصيدليات المجتمعية، السلوك، الخدمات الصحية.

Introduction:

Pharmacists are consistently ranked to be one of the most trusted professionals [1-3], and according to researches, there is a high satisfaction level towards the services that community pharmacists provide [4-8]. Furthermore, studies have shown that there is a general unawareness in the public

regarding the full range of responsibilities and roles that pharmacists have [4-6,8,9].

The scope of practice that pharmacists have has significantly expanded recently. Specifically, it has moved away from more traditional roles such as dispensing medication, and moved towards providing services that aim to improve health

outcomes, such as medication reviews, minor ailment prescribing, immunizations, and approaches to promote adherence to medication [10].

Basra has approximately 800 community pharmacies. The large amount of functioning community pharmacies has resulted into high business competition and non-scientific practice at times. In Basra, community pharmacies are private and are licensed from the syndicate of Iraqi pharmacist and the Ministry of Health (MOH) based on the conditions of the pharmacy practice law. This law includes rules like the owner needing to be a registered pharmacist. With regards to public health, changes have to be done in terms of the behaviour of both pharmacy customers and pharmacists in order for the service to achieve success [9]. Patient in Basra look for a quick and cheap medical advice in which they find it with community pharmacists.

This phenomenon is even more apparent in rural areas with less developed medical services. Understanding the view of the public about the competency of professional pharmacists is very important. Fortunately, the information available is indicative of the fact that people show respect and appreciation towards pharmacists in various countries [11-14]. Many studies have conducted investigations about the attitudes about, and public use of, community pharmacy in Jordan, Canada, Malta, and Saudi Arabia, among others. The major reason for utilising a specific pharmacy in Saudi Arabia was due to the presence of qualified and trusted pharmacists [13], while in Jordan was the pharmacy location [11]. In Malta and in Jordan, more than 60% of customers stated that their main reason for seeking a pharmacist's instead of physician's advice was that their condition was not serious enough to warrant a visit to the physician [11, 12].

On the other hand, most Canadian customers viewed pharmacists as health care professionals despite the fact that they

practiced in retail settings [1]. During the evaluation of pharmacists, one key factor that has to be considered is how things are said during the process of counselling [1]. This shifts the focus from the encounter's content (facts, recommendations, and clarifications) to the communicative process' subtleties (listening skills, questioning style, and conversation speed). Unfortunately, there is minimal information available in these areas. Thus, the Iraq Ministry of Health intends to implement pharmaceutical care services in their strategic plan to help improve the health outcomes of patients.

Ultimately, this will help improve the drug use process. If the move to pharmaceutical care is to take place successfully, the community pharmacists in Iraq should spend substantial efforts in raising public expectations about the professional role that they play. They should also show the potential benefits that result from extending the contributions that pharmacists have to the medication use process besides providing basic counselling and ensuring accurate dispensing. Knowledge about the public use of community pharmacy services may help pharmacists meet the needs of the customers, improve customer satisfaction, and enhance the quality of their services.

To our knowledge, the attitude of consumers towards the services provided by the community pharmacy has not been assessed in Basra. There is an urgent need to promote awareness about the roles and responsibilities that they play in the community healthcare system. Thus, this study aims to evaluate the role that pharmacists play in community healthcare service and the expectation and attitude that consumers have about them and the health services that they provide to the community.

Materials and Methods:

In this study, the researchers carried out a cross-sectional analytical survey in the Basra province of Iraq during the period

between Feb –June 2016. They approached the consumers who were aged above 18 years and could communicate in both the Arabic and/or English languages and provided them with their study objectives. Such consumers were assured about their anonymity and data confidentiality and were requested to take part in the survey. The researchers distributed 150 cross-sectional survey questionnaires to the patients who visited the community pharmacies.

Through these self-administered, well-structured, and validated questionnaires [1, 14, 15], the researchers aimed to determine the attitude of the consumers towards the community pharmacies and if they were interested in the expansion of the community pharmacy services in the Basra region of Iraq. The researchers estimated the value of the Cronbach's alpha to be 0.72, which was then considered as acceptable in the exploratory survey [16].

The questionnaire used in this research comprised of three parts – first part was related to the consumers' demographic information (4 questions); the second section investigated the consumers' attitude towards the community pharmacy services (8 questions), while the last

section assessed the interest displayed by the consumers in the expansion of the community pharmacy services (5 questions). The participants were requested to answer the questionnaires within an hour and then they were analyzed. SPSS version 17 was used to conduct the descriptive analysis. A two-sided 99% confidence level Monte Carlo estimate of Fisher's exact p-value was computed, with a p-value of 0.05 or less taken to demonstrate statistical significance.

