

Health Workforce Development with a Focus on CVD in Zimbabwe

CHRIS Program, a Medical Education Partnership Initiative

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The health workforce challenge in sub-Saharan Africa has gained prominence because of the pivotal place that it plays in health care delivery and development in the continent [1–4]. Several workshops and conferences by the WHO and other interested global partners have been held to address this challenge. Unless this serious short fall in the healthcare workforce is addressed, global health disparities between the developed and the developing world will continue to hamper the implementation of plans that are resourced and funded through well-meaning initiatives. The Medical Education Partnership Initiative (MEPI) has been lauded as an intervention that begins to address this challenge [1,2]. Zimbabwe, one of the countries with a serious health workforce shortage, is a beneficiary of this initiative.

During the decade from 1999 to 2009, Zimbabwe suffered a serious economic downturn which seriously affected the training of all health professionals including doctors. In 2009, the vacancy rate of doctors in the Ministry of Health institutions was as high as 62% [5]. Similarly, at the University of Zimbabwe College of Health Sciences (UZCHS), the only medical school in the country, the faculty vacancy rate in some departments was as high as 80%. Postgraduate training, the source of future specialists and faculty, fell to insignificant levels, while at the undergraduate level student performance fell dismally with alarming failure rates.

THE MEDICAL EDUCATION PARTNERSHIP INITIATIVE (MEPI)

The Medical Education Partnership Initiative (MEPI), a collaborative funding mechanism between the US National Institutes of Health (NIH) and the President's Emergency Plan for AIDS Relief (PEPFAR), awarded \$130 million towards the improvement of medical education and research capacity at 13 medical schools in sub-Saharan Africa [1,2]. This initiative is designed to improve the quality of training of doctors, to encourage the conduct of relevant health research, and to improve health worker retention of in sub-Saharan Africa. MEPI is a welcome and innovative initiative, which if implemented well will provide a roadmap and a template of how to address the shortfall in health workforce in sub-Saharan Africa. The University of Zimbabwe College of Health Sciences (UZCHS) is a beneficiary of 3 MEPI grants amounting to \$13.6 million for the period 2010 to 2015. The grants consist of programmatic awards and smaller linked awards (each a maximum of \$2.5 million over 5 years) to address areas that are not included in the PEPFAR health priorities.

The two linked awards granted to the UZCHS address cardiovascular diseases and mental health, respectively. The MEPI grant comes at an opportune moment to begin to address some of the dire needs in human resources for health in the country.

The Zimbabwe MEPI programmatic award, NECTAR (Novel Education and Clinical Trainees

and Researchers) program, will serve as a backbone to the two linked awards, CHRIS (Cerebrovascular, Heart Failure, Rheumatic Heart Disease Interventions Strategy) and IMHERZ (Improving Mental Health Education and Research in Zimbabwe). NECTAR will address issues of curriculum development, modernizing teaching methods, and improving internet communicating technology. Central to this initiative is the collaboration with partners in the USA (University of Colorado, Denver and Stanford University), South Africa (Cape Town University), and the United Kingdom (University College London, King's College and Bristol University).

CHRIS PROGRAM

Cardiovascular disease mortality has shown a steady decline in high income countries while the low and middle income countries have shown increasing trends [6,7]. Chronic non communicable diseases account for 60% of all deaths globally; 80% of these deaths are in low and middle income countries [6,7]. The CHRIS award will address human resource constraints and training needs in cardiovascular disease at UZCHS. The intention is to use the grant as a platform to achieve a number of objectives. Zimbabwe has three physicians with training in cardiology; two adult and one pediatric. With a high burden of cardiovascular diseases there is a dire need of physicians trained in adult and pediatric cardiology and other disciplines dealing with cardiovascular diseases.

The objectives of the CHRIS program are (1) to integrate a focused cardiovascular curriculum into the existing medical school curriculum including application of this curriculum in rural communities, (2) to initiate a cardiovascular clinical scholars program to provide highly motivated graduate and

undergraduate students with the knowledge and skills necessary to become effective academic physicians in cardiovascular disease, (3) to engage UZCHS undergraduates, postgraduates and faculty in research methodology including survey methods in rural communities, and (4) to create an academic environment at UZCHS through the establishment of a research support center and a teaching and learning center to champion training in research competency and modern teaching methods. The whole program has been crafted so that it is embedded within the existing UZCHS and wider university structures to ensure sustainability after end of the grant period. The program will be monitored and adjusted to achieve the intended objectives.

CONCLUSIONS

The CHRIS award will enable the UZCHS to improve cardiovascular disease training, including improvement in research competence. Using the platform provided by the programmatic NECTAR award and the CHRIS awards as well as the partnerships afforded by the MEPI award, the college will use other mechanisms for the formal training of cardiologists, neurologists and other specialists in cardiovascular disease to ensure that undergraduates, graduates and faculty are beneficiaries of the objectives of this initiative.

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