

VIEWPOINT

The Importance of Public Health in Pharmacy Education and Practice

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Professional and governmental organizations continue to acknowledge the profound impact of pharmacists on public health,¹⁻⁵ and the academy is no exception. It has long recognized the importance of preparing pharmacy students to assume roles in public health. Topics related to public health have been a fundamental component of each iteration of the Center for the Advancement of Pharmaceutical Education (CAPE) Educational Outcomes.⁶⁻⁹ For example, in the 2013 Outcomes, 1.1 (Learner), 2.1 (Patient-centered Care), 2.3 (Health and Wellness), 2.4 (Population-based Care), 3.2 (Educator), 3.3 (Patient Advocacy), 3.5 (Cultural Sensitivity), 3.6 (Communication), 4.1 (Self-awareness) and 4.2 (Leadership), support the need to include public health concepts in the doctor of pharmacy curriculum.⁹

In addition, the American Association of Colleges of Pharmacy (AACP) is a member of the Healthy People Curriculum Task Force, convened by the Association for Prevention Teaching and Research, which developed a Clinical Prevention and Population Health Curriculum Framework.¹⁰ Moreover, many pharmacy faculty members are involved and interested in public health, as evidenced by the robust membership in the Public Health Special Interest Group (SIG) of AACP. The group is currently the sixth largest among AACP's 21 SIGs. Eight active subcommittees comprise the SIG, with areas of focus that include tobacco control, emergency preparedness and response, caring for the underserved, and global public health pharmacy.¹¹

In this theme issue of the *Journal*, we present five diverse examples of ways colleges and schools of pharmacy are engaging their students and faculty members in public health inside and outside of the classroom. We include four areas where pharmacists may contribute to public health activities and principles, but enumerable examples exist beyond these. Also contributing to the

issue is Georges Benjamin, MD, executive director of the American Public Health Association (APHA), which has one of the most comprehensive policy statements outlining opportunities for pharmacists in public health.³ A Pharmacy Special Primary Interest Group also has been recently established within the organization.^{12,13} Importantly, Benjamin distinguishes between public health and population health, the latter a term also used in the CAPE 2013 Outcomes and Accreditation Council for Pharmacy Education (ACPE) 2016 Standards.^{9,14} Pharmacists may contribute to both, in that public health may be considered local activities of a public health department to improve health, and population health may be considered the activities (medical care or public health activities) focused to improve the health of populations.

In two articles, pharmacy faculty members provide examples of efforts that consider emergency preparedness, an area that public health organizations such as the National Association of County and City Health Officials have highlighted as needing pharmacy involvement.¹⁵ This topic has been specified as a necessary entry-level competency for pharmacists.¹⁴ For example, it is critical that pharmacists consider how individuals obtain their medications during emergencies when pharmacies may be flooded or transportation limited. Ford and colleagues share the results of a comprehensive analysis of pharmacy legal documents from US states and commonwealth territories to estimate the degree of pharmaceutical emergency preparedness, and Hannings and colleagues provide a guide to designing, implementing, and assessing an introductory pharmacy practice experience focused on emergency preparedness. Based on their findings, the profession may need to focus explicitly on this important public health activity, particularly in areas with a high risk of devastating events such as earthquakes, tornados, and floods.

The remaining three papers present the variety of activity in which pharmacists may participate in public health and generally represent the theme of caring for underserved or vulnerable populations. Potential roles

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for pharmacy students as tuberculosis screeners are explored by McKennon and Arnold, significant because it represents a novel screening certification specifically created for and delivered to pharmacy students. Clarke and colleagues present the effect of a poverty simulation exercise on pharmacy students' attitudes toward poverty, an important consideration as pharmacy students must be familiar with social determinants of health.⁹ This type of activity is important for pharmacy students in terms of CAPE Outcomes such as 2.1 (Patient-centered Care), 2.3 (Health and Wellness), 2.4 (Population-based Care), 3.5 (Cultural Sensitivity), 3.6 (Communication) and 4.1 (Self-awareness).⁹ It can be easy to find oneself in a judging mode after several years of practice—activities such as this may ameliorate such attitudes. Finally, Karwa and colleagues detail the construct and impact of an international residency program in global health, which is increasingly becoming a national priority^{16,17} and is included in Healthy People 2020 as a new topic area.¹⁸ Access to medications and their best use is a critical need, and pharmacists can help in this regard.

The academy must continue to ensure that students are well-equipped to assume roles in public health and population health management. The papers presented here provide specific examples that can be implemented. However, the topics are not exhaustive; there are many other ways and opportunities for schools of pharmacy to incorporate principles of public health in didactic and experiential curricula, co-curricular or extracurricular activities, and postgraduate training. For example, members of the Public Health SIG have assisted faculty members at schools of pharmacy to adopt official policies to reduce the health burden associated with tobacco.¹⁹ Recent SIG webinars have explored subjects such as expedited partner therapy, quality improvement, and interprofessional collaborations in public health.²⁰ As faculty members continue to develop and revise programs, especially in light of the updated CAPE Outcomes and ACPE Standards, we hope that this theme issue calls attention to the importance of public health in pharmacy education and practice. We also hope that faculty members who do not yet participate in the AACP Public Health SIG but who provide instruction or have an interest in public health consider joining the group in order to facilitate a continued sharing of ideas and strategies to best prepare pharmacy students in these areas.

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