

## COMMENTARY

### Is the Global Pharmacy Workforce Issue All About Numbers?

Ifunanya Ikhile, BPharm,<sup>a</sup> Claire Anderson, PhD, BPharm,<sup>a,c</sup> Simon McGrath, PhD,<sup>b</sup> Stephanie Bridges, PhD, BPharm<sup>a</sup>

<sup>a</sup> School of Pharmacy, University of Nottingham, Nottingham, United Kingdom

<sup>b</sup> School of Education, University of Nottingham, Nottingham, United Kingdom

<sup>c</sup> International Associate Editor, *American Journal of Pharmaceutical Education*, Arlington, Virginia

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By 2030, there will be a global shortage of about 18 million skilled health care workers, including pharmacists.<sup>1</sup> This is the largest shortage in history and is expected to cause a significant gap between the availability of health care services and that required to achieve universal health coverage and other global health goals. This long-running challenge shows no sign of abating and is the major driver behind the growing focus on numbers: how to increase the number of health care workers, how to admit more health care students, and how to introduce new cadres of health staff, all in an effort to bridge this workforce gap.<sup>2</sup> The crucial role that all health workers play is the reason behind the slogan, “There is no health without the health workforce.”<sup>3</sup>

In many developing countries, pharmacies are often the first port of call for health care advice and services because they are located in residential areas, provide services at a lower cost, and are readily accessible since no prior appointment is required to see a pharmacist.<sup>4</sup> Hence, pharmacists as health care professionals make a crucial contribution to the health status of such countries.

While the numbers are important, the quality of the pharmacy workforce is especially critical considering that the countries with the highest deficits are also often those with the lowest capacity for training pharmacists. Hence, the move to increase pharmacy workforce numbers has had inadvertently negative quality consequences to pharmacy students’ education in many low- and middle-income countries, where universities are often stretched beyond capacity and educators overburdened.<sup>5</sup>

Funding is a major challenge in most developing countries and is the root cause of many other issues troubling the education sector. Increasing student numbers has significantly elevated the cost of training in many such

countries – a cost which is borne by both government and citizens in public and private universities, respectively. With public universities dependent on meager government funding, there is less money available to be spent per student for quality training and education. This therefore negatively affects the quality of education that can be provided.<sup>6</sup>

Emigration is a major contributor to the deficit in workforce numbers in many developing countries, causing a “brain drain” where skilled health workers and professionals travel to other countries seeking better conditions of employment and a better quality of life.<sup>7</sup> In Nigeria, for example, there are approximately 20,000 pharmacists registered with the Pharmaceutical Council of Nigeria (PCN), making it a country with one of the lowest pharmacist-to-population ratios of about 1:10,000, far from the recommended 1:1,000 ratio by the World Health Organization (WHO).<sup>8</sup> This low ratio is caused partially by the relatively high and growing number of Nigerian pharmacists who choose to practice abroad, mostly in Europe or America, seeking more favorable conditions of living and employment, and thereby depriving the population of expertise in the management of drug-related problems across all sectors. In 2014, about 6,000 registered Nigerian pharmacists were in diaspora.<sup>8</sup>

How can these pharmacists stay in their home countries where they are crucially needed? Can community health workers successfully bridge the gap partly created by this exodus? How can migration be beneficial to both host and exit countries? Such questions are left unanswered as the trend continues.

Some pharmacists, rather than leave their countries, change professions, demotivated by the sense of loss and frustration when faced with the realities of practice.<sup>9</sup> The feeling of having wasted years, money, and effort in university training pales in comparison to the desperation for better conditions of practice. Health professionals in several countries have engaged time and again in strikes often related to remuneration and earned allowances.<sup>10</sup>

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**Corresponding Author:** Claire Anderson, School of Pharmacy, University of Nottingham, University Park, NG7 2RD, Nottingham, United Kingdom. Tel: +44-115-951-5389. E-mail: [Claire.Anderson@Nottingham.ac.uk](mailto:Claire.Anderson@Nottingham.ac.uk)

The government's perception of health as a cost and not as an investment may be partly responsible for the poor financing of health care. Also, returns from health care in these countries may be low, given that the wealthy population with funds to spend on health care prefer to patronize other countries for these services.

Within health centers, funds are diverted and poorly accounted. Most health workers are underpaid and many go for months without pay. Rural pharmacy practice in many such countries has less investment and few city-trained pharmacists wish to take up employment in such areas. This leads to within-country maldistribution and a geographical disparity in access to essential medicines.<sup>11</sup> Similarly, between countries, there is little or no incentive for pharmacists in high-income countries to practice in low- and middle-income countries where the workforce deficit is worse.

It is evident that there are fundamental issues that need to be addressed which, if left unhandled, will lead to a vicious cycle where newly trained pharmacists continue to leave for other professions or countries. Despite awareness of these issues, through studies and discussion, no workable solution has been found or implemented. Since results can only be seen after action, implementation of research recommendations must be considered to meet global health goals by 2030 and beyond.

The issue of workforce numbers clearly has no easy solution. Interim measures should be sought to maximize efforts and productivity of pharmacists and other health care professionals who are currently available to meet local health needs. Such measures could include: upgrading education, providing more education and placements in rural areas, ensuring education is relevant to practice, and training of health workers and available personnel to

bridge the workforce gap. This may be the only way to optimize access to essential medicines in the meantime.<sup>12</sup>

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