

Strengthening public health education and training to improve global health

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Public health training and education have existed for over a century,¹ yet there is little systematic evidence on whether current approaches prepare graduates to improve health by developing, evaluating and implementing effective and equity-oriented public health programmes.

There are three reasons to document and debate this topic worldwide and disproportionately focus on low- and middle-income countries. The first is that the global health workforce is in a state of crisis. The *World health report 2006* describes this situation as a “major mismatch” between population needs and the available public health workforce in terms of overall numbers, relevant training, practical competencies and sufficient diversity to serve all individuals and communities.² In many countries, public health programmes led by clinicians with little or no public health training are plagued by poor management and ineffective resource allocation. This cannot be overcome by simply building on current policies: government oversight must ensure proper recruitment for public health jobs, and new models are needed for pre-service and in-service training. What information is available to guide reforms and ensure goals are met?

The second is that there is increasing demand for well-trained public health professionals that can address the changing context of global health challenges, including complex and persistent health problems, increasing health inequities, new and emerging diseases, necessity for greater collaboration, and incorporation of social models and determinants of health.³ What advances equip graduates to anticipate and respond to these and other challenges?

Thirdly, such debate allows networking among schools, public health agencies, policy-makers, student groups, professionals, United Nations agencies and other organizations. These groups include the World Federation of Public

Health Associations, regional associations of public health schools, the People's Health Movement, health ministries, other senior policy-makers and the newly created International Association of National Public Health Institutes. These groups can collaborate to implement and evaluate innovations in public health training and education.⁴ This type of enquiry offers opportunities to learn from many experiences.⁵ WHO estimates that about 400 schools of public health exist, not counting hundreds of departments of public health, hygiene, epidemiology, community or social medicine, and other units with similar mandates. These programmes need evidence on selecting and retaining an optimal mix of students and professionals, on matching training to health systems challenges, on meeting the demand for specialized competencies and on ways to involve alumni in enriching learning approaches. On paper, most schools combine intersectoral and interdisciplinary training, research and field experiences. But how forward thinking are these programmes and do they meet employers' expectations? Or are other professional schools providing stronger candidates?

Some deans have openly debated the vision and mission of public health schools.⁶ Yet most research on public health training and education tends to focus narrowly on educational measurements or new curricula. There is almost no evaluation of the degree to which educational practices match real-world conditions. Possible avenues for innovation include more strategic use of fellowships, foreign training experiences, student-led research or institutional partnerships. Public health content also can enrich coursework in business, public policy, urban planning, foreign policy and international relations.

Schools are developing innovative models, public-private partnerships, wider ranges of students, networks of

faculty and other programmes with greater relevance to public health priorities. These innovations address challenges that may vary across contexts, such as the struggle to recruit and retain experienced faculty in low-income country settings.

To share experiences globally, a future *Bulletin* theme issue will focus on public health training and research, and particularly on their impacts on health and health equity.

We are interested in contributions that evaluate, compare and synthesize experiences from different settings that may be adapted to other contexts, such as:

- schools' leadership role in influencing strategies and policies;
- intersectoral collaboration and networking with stakeholders;
- diversity of students and professionals, and their retention through graduation;
- career paths of graduates and use of alumni networks;
- community-based, problem-oriented teaching approaches addressing health challenges;
- learning how to commission research, build evidence and use results;
- steering student-led research towards global and national priorities;
- in-service or executive training of public sector officials;
- core competencies for public health practice;
- adding public health learning to other schools' curricula.

Manuscripts should be submitted to <http://submit.bwho.org> by 1 June 2007. We may arrange collaborations if papers on similar topics can benefit from a comparative perspective. ■

References

Web version available at: <http://www.who.int/bulletin>

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References

1. *Welsh-Rose report on schools of public health*. New York, NY, Rockefeller Foundation, 1915.
2. Hernandez LM, Blazer DG, eds. *Genes, Behavior, and the social environment: moving beyond the nature/nurture debate*. Washington, DC: Committee on Assessing Interactions Among Social, Behavioral, and Genetic Factors in Health, Institute of Medicine, National Academies Press; 2006.
3. *World health report 2006: working together for health*. Geneva: World Health Organization; 2006.
4. *Rio Declaration*, 11th World Congress of Public Health, Rio de Janeiro, Brazil, 2006. Available from: http://www.saudecoletiva2006.com.br/ingles/rio_declaration.php.
5. *Essential public health functions: a three-country study in the Western Pacific Region*. Manila: World Health Organization Regional Office for the Western Pacific; 2003.
6. Bloom B. Future of Public Health Symposium Series. Boston: Harvard School of Public Health; 2001. Available from: <http://www.hsph.harvard.edu/foph/>.