Result:

In this study, a total of (no=107) consumers (response rate 71.3%) completely answered and provided their responses. Table 1 tabulates the demographic details collected from the respondents. Out of all the respondents, seventy six patients (71%) were males. forty of the respondents (37.4%) were aged between 18-25 years. Ten respondents (9.3 %) had obtained a less than high-school; twenty seven (25.2%) high school; while thirty respondents (28%) were seen to be undergraduate students. Forty five respondents (42.1%) had a middle-class income.

Table-1: Socio-demographic data for consumers

Gender No. (%)		Age No. (%)			Income No. (%)		
Male	Female	18-25	26-40	>41	Low	Middle	High
76 (71)	31 (29)	40 (37.4)	28 (26.2)	39 (36.4)	32 (29.9)	45 (42.1)	30 (28)
Level of education No. (%)							
Less than high school	High school	Undergraduate student	Diploma	BSc	Ph	PhD	
10 (9.3)	27 (25.2)	30 (28)	4 (3.7)	29 (27.1)	7 (6.5)		

With regards to the respondents' attitude and expectations from the community pharmacies in Iraq, the researchers asked them their opinion about the community pharmacists in Iraq. In response, sixty two of the participants (58%) believed that the pharmacists were business-class people who were only interested in making more money and were not bothered about the health of the people. However, thirty three of the respondents (30.8%) believed that the community pharmacists were health care professionals and efficiently balanced between the business and the health matters.

Only about twelve (11.2%) respondents believed that the pharmacists were more worried about the patient health rather than their business (Fig. 1). This question received a statistically significant variation in response based on the education level ($p = 0.001$) and the gender ($P = 0.004$) of the respondents. A higher proportion of the high-school educated respondents (no. =26) believed that the pharmacists were primarily business-oriented and were more concerned about making money.

On the other hand, the participants with a B.Sc. degree (no. =14) or other undergraduate students (no. =14) believed that the community pharmacists were a form of health care professionals and could effectively balance between their business and the health of the patients. A majority of the male respondents in comparison to the females (45 Vs 17) believed that the pharmacists were primarily business-oriented and were concerned with the business side of the matters instead of the health of the patients. Furthermore, the male respondents as compared to female respondents (27 Vs7) believed that the pharmacists effectively balanced their business and patient health. However, the researchers did not notice any statistical difference between the responses for the other demographic features.

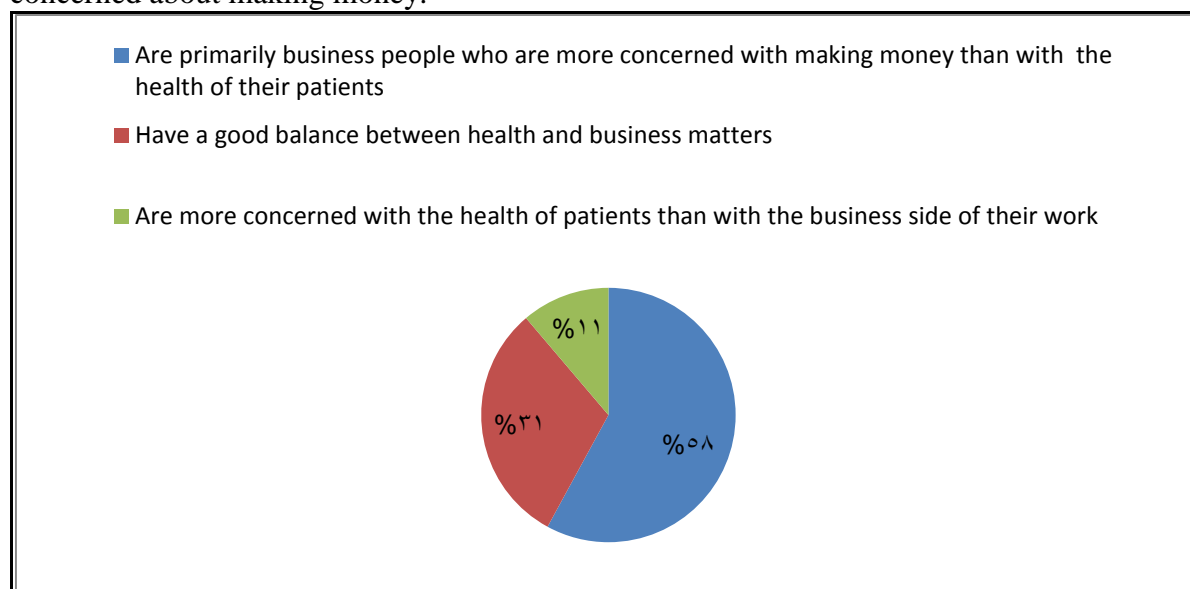


Figure-1: Patient survey-respondent view of community pharmacists

A majority of the respondents (no. = 69, 64.49%) stated they first approached the physician to obtain answers to a drug-related problem or question. On the other hand, some respondents initially contacted the pharmacists (no. = 35, 32.71%), while

