

Performance assessment of community pharmacist's intervention in quality of care in Tripoli, Libya: A cross-sectional study

Shukri M. Alsharif⁽¹⁾, Abdurraouf M. Khalf⁽¹⁾, Abdussalam A. Sughir⁽²⁾, Mohamed N. El-Attug⁽³⁾, Amal A. Ammar⁽³⁾, Ruwaida M. Kamur⁽³⁾

⁽¹⁾Faculty of Pharmacy, University of Zawia, Alzawia, Libya, ⁽²⁾College of Pharmacy, University of Almergib, Alkoms, Libya ⁽³⁾Faculty of Pharmacy, University of Tripoli, Tripoli, Libya.

ABSTRACT

Aim: Since the public is entitled to expect standard of excellence from the health sector and the community pharmacists are considered a vital ring in the health services chain. Hence, this quantitative study was carried out to evaluate the community pharmacists' role of dispensing in the city of Tripoli, Libya.

Methods: A cross sectional study involving 478 community pharmacists working in their own pharmacies in the city of Tripoli, Libya during the three month study period between Aug. and Oct. 2012 using a questionnaire consisting of 17 questions.

Results: Twenty two pharmacists refused to participate in the study due to either lack of time or not interested. In response to the question "whether refused to dispense the illegal prescription" received negative response, which could be due to the bias terminology of the question itself. Over 65% of positive responses were obtained for other questions from the community pharmacists. On the question, "whether refused to dispense the Prescription Only Medicines (POM) without a prescription", the response was unpredictable, where 80% of pharmacists answered 'No' which means they dispense the prescription only medicines without a prescription. On the other hand, more than 90% of the community pharmacists strictly advised the patients for duration of the treatment in terms of frequency and days which is a significant positive outcome. Pharmacists' response (23%) towards education of smoking cessation was relatively disappointing. Only 1.8% of pharmacists registered the prescriptions dispensed per day. Excessive workload of pharmacists and patients' attitude (e.g. treating the pharmacists as a medium of drug dispensing only and lack of interest in counseling) which endangers patient safety. Limited involvement of pharmacists in patient education is another observable deficit. In spite of Libyan community pharmacists' elevated level of approach, their practice was still at a small level.

Conclusion: Updated acquaintance of knowledge is a compulsory for Good Pharmacy Practice (GPP). There is a dire need of more efforts to educate and learn the community pharmacists by professional performance, continuous education and training programs which should be supported by the ministry of health, Libya to elevate their professional knowledge. These programs will build up enough expertise gradually among community pharmacists and to keep this experience in serve of the community. Further, proper periodical supervision by Libyan drug regulatory authorities over implementation of the standards is required.

Keywords: Tripoli, Libya; community pharmacists; good pharmacy practices; quality assessment.

INTRODUCTION

The World Health Organization (WHO) has defined health as the state of complete physical, mental and social well-being and not merely the absence of disease or infirmity [1]. Public expectation has enhanced to ensure the quality of care provided by health care professionals. Regulatory authorities mandate the healthcare providers

to be publicly accountable which stimulate them to evaluate performance and revise their quality assurance programs [2]. Although pharmacy has been recognized as an vital profession in the health care community. In contrast to the position in developed countries, pharmacists in developing countries are underutilized due to lack of recognition by the community and other health

care professionals [3].

Pharmacy profession that links the basic sciences with health sciences and it is devoted to ensure the safety and efficacy in use of medications [4]. The professional responsibilities of pharmacists have evolved in history from a focusing on simple compounding and dispensing to comprehensive pharmaceutical care services [5].

Due to increase in health demands due to complexity of chronic diseases and treatment, the pharmacists are forced to take up a patient-centered approach [6, 7]. The concept of pharmaceutical care has changed the pharmacy profession to be more liable in patient care to ensure the patients with positive results from treatment [8].

According to American Pharmacists Association, the pharmaceutical care should be patient-centered, outcomes oriented pharmacy practice, rather than medication centered, requiring pharmacists to accept responsibility as direct patient-care providers [9, 10, 11]

Good Pharmacy Practices (GPP) is a set of standards for the practice of pharmacy which play an important part in the measurement of quality of service to the consumer, also to guarantee that the elevated standards are sustained so as to provide good pharmaceutical services [12]. Several studies were conducted to assess the quality of the role of pharmacists in various health care settings [13-19].

