What Can Be Done to Help the Pharmacy Profession Advance Globally?

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While well-resourced pharmacy schools are able to update their curricula, maintain adequate staffing levels and introduce contemporary teaching methods, many schools in poorly resourced countries struggle to deliver quality programs. What can be done to improve academic programs and advance the profession globally? Sharing may be a solution. Pharmaceutical care has been accepted worldwide and acknowledged as a means for pharmacists to use their knowledge, skills and availability to improve patient outcomes.1,2 Pharmaceutical care and team-based care that include the patient along with their other health care providers is designed to promote health, prevent disease, and ensure that drug therapy regimens are safe and effective.3,4 Pharmacists have embraced the concept in its broadest sense and have extended their scope of practice such that, in many countries, they are now able to administer vaccinations, play their role in clinical decision-making and patient-care teams, and dispense independently (or in a supplementary capacity).5

Practice change of this magnitude requires appropriate changes in education. Over the past few decades, there have been significant advances in pharmacy education in many countries aimed at improving the standard of graduates and their ability to provide a wide range of innovative patient care services. Advances in pharmacy education have occurred in curriculum design and pedagogy that include student-oriented teaching methods and increased clinical and experiential training and assessment.3 In many countries, however, pharmacists are still being taught with outdated curricula and largely didactic teaching methods. The emphasis is on science, drug production, and some clinical content with little emphasis on preventive health.6 In a large part, this may be due to inadequate financial support from the government, combined with the difficulty in maintaining appropriate levels of adequately qualified academic staff.

In many under-resourced countries, there is an acute shortage of health care workers – doctors, nurses, pharmacists, dentists – and a largely under-funded public health care system.7 Pharmacists are essential to ensuring a quality supply chain for medicines, for promoting the cost-effective use of scarce resources, and for providing public health programs. Adherence to treatment regimens, promoted by pharmacists, is critical to the success of a wide variety of public health programs aimed at improving outcomes for diseases such as malaria, HIV-AIDS and TB.

The pharmaceutical services that pharmacy graduates are expected to provide need to be considered when designing the curricula to ensure that they meet those needs and are “fit for practice.”8 Local graduates are focused on meeting basic local requirements for maintaining a quality medicine supply chain that addresses patient needs. Providing pharmacists with advanced skills would enable them to fill a “needs gap” in patient care and improve health care standards. Clinical pharmacy services aimed at encouraging the quality use of medicines could help improve patient outcomes and contribute to reducing health care costs. Low numbers of pharmacists have largely restricted professional involvement to managing the supply of medicines in hospitals and to a limited role in community pharmacy. Pharmaceutical care, in its broadest sense, may not be possible in countries where there is a severe shortage of pharmacists and where available pharmacists must concentrate on supply chain management. Increasing the number of pharmacists is necessary before practice change and improved health outcomes can be realized.

Providing for greater numbers of pharmacy graduates and an increased level of clinical and experiential training requires more pharmacy academics, advanced teaching practices, more clinical teachers and quality training sites. This assumes that modern/advanced curricula, appropriate teaching facilities and teaching materials and academic staff are available. The majority of pharmacy schools in poorly resourced countries are underfunded and understaffed. Educating or recruiting appropriately qualified
academics is neither simple nor easy, and is certainly not a quick solution. Curriculum change is time-consuming and difficult as new courses must be designed and then approved by university and regulatory bodies before implementation can occur. Clinical pharmacy may not be introduced in sites where there is barely sufficient pharmacy workforce to maintain appropriate medicine supply for inpatient and outpatient services. The difficulty of providing adequate and appropriate clinical sites for undergraduate experiential education, internships and residencies limits the ability of new graduates to strengthen their competency. There are many schools that cannot keep pace with educational and practice change, and for different reasons, need assistance to introduce contemporary curricula and teaching methodology, educate academic workforce, and provide clinical experience that may not be possible in the local setting.

In other countries, the structure of the health system and the traditional roles of doctors and pharmacists may be additional barriers to practice change. The ability to provide a comprehensive range of pharmacy services may vary and be restricted by local laws or a shortage of qualified pharmacy personnel. Many innovative services may not be allowed by governments or sanctioned by professional bodies. Clinical roles may be more widely accepted in hospitals and this may be a driver for change in community settings.

Well-resourced schools continue to make significant curricular changes that drive professional practice change. They have the ability to maintain a contemporary curriculum using modern student-centered teaching methods. Is there a way that these schools can partner with under-resourced schools to share expertise, curricula, and assist with training students? Some schools already are committed to this goal and share their programs, expertise and resources to enable others to use developed resources. Sharing does not diminish the standard of education provided by the donor school/academic, but may save immeasurable time and effort in under-resourced schools and enriches existing programs. Sharing websites are available and could be easily used to provide digital assistance and communication, sharing ideas and resources.

Exchange programs could be established between schools to enable countries with few/no appropriate experiential sites to have students complete clinical experiences outside their home countries. Some advanced countries allow students to undertake practice experiences overseas. Could this work both ways with some funding assistance? Programs, such as the FIP Pharmabridge program, are available for established practitioners, including junior academics. This type of assistance could be expanded, with funding assistance, to enable more academics to develop skills and expertise that would raise the standards of education, providing pharmacy graduates with expanded skills to meet local health care needs.

Continuing professional development (CPD) is mandatory in many countries to ensure that pharmacists maintain their knowledge and skills in their area of practice and post-graduate courses are available to develop new knowledge and expertise. It is critical to the continued evolution of the profession that appropriate CPD opportunities exist. How this can be provided in many countries is a problem, but the solution may lie in the use of technology and sharing of existing online resources developed in well-resourced and regulated countries.

Partnership and sharing is a workable solution that can enable the profession of pharmacy to advance globally. Well-resourced schools have a responsibility to share knowledge and resources to assist all pharmacy schools to have access to modern curricula and appropriately trained academic staff so that graduates, the profession and the public can benefit from a competent pharmacy workforce that meets local needs.

REFERENCES