

Study of Professional Classification of Dispensers in Pharmacies of Al-Dhalea Governorate - 2023

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ABSTRACT

Background: Pharmacies play a vital role in meeting the healthcare needs of the population, as many people rely on pharmacies for medicine and health advice. The classification of professionals working in pharmacies is essential for improving pharmaceutical care. Professionals classified based on educational qualification.

Objective: This study was aimed to determine the professional identity of the dispensers in the pharmacies of Al-Dhalea governorate.

Method: Data of 218 professional dispensers from pharmacists, pharmacy technician and non-pharmacists were collected from 115 pharmacies of community and hospital pharmacies from different areas in Al-Dhalea governorate as questionnaires filled by the dispensers in the pharmacies for identification of their profession. In addition, consent form was signed by participants.

Results: The results showed that the profession of the dispensers in the studied pharmacies were as follow [104 (47.7%) pharmacy technician, 47 (21.6%) pharmacist, 17 (7.8%) high school, 14 (6.4%) nursing, 11 (5.0%) physician assistance, 10 (4.6%) laboratories, 7 (3.2%) college of education, 3 (1.4%) physician, 2 (0.9%) accounting graduation, 2 (0.9%) dentist, and 1 (0.5%) anesthetic graduate].

Conclusion: Most dispensers in the studied pharmacies were pharmacists and pharmacy technicians (69.3%), while the non-pharmacists were (30.7%). It is recommended to adhere to the laws regulating work in pharmacies in order to provide appropriate health services.

Key words: Dispensers, Pharmacist, Pharmacy, Al-Dhalea governorate, Pharmacy technician

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INTRODUCTION

The World Health Organization (WHO) has long believed that pharmacists could make a greater contribution to the provision of health care [1, 2]. This is particularly the case in developing countries, where health needs are greater and public sector health care provision is limited. The profession of pharmacy is concerned with promoting the safe and appropriate use of drugs. Pharmacists are viewed as being well placed to advise on the management of common symptoms and long-term conditions, and to participate in health education and promotion. In many parts of the world, pharmacies are increasingly recognized as a source of professional advice. Their potential to contribute more extensively to health care continues to be addressed on both national and international levels with the particular needs of developing countries in mind, the International Pharmaceutical Federation (FIP) set up a working party, which produced recommendations for step-wise implementation of Good Pharmacy Practice in these countries [3]. These recommendations focused on four aspects of services: access to pharmaceutical personnel, with the ultimate aim that all people should have access to a qualified pharmacist; the training needs of pharmacy personal, ranging from the provision of basic training for community health workers to continuing professional development for qualified pharmacists; the promotion of In addressing the education and professional development of pharmacists, a WHO consultative group identified seven roles around which 'preparing the future pharmacist' should aspire [4]. The framework describes the activities of a seven-star pharmacist as care-giver, decision-maker, communicator, leader, manager, life-long learner and teacher rather than a more limited drug supply role, For example, in Britain, pharmacist prescribing, medication review and responsibility for repeat prescriptions, with associated monitoring and records, are being introduced [5]. The concept of pharmaceutical care also includes emotional commitment to the welfare of patients as individuals who require and deserve pharmacists' compassion, concern and trust [6]. Currently, pharmaceutical care is understood as the pharmacists' compromise to obtain the maximum benefit from the pharmacological treatments of the patients, being therefore responsible of monitoring their pharmacotherapy. As the profession has moved

from a product orientation (dispensing medications) to a patient focus, clinical training requirements have expanded [7].

Pharmaceutical care may offer the important benefit of assuring more appropriate use of medications, and pharmaceutical care may be useful as a way for pharmacists to contribute to the monitoring of patient care [8]. The pharmaceutical care process is the development of a collaboration relationship between pharmacist and patient [9]. One of the most important barriers to implement pharmaceutical care is pharmacists' concern about their relationship with other health care providers, especially with physicians [10]. Relationship between pharmacist-patient and with other health professionals. Furthermore, innovatory learning methods, which include the use of computer programs specially designed to register patients' pharmacotherapeutic history [11].

Pharmacy is the health profession and Pharmacy encompasses the research, production, distribution, disposal, and indications of any medications or drugs [12]. According to the 1968 Medicines Act, a therapeutic substance is 'any substance or article (not being an instrument, apparatus or appliance) administered to human beings or animals for a medicinal purpose'. Such a purpose may include 'the diagnosis, treatment or prevention of disease, and otherwise preventing or interfering with the normal function of the body processes [13].

To promote rational drug use the pharmacist requires to be part of all the decisions regarding medicines and their use. The changing role of the pharmacist as patient counselor/educator and as an intermediate to improve patient outcome in the ambulatory settings is essential for promoting rational use of drugs [14]. Drugs are procured, stored, distributed, and dispensed and the information given by the pharmacist/dispensers dictates the quality of their use, thus in terms of influencing the rational use of medicines [15]. The objective of this study was to identify the profession of dispensers of pharmacies in AL-Dhalea governorate and estimating of percent of pharmacists to non-pharmacists dispensers.

METHODOLOGY

The study area was conducted on the pharmacies of AL-Dhalea governorate from 10-June to 3-Aug 2023. The study includes random samples of the most



professional drug dispensers in pharmacies in AL-Dhala governorate. All pharmacists' healthcare professionals and non-pharmacist healthcare providers working in pharmacies in all community pharmacies and hospital pharmacies in AL-Dhalea governorate were included in this study, while those who did not respond well and did not provided all the required information were excluded.

