

## Practical public health training: drawing on lessons from experience

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Public health is simultaneously a science and an art, which aims to prevent disease and promote health. As a science and art, public health "...is the combination of sciences, skills, and beliefs that is directed towards the maintenance and improvement of the health of all people through collective or social actions" (1). As such, the discipline interfaces with several disciplines in the natural, social and humanities. Dealing with such complexities that poses uncertainties requires an art of inclusivity, accommodation and embracing.

As a practical discipline, public health invests in the competencies of professionals who work in public health policy, practice and research (2). Such competencies help not only in rolling out public health functions at policy, education and research levels, but also facilitate the prevention of morbidities and mortalities. Although there are not uniformly articulated functions of public health across the globe, assessment, policy development and assurance are the overarching functions of public health<sup>1</sup> (3). Various suggestions of what is required for public health programs to be effective include political commitment; generating contemporary evidence to refine programming; providing evidence for informed and proven interventions; managing performance with accurate and timely information; ensuring public-private and community partnerships; and applying sound and feasible communications (4).

Public health experts have made continuous efforts to sharpen public health approaches and

tools for education, research and services to ensure the smooth implementation of public health functions. The impact of the smooth implementation of public health functions is self-evident – contributing to declining mortality and morbidity, while more generally meeting national and global health indicators. Although the health of people living in developing countries has improved during the last decades, there are still limitations on the pace and sustainability of the improvements. Efforts to improve the practical aspects of public i.e, identifying health problems in the community; informing, educating and empowering the community about their health status and mobilizing resources and partnership for actions to solve problems remain (5,6).

The degree to which educational institutions have contributed to enhancing the practical aspects of public health by improving the competencies of their students has been extensive. In higher education institutions, health science education is expected to link theoretical learning with community needs. Such an instructional approach is often referred to as problem-solving, student-centered, community-based and has long been recognized as useful in building competence (7). Community-based education (CBE) offers opportunities that go beyond cognitive capacities. It offers a platform for learning broader social, cultural, economic, political and physical environmental contexts are recognized in relation to the theme of interest (8).

As an educational strategy, CBE aims to ensure educational relevance to the public needs and as such learning activities use the community extensively as a learning environment, and has been in force since the 1940s (9,10).

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<sup>1</sup> Although there is no global agreement on public health functions, the common functions that are referred to in public health writing are those developed by the Centers for Disease Control and Prevention. These functions are categorized under the headings 'assessment', 'policy development', 'assurance' and 'system management'.

The Community-Based Learning Working Group at Johns Hopkins University defined community-based education (CBE) as ‘...a pedagogical model that connects classroom-based work with meaningful community involvement and experiences (11)’. The approach gives students an opportunity to use their theoretical knowledge to collect and collate evidence to solve practical problems. In the process, students mobilize resources and forge partnerships to draw up plans, and implement, monitor and evaluate consequent outcomes. The implementation of community-based education within higher educational institutions is an innovation to rollout public health functions.

Following the 1978 meeting of world health leaders in Alma Ata, Kazakhstan, where the principles and practices of primary health care was adopted, health science training institutions took up the challenge to make their students more responsive to needs of the population they serve.

As such, a number of medical schools took the initiative to make their curricula socially relevant and responsive to community needs (12). However, universities have different approaches to implementing CBE. While some have developed specific curricula, others have incorporated community health topics within a course to meet quality and relevance standards.

In Ethiopia, the need to improve the quality of public health education and its relevance through educational strategies has long been recognized with Gondar and Jimma being the pioneers Gondar College of Medical Sciences was established in the early 1950s to educate different cadres of health professionals in a manner that would allow them to prevent health problems that were prevalent in rural Ethiopia (13). Following Gondar College of Medicine, Jimma University, formerly Jimma Institute of Health Sciences, pioneered the CBE philosophy in higher learning institutions. CBE is a means to achieve educational

relevance to community needs where the community has extensively served as a learning environment. Students, teaching staff, the community – as well as other public, Non-Governmental Organizations and private sector in the operational community – are actively engaged in the learning and service provision processes.

In 1999, the Ministry of Education combined experiences from different universities to adopt community-oriented practical education (COPE). The major objective of COPE was to ensure graduates had the practical skills and experience that would enable them to solve community- and institutional-level problems. All faculties including health were required to adopt COPE (14). COPE however was not any different from CBE except the mere assumption that CBE is associated only with health Higher Education Relevance and Quality Agency (HERQA) was established in 2003 in order to improve the quality and relevance of education, as well as to develop tools, approaches and standards. As such, the agency is expected to develop standard tools, approaches and document experiences for further refinement.

To date, CBE is still widely adopted by several universities in Ethiopia. While some have incorporated CBE in their health training, others have pushed the bar to cover all other faculties. Nonetheless, there are no customized CBE approaches and tools for the different fields of studies; even the health-focused CBE, which has a relatively long history, has no standardized CBE approach or tools.

Several higher training institutions in Ethiopia have adopted CBE, and students in these universities are benefitting from the program. The Ethiopian government is taking steps to improve the quality and relevance of higher education. The establishment of HERQA is a witness to the government’s commitment to improve education quality and relevance in general and public health training in particular.

Anecdotal evidence shows that public health graduates' contributions to public health functions are not up to expectations.

Thus, to meet its practical expectations, public health education and training approaches and tools, particularly the CBE approach, require extensive assessment and documentation of approaches, procedures, tools as well as their contribution to teaching and learning, and how they address community needs.

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