CHAPTER 8
Valorization
This chapter will provide recommendations for future research as well as practice.

**Future research**

The first suggestion comes from the first limitation that only self-assessment was used to measure outcome and impact of the MIH and MPH programmes. Several different methods can be used when assessing outcome and impact, for example, conducting in-depth interviews with graduates as well as their peers and supervisors, in order to allow for triangulation.

The next suggestion arises from the limitation that the studies were unable to elucidate what works in which context and why in terms of public health education. Possibly a realist evaluation, with more emphasis on context and mechanisms will help to identify critical pathways necessary for MIH and MPH programmes to improve outcome and impact (1).

Another suggestion originates from the observation that very few evaluation studies are published in public health educational literature. Potential areas include identifying change in competencies through a retrospective post-test, as done by Drennan in the evaluation of master’s in nursing (2), how to enhance learning through self-reflection in a multicultural environment, or how to enhance learning through peer feedback in a multicultural environment, as done by Kamp amongst graduate medical students in the Netherlands (3). Other areas are: involving other stakeholders in the evaluation, as performed by Hart at an English University (4), as well as studies on the perceptions and competencies of teachers, as done by Sutkin and Singh amongst medical clinical teachers (5, 6).

Another possibility for study would be to study interprofessional education within the MIH and MPH (7, 8). Given the diverse background of the participants, the programmes are by virtue of their nature examples of interprofessional education. The suggestion would be to study whether and how this interprofessional education contributes to a better understanding of each other’s role and improved team work in public or international health, as advocated by Frenk (2010) (7).

To study the actual need and planning, including projections for public health professionals in LMIC, is recommended, such as done in the US and suggested for Europe by Bjegovic (9, 10). For example in Switzerland a study on the public health workforce was recently conducted (11). The number of public health professionals educated by schools of public health have been documented (7). However in most LMIC, and a number of high income countries, studies on actual need, planning and implications for human resource and education policy such as production by schools of public health have not been conducted. Interestingly the 2012 WHO statistics lump environmental and public health professionals together, therefore it is difficult to relate the number of public health professionals to population or health status of a country (12). The two
types of professionals should be recorded separately in order to allow for disaggregated analysis and planning.

Another suggestion is to compare the applied competencies and impact of the two different master’s programmes, the Master of Public Health and the Master in International Health.

Other aspects to the competencies and/or impact variables could be added: such as networking, humanism, ethics, accountability, reflection (13) and to validate those.

A question that remains is whether the emphasis on quality assurance does improve learning and in the end outcome and impact. Harvey states in his journal review of 15 years of quality in higher education, that external quality reviews did little to encourage quality improvement, especially when those external reviews had a strong accountability focus (14, 15). According to Støren however, using “employability” as an indicator of quality in a comparative survey among graduates in 13 countries, the quality indicators of study programmes influence the graduates’ job performance, but have little influence on their success rate in securing employment. Future research could focus on how to achieve a balance in quality assurance between accountability and improvement.

**Implications for practice**

As for the Master of Public Health, given the fact that some competencies scored overall higher and some scored lower and the differences between and in specific institutions, the results can be used for curriculum reform. All involved institutions have stated that they will use the overall results, as well as the respective specific results for their specific institution for curriculum review and reform (NT Huong, L. Magaña Valladares, Q. Xu, H. Tahi, L. Alexander, personal communication).

The number of public health schools has been rapidly increasing, placing quality assurance in focus (7, 16). The validated cross-country public health competencies and impact variables can be used by low- and middle-income countries as a framework for establishing international standards for education and accreditation of institutions. The public health competencies and impact variables can be used for role definition and delineation of the public health profession, for job descriptions and job function standardization. Subsequently the competencies and impact variables can be used for workplace assessment, continuous education and continuous professional development as well as in programme assessment and programme evaluation.

As public health is a relatively young discipline, in order to gain in importance and enhance the quality of practising public health professionals, certification and credentialing or licensing of public health professionals could be started using the competencies and impact variables as an international framework, such as is done in the USA and as suggested by ASPHER for Europe (17, 18).
The public health competencies and impact variables could be used by those responsible for public health human resources, such as policymakers, trainers and human resource managers as a standard for adaptation to the local situation in each specific country.

The expected competencies together with the size estimation of the public health workforce can be used to evaluate how well the current or projected workforce will be able to address the public health needs of a country or region.

With regards to the MIH, a number of action points that emerged from the alumni survey and the quality assurance review have already been implemented, such as an improved tropEd website with a search function, including key words for modules. Currently the future of tropEd is being discussed within the network, including such topics as the development of specific tracks within the MIH to tailor to the needs and expectations of students and offering the quality assurance of courses to institutions outside the network (19). When course coordinators advise students regarding the possibilities of the tropEd MIH programme, students are more clearly pointed to the strengths and weaknesses as identified in the study (L. Gerstel, personal communication).

As suggested by Evashwick and Koo, public health education needs to be established as a separate discipline. Within public health education a number of areas have not been studied, for example what works in terms of learning and teaching methodology, how to develop specific competencies, what is the use of new learning methods, such as e-learning and social media and the types of assessments that work well (16, 20–22). Even though there is some overlap between public health education and other educational disciplines (e.g. medical education) and fragmentation should be avoided, due to its inter- and transdisciplinary nature, public health education should be given specific attention.
References