some others approached their family members or friends (no. = 3, 2.8%) (Fig.2). However, the researchers did not notice any statistical difference between the responses for the other demographic features ($P > 0.05$).

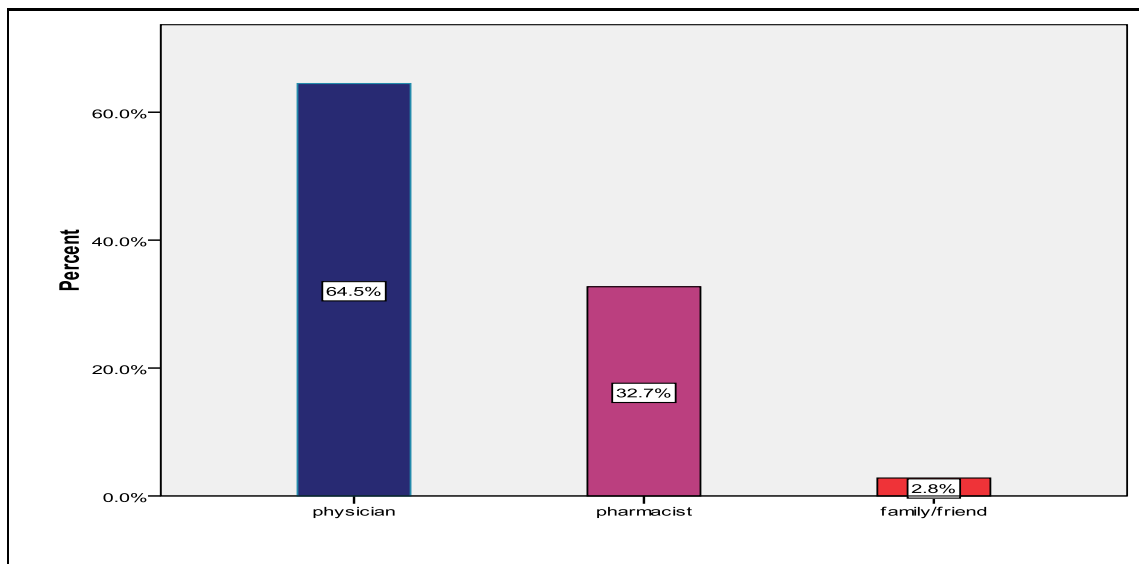


Figure-2: The first person you contact? In case of any drug related question

The Top-3 barriers that were observed which prevented the people from approaching the pharmacists were - 1) The physicians were more knowledgeable and trusted-worthy than the pharmacists (no. = 30, 44%); -2) The pharmacists were generally unavailable for answering the

questions of the people (no. = 21, 30%) ; - 3) There was no privacy in the pharmacies (no. = 18, 26%). Fig. 3 highlights these results. However, the researchers did not notice any statistical difference between the responses for the other demographic features (P >0.05).

