

Title: Designing dialogue and outcomes-based MPH curriculum

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Context and setting: The ability of Ethiopia to improve the health of its population hinges heavily on the presence of competent public health professionals that have problem solving, critical thinking and leadership skills. The School of Public Health at Gondar University has a semi-distance Master of Public Health (MPH) program enrolling working professionals. Program participants come with a large repertoire of knowledge and experience, a rich potential resource for their own learning and that of their peers and faculty. However, there are discontents about the teaching-learning process and competence of public health graduates. The curriculum is traditional (e.g., teacher-focused, not competency-based), and does not adequately prepare participants for the challenges of the profession.

Why the change was necessary: A shift to dialogue- and outcomes-based education is necessary in order to maximize attainment of intended learning outcomes, meet individual learning needs, and take advantage of learners' prior knowledge and experience. Dialogue education is a problem-posing approach, where concepts, skills or attitudes are presented as open questions for reflection and integration into a particular context. There are seven design steps in planning dialogue education. We ask and answer: who (participants); why (what participants need to do); when (timeframe); where (site of learning); what (content); what for (achievement-based objectives); and how (learning tasks and materials). An important principle in sequencing learning tasks is starting with evoking prior knowledge and experience of participants, followed by substantive input, leading to implementation of tasks by learners, and finally integration task based on learners' daily work.

What was done: We identified core competencies for MPH education based on literature review and adapting the findings to the context of Ethiopia. We redesigned the Reproductive and Child Health Course based on principles of dialogue and outcomes-based education. To identify strengths and areas for improvement in the current curriculum, we collected data on one specific course- Reproductive and Child Health. Before and after taking the current course, participants anonymously rated their knowledge (18-items) and practical competency (7-items) on a Likert scale (where 1=very low, and 5= very high). They also gave their opinions about the course.

Evaluation of the results or impact: Before the course, participants felt they already had satisfactory or higher knowledge in 13 out of the 18 topics (72.2%). Conversely, they rated their practical competency and possession of key public health values as less than satisfactory in all 7 areas. Post-course results demonstrated that the course did not significantly impact their knowledge for 9 out of 18 topics (50%) and their attitude towards key public health values when Wilcoxon Signed Ranks Test was applied. Participants recommended making the course more relevant and practical. These results suggest that students come with a good level of knowledge; however, the course experience does not significantly impact their knowledge and, even more importantly, their values and attitudes. We conclude that these results lend support to the shift to a curriculum model that is outcomes-based and aligned with principles of dialogue education. Further research is needed to evaluate the new curriculum.