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BRIEF COMMUNICATION

Healing the Schism: Medicine and Public Health in Pakistan

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A B S T R A C T

Background: The relationship between medicine and public health has a long and complex co-evolution. In developing countries where the health needs are greatest and resources are few, this relationship is of critical importance.

Development of medicine and public health at the Aga Khan University: This paper provides a case study of the development of the relationship between medical and public health at the Aga Khan University (AKU), a leading educational institution in Pakistan, which was founded with a vision of reuniting medicine and public health. Rapid growth and development have led to successful medicine and public health programs, but have fallen short in creating the synergies needed to address the population health problems of the country.

The way forward: In a twenty-five year history of strong growth and development, the AKU has recreated the schism that marked US institutional development in the 20th century, despite strategic consideration to address population health in the design of the University. We recommend the creation of public health schools that focus on leadership to renew an emphasis on unifying health concepts and actions following successful examples to bring medicine and public health together.

Keywords: Medicine, public health, developing countries, Pakistan.



Background

The relationship between medicine and public health has a long history of oscillations, working together and working in silos. In developing countries where the needs are greatest, solutions to this problem are critical. This brief communication provides a case study of the dialogue between medicine and public health in Pakistan, focusing on the history of a leading educational institution in that country, the Aga Khan University (AKU).

In a highly influential study, "Healing the Schism," Kerr White described medicine and public health in two different and often unfriendly worlds (White, 1993). The rapid accumulation of new science in medicine and public health over the course of a century has also led to the specialization of all fields. Multiple silos of scientific inquiry, training, and practice were created in health professional schools, government agencies, philanthropic agencies, and professional associations (Lasker *et al.*, 1997). Late in the 20th century, the adverse effects of this schism were keenly noted. Public health had been weakened and was in "disarray" (Institute of Medicine of the National Academics, 2003). Medicine and medical education had lost their population and community focus. Contemporary health challenges (increasing chronic diseases, environmental health, emerging and re-emerging pathogens) demanded a unified effort.

A highly influential movement to rejoin public health and medical education was felt in many parts of the world. In 1964, His Highness Prince Karim, the Aga Khan, announced plans to found a private medical school in Pakistan. The creation of a new school was an opportunity to avoid mistakes of other nations by creating an institution in which medicine and public health would be re-united.

Growth and Development of Medical and Public Health at AKU

By the late seventies, the planning process was completed and construction began. On February 16, 1981, the School of Nursing was inaugurated followed by the School of Medicine. On March 16, 1983, the President of Pakistan awarded AKU a charter for the first private university in Pakistan. Efforts to bring medicine and public health together were central to the strategy of the founders. McGill University's Spitzer Report recommended creation of a Department of Community Health Science (CHS), which was to become the core and incubator of the medical school and has provided twenty percent of the undergraduate medical teaching (McGill University & Aga Khan University, 1983). This new department established off campus sites, in poor communities, to conduct research, provide services, and to teach principles of community health. CHS developed a model for primary healthcare that was part of a global strategy to achieve "Health for All". The CHS at AKU was also a model for departments of community health in medical schools around the country.

Over a twenty-five year history, there has been remarkable growth and development at the Aga Khan University (2006). The University Hospital has developed into a sophisticated tertiary care medical center, with residency programs in 25 areas and receiving Joint Commission for International Accreditation in 2006. A successful business model has led to a financially sustainable institution that provides a large amount of charity care. The medical school developed and has gained recognition, though 90% of students go to the U.S., Canada, Europe and other locations outside Pakistan for post-graduate training. The primary health care (PHC) model was honed and exported to many other agencies of the Aga Khan networks of institutions working in Pakistan and in the other countries where the Aga Khan functions.



The Department of Community Health Sciences also experiences growth and development through a series of effective leaders, who have added new types of community interventions (outbreak investigations, primary prevention activities) and built a research program. The department has established three successful graduate programs, a residency in Community Medicine, and plans to establish a doctoral program in public health. CHS has research and service programs in maternal and child health, cardiovascular disease, nutrition and school feeding programs, control of infectious diseases, mental health, environmental health, and HIV/AIDS, with funding from numerous international agencies (Aga Khan University, 2007). The department currently has 45 faculty and over 160 staff members. Perhaps of greatest significance, CHS has seeded most health institutions in the country, NGOs, international donor, bilateral agencies, and government, with well-trained graduates who have improved the functioning of the health system in the country.

The irony of this story is the growth of a schism at AKU. In addition, a robust public health/prevention capacity has yet to develop in Pakistan. The Ministry of Health has not developed focus programs for outbreaks of infectious disease, chronic disease prevention (e.g., smoking), or for environmental health problems. The emphasis at the federal and provincial levels in the country is still curative care. The creation of a schism between medicine and public health at AKU, while not a design flaw of the original plan, is a reality. The original strategy of a strong CHS to develop a unique medical school succeeded. The model does not work in a mature, complex institution, however. The need to refocus on population-based health at AKU was reiterated in the 2004 report of the AKU Committee for Health Science, recapturing the original vision of the founders (Aga Khan University, 2004). This document directs attention to the need to engage various components of the University to work together to improve population health.

A way forward: Medicine and Public Health Initiative in Pakistan

Pakistan faces a double burden of disease (Pappas *et al.*, 2001). The traditional health challenges of poverty, nutrition, and sanitation have remained for many in the country and have been compounded by increases in environmental and occupational problems associated with the rapid growth of cities and industries. Cardiovascular diseases, diabetes, cancer, and road traffic accidents have reached epidemic proportions in the country. Future projected growth in the population will require numbers of doctors unimaginable given the length of time and resources required by traditional medical education (Talati *et al.*, 2006).

AKU can lead in the region, by example, through creation of a medicine and public health initiative that will help align the multiple agendas of the institution. The Medicine and Public Health Initiative (www.mphi.net) and The Network: Towards Unity For Health (www.the-networktufh.org) provide examples of projects that bring together complex institutions around population health and accommodate local needs. In Pakistan, there is a need to simultaneously elevate public health and to reconnect it with medicine. Strengthening departments of community health sciences by transforming them into schools of public health may be the best path forward. Public health schools will provide a strong institutional platform that can connect with medicine through such mechanisms as MPH and TUFH. New schools of public health that “think out of the box,” can continue to provide teaching in population health in medical and nursing schools, and strengthen those institutions by building bridges to revitalize population health.



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