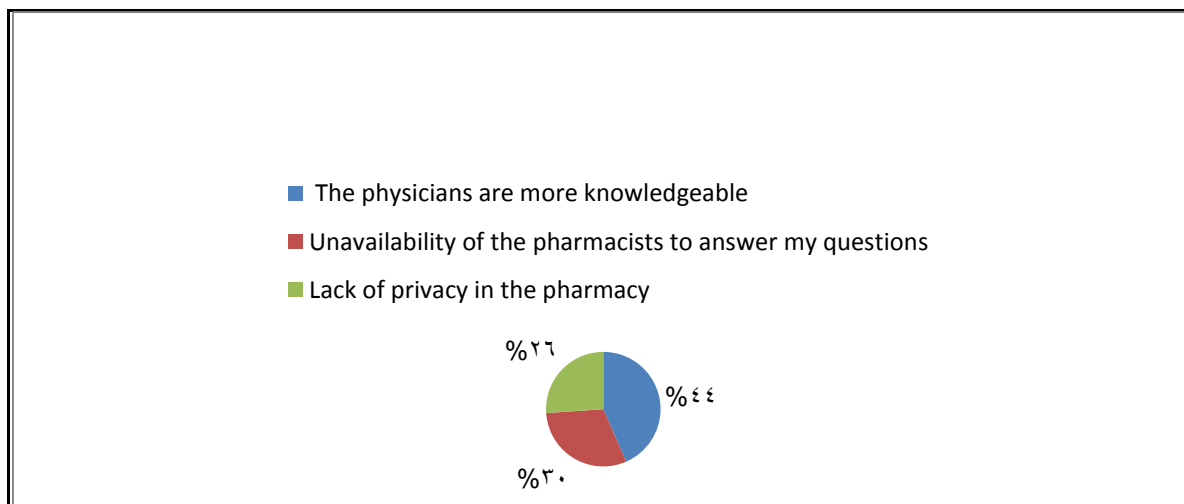


Figure-3: Barriers prevent you from asking any question to a pharmacist

In their survey, the researchers also asked the participants about the different reasons why they would seek advice from the pharmacists before consulting their physicians. In response, a majority of the respondents (no. = 23, 66%) stated that

they consulted their pharmacist in the case of minor health problems. Also, some respondents (no. = 10, 28%) stated that they did not need any prior appointment to visit their pharmacist, while a few of the respondents (no. = 2, 6%) stated that the

pharmacists had a higher knowledge about the medicines (Fig. 4). However, the researchers did not notice any statistical

difference between the responses for the other demographic features (P>0.05).

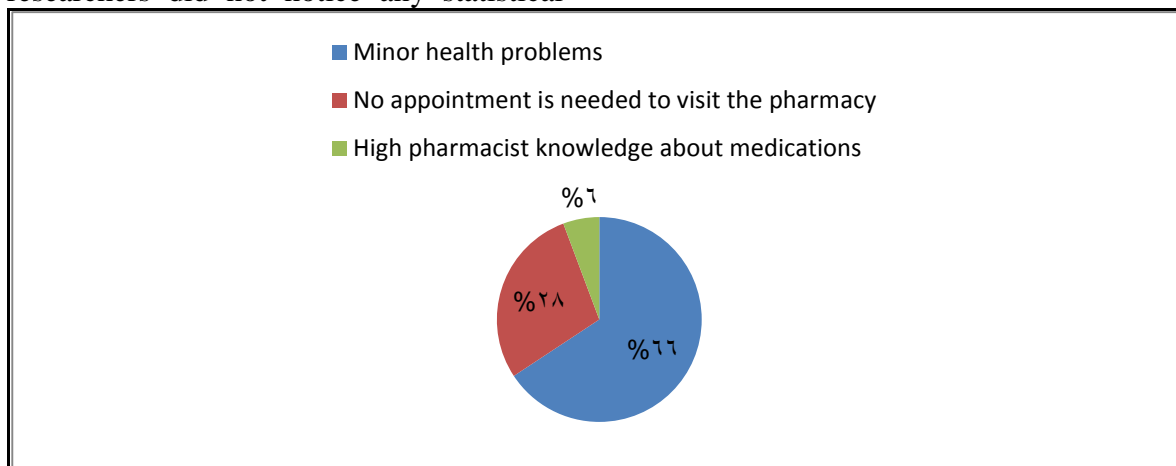


Figure-4: the reasons to approach the pharmacist before the physician

All of the respondents appreciated the pharmacists with qualities like good communication skills (no. = 107, 100%), knowledge about the diseases and the medicines (no. = 107, 100%), understanding the patient’s concerns (no. = 89, 83.1%) and willing to offer some advice and answer questions related to the diseases or medicines (no. = 76, 71%). However, the researchers did not notice any statistical difference between the responses for the other demographic features (p >0.05).

they visit the pharmacy at least once a month, some (no. = 31, 29%) stated that they visited once every few months, while a few respondents (no. = 20, 18%) stated that they visited the pharmacy once or more than once every week. Fig. 5 highlights the major reasons as given by the participants for visiting the pharmacy. The two main reasons were to buy some over-the-counter and prescription medicines (100%); whereas (62%) visited the pharmacy for seeking advice. However, the researchers did not notice any statistical difference between the responses for the other demographic features (P >0.05).

