

Patient counseling as a valuable approach in Pharmaceutical care, A cross sectional study in Azawia city, Libya

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ABSTRACT

Pharmaceutical care is one of the most important new approaches of modern pharmacy practice, where in the last four decades the role of the community pharmacist is changed dramatically towards patient oriented services rather than product oriented services in order to promote safe and effective use of medicines and also to maximize their therapeutic outcomes. Patient counseling is considered as a main component of pharmaceutical care where it focuses on enhancing the problems solving skills of the patients to ensure safe, effective and convenient medicine would be provided to the patient for the purpose of improving and maintaining better health and life quality. The main objective of this study is to explore the practicing a concept of medication counseling in community pharmacies in Azawia city of Libya, and to evaluate the expertise of the pharmacists about that and also to find out whether they are practicing patient counseling in their pharmacies. Furthermore, this study aimed to collect and suggest solutions for problems and barriers hinder the counseling process .

This descriptive cross sectional study was conducted in the period between 8th and 25th Sep.2020, where the data was collected from randomly selected community pharmacies of different areas with in Azawia city. The questionnaire was designed of twenty one questions divided into two parts; the first part considered the profile of health care provider in the pharmacy, and the second part consists of nineteen questions involving open and closed questions. It was found that more than 50% of the care providers involved in this study were not pharmacists and only 42% of them were aware with counseling concept. Almost no counseling area was found in 50 community pharmacies participated in this study. Asking about chronic diseases, taking other medications and allergy to certain drugs were acceptable as the study showed percentage of practicing of 90%, 98% and 68% respectively. Moreover, counseling about drug interactions, contraindications and drug storage were not enough as the percentages were 16%, 20% and 8% respectively. Communication skills of the care providers need to be improved in order to enhance patient's compliance and in addition to that a lot of work need to be done either through the pharmacists syndicate, health authorities and schools of pharmacy in Libya to reinforce and practicing the counseling concept properly

Key words: Pharmacy practice, Pharmaceutical care, Counseling DRPs, Community Pharmacy, Patient's education .

INTRODUCTION

Over the last four decades, it is well known that the new role of the pharmacist is changed towards providing services and patient's care rather than compounding and manufacturing of medicines¹ and to perform and practice this new role, it is necessary to have the required knowledge and skills enabling the community pharmacists to perform this new function properly to achieve the five rights (the right medicine for the right patient in the right dose at the right time by the right route of administration)^{2,3}. Pharmaceutical care is one of the most important new models of the pharmacy practice where it was defined by Helper and Strand (1990) as the responsible provision of drug therapy for the purpose of achieving definite outcomes that improve a patient's quality of life⁴. Patient's counseling is one of the valuable elements in pharmaceutical care process in order to assist, identify the drug related problems (DRPs) and to resolve the actual and potential DRPs. Counseling according to USP is defined as an approach that focuses on enhancing the problem solving skills of the patient for the purpose of improving or maintaining quality of health and quality of life where the pharmacist should give a verbal, written information and to use all available tools like visual and auditory materials to help the patients in solving problems related to their medications and also how to use medications properly^{5,6,7,8}.

Patient education about medicines is an essential component of the practice of pharmaceutical care by maximizing the proper use of medications. This approach of patient education was endorsed by The American Society of Health System Pharmacists (ASHP)⁹ which proposes the following four steps to effective patient counseling; establishing caring relationships, assessing the patient's knowledge, attitude, physical and mental capability, providing visual aids in addition to oral information and verifying patients' understanding. In this context, counseling is 'a face-to-face interaction between the pharmacist and the patient. In addition to that, counseling involves a process of patient empowerment, especially in serious acute cases, in chronic diseases, in disabled, elderly or pediatric patients. The two concepts of pharmaceutical care and counseling are focusing on the same goal of improving and maintaining the quality of health and life¹⁰. These two approaches in addition to patient's education are new concepts in pharmacy practice and might be unknown in community pharmacies in Libya where this study is a small step to explore and to discuss such concepts.

AIM OF THE STUDY:

As the new models of pharmacy practice have a trend towards patient's care and providing health services, it is not obvious that the new concepts of pharmacy practice are familiar by the community pharmacists in Libya. This cross sectional study was designed to explore these

concepts of new pharmacy practice in Libyan community pharmacies, to evaluate the knowledge of the pharmacists about these concepts and whether they are practicing them or not by focusing on medications, medical appliances and devices counseling.

METHODOLOGY:

This descriptive cross sectional study was conducted to explore the new concepts of modern pharmacy practice in Azawia city, west of Libya in the period between 8th Dec. 2020 and 25th Dec .2020 where the community pharmacies were selected randomly. The survey was distributed to community pharmacists using a questionnaire. The questionnaire was developed and modified from the work of Yang et.al¹¹, and Alfadl et.al¹² where the first part of questionnaire was about the profile of health care provider in the pharmacy as many of them were not pharmacists. The second part was of nineteen questions about medication counseling, types of advice were given, counseling area and outcomes of counseling process.

