The journey of health professions education in Africa

Education is the critical entry point for the health workforce, Elsie Kiguli-Malwadde and Marietjie De Villiers write

Considerable attention has been focused on the apparent shortage of health workers in countries with the poorest health indicators, and the potential impact of the shortage on countries' ability to fight diseases and provide essential, life-saving interventions. Health worker shortage in sub-Saharan Africa has many causes, including past investment shortfalls in pre-service training, international migration, career changes among health workers, premature retirement, morbidity and premature mortality. Education is a critical entry into the health workforce. It is well known that the health workforce is the driving force of the healthcare delivery systems. It has been reported that there is a critical global health workforce crisis involving serious professional shortages, an imbalanced skill mix, and an uneven geographical distribution of health professionals. This crisis has left millions in low- and middle-income countries without access to health services.[1] There are 230 medical doctors per 100,000 people in the USA, but only 1.1 per 100,000 in Malawi. Overall, sub-Saharan Africa has a total professional health workforce of approximately 10 per 100,000 populations, which is the lowest ratio of any region in the world and yet it has the highest disease burden.[2] These statistics reflect the enormous need for health workers in Africa.

The late Cameroonian physician GL Monekosso noted that the first half of the twentieth century saw the effective installation of the Europeans in their African colonies. No medical doctors were trained in sub-Saharan Africa during this period; emphasis was on training medical assistants, nursing aids and field assistants to work under qualified European doctors. The Africans provided basic healthcare to fellow Africans. Benevolent missionaries did their best in the rural areas and the locally trained medical assistants developed a high level of skill in the management of local health problems, but could not practice anywhere else.[3]

Monekosso also noted that in independence period of 1950 to 1980, health was an instant priority, and the new African governments realised the great need to train health professionals. They started to produce fully qualified doctors 'Made in Africa'. The schools then were well-planned, adequately staffed, and well-equipped. The examples included the University Medical Centers in Dakar, Ibadan, Makerere, Khartoum, Leopoldville and Salisbury, to mention but a few. These mother institutions provided the models and the foundation staff for new institutions in Africa. There were about 30 medical schools by 1980. There was valuable support from national governments and development partners to the institutions.[3]

In the last thirty years, there has been a rapid growth of health professions education and many new schools have been created. For many, the gestation period has been short: as little as months or a year. Some have been opened 'illegally' – without government agreement. At the same time governments have felt the need to expand publicly owned medical schools, imposing intakes of 200 or more per class. However, this has not been without challenges such as overstretched physical facilities and shortage of staff.[3]

Education and health systems

The education system plays an important role in building strong health systems and there is strong evidence linking health professional education and health outcomes. Health institutions are like factories; a good factory will produce good products. A World Health Organization report on *Scaling up Medical and Nursing and Midwifery Education* confirms that 'Insufficient collaboration between the health and education sectors as well as weak links between educational institutions and health systems can create a poor match between medical education and the realities of health service delivery'.[4] The inseparable linkage between service, teaching, and research as part of knowledge, skills, and attitude transfer in professional development has received overwhelming endorsement. These systemic constraints perpetuate skill flow away from under-served communities that bear the burden of poor health and force institution to choose between global excellence and local responsiveness in skills and competence of medical trainees.

Three reports highlight the critical need for close collaboration between the education systems and the health systems: the Sub-Saharan African Medical Schools Study,[5] which highlights the emerging role played by the private sector in Health Work Force (HWF) education and the need for closer supervision by both sectors working in tandem; the study on Social Accountability of Medical Education, which promotes the inculcation of attitudes and skills to enable graduates to work in their own communities as professionals;[6] and the Medical Education Partnership Initiative (MEPI), which reported that sustainability of the MEPI innovations was assured by enlisting the support of universities and ministries of education and health in the MEPI countries thus enabling integration of the new programmes into the regular national budgets.[7]

Other studies and commissions both globally and in Africa have emphasised the need for major reforms of health professions education. These include: the Global Health Workforce Alliance Task Force on Scaling up

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Education and Training;[8] the Commission on Education of Health Professionals for the 21st Century; and the Lancet Commission.[9] These independent initiatives adopted a global perspective seeking to advance health by recommending instructional and institutional innovations to nurture a new generation of health professionals equipped to address present and future health challenges.

There are numerous challenges facing health professions education in Africa, including inadequate teaching of laboratory disciplines, insufficient supervision of clinical experiences, and inability to ensure community based experiences due to lack of logistics.[3] The curricula are fragmented, outdated and static, producing ill-equipped graduates;[9] there is lack of accreditation systems for training programmes and a mismatch between the number of medical students trained and the number of doctors the government can employ contributing to physician emigration and inadequate or no post-graduate education.[5]

There is need for more collaboration between ministries of education, ministries of health, civil societies, and non-governmental organisations to better match professional education and health service delivery. It is imperative to engage stakeholders within and outside of government; establish regulatory bodies, such as professional councils to assure quality of medical schools; and standardise competencies and skill measurement tools. This requires establishing and supporting the necessary governance structures for inter-sectoral coordination and collaboration to plan, implement and monitor health workforce development and retention at the country level. There is a need to increase infrastructure investments to facilitate better quality education, improve diffusion of information among schools, and provide more useful data for self-study by institutions. Developing and expanding national programmes for health professions education will be essential to building quality health work force cadres in every country to promote excellence and retention.

Looking at MEPI, many of its outcomes could be scaled up to improve health professions education in Africa. These include and are not limited to partnerships characterised by engagement of multiple stakeholders within the countries especially the vice-chancellors, professional associations and councils, the ministries of health, education and outside the country like universities leading to north-south and south-south collaboration and widening the networks. Joint learning was recognised as critical to success. Technical working groups that were established as communities of practice were a great innovative success. Innovations in teaching and learning like e-Learning, supporting curriculum reviews-competency-based, establishment of medical education units, building faculty development programmes, building capacity for locally relevant research through research support centres, popularising community-based and decentralised training as well as development of skills labs. Sustainability of these achievements is important and is one of the major thrusts taken up by the African Forum for Research and Education in health (AFREhealth) which is a new multidisciplinary organisation that has been formed out of MEPI and NEPI. This new organisation is committed to developing health professionals' education and research in Africa, sharing best practices, and reducing health disparities, building on the MEPI and NEPI work.[7]

Although scaling up of health professionals and educational programmes as a way of improving health professional education is urgent and crucial in Africa, increasing the number of graduates is not enough. More focus should be put on quality and quantity of health professional that are skilled, experienced, competent, and ready to work in the changing environment and serve in communities where they are needed. It is crucial to raise the quality and relevance of education and training of health workers in the region to the highest standards. However, this can only be done by taking into account Africa's unique epidemiological context, the public health threats and their underlying cultural, social and economic determinants.

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