When asked about the frequency of their visits to the pharmacy, around half of the respondents (no.= 56, 52.3%) stated that

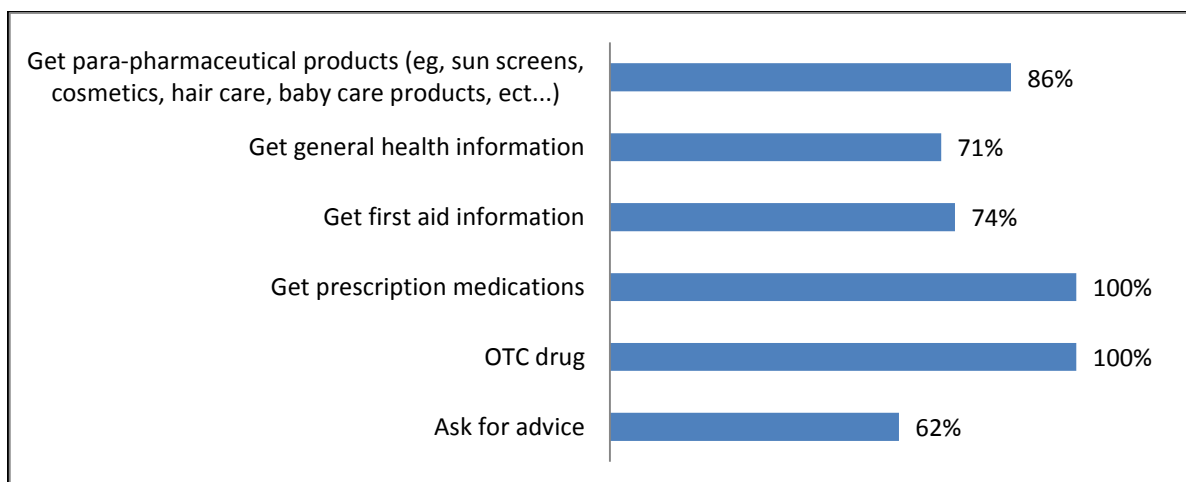


Figure-5: The main reasons for visiting a community pharmacy

Fig. 6 describes the major factors which affect the selection of a particular pharmacy. The researchers noticed no

statistical difference between the responses for other demographic features ($P > 0.05$).

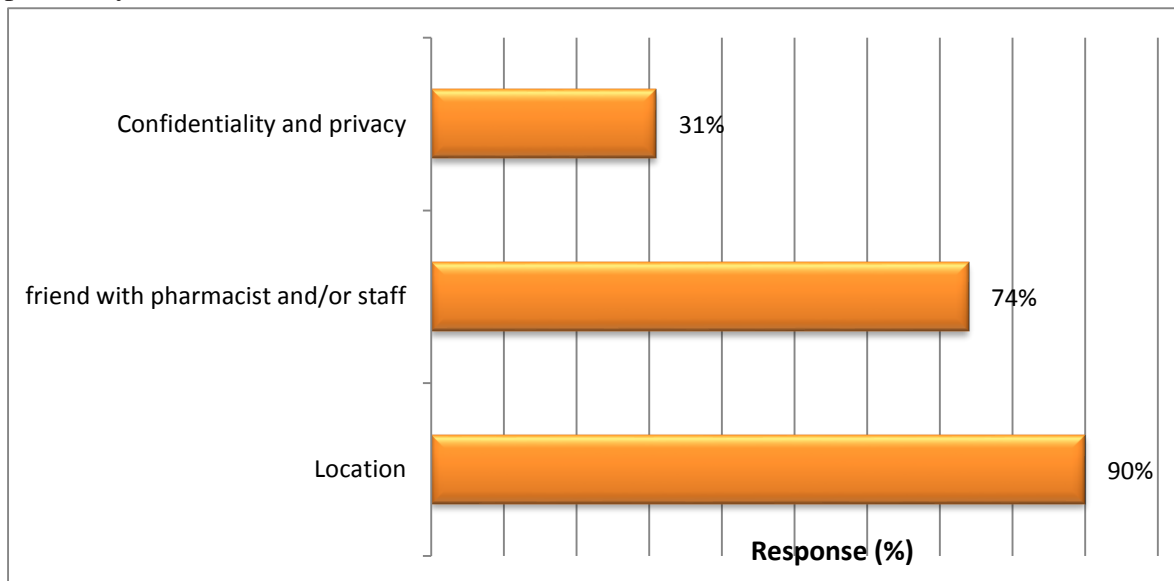


Figure-6: Factors influencing the choice of any particular pharmacy

In Fig. 7, the researchers have summarized the consumer attitude towards the expanded role of the community pharmacists. As shown in the results, the respondents supported the pharmacists who encouraged other health professionals (no.=72,67.3%), advised the patients about the non-medicine related methods for managing their health (no.= 77,71.9%), and provided a health-screening method for monitoring their blood pressure or

cholesterol levels (no.=71,66.3%). However, the respondents showed a low interest in the pharmacists who prescribed antibiotics for minor respiratory ailments (no. = 59, 55.2%) and were involved in the monitoring of long-term diseases like asthma (no.= 61,57%). The researchers noticed no statistical difference between the responses for other demographic features ($P > 0.05$).