About sixty pharmacies were visited; fifty were fully collaborated, while ten were not. Interview questionnaire was used. Participation was voluntary and no incentives were given to the participants. The interview was individual face to face where the interviewer intervened only to clarify a question if required. No attempt was made to prompt the respondents by suggesting answers directly. Each interview lasted between one to one and a half hours. Verbal consent was obtained from each participant during data collection. The confidentiality of the data obtained was assured and the name and address of the pharmacy was omitted from the questioner.

RESULTS:

Fifty pharmacies of sixty were respondent to the study and this represents (83.3%) of the whole pharmacies randomly selected, where the rest (ten health care providers) were not willing to participate. By using the first part of the questionnaire, it was found that 52% of health care providers participated in the study were physicians, where the pharmacists representing only 40%. Figure 1a show health care providers working in community pharmacies. By using the second part of the study's questionnaire, the results were as following; the concept of medication counseling was known in 42% of the health care professionals working in those community pharmacies, where 95% of the participants confirmed that they are practicing this concept even though, they have no idea about counseling concept. Only 6% of community pharmacies have counseling area and most advises were given about side effects (approx.50%), whereas advises about medicine storage were only 8%. All these data are showing in the figures 1b, 1c, 1d and 1e respectively.

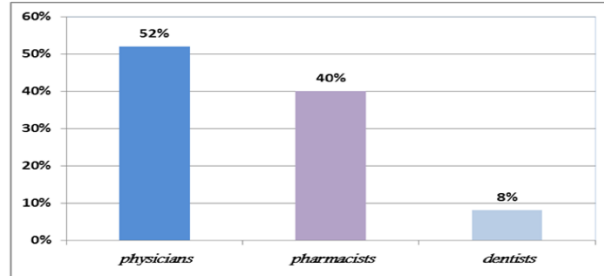


Figure 1a: Percentage of professional health care working in community pharmacy

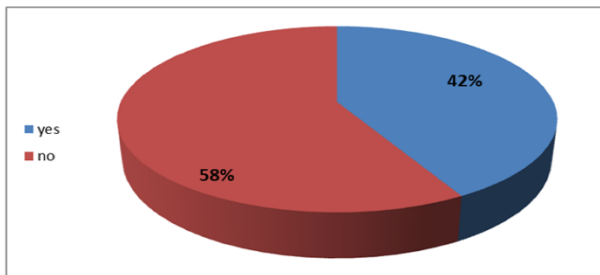


Figure 1b: Percentage of health care professionals familiar with counseling concept.

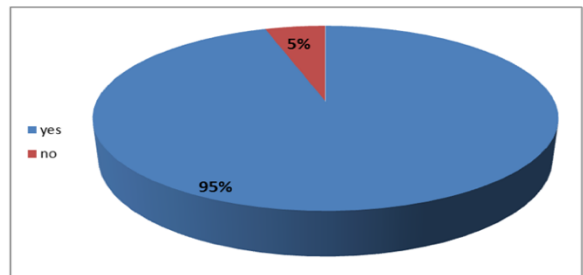


Figure 1c: Percentage of pharmacists practicing medication counseling

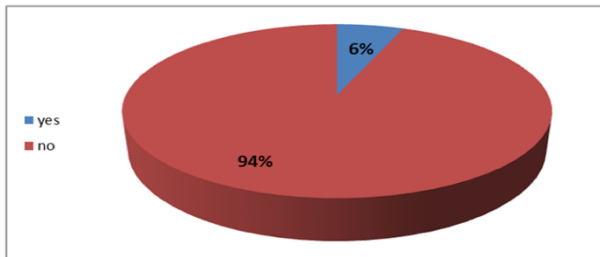


Figure 1d: Percentage of pharmacies having separate counseling area.

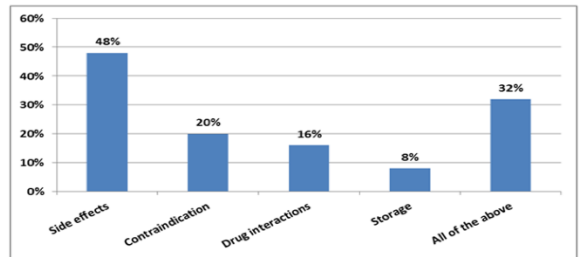


Figure 1e: Percentage of given medications advices.

Figure 1.

Tables1 shows some important data were found out in those fifty community pharmacies like doses of the medicines, missing doses, history of allergy, chronic diseases and taking other medications. However, table 2 finds out some information about the method used in counseling, information and advices were given, age group of the patients and communication skills.

Table 1: Represents percentage answered (Yes/No) about medication counseling a practicing

		Questions
58%	42%	Have you any idea about counseling concept?
5%	95%	Do you practice this concept in your Pharmacy?
94%	6%	Have you a separate Place appropriate for counseling?
66%	34%	about home testing devices? Do you provide advice(s)
2%	98%	other medications? any the patient is taking whether Do you try to find out
10%	90%	history of any chronic diseases like the patient has a whether Do you find out diabetes or hypertension?
32%	68%	any drug or food allergies? the patient has whether Do you try to find out
56%	44%	was missed? Do you explain what to do when a dose
84%	16%	Did you participate in health promotion programs?
20%	80%	Do you think that there is a positive outcome(s) through counseling practice?