As insufficient data is available on the assessment of pharmacists in Libya, we undertake this study. The present study was aimed to evaluate the performance of the community pharmacists towards quality of care in Tripoli, Libya. It also looks into aspects toward achieving GPP among professionals in order to push the health care system to synthesize a special model for the community pharmacists.

METHODS

A cross-sectional study was conducted between Aug. and Oct. 2012 in the city of Tripoli, the capital of Libya. The questionnaire consisted of 17 questions divided into three sections according to features of the professional practice. The questionnaire was given to the pharmacists in both Arabic and English versions. The questionnaire was prepared by a panel of 7 pharmacists and 3 faculty members at Faculty of Pharmacy, University of Alzawia, Libya, and all commented that the questions of the questionnaire are very clear and understandable. The sections included were demographics; qualification and experience; professional activity as community pharmacist. The pharmacists were asked to answer the questions either with 'yes' or 'no'. About 500 community pharmacists were selected for the study to which the questionnaires were distributed. The questionnaire was delivered to the community pharmacists by hand and left them to fill the document for enough time in private envelope. All data were analysed using Microsoft Excel software 2007. Descriptive statistics were calculated to

establish patterns of distribution.

RESULTS AND DISCUSSION

Of 500 questionnaires 22 pharmacists refused to participate in the study due to either lack of time or not interested. A total of 478 pharmacists have submitted their filled-in questionnaires during the three month study period between Aug. and Oct. 2012. The percent distribution of community pharmacists relating to age is presented in Figure 1. The demographic results showed that about 44% of pharmacists were in the age group of 21-30 years. About 17% of them were older above 41 years. The reason could be due to loss of interest as being community pharmacist or they shifted their job to hospitals or distribution services.

Several questions were asked to the pharmacists and their responses are summarized in Figure 2. All the questions were asked from the point of dispensing the medicines as a professional community pharmacist. The five questions answered whether the pharmacists: 1=checked of prescription date, 2=checked prescription twice before dispensing, 3=refused to dispense the illegal prescription, 4=refused to dispense the POM without a prescription, and 5=strictly advised for the duration of treatment. Of these five questions, the question 3 received more negative response, which could be due to the bias terminology of the question itself. However, those prescription which did not meet the requirements to be a medical prescription; e.g. name, date, Gender, General Practitioner (GP) name and GP signature; were termed as, 'illegal prescription'. Over 65% of positive responses were obtained for other questions from the community pharmacists.

Another important issue is that, the answers for question 4 was unpredictable, where a high % of pharmacists answered 'No' which means they dispense the prescription only medicines without a prescription. We all know this fact in our community but the interesting thing is that more than 80% of the survey subjected pharmacists do this practice. This number is really high and we believe something should be done to stop this in the near future. On the other hand, more than 90% of the community pharmacists strictly advised the patients for duration of the treatment in terms of frequency and days. This is a significant positive outcome, but still about 10% of them did not follow the professional way and we have to seek better ratio.

The pharmacist' contribution towards enhancement of health care of their small society was also evaluated and shown in Table 1. Community pharmacists have to contribute in the elevation of the whole health care system by educating the people. Pharmacists' response toward smoking cessation was relatively disappointing, where only 23 % used posters and leaflets to educate people about smoking- cessation and 76 % were not. On the

other hand, the numbers were relatively high in monitoring of body weight and height (88%), blood pressure (85%) and blood glucose (62%). This might be because the pharmacists used commercial instruments and gains commercial benefits by serving the patient.

There is another negative trend observed regarding registration of prescriptions dispensed per day which was only 1.8%. This could result in anonymity of cause and avoids responsibility of pharmacist in case of any adverse drug reactions occur in patients. About 8.9% of community pharmacists were satisfied by their relationship with local general practitioners, which shows that there exists meager professional relationships among health care providers which is alarming situation and to be curbed immediately. Above 80% of community pharmacists were satisfied with their patients and a second pharmacist was present which indicates that the basic relationship with patients may be towards gaining monetary benefit rather than providing a better health care. There is a dire need for proper collaboration among pharmacists and medical practitioners so as to provide a rational and objective health care to their patients.

Excessive work load of pharmacists and patients' attitude (e.g. treating the pharmacists as a medium of drug dispensing only and lack of interest in counseling) which endangers patient safety. Limited involvement of pharmacists in patient education is another observable deficit. In several cases patients are not advised by pharmacists about storage, adverse reactions, precautions and interactions of drugs [20-21].

