ABSTRACT

As a member of the therapeutic team, pharmacists should be directly involved in patient healthcare. Many studies over the last few years have shown that pharmacists providing pharmaceutical care services can enhance patients' clinical status and health care outcomes. However, differences exist between developing and developed countries in the accepted scope of pharmacists' professional services. The expansion of the pharmacist's role can lead to significant changes in patient perceptions. Advancements in pharmacy practice and the incorporation of professional services are gaining attention in developing countries. This review aims to analyze pharmacists’ and public views and attitudes towards the role of pharmacists in healthcare to find the best ways to support and improve the services. Studies investigating public or pharmacist views on pharmacists’ roles or pharmacy services from 2010 to 2021 have been considered and reviewed.
1. INTRODUCTION

Over the last few decades, the pharmacy field has seen a transformation of professional roles from compounding to delivery of pharmaceutical care. [1] In both community and hospital settings, pharmacists play a significant role in maintaining and promoting public health. According to the American Society of Health-System Pharmacists must engage in global, national, state, regional and institutional efforts to promote public health and to incorporate the aims of those initiatives into their practices [2]. Community pharmacists are recognized as the most accessible health care professionals to the public and are best suited to provide individualized patient care. Pharmacists deliver various functions, including drug dispensing, patient counseling, health promotion, advice on minor ailments and encourage adherence. Pharmacists identify, resolve and prevent drug therapy problems in collaboration with other health care providers. Pharmacists have an active role in recommending OTC medications [3]. Pharmaceutical care is the provision of direct, responsible medication-related care, intending to achieve positive outcomes and to improve patient’s quality of life, which requires pharmacists to work in collaboration with other health care providers while maintaining a professional relationship with patients [4].

Views on the role of the pharmacist are different in different parts of the world. The expansion of the pharmacist's role could lead to significant changes in patient perceptions. Even though pharmacists have the potential to make a significant contribution to public health, improvements in the behavior of both pharmacists and pharmacy customers are needed for the service to be effective. Pharmacists must recognize their position in public health [5].

2. CONSUMER VIEWS

The general public's and pharmacy customers' perceptions and views about the role of pharmacists in health care were investigated and are described under two main topics in this review: perception of pharmacist's role and satisfaction with pharmaceutical services.

2.1 Perception of Pharmacist's Role

A common finding was low in public awareness of extended pharmacy services. [6–8] In a study done by focus group discussion, conducted in Wales, all groups were aware of the pharmacist's dispensing role with checking dosage, storage, and distribution of drugs. The participants also agreed on the pharmacist's role in prescription monitoring, providing advice, and answering queries, but were unaware of their role in chronic condition management and medication reviews [9]. A research in Poland concluded that the public reduced pharmacists' role to dispensing medication and they are not even treated as health advisors. [10] The findings of a survey in Kuwait identified physicians as the first person to contact about any drug related problem, followed by the pharmacists. About half of the participants expected pharmacist's job to include taking medication history (56.8%), disease screening (54.7%), and health progress monitoring (45.5%) [3]. The public's acceptance of pharmacists as health educators is found to depend on people's personal preference of general practitioners over pharmacists, availability of pharmacists and their level of knowledge about health care issues [11].

The majority of respondents in many studies on weight management did not prefer pharmacists as sources of weight management advice. [7,12] However, those who had previous experience with such services were more supportive of the proposal for a pharmacist-led weight management service. [12] In a study conducted in Poland, pharmacists were the highest ranked health care professionals that smokers would ask about pharmacological treatment for smoking cessation and more than half of the current smokers perceived pharmacists to be qualified health professionals to provide smoking cessation support. [13]

2.2 Satisfaction with Pharmacy Services

More than 90% of respondents in a study in Taiwan declared being satisfied or very satisfied in six of the eight dimensions for which the satisfaction level was measured. Some of the dimensions considered were the competence of providers, the information offered, the location, or the amount and quality of services provided by the pharmacy [14]. Out of 31.7% of respondents in a study, who went to the pharmacy to
purchase items, 77.1% were satisfied with pharmacist's help [15]. Only 33.2% of consumers in a survey, chose to trust pharmacists and only 41.2% agreed that pharmacists were able to answer questions. A small majority of respondents reported being satisfied with medication instruction, pharmacist developing medication records and the assistance with filling chronic disease prescription [16].

3. PHARMACIST VIEWS

This study describes the views and opinions of pharmacists and pharmacy students on three main topics: Awareness and provision of pharmaceutical services, role in public health and barriers.

