

## Pharmacists Impact on Promoting the Public Health

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### ABSTRACT

Because they can guarantee that patients receive safe and effective medications, pharmacists are essential members of the healthcare team. In an effort to maximize patient results, they work in tandem with other medical specialists to evaluate pharmacological therapy, dispense medication, counsel patients on drug interactions and side effects, and monitor medication schedules. Pharmacists also give patients advice on managing illnesses, changing lifestyles, and adhering to medication regimens. The range of work that pharmacists do has expanded with the emergence of numerous global health issues. Safe and efficient drug usage by community and clinical pharmacists is necessary to provide the best possible patient outcomes. The public is still ignorant about the pharmacist's contribution to national and international health, nevertheless. They also perform drug use assessments, act as drug information specialists, and offer advice on the proper choice and dosage of medications. Pharmacists play a critical role in healthcare organizations as they strive to reduce prescription errors, enhance patient safety, and manage costs. The pharmacist can improve public health in a beneficial way. Thus far, the rise in the importance of pharmacists has been more influenced by the expansion of patient services than by a population-based approach to health. Pharmacists may find that integrating the five public health core competencies—social and behavioral science, health policy and administration, epidemiology, biostatistics, and environmental health sciences—into their pharmacy practice increases their efficacy and influence.

## 1. Introduction

The profession of pharmacy currently places a greater emphasis on professional services and patient-centered, health outcomes counseling information than it does on technical, task-oriented responsibilities. This change, dubbed "Pharmaceutical Care," shames the country by giving pharmacists responsibility for patients' outcomes related to their pharmaceutical therapy while collaborating with other medical specialists [1]. Today, a pharmacist's main responsibility is to recognize, address, and avoid drug-related issues. Public health science seeks to "protect and improve people's and communities' health." Unlike clinical medicine, public health focuses on entire populations and communities in an effort to improve the "live, learn, work, and play" environments for people by using prevention, education, health-promoting therapies, and legislation. These goals are accomplished by an upstream approach, sometimes known as "upstream healthcare [9]." Primordial, primary, secondary, and tertiary are the four stages of prevention that public health acknowledges. Tertiary prevention aims to lessen the long-term impacts of disease, illness, injury, or poor health outcomes, whereas secondary prevention focuses on minimizing the effects of these conditions. The goal of primary prevention is to stop disease, illness, damage, or unfavorable health outcomes before they start. Primitive prevention also prevents the emergence of risk factors for harm, disease, illness, or adverse health outcomes. Public health recognizes and employs all four phases of prevention; however, secondary and tertiary prevention are seen as more downstream, and primordial and primary prevention as primarily upstream [15]. Prioritizing upstream projects, public health works collaboratively with the medical community and other stakeholders to improve downstream activities. [2]

## 2. Literature Review

The goals of public health that pharmacists practice include promoting healthy life years, improving the quality of life, and eradicating health inequities. Patient education, encouragement, and chances to

make knowledgeable health decisions can help achieve this [11]. Pharmacists conduct blood pressure, blood glucose, and memory tests, conduct brown bag session counseling, participate in health fairs, and run a variety of health education seminars in the community. In order to optimize medication use and provide services such as drug administration, pharmacists are essential (Traynor 2005). [6] Patient counseling includes providing written and verbal information on drug products, including common adverse effects, how to store and administer them, when to take them, how to schedule dosages, and lifestyle tips for improving wellness. (Vivian and Fink III 2008)[12]. These days, pharmacists offer a variety of public health services, such as weight management, National Health Service (NHS) health examinations, and smoking cessation. The majority of services reviewed under the initiative produced better quality outcomes and received positive public response, demonstrating the scheme's success. The clinical abilities of pharmacists are increasingly valued and stressed. Community pharmacies, for instance, are crucial to the early identification of cancer. Collaboration between general practitioners and community pharmacists is growing. (GPs). In addition, pharmacists oversee clinics for long-term illnesses like HIV, mental health issues, diabetes, hyperlipidemia, anticoagulation, and hypertension. Immunizations, programs to help people quit smoking, and wellness and preventative initiatives are among the additional services offered. Patient adherence, targeted drug treatment monitoring, drug utilisation review (DUR), access to full medication therapy management (MTM) services, patient counseling standards, and patient record maintenance are all areas where pharmacist-run clinics can assist. (Vivian and Fink III 2008). Nonetheless, there is still a lack of public understanding regarding pharmacy services. To enable pharmacists to assist the community, efforts in education and awareness-raising should take precedence (The Royal Pharmaceutical Society England 2013).[8] Population prevention, individual clinical care, and the promotion of health equality are the three core objectives of global health. Clinical pharmacists must provide guidance and knowledge regarding the medicinal use of medications. A collaborative approach involving community-based organizations and clinical pharmacists is being investigated as a treatment option in rural South Africa for HIV infection, acquired immune deficiency syndrome (AIDS), substance misuse, and mental health disorders [7]. The goal is to raise awareness of diabetes, nutrition, and the need for more maternity and child health services [13]. In order to increase patient safety in a pediatric HIV clinic, practices are provided to adolescents and primary caregivers in Lesotho, along with an assessment of drug storage conducted by the pharmacy. In the Mississippi Delta region of the United States, pharmacists implemented projects and made efforts to incorporate cutting-edge chronic illness treatment methods into public health policy. (Oji et al. 2013).[16]

The goal of this research is to determine how practicing pharmacists may help public health initiatives going forward by utilizing public health core skills.