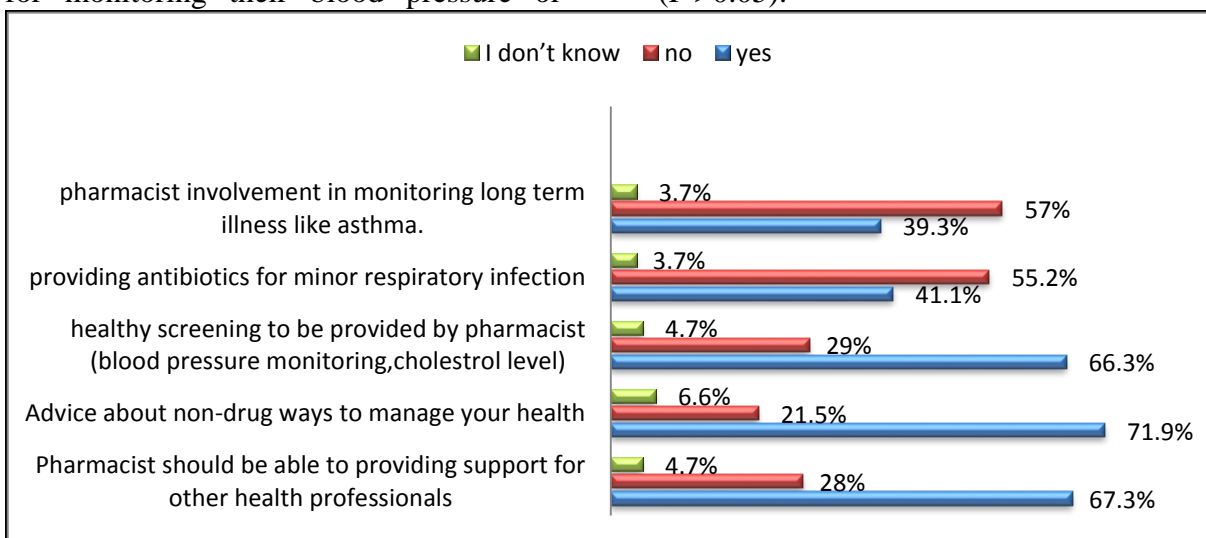


Figure-7: Summaries of consumers' attitude to the expanding role of community pharmacist

Discussion:

In Basra/Iraq, this study was the first of its kind to study the views, attitudes, and practices that the general public had about community pharmacy services. Generally, the attitudes of the participants towards the community pharmacies in Basra were less than ambitious. In this study, approximately 30.8% of participants stated that pharmacists possess a good balance between business and health matters, which is identical to the results of the study conducted in UAE[15] (27%) and Palestine[17] (28.1%) when respondents there stated that they believed pharmacists exhibited a good balance between business and health matters.

However, this result is relatively low compared to studies conducted in Qatar [14], where 45% of participant stated that pharmacists exhibited a good balance between business and health matters. In this study, only 11.2% believed that the community pharmacists show more concern with the patients' health than their work's business side.

Given these findings, pharmacists in Iraq should make the public more aware about their clinical experience, accessibility, and ability to provide drug informational services. Furthermore, Iraqi pharmacists should also strive to be better incorporated into Iraqi's health care system.

32.71% of the total participants went to the community pharmacist first when they experience a drug related problem.

This result is similar to the result of the study conducted in UAE [15] (31%) and a study conducted in Palestine [17] (23.8%). However, this result is relatively low compared to the studies conducted in Qatar [14] (41%). On the other hand, a study conducted in Baghdad [18] (capital of Iraq) in 2013, it was found that over 50% of the respondents go to community pharmacists first for their drug related problems.

Unfortunately, this is indicative of a problem in the relationship between patients and pharmacists in Basra. This finding emphasises the importance of

having good patient communication, which improves the trust and confidence that patients have in their pharmacists. It was also discovered in this study that (2.8%) of patients tend to ask their family and friends first when they experience a drug related problem. This figure is low compared to a result from another study conducted in Europe, where approximately (8%) of participating patients approached friends and family and chose them as their first information source [19].