3.1 Awareness and Provision of Pharmaceutical Services

One study revealed that pharmacists want to be recognized as medicine experts in health care, and they are aware that the public evaluates their status based on their practice.[17] The majority of pharmacists respondents in a study conducted in Pakistan agreed that pharmacists currently provide basic services such as dispensing, storage, purchase and sale of medicines, and about 70% reported that healthcare organizations partially offer services like patient counseling, prescription monitoring, pharmacovigilance, and drug utilization review.[18] Participated pharmacists in a study agreed that majority of them spent their work time on patient counseling and prescription monitoring. Only a small portion monitored adverse drug reactions, drug compliance and engaged in health promotion, only 57% believed they would be able to provide better pharmaceutical care in the future. [19] In a study conducted to explore pharmacists' perceptions and willingness to provide professional services in the United Arab Emirates, 92% of participants agreed that it is time for community pharmacists to engage in extended services like screening, medication use reviews, and chronic disease management. About 63% of respondents reported that pharmacist's role in UAE remains product-oriented and mainly focuses on dispensing,[20] Another study observed that community pharmacists express a less positive attitude towards the provision of pharmaceutical care,[21] Although majority of the community pharmacists in a study were unaware of extended pharmacy services, they were ready to accept practice change if given the necessary skills and training.[1] Similar results were observed in other two studies, where community pharmacists tended to ignore health promotion within and outside pharmacy, and are more focused on management of the pharmacies and not the clients.[22,23] Consistent with this, the community pharmacists in a survey believe that adverse drug reaction reporting is the responsibility of physician or hospital pharmacists. The majority of pharmacists had never reported adverse drug reactions and the most common reason for not reporting was the lack of awareness about the reporting method [24].

3.2 Role in Public Health

Many pharmacists in a study suggested that their roles, particularly patient education and monitoring, should be expanded. The study also concluded that the advancement of pharmacists' professional roles would aid in the management of the growing diabetes burden [25]. In another study, pharmacy students believed pharmacists' participation in health promotion activities would enhance their profession's profile among public and other health care professionals [26]. Pharmacists' attitudes towards providing screening programs were generally positive. A study conducted in UK found that pharmacists were enthusiastic about providing alcohol screening programs and brief advice for women accessing emergency contraception [27]. In a study conducted to determine the contribution of community pharmacists in weight management, majority of pharmacists claimed to offer general dietary advice and some offered weight-loss clinics. Blood-pressure monitoring, exercise and lifestyle advice were provided by most pharmacies [7]. A similar study in Scotland reported weight measurement, calculation of BMI, body fat, advice on healthy food and supply of weight loss products as the major weight management services provided [28]. 98% of pharmacists in a survey were confident in their ability to provide oral health advice and 93% expressed an interest in expanding their oral health care knowledge through dental professional-led courses or programs [29]. Majority of pharmacists in a study in Qatar were interested in providing smoking cessation counseling and considered it as an important activity and efficient use of their time [21]. A survey showed that the majority of pharmacists had limited knowledge of diabetes management and were less engaged in providing type 2 diabetes patients with counseling and health
promotion services [30]. Pharmacists in another study reported that they are not currently providing pharmaceutical care to most of the patients during preconception, lactation and pregnancy, and the main barriers hindering pharmaceutical provision were difficulties to identify women's status and lack of knowledge [31].

### 3.3 Perceived Barriers

A number of common barriers were observed across various services. In several studies, perceived lack of time and staff were repeatedly raised as a barrier for extended pharmacy services [19–21,23,27,32] A small minority of respondents in a study were reluctant to provide more services primarily because they already felt under pressure.[27] More than 90% of participants reported that insufficient communication with physician was a barrier in the provision of pharmaceutical care. Lack of physical space, lack of patient acceptance and lack of compensation were also considered as important factors by the respondents.[19] Lack of external conditions, insufficient knowledge, and lack of support from other health care professionals are all factors found to influence the implementation of pharmaceutical care in the surveyed community pharmacies in China.[23] A study reported poor public awareness, lack of training programs and deprived salary structures as barriers in providing extended pharmacy services.[1] Lack of documentation skills (56%), insufficient staff (77%), and lack of technology for keeping patient's records (61%) were considered as barriers by majority of the respondents in Qatar.[20]

### 4. CONCLUSION

The review updates the public and pharmacists' views on the role of pharmacists in healthcare. Even though the majority of pharmaceutical services are well received by the general public, awareness remains limited. So, it is essential to raise public awareness about knowledge, expertise, and roles of pharmacists as healthcare professionals. Pharmacists' clinical skills beyond medicine supply need to be recognized and appreciated. Continuing education programs, as well as adequate training and support, are needed to equip pharmacists with the necessary knowledge and capabilities to address the evolving needs of pharmacy practice. Potential barriers such as lack of time and staff, work pressure, deprived salary structures, and low pharmacist confidence need to be addressed.

### CONSENT AND ETHICAL APPROVAL

It is not applicable

### COMPETING INTERESTS

Authors have declared that no competing interests exist.

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