### **Health policy and administration**

Policies that benefit the largest number of people in a population are prioritized from the standpoint of public health, with special attention paid to the most vulnerable members of the group. For instance, when a patient forgets to pick up their medication, pharmacists are usually the first to know. Financial limitations rather than carelessness are frequently the reason behind pharmaceutical non-adherence. Pharmacists are in a good position to speak up for these vulnerable individuals of their health system community because they are familiar with the patient characteristics as well as the larger factors that contribute to nonadherence [5]. Pharmacists can further utilize their influence to better assist these patients by influencing the economy or policy. When pharmacists band together with other medical professionals to further their interests, their voices are amplified to a large extent. Due in large part to

their close advocacy work with other professions, pharmacists are viewed as vital members of the public health team. Pharmacists are becoming essential members of accountable care organizations and patient-centered medical homes on a smaller scale. Pharmacists can make a substantial contribution to broader public policy discussions by giving legislators and regulators background data, testimony, and remarks. This will increase the scope of services that pharmacists are now able to provide, helping to address the primary care physician shortage. This new possibility was made possible by the informed advocacy of health policy-savvy pharmacists. [10]

### Roles of Pharmacist in healthcare system

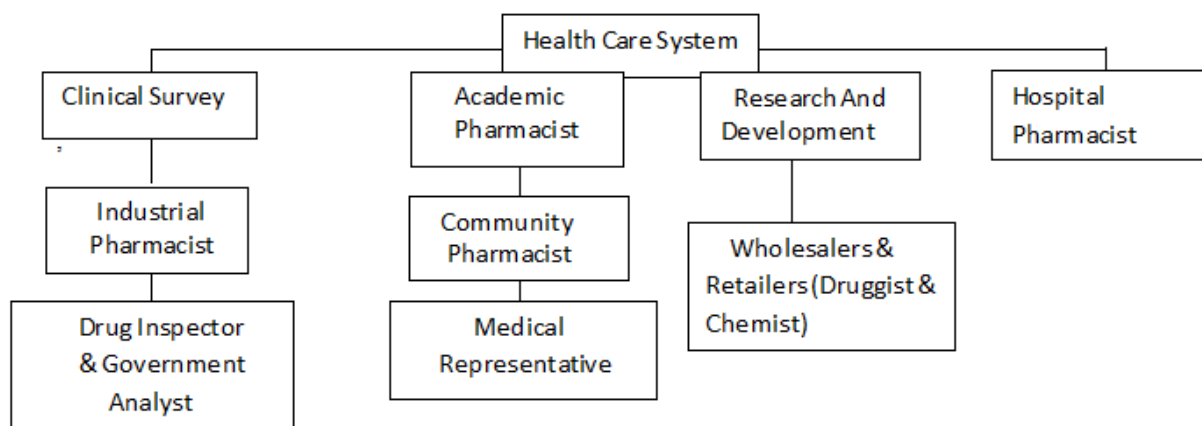


Figure 1: Roles of Pharmacist in Healthcare System

Research, student education, and training are highly valued by academic pharmacists. Pharmacists are an invaluable professional asset to the healthcare sector, and universities are a major source of these professionals. The healthcare system can benefit greatly from the efforts of pharmacists in arranging projects, events, and educational initiatives. The motivation of healthcare personnel is education. Students' foundational education and pre-registration training provide them with a comprehensive understanding of the basic ideas and procedures of the pharmaceutical sciences. Throughout their careers, they also learn how to stay up to date on developments in pharmacy and medical. They enable those who choose to further their education to pursue postgraduate study and research, and they are well-versed and proficient in all areas of medicine production, distribution, action, and usage [3]. Educational training programs help professionals stay up to date on the latest developments in their field. Because of their hands-on training in therapeutic action and the knowledge they gain about drugs, academic pharmacists are considered the entry point into the pharmacy profession. [4]

### Public Health Activities of Pharmacists

Building on two earlier APHA publications, the American Public Health Association (APHA) released a statement in 2006 outlining the pharmacist's role in public health.<sup>8, 9</sup> Through the implementation of population-based care and the reduction of health disparities and inequalities, the American Association of Colleges of Pharmacy acknowledged in 2013 the significant role that pharmacists may play in public health in its Center for Advancement in Pharmaceutical Education (CAPE) Educational Outcomes.<sup>10</sup> "Design[ing] prevention, intervention, and educational strategies for individuals and communities to manage chronic disease and improve health and wellness" is another important role that pharmacists play, according to these studies. [14]

