

Enhancing Formal Educational and In-Service Training Programs in Rural Rwanda: A Partnership Among the Public Sector, a Nongovernmental Organization, and Academia

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Abstract

Global disparities in the distribution, specialization, diversity, and competency of the health workforce are striking. Countries with fewer health professionals have poorer health outcomes compared with countries that have more. Despite major gains in health indicators, Rwanda still suffers from a severe shortage of health professionals.

This article describes a partnership launched in 2005 by Rwanda's Ministry of Health with the U.S. nongovernmental organization Partners In Health and with Harvard Medical School and Brigham and Women's Hospital. The partnership has expanded to include the Faculty of Medicine

and the School of Public Health at the National University of Rwanda and other Harvard-affiliated academic medical centers. The partnership prioritizes local ownership and—with the ultimate goals of strengthening health service delivery and achieving health equity for poor and underserved populations—it has helped establish new or strengthen existing formal educational programs (conferring advanced degrees) and in-service training programs (fostering continuing professional development) targeting the local health workforce. Harvard Medical School and Brigham and Women's Hospital have also benefited

from the partnership, expanding the opportunities for training and research in global health available to their faculty and trainees.

The partnership has enabled Rwandan health professionals at partnership-supported district hospitals to acquire new competencies and deliver better health services to rural and underserved populations by leveraging resources, expertise, and growing interest in global health within the participating U.S. academic institutions. Best practices implemented during the partnership's first nine years can inform similar formal educational and in-service training programs in other low-income countries.

The World Health Organization's 2006 annual report estimated a global shortage of 2.4 million health service providers and of 1.9 million health management and support workers affecting primarily low-income countries.¹ Such a shortage is associated with poor health outcomes and is, in great part, due to the inability of low-income countries to increase the size, to diversify the skills, and to improve the competency of the local health workforce through formal education and in-service

training.^{1,2} Notably, Sub-Saharan Africa suffers from 25% of the global burden of disease, yet is served by only 4% of the global health workforce.¹ Health professionals with adequate clinical and programmatic competencies are therefore essential to address the region's evolving health challenges.^{3,4}

Rwanda: Health, Health Workforce Shortage, and Vision 2020

Rwanda, which is about the size of the state of Maryland and has a population of approximately 11 million, is Sub-Saharan Africa's most densely populated country and is in need of a large and well-trained health workforce. The ratio of health professionals to the general population in Rwanda in 2011 was only 0.72/1,000,⁵ well below the World Health Organization-recommended target of 2.3/1,000.¹ Additionally, the majority of

Rwandan physicians and nurses do not have formal postgraduate education, and although opportunities to specialize are expanding, they remain limited. Further, insufficient and outdated infrastructure and equipment, along with a shortage of lecturers and clinical mentors, have led to gaps in training and quality.

To begin to improve health outcomes and strengthen health service delivery in Rwanda, the government has prioritized economic and human development and has incorporated a strong equity agenda into the national development plan (published in 2000), known as "Vision 2020." This plan has paved the way for Rwanda's subsequent development achievements including robust economic growth and some of the steepest declines in premature mortality in recent history.⁶ A core component of this vision is the establishment of a large, skilled, and diverse health

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Acad Med. 2014;89:1117-1124.

First published online June 20, 2014

doi: 10.1097/ACM.0000000000000376