Samples of 218 dispenser were receive the questionnaire contain information about his professional identity. All areas in AL-Dhalea governorate were studied, the approximate number of pharmacies in AL-Dhala governorate was obtained and visited for filling of the structured and comprehensive questionnaire. The collected filled questionnaires of 218 professional dispensers from

pharmacists, technician and non-pharmacists from 115 pharmacies of community and hospital pharmacies from different areas in AL-Dhalea governorate were subjected to analysis using Microsoft Excel.

RESULTS

The number and percent of pharmacy dispensers of each group were as follow: 104 (47.7%) pharmacy technician, 47 (21.6%) pharmacist, 17 (7.8%) high school, 14 (6.4%) nursing, 11 (5.0%) physician assistance, 10 (4.6%) laboratories, 7 (3.2%) college of education, 3 (1.4%) physician, 2 (0.9%) accounting graduation, 2 (0.9%) dentist, and 1 (0.5%) anesthetic graduate as showed in table 1.

Table 1: Professional Classification of dispensers in community and hospital pharmacies

No.	Professional identity of dispenser	Frequency	Percent %
1	Pharmacy technician	104	47.7
2	Pharmacist	47	21.6
3	Nurse	14	6.4
4	Laboratories	10	4.6
5	Physician Assistant	11	5.0
6	High school	17	7.8
7	Academic	7	3.2
8	Accountant	2	0.9
9	Physician	3	1.4
10	Dentist	2	0.9
11	Anesthesia	1	0.4
	Total	218	100.0

DISCUSSION

Both healthy and ill people go to retail pharmacies to buy over-the-counter (OTC) or parapharmaceutical products, refill their chronic prescription medications, get advice on common medical concerns, and follow the results of particular illnesses and conditions, such as measuring blood pressure and blood glucose readings and looking at body temperature, height, and weight (16).

This study focuses on the professional classification of dispensers in the pharmacies in Al-Dhalea Governorate. The study was carried out through four Directorates of Al-Dhalea Governorate and there were two types of pharmacies; Hospital and Community pharmacies. Six samples out of 224 were

excluded because they did not provide sufficient information, in accordance with the study that was carried out on 115 pharmacies and from which 224 questionnaire were distributed. As a result, 218 samples were obtained.

According to statistical data and the results from data analysis, it was found that 104 (47.7%) dispensers were pharmacy technicians, while 47 (21.6%) dispensers were pharmacists, on the other hand we found that 17 (7.8%) of pharmacy workforce were high school, 14(6.4%) nurse, 11(5.0%) physician assistant, 10 (4.6%) medical laboratories, 7 (3.2%) academic, 3 (1.4%) physicians, 2(0.9%) accounting graduation, 2(0.9%) dentists, and 1(0.5%) anesthetic graduate.



The reasons for the low number of bachelor's degrees in pharmacies may be because pharmacists prefer to work in the field of drug marketing due to high salaries, pursue postgraduate studies, travel to other countries for higher salaries and easier practice of the profession, or work for other national or international organizations that attract pharmacists. This insufficiency of pharmacists has led to an increase in the number of pharmacy technicians and non-pharmacists as dispensers in pharmacies. Yemeni graduates frequently give preference to professions that offer financial stability and employment security, demonstrating a practical mindset shaped by the country's economic reality (17).

This study also found that 30.7% of dispensers in pharmacies are not pharmacists. Some of them are from other medical field, while others are graduates of education or accounting fields, or high school graduates who work in the pharmacy by chance (for example, if the pharmacy is owned by their parents or relatives). Some people work in the pharmacy for financial reasons, as the salary they receive is higher than their salary in their specialized field. The insufficiency of manpower in the pharmacy also contributes to non-pharmacist personnel working in the pharmacy.

This raises concerns about the quality of pharmaceutical care, as unqualified personnel may lack the necessary training to provide accurate medication advice. Implementing stricter regulations and improving incentives for pharmacists may help address this issue. The current study found that most non-pharmacist personnel who work in pharmacies are intruders in the pharmacy profession, especially in hospital pharmacies, where pharmacists are considered drug experts. The owners of the pharmacies hire non-pharmacist personnel due to their availability and competence for the job. The insufficiency of pharmacists in pharmacies has led to an increase in the number of pharmacy technicians and non-pharmacist personnel in the profession. This situation highlights the need for more bachelor's degree programs in pharmacy and for policies that encourage pharmacists to work in the profession.

Medication counseling should be provided whenever a prescription is being dispensed at a community pharmacy because it gives the patient the chance to discuss all aspects of the prescribed medications in

order to ensure that the desired therapeutic effect can be achieved. Several studies have found that improved communication between patients and health professionals, especially dispensers, is crucial for improving treatment adherence. Drug dispensers should receive training on how to effectively communicate with patients regarding the proper usage of medication, associated side effects, benefits, and the risk of not following prescriptions (18).

Due mostly to a substantial shortage of certified pharmacists working in pharmacies and a lack of standard practice guidelines, pharmacies in developing nations frequently lack the skilled and trained staff necessary to handle, label, and store medications appropriately. According to reports, most dispensers lack official education and training, and the majority of trained individuals are not present at these pharmacies. Knowing which medications can be sold with or without a prescription is crucial when supplying them. Nevertheless, research has shown that prescription medications are sold to patients without regard to ethical or legal issues (19).

CONCLUSION

The study was found that most dispenser in pharmacies in general are pharmacy technicians in both community and hospital pharmacies for the reason of desiring, followed by pharmacists. The other non-pharmaceutical profession were with lower percent. It is recommended to adhere to the laws regulating work in pharmacies in order to provide appropriate health services.

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CONFLICT OF INTEREST

The authors declare that no conflict of interest.



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