Pharmacy and public health: A pathway forward

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Abstract

Objective: To identify a pathway forward for practicing pharmacists in supporting public health initiatives by applying the five core competencies of public health.

Summary: The pharmacist is well positioned to improve population health. Until now, increased impact of pharmacists has been based on the expansion of patient services rather than guided by a population approach to health. To increase their effectiveness and breadth of impact, pharmacists would benefit from applying the five core competencies of public health (social and behavioral science, health policy and administration, epidemiology, biostatistics, and environmental health sciences) to the practice of pharmacy. This article aims to explain how each of the core competencies applies to pharmacy practice and how pharmacists might apply public health skills in a more specific manner.

Conclusion: With increased clarity of the role of public health, and mastery of the five core competencies of public health, pharmacists can make unique and valuable contributions to the health of the public.

Keywords: Public health, population health, pharmacy practice.

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Public health planners have long recognized that pharmacists are well positioned to engage in activities that contribute to improved health of the public.[1,2] Through early reporting of adverse drug reactions, delivering immunizations, providing lifestyle education, conducting screenings, and taking a stand against the tobacco industry, pharmacists have made their mark in public health.[3,4]

Goals of the Affordable Care Act, signed into law in 2010, include expanding access to health care and providing dedicated funding for public health initiatives. Implementation of this law is now largely complete, and its provisions may provide an opportunity for pharmacists to contribute even more to improving disease prevention, wellness, and population health. For example, pharmacists who have negotiated enabling contracts can participate in the provision of free preventive services such as an annual wellness visit, screenings for cancers and other illnesses, and vaccinations. Improving the value obtained in the American health system will come from improving the health and well-being of communities in addition to expanding clinical care.[5]

Pharmacists' current public health involvement remains limited or is not well documented.[6] Some of the barriers include lack of time, working in a large pharmacy, and lack of support from one's supervisor.[7] Low self-efficacy and vague concepts of what public health means also limit the involvement of pharmacists in public health activities.

In this article, we explore the potential for practicing pharmacists to participate more fully in public health initiatives and improve the health of the populations they serve. To inform this discussion, we conducted a search in PubMed and International Pharmaceutical Abstracts using the keywords *pharmacy* and *public health* in the title or abstract. This search yielded 192 and 229 references, respectively. From this search, we identified and reviewed 57 papers relevant to the topic of collaboration in pharmacy and public health. This article presents a summary of key concepts from our review of these articles, but not all are cited here.

At a Glance

Synopsis: This commentary, by two individuals who have worked at the interface of pharmacy and public health, considers ways that public health can be applied in pharmacy practice. Although the potentially important impact of pharmacists on public health has been recognized for some time, the relationship between pharmacy practice and public health has not been well defined. Additionally, a pathway leading to a more ideal application of public health in pharmacy practice has not been developed. The authors propose using the five core competencies of public health as the pathway forward for public health in pharmacy: social and behavioral science, health policy and administration, epidemiology, biostatistics, and environmental health sciences.

Analysis: *Historically, pharmacists have been accessible, community-based health professionals. Many factors are causing pharmacists to increase their scope of practice and influence in the health of populations. Guiding this development forward along the lines of the five core competencies of public health may provide the clarity and specificity needed to make this process more tangible and measurable.*

A map to guide the way

Eight years ago, the American Public Health Association (APHA) endorsed the role of pharmacists in public health.[8] One year later, standards were implemented requiring schools of pharmacy to educate students to provide public health services.[9] However, the concern of the APHA—"the public health role of the pharmacist is yet to be clearly defined, broadly recognized and sufficiently promoted"—has not been thoroughly addressed.

The time is ripe to clarify the role of public health within a pharmacy practice context. Many models and frames could be used to conceptualize this relationship, but we believe that pharmacists will, while continuing to practice traditional pharmacy, also integrate the five core competencies of public health into their work: social and behavioral science, health policy and administration, epidemiology, biostatistics, and environmental health sciences.[10] This would be a form of enhanced-value pharmacy practice.

For pharmacists to have a more substantial public health impact, they will need to extend their perception and practice of public health from providing clinical services that affect their communities, such as lipid screening and immunizations, to increasing their mastery of the five core competencies of public health. Consider the following ways of applying these competencies in community and other types of pharmacies.

Social and behavioral science

Compared with pharmacy and other medical disciplines, public health has the key feature of focus on the health of a population of people. A population is a group of people with some shared characteristic. The population may be considered as the individuals frequenting one's pharmacy, the population from which those individuals came, or everyone in the community regardless of their relationship with a specific pharmacy.

By definition, populations have shared social and environmental influences. These influences may be positive, but frequently populations have influences such as poverty, weak social support, unsafe communities, poor