Other actions that pharmacists can take to advance public health include the following:

- Encouraging general health.
- Creating programs for the prevention and control of disease, such as those for the treatment of chronic illnesses.
- Encouraging community and institutional initiatives to improve pharmaceutical safety.
- Participating as individuals and as members of committees overseeing public health-related initiatives in the development of health education policies and programs within their institutions that address the needs of patients, other healthcare professionals, community leaders, and the general public. They also participate in public health organizations and pharmacy organizations' chapters.
- Promoting sensible laws, rules, and public policies that address the management and prevention of disease.
- Conducting studies, educating the public, launching campaigns to spread new knowledge, and offering training courses on fundamental population health tools like epidemiology, statistical analysis, risk reduction plans, illness surveillance methods, and methodological insights.

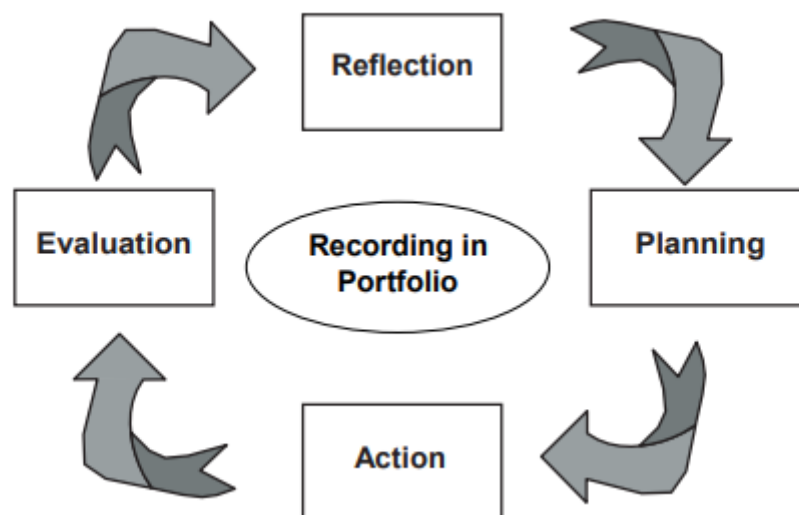


Figure-2: Different Stages of CPD Cycle

### Survey details

People who are currently taking either short-term (like antibiotics), long-term (like chronic diseases like hypertension), or lifestyle medications (like contraceptives) were asked to participate in the study and provide their comments. Since certain results are stratified by medication type, we offer the data averaged across all medication types (long term, short term, etc.). The additional information and services that three out of four respondents want Pharma to offer to help patients control their own health will be beneficial to the country. This suggests that a growing percentage of your present patients want more control over their health, as will probably be the case for most of your future patients as well. We have addressed this change in healthcare on several occasions in the past in our articles.

### Survey instrument

To achieve the study's goals, a self-completion questionnaire in English was created using the pharmaceutical care model and the unique pharmaceutical care procedures used in industrialized nations. There were a total of twenty questions on the questionnaire: two questions evaluated knowledge, and nine questions each evaluated the attitude and practice of community pharmacists. Many of these were multiple-choice, closed-ended questions where the best answer was to be chosen. The original scales' items came from content analyses of focus group discussions on pharmaceutical care and factors that influence barriers, as well as a subset of items drawn from known measures of pharmaceutical care and factors that hinder hurdles in developing nations.

### **3. Results and discussion**

Depending on the subject or area they need advice and collaboration on, pharmacists work with a range of organizations and other medical specialists. Together with nurses, case managers, social workers, radiography and lab technicians, physicians, physician extenders, and other pharmacists, they provide patient care. When assessing if medication therapy is appropriate for a patient's condition, they will also look over recent research, reference articles, and sometimes even get in touch with the drug maker. According to their self-efficacy claims, most doctors and nurses felt more competent and could focus more on their own professional responsibilities when a pharmacist was available to assist with medication-related concerns. These views had little effect on the way clinical pharmacy services were implemented within each profession.

### **4. Conclusion and future scope**

Integration of public health abilities into practice is necessary for progress in both public health and pharmacy; public health should not be seen as a distinct duty assigned to pharmacists. Pharmacy is in a unique position to make significant and distinctive contributions to community health. Pharmacists must have training in the five public health core competencies in order to make this contribution. Pharmacists are essential to preserving and enhancing public health. Pharmacists can promote public health by developing and implementing programs for disease prevention and control, enhancing medication safety procedures, assuming responsibility for opioid use, creating policies and programs for health education, advocating for pertinent and important legislation, regulations, and public policy pertaining to public health, participating in public health-related research and education initiatives, starting campaigns to spread new information, and offering training that includes fundamental population health tools. It is the duty of all pharmacists to take part in institutional, state, national, international, and local initiatives aimed at advancing public health.

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