Moreover, when questioned about the barriers that are preventing them from approaching a pharmacist about drug-related questions, (44%) of participants stated that they felt that physicians have more knowledge compared to pharmacists. This is therefore the main barrier, which is similar to the study conducted in Qatar [14]. However, it is not similar to a study conducted in UAE [15], where only (8.3%) of participants stated that they felt physicians had more knowledge.

The respondents who stated that pharmacists are not their first choice for their drug-related questions may have gone through unsuccessful experiences when they tried to obtain such information from pharmacists or they may also have no awareness that the pharmacists have the abilities to address their drug-related questions. Furthermore, they may feel that pharmacists lack the expertise necessary to provide this service. Thus, to enhance and strengthen the relationship of the patient and pharmacist, informative and comprehensive workshops must be conducted so that the public can be made more aware of the roles and abilities that pharmacists, specifically community pharmacists, play.

Those participants (32.71%) who went to a pharmacist first before the physicians stated that they would seek the advice of the pharmacists before the physicians when they are only experiencing a minor illness (66%). In contrast, only (28.0%) of all participants in the study conducted in Palestine [17] claimed that they visited a

pharmacy to address minor health problems. However, the majority of the public (63%) in Jordan [11], and most participants (91%) in Qatar [13] and Northern Ireland [20] (67%) stated that they had no hesitations in asking for a pharmacist's advice, especially if their condition was not as serious to warrant a visit to the doctor.

It should be noted that most of the participants of this study stated medication knowledge, communication skills, and an understanding of the concerns of the patients as favourite qualities of community pharmacists instead of personal aspects (friendliness and other qualities). Effective pharmacist communication is vital in building a continuing pharmacist-patient relationship, improving the use of medication by patients.

Most public (52%) shared that they went to the community pharmacy at least once a month. This shows good correlation with the cited frequency of community pharmacy visits in studies conducted in Jordan [11] (67.4%), Qatar [14] (52%), Northern Ireland [20] (67.7%), and Malta [12] (70.8%). As presented in various parts of the world, the top reason for select a pharmacy was its location. In this current study, going to the community pharmacies was mainly for buying OTC medications or prescription medication (100%), and only (62%) went to the community pharmacies to get advice. This result is similar to other studies that examined the perception of the public towards community pharmacies in Middle Eastern countries [11,13-14].

This is due to the fact that there are numerous medications in Iraq that are available over the counter, despite other countries classifying them as prescription medications. Given the high likelihood of the abuse and misuse of these medications, the community pharmacists in Iraq should have an important responsibility in endorsing the proper, safe and effective utilisation of medications by the Iraqi public.

Based on the new (extended) services, participants had a positive response to the possible new services that will be given by the community pharmacy. These services could include weight and temperature measurement, blood glucose, blood pressure, and cholesterol levels monitoring. Interestingly, the most demanded service was blood pressure measurement and blood glucose monitoring. Numerous studies have shown that patient outcomes can be improved by these pharmacist-delivered programs [1,2]. There is currently an initiative underway that tries to integrate these services into the pharmaceutical care practice for community pharmacies in Iraq. Furthermore, patients seemed to be receptive to majority of the pharmacy-based disease management programs where pharmacist offers support and care to consumers with diabetes, hypertension, asthma, or hyperlipidaemia. This shows that such programs could enhance patient care and outcomes.

Conclusion:

Though a majority of the people does understand the role played by the pharmacists, more opportunities must be explored for further educating the people about the skill, knowledge and the various professional abilities of the pharmacists as this could support the expansion and the uptake of the pharmacists' services. Hence, in order to improve the community pharmacy practice and thereafter implement the pharmaceutical care in the Iraqi community pharmacies, the researchers have to address the identified problems and also promote the services offered by the community pharmacists while monitoring the drug therapy and providing the people with the relevant drug-related information.

Furthermore, the pharmacists have to take into consideration the confidentiality of their patients, which could improve the customer satisfaction. The customer satisfaction can be increased if the

pharmacists provide privacy to the patients during their counseling. In general, the Iraqi consumers view the pharmacists and their services very positively. However, they must be made more aware about the role played by the pharmacists as additional health care professionals.

Limitation:

The results presented in this study are subject to some limitations. First, the study was only conducted in Basra, therefore the data collected cannot be generally applied to the whole of Iraq. This study was also limited due to its small sample size, which may not be a proper representation of Iraq's population. Thus, generalising this study's results to apply to all of Iraq's public should be done carefully.

