Title: Developing objectives and assessment tools for the rural/field laboratory practice course of the Medical Laboratory Sciences curriculum

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Context and setting: Department of Medical Laboratory Science (MLS) is giving MLS training for almost 60 years and is the first to start the programme in Ethiopia. Since 2008, nationally harmonized undergraduate training curriculum of MLS is in effect one of the courses included being Rural/Field laboratory practice. This practice is one form of community based education aimed at helping the students to acquire first hand experience of working in team at rural health institutions and the community by providing promotive, preventive, curative and rehabilitative health services.

Why the idea was necessary: When it was started in 2010 for the first time and 2011 for the second time for training MLS students of Addis Ababa University, it was conducted in Batu/Ziway located 160km away from Addis Ababa on the way to Hawassa. During this time the course was found to be unstructured, without well-defined objectives, with no formal assessment tools to evaluate the accomplishment of the desired competencies and lacks integration with the curriculum of other health professionals.

What was done: Three methodologies were used for defining objectives and developing assessment tools: desk-review, in-depth interview and FGD. Desk-review was done on published articles and syllabus of two in-country Universities who carry out similar programme for more than decades. The activities and assessment tools they use were reviewed. A Total of 22 in-depth interviews (3 post graduate students, 2 final year students, 5 graduating class, 6 graduates who are currently a faculty and 6 staffs at the rural attachment area) were conducted. One FGD among 7 Faculty representing all specialties of the training programme was conducted. Both the interview and the FGD focused on the faculty/graduates/students/rural attachment staffs experience of the course, Knowledge, Skill and Attitudinal components students are expected to obtain during and after completing the course, the activities expected from the students to perform, the methods to teach these activities and assessment methods they think are appropriate. The FGDs were recorded, data was transcribed, analyzed, compiled and draft objectives and assessment tools were prepared. These were presented for faculty who attended the FD workshop on objective writing and assessment. Feedbacks were incorporated. The activities that enable teaching the objectives during the course were also identified.

Results: Objectives were defined, activities were identified and assessment tools were developed.

The objectives defined for the course fall into four categories. These objectives deal with: a) strengthening rural laboratory services, b) providing lab services in outreach activities, c) Learning and collaborating inter-professionally and d) planning, implementing and evaluating health care team activities according to the needs and resources of the community.
To meet these objectives, activities which are either specific to the profession or that are cross-cutting with other health professions are identified. The activities are performed at the rural health institution (assessment of the lab, strengthening the lab, continuing professional development etc.) and out of the health institution (outreach lab services like screening and survey in schools, prisons, community etc.).

The assessment approaches developed included individual and team assessment tools. These comprise reports (weekly, monthly, end of attachment), case report, peer-evaluation and evaluation of team action-plan.

**Lessons learned:** The objectives and assessment tools are not well-defined even in the two universities who were undertaking similar course for long time and thus shows the need to integrate the objectives and assessment tools into the nationally harmonized curriculum

There are common areas with other professions so if structured properly rural attachment programme will be a good opportunity for interprofessional learning and collaboration

Future plans include implementing the objectives and assessment tools, identifying common areas of training with other health professionals training curriculum and integrating in a way that fosters interprofessional learning.

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