CONCLUSIONS

The Pharmacists have greater impact on public health and improvement of patient's quality of life, the present practices of community pharmacists require further enhancement by acquiring GPP standards. Our survey showed various lacunae about GPP among community pharmacists. There is a dire need of more efforts to educate and learn themselves by professional performance, continuous education and training programs which should be supported by the ministry of health, Libya to elevate their professional knowledge. These programs will build up enough expertise gradually among community pharmacists and to keep this experience in serve of the community.

RECOMMENDATIONS

Most of the countries are looking towards achieving the goals of good pharmacy practices (GPP). [13-17]. In spite of Libyan community pharmacists' elevated level of approach, their practice was still at a small level. Updated acquaintance of knowledge is a compulsory for GPP [21-22]. An augment in our pharmacists' knowledge and attitude should be paralleled with an increase in quality of their practice. It provides

significant evidence for Libyan regulatory authorities and pharmaceutical organizations to arrange educational programs for the community pharmacists to endow them for their main role in promoting proper use of medicines. Further, proper periodical supervision by Libyan drug regulatory authorities over implementation of the standards is required

Table 1. Tripoli community pharmacies response to their contribution in the enhance of health care system in Tripoli, Libya (October-December 2012)

Contribution area (n = 478)	Numbers (%)	
	Yes	No
1. Smoking cessation	111(23.2)	367(76.7)
2. Body weight and height	425(88.9)	53(11.0)
3. Monitoring of blood pressure	411(85.9)	67(14.0)
4. Monitoring of blood glucose	301(62.9)	177(37.0)

Table 2. Role towards building professional relationship between pharmacists and general practitioner (GP)

Question (n = 478)	Numbers (%)	
	Yes	No
1. Do you know and register the number of prescriptions you dispense per day?	9 (1.8)	9 (98.1)
2. Are you satisfied with your relationship with the local GP?	43 (8.9)	435 (91.0)
3. Are you satisfied with your relationship with the patient?	396 (82.8)	82 (17.1)
4. Is there a second pharmacist on the counter?	87 (18.2)	388 (81.7)

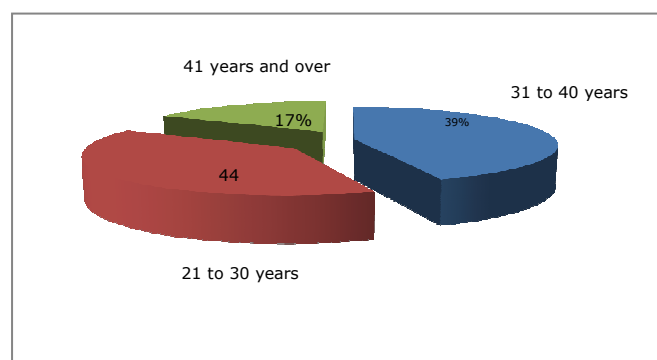


Figure 1. Chart showing the percentage of community pharmacists relating to age (n = 478) Tripoli, Libya

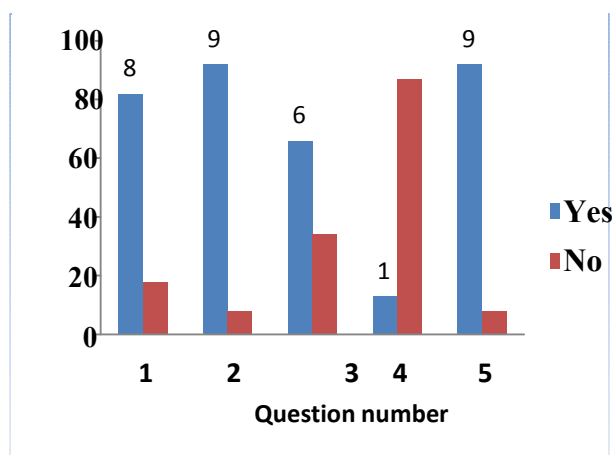


Figure 2. Representative graph of response from community pharmacist (n = 478), Tripoli, Libya. (1=Checked of prescription date?, 2=Checked prescription twice before dispensing, 3=Refused to dispense the illegal prescription, 4=Refused to dispense the POM without a prescription, 5=Strictly advised for the duration of treatment)

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