Table 2: Represent percentage answered (multiple choice) about of counseling concept

How do you practice this concept in your Pharmacy?	Written	34%
	Verbal	72%
	Draw and chart	0%
	All of above	20%
Which age groups of patients do you find to need counseling in particular?	Pediatric	14%
	Adult	24%
	Geriatric	60%
	They all need the same level of counseling	38%
Which information and advice do you provide in counseling process?	Drug information.	50%
	Life style	16%
	Device information.	4%
	All of above	46%
What advice(s) you provide about medicines?	Side effects	48%
	Drug interaction	16%
	Contraindication	20%
	Storage	8%
	All of above	32%
Do you maintain the following communication skills?	Good eye contacts	52%
	Audible voice, tone and good pace	16%
	Good posture and gestures	16%
	All of above	24%
	Non above	10%
Did you participate in health promotion programs?	Cancer	8%
	Smoking cessation	6%
	Others	10%

DISCUSSION:

Medicines, medical appliances and devices are available to patients in Libya through two channels, the public sector in governmental hospitals and health centers and the second one is through the private sector as the community pharmacies are playing the whole role. Health care services are achieved by providing medical, nursing and pharmaceutical care in order to improve health and economic outcomes, reduction in drug related adverse events, reduce morbidity and mortality and finally improve and maintain quality of life. The role of the pharmacist has evolved from that of a compounder and supplier of pharmaceutical products towards that of a provider of services and information and ultimately that of a provider of patient pharmaceutical care. The provision of medicines and pharmaceutical products in Libyan community pharmacies is well known and familiar; however patient care and providing services to the patients are not well practiced.

In this descriptive cross sectional study fifty of sixty community pharmacies (83%) in Azawia city, west of Libya were participated. All of these pharmacies were selected randomly. More than 50% of the practitioners in these pharmacies were not pharmacists (they were either physicians or dentists) and this explains clearly the other results of our study Figure 1a. This negative note should be corrected by the Libyan pharmacists syndicate and other Libyan health authorities. As most of the workers in the pharmacies were not pharmacists, only 42% of them were aware about the counseling concept Figure 1b. However, 95% of the pharmacies workers confirmed they are practicing the medication counseling even though they are not conscious about that Figure 1c.

Only 6% of the community pharmacies participated in this study have a separated counseling area which is indicating that the counseling concept is unknown in other pharmacies or not important Figure 1d and this is not surprising as more than 50% of the care providers are not pharmacists. So that lack of privacy, lack of knowledge and lack of interest lead to decrease the counseling time. The majority of care givers perceived that they spent 1-5 min counseling patients, whereas the majority of patients reported that the length of time taken for medication counseling was less than 1 min. As the length of time taken for counseling increased, the levels of patient and health care provider satisfaction significantly increased, thus, health care providers should attempt to allocate sufficient time to deliver effective medication counseling to patient. Our study results supported by previous study conducted in south Korea¹¹.

By comparing the data shown in Figure 1e, it was found that advices about home storage of medicines represented only 8% whereas it was more than 25% in the work of Sara A. et al (2019).¹³

While counseling about expected side effects and drug-drug interactions were more than 48% and 16% respectively, it was about 15% in the work of Sara A. et al¹³ and no information was provided to any patient about drug interactions and common side effects in the study of Alfadl A. et al.¹² while 10 % was found out by Sinna A¹⁴. Results of the study in

Ethiopia were compatible with our results regarding counseling about side effects, medicines storage and contraindications. Table 1 shows some promising results regarding patient counseling about taking other medications 90%, history of chronic diseases 98%, and allergy to other drugs or food 68%.

The most used method in the pharmacy to give advice was verbal as indicated by 72% of pharmacists, may be because it is the easiest and shortest way for both patients and pharmacists. However, writing method was used in some cases as in case of geriatrics, children or patients with special needs. 49.4% was observed in study in south Korea.¹¹

The biggest barrier in the counseling practice was the absence of the counseling area, which found at only 6% of pharmacies included in this study. Almost the same percentage was found in Karachi city as it was 6.6%.¹⁵ In addition to that Lack of knowledge and updating of drug information were the main reasons for not practicing counseling about the drug interactions, contraindications and drug storage, as the percentages of these parameters were in this study (16%, 20%, 8%) respectively, comparatively in another study performed in Dubai was (25%, 5%, 10%) respectively¹⁷.

In order to improve the patient's adherence, pharmacists need to establish a professional relationship with the patients, where communication skills are required. Our study showed that training is required to improve communication skills of Libyan pharmacists especially in verbal and non-verbal techniques, asking questions and patient's answers obtaining and interpreting.

CONCLUSION:

As a medication counseling is a valuable approach in pharmaceutical care, it is important to improve the skills of Libyan pharmacists by changing the health care policy in Libya, changing the pharmacy education, enforcing the role of Libyan pharmacists syndicate and health authorities and encouraging the training course programs.

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