

VIEWPOINTS

Oversupply and Under-resourced: The Global Context of Pharmacy Education

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There are growing concerns over the oversupply of pharmacists amid continued growth in the pharmacy education sector in the United States.¹ Brown predicts that 21 US states will increase the number of pharmacy graduates by 100% or more from 2001 to 2016, with no sign of a slowdown and a declining demand in the market.² The author paints a bleak picture and argues that the profession should not simply allow market forces of survival of the fittest to correct the imbalance. However, there appear to be encouraging signs of expansion of the profession. For example, the broadened and well-defined role of the clinical pharmacist, not just in the hospital setting but in the community; the range of the profession in seeking traditionally hard-to-reach communities and less desired nightshift work; task-shifting from the medical profession; and a comeback of the compound pharmacist.³ The US situation does not appear to be unique, with a proliferation of both pharmacy schools and pharmacy graduates reported in other countries such as the United Kingdom and Canada. In response to this, the United Kingdom is examining a cap on student numbers.⁴

There are, however, vast differences in the pharmacy workforce globally. The International Pharmaceutical Federation Global Pharmacy Workforce Report (2009)⁵ identified sub-Saharan Africa as the area with the smallest proportion of pharmacists. Although the report did not include an analysis of schools of pharmacy or other pharmacy education programs, there appears to be a similar trend in the educational output. For example, the southern African countries Botswana, Namibia, and Swaziland are creating pharmacy programs for the first time.⁶ These countries share similarities besides their geography and disease profiles in that they are all low-population countries. They also all neighbor the Republic of South Africa where pharmacy education has long been established with a relatively healthy pharmaceutical

industry sector. This might also explain why pharmacy education has been slow to take off given the huge investment required to initiate such programs when it may make more economical sense to train pharmacists in neighboring or wider countries. A report by Brock et al,⁷ for example, suggested that an increase of 50% of pharmacists to steady state may be sufficient to meet the pharmaceutical care demand in Namibia. While this may seem a significant challenge, with the number of registered pharmacists in Namibia hovering at about 200 (a professional group less than the number of pharmacy graduates predicted for 2016 in 25 US States), an output of 20-30 pharmacy graduates per year over a decade may be all that is necessary. In this setting, there is little room for competition and little room for significant growth in the education sector except to consider international students, postgraduate programs, continuing professional development, and other educational programs such as technician training. This trend between oversupply in the “developed” setting and undersupply in continents such as Africa is not truly a dichotomy. In Ethiopia, for example, there were reported to be upwards of 12 pharmacy education programs,⁸ some of which with support from US institutions.⁹ With a population of over 90 million people, this may not be surprising but could also result in government initiated rationalization to avoid oversupply and/or a loss of quality in the profession.

While there are some stark differences between pharmaceutical care needs in different settings and the resultant educational strategies (for example, the clinical emphasis of North American education vs the emphasis on the pharmaceutical industry in some South African courses), there are also some lessons to be learned by policymakers and educationalists from the global trends observed in pharmacy education. Observing how educational output can change the profession might call some to question whether the tail wags the dog.

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