References:

- 1- Kelly DV, Young S, Phillips L, Clark D. Patient attitudes regarding the role of the pharmacist and interest in expanded pharmacist services. *Canadian Pharmacists Journal*. 2014;147(4):239-47.
- 2- Bishop AC, Boyle TA, Morrison B, Barker JR, Zwicker B, Mahaffey T, Murphy A. Public perceptions of pharmacist expanded scope of practice services in Nova Scotia. *Canadian Pharmacists Journal*. 2015;148(5):274-83.
- 3- Schindel TJ, Given LM. The pharmacist as prescriber: a discourse analysis of newspaper media in Canada. *Research in Social and Administrative Pharmacy*. 2013; 9(4):384-95.
- 4- Krska J, Morecroft CW. Views of the general public on the role of pharmacy in public health. *Journal of Pharmaceutical Health Services Research*. 2010; 1(1):33-8.
- 5- Cerulli J. Patients' perceptions of independent community pharmacists. *Journal of the American Pharmaceutical Association*. 2002;42(2):279-82.
- 6- Malovecká, I., Papargyris, K., Mináriková, D., Foltán, V. and Jankovská, A. Prosperity of community pharmacy evaluated by gross and net profit and suggested corrective measures. 10 years study/Prosperita verejnej lekárne hodnotená prostredníctvom hrubého a čistého zisku a opatrenia vedúce k ich náprave. 10 ročná štúdia. *Acta Facultatis Pharmaceuticae Universitatis Comenianae* 2015; 62(1), pp.20-24.
- 7- Schommer JC. Patients' expectations and knowledge of patient counseling services that are available from pharmacists. *American Journal of Pharmaceutical Education*. 1997 ;61(4):402-6.
- 8- The ratiopharm CFP report: the perceptions of seniors, baby boomers and caregivers. 2008. Available: www.ratiopharm.ca/english/pdf/2008_CFP_Report_EN_web.pdf (accessed August 11, 2017).
- 9- Anderson, C., Blenkinsopp, A. and Armstrong, M., 2004. Feedback from community pharmacy users on the contribution of community pharmacy to improving the public's health: a systematic review of the peer reviewed and non-peer reviewed literature 1990–2002. *Health Expectations*, 7(3), pp.191-202.
- 10- Murray MD. Medication instruction by pharmacists: making good on an offer. *North Carolina medical journal*. 2007; 68(5):343-5.
- 11- Wazaify M, Al-Bsoul-Younes A, Abu-Gharbieh E, Tahaineh L. Societal perspectives on the role of community pharmacists and over-the-counter drugs in Jordan. *Pharmacy world & science*. 2008 ;30(6):884.
- 12- Cordina M, McElnay JC, Hughes CM. Societal perceptions of community pharmaceutical services in Malta. *Journal of clinical pharmacy and therapeutics*. 1998 ;2(2):115-26.

- 13- Bawazir SA. Consumer attitudes towards community pharmacy services in Saudi Arabia. *International Journal of Pharmacy Practice*. 2004 ;12(2):83-9.
- 14- El Hajj MS, Salem S, Mansoor H. Public's attitudes towards community pharmacy in Qatar: a pilot study. *Patient preference and adherence*. 2011;5:405.
- 15- Al Akshar S, Metwaly Z, Shamssain M. Patients' perceptions of community pharmacy practice in UAE: an overview. *IOSR Journal of Pharmacy*. 2014;4 :8-14.
- 16- Oppenheim, A. N. Questionnaire design, interviewing and attitude measurement, London, Pinter Publisher, Ltd.1992; 58-59. (crombach)
- 17- Khdour MR, Hallak HO. Societal perspectives on community pharmacy services in West Bank-Palestine. *Pharmacy practice*. 2012 ;10(1):17.
- 18- Ibrahim IR, Al Tukmagi HF, Wayyes A. Attitudes of Iraqi society towards the role of community pharmacists. *Innovations in pharmacy*.2013;4(2): Article 114. <http://pubs.lib.umn.edu/innovations/vol14/iss2/4>
- 19- Grigoryan, L., Haaijer-Ruskamp, F. M., Burgerhof, J. G., Mechtler, R., Deschepper, R., Tambic-Andrasevic, A.,& Birkin, J. Self-medication with antimicrobial drugs in Europe. *Emerging infectious diseases*, 2006; 12(3), 452-459.
- 20- McElnay JC, Nicholl AJ, Grainger-Rousseau Tj. The role of the community pharmacist—a survey of public opinion in Northern Ireland. *International Journal of Pharmacy Practice*. 1993;2(2):95-100.