

Evolutionary role of the community pharmacist: A review

Firdous Fatima*, Bushra Ali Sherazi

Department of Pharmacy, Lahore College for Women University, Lahore, Pakistan

ABSTRACT

Pharmacy is a science related to the preparing and dispensing of drugs. In the past pharmacist, only dispense the medicines. With the passage of time, pharmacists gained his position in multidisciplinary provision of health-care system (HCS). In 1948, in Pakistan, pharmacy course was introduced in universities. After attaining main position in HCS, pharmacist started work as community pharmacist, clinical pharmacist, hospital pharmacist, and many others in different settings. In past decades, in many countries, pharmacist's role has changed from dispensing services into patient-oriented services. In developing countries, community pharmacists are facing some problems such as lack of great quality pharmaceuticals, drug regulatory structure, and irrational use of medicine and not trained according to their roles. There is less number of community pharmacists which are not according to the WHO criteria. Now roles of pharmacists are going strengthened and extended effectively. Role of community pharmacist has evolved like now they are involved in treating diseases, managing chronic diseases, immunization programs, initiating drug therapy in the pharmacy, providing medicines and advice without appointment, and focused services are provided to decrease adverse events to patients health. In future, pharmacist's role and job responsibilities will be increased which result in enhanced quality of care and control health-care cost.

Key words: Adverse events, community pharmacist, community pharmacy, health-care system, immunization program

INTRODUCTION

Background

Pharmacy is the health profession that connects health sciences with basic sciences; it is focused on guaranteeing the protected and viable utilization of medications.^[1] In the past few centuries, the role of community pharmacist has changed greatly. In the 1800s, pharmacists were playing the role of an apothecary, meaning a professional person that prepared and sold medicine in those days.^[2]

In earlier days, doctors prescribed and pharmacist dispensed and compounded medicines. With the passage of time, pharmacists have gained an important position in multidisciplinary provision of healthcare. In 1990, when Helper and Strand introduced the concept of "pharmaceutical care," the change in perspective for pharmacy practice occurred. It is defined as:

"Pharmaceutical care is the responsible provision of drug therapy for achieving definite outcomes that improve a patient's quality of life."^[3]

The theory of pharmaceutical care is presently acknowledged worldwide as an essential mission of pharmacy.^[4] The World Health Organization has contributed viably toward empowering and defending the role of pharmacist around the world. Due to the expanding interest for pharmacist in public health and well-being, the World Health Organization suggests a proportion of

one pharmacist for each 2000 populace all together for ideal health-care insurance to be conveyed. Other than their pivotal part in general well-being, the pharmacist can likewise go about as counsels to doctors and nurses, something to be considered, add to policy choices.^[5]

History

In Pakistan, in 1947, there was not even a single university or institution which was offering pharmacy profession education. In 1948, the University of Punjab was the first university which started pharmacy; in 1964, a Department of Pharmacy was established at the University of Karachi. The pharmacy program was started as a 3-year baccalaureate program, and afterward in 1978-1979, it was extended to a 4-year program. Around then, the pharmacy educational programs were coordinated for the most part toward the creation of pharmaceuticals, which furnished the pharmaceutical business with highly qualified and gifted skilled human resources; however, there was no thought of the general well-being part of the pharmacist.^[6]

In Pakistan, there are less number of pharmacists in public and private sectors (hospital, community pharmacy, and intuitions), but the number in the past few years has been increasing.^[7]

Types of Pharmacy

As pharmacy profession develops with time, the separation of roles of pharmacist started. For example, the separation of role of

Address for correspondence:

Firdous Fatima, Lahore College for Women University, Jail Road, Lahore, Pakistan. Phone: 92332-3200119.

E-mail: firdousfatima862@gmail.com

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the pharmacist in giving advice to patients and other health-care providers; development of clinical pharmacy and social pharmacy (community pharmacy). These are core of pharmaceutical care paradigm “community pharmacy.”

“The science dealing with relationship between the drug and the society.”^[8]

“Clinical pharmacy” is defined as:

“A branch of pharmacy that deals with the science and practice of rational medication use.”^[9]

DEVELOPING ROLE OF COMMUNITY PHARMACIST

In past, the professional role of the community pharmacist has been largely concerned with preparing and dispensing prescriptions. Over the past few years, pharmacists generally have been debating the direction of their profession, called “extended role of the community pharmacist.” Pharmacists want to develop their dispensing services. They want to offer better and more regular advice to patients on how to use prescribed medicines. Community pharmacists wish to pursue their advisory role in healthcare, and particularly in treating minor diseases.^[2]

In past 20 years, in many countries of world, role of pharmacist has changed from dispensing services into patient-centered service.^[10-12] Now, the changing role of community pharmacy from traditional dispensing activities to greater involvement in health improvement is recognized, and its importance of these services are also understood.^[13] An expansion in health requests, with a complex scope of chronic medications and poor adherence to recommended medications, has constrained pharmacist to take a patient-focused approach. In recent couple of decades, pharmacy organizations and academic training programs around the globe have advanced pharmaceutical care as a logic and standard provision of care for patients. Pharmacy-oriented care in developing nations confront a particular difficulties not at all like those looked by pharmacist in the developed countries. In most developing countries, need of suitable and great quality pharmaceuticals is the most common issue which is experienced.^[14]

In many developed countries, pharmacy profession is very important in health-care services; while in developing countries, it is still underutilized.^[15]

Pharmacy practice in developing countries changes altogether from one nation to another. On account of Pakistan, the pharmacy profession is at a beginning period of its improvement in terms of pharmaceutical care. The quantities of pharmacists employed in most public sector hospitals are insufficient. Subsequently, their capacities restricted to drug dispensing, procurement, and stock control.^[16]

Another example is Malaysia, it is one of the main nations as far as monetary development in the south-east Asia area, and there is an intense deficiency of pharmacists practicing in community settings.^[17] In 2006, one data demonstrated that the proportion of pharmacists to populace in Malaysia was 1:6207.^[18] In Malaysia, doctors are still dispensing medications because it is part of their professional practice. Doctors and community pharmacists both

are similar in their jobs such as drug dispensing and prescribing. Registered pharmacists are not the only professionals with the legal right and responsibility of dispensing medications. In spite of the fact that the call for partition has been made throughout the previous 20 years, the government still trusts that due to the deficiency of pharmacists the partition cannot be actualized. Another explanation behind postponing the division is the complaint of medical practitioners.^[19]

Taking a grander at the point of view of African countries, for example, Ghana, the deficiency of pharmacist is far more atrocious: It has been accounted for that only 600 and 19 pharmacists are serving 2.9 million individuals in Greater Accra. It is not according to the WHO recommendations.^[20]

Other countries like in India, there are relatively high percentage of trained and skilled pharmacists, but they are more focused toward industrial sector. This is due to more demand from industrial side and another reason is the national pharmacy educational programs in most colleges and universities, which cover fundamentally subjects relating to the production of pharmaceuticals.^[6]

In developing countries, weak drug regulatory structure and irrational use of medicine are also difficult issues. For instance, a survey in rural area of Ghana was conducted which showed that drug retailers in five community pharmacies have just very little or no training in pharmacy, they were supplying medicines to people without any prescription, misinformation about medications leading people toward drug misuse.^[21]

In 2005, in Scotland, through a “community pharmacy contract,” pharmacists are allowed to present more services to patients through Minor Ailment Service, the Chronic Medication Service, and the Acute Medication Service.^[22] Moreover, in the United State of America, developing role of community pharmacist is a point of care testing, immunization program, initiate, adjust, or discontinue medications for cure of diseases such as heart failure, diabetes, high blood pressure and asthma and interpretations of laboratory data, clinical assessment and planning therapeutic plans, providing other health services for prevention and treatment of disease, and providing health-care education.^[23] In Canada, the USA and the United Kingdom, prescribing rights have been given to community pharmacist.^[24]

Now, role of pharmacist in community health services has evolved. According to a 2011 Gallup Poll, after nurses, pharmacists are the second most trusted profession in health-care system.^[25]

MAJOR/EXTENDED ROLES OF COMMUNITY PHARMACIST

One of the important roles of pharmacist is enhancement of healthy lifestyle.^[26] New role of community pharmacists is management of chronic diseases, for example, asthma, arthritis, heart diseases, diabetes mellitus, depression, high blood pressure, osteoporosis, and palliative care. They are involved in chronic disease management in collaboration with other health-care providers or doing themselves.

In Singapore, pharmacists in community pharmacies are providing advice on treatment of minor diseases, limited health promotion,

and dispensing. The roles of pharmacist are going to be further strengthened and extended effectively and efficiently tap on their valuable contribution to patient care. There are number of proofs showing that community pharmacist efficiently working for hyperlipidemia, diabetes, and hypertension management and for preventive services such as weight management, osteoporosis prevention, and flu immunization services.^[27]

In Dubai, community pharmacists, sometimes, have a practice of initiating drug therapy in the pharmacy and not prescribed by physician. According to the findings of this study, 49.5% of the pharmacists screened are spending an approximate of 3–5 min with each patient and 36.4% are spending 5–10 min for thorough explanation, consultation, and claims online approval for patients holding medical insurance. The new trend of community pharmacists in Dubai is providing extra pharmacy services.^[28] In Germany, patients are spending about 3 s to 5 min with pharmacist regarding their medications.^[29] Moreover, in Canada, patients are willing to be receptive to 2 min of clinical interaction when they are taking over the counter drugs 1st time by name.^[30]

In the UK, public health interventions which are given at community pharmacy have positively impacted health equity due to their access and acceptability. There are almost 10,500 community pharmacies, located across countryside and urban areas of England. Moreover, they are (community pharmacists) also involved in weight management (obesity), misuse of drugs (alcohol consumption), and smoking cessation health-related behaviors.^[31]

Community pharmacies are open in evening and even at weekends; this allows the patients to access healthcare and medicine without any appointment. Focused services are designed to decrease specific adverse events to health, in which community pharmacist deliver health-care advice at an opportunistic level, related to prescription and non-prescription medications.^[32]

FUTURE OF COMMUNITY PHARMACIST

As indicated by the World Health Organization, in the future, the pharmacist must have skills, knowledge about their role, and good attitudes to maintain their role in healthcare.^[20]

Later on, many changes are expected to happen and job responsibilities will keep on increasing with a specific end goal to control costs and enhance the quality of care. Community pharmacists are able to promote optimal health outcomes and assessing the patient's therapeutic needs to prevent adverse drug reactions. Moreover, expanding the public's knowledge about services which are provided by pharmacist can help in reducing barriers faced by patient's concerning their health and contribute to the overall wellness of the community and nation.^[33]

CONCLUSION

This study shows that current literature highlights multifaceted roles and extended roles played by community pharmacist globally. In developing countries, the pharmacist is facing many problems while in developed countries such as Canada, United Kingdom, USA, and Germany community pharmacists are

playing their extended roles and have involved the in diseases management program and primary care team.

The role of community pharmacist is evolving day by day; they are performing extended roles such as chronic disease state management, immunization programs, and providing their advice to other health-care providers and patients. Extended roles and jobs responsibilities will lead to enhanced quality care and controlled health-care cost.

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