ANM Assessment 2014: Summary of Findings

Background
As the main providers of reproductive health services including family planning (FP) and maternal neonatal and child health (MNCH) at the community level, auxiliary nurse midwives (ANMs) must be completely proficient in skilled birth attendant (SBA) knowledge and skills, supported by clinical supervision, coaching and mentoring for client-centered maternal and newborn care and FP services.

To improve the SBA core competencies of ANM graduates, the Council for Technical Education and Vocational Training (CTEV) revised the ANM curriculum with support from the Health for Life project in 2014/15. Prior to its introduction in ANM schools, Health for Life conducted an assessment of competencies of outgoing ANM graduates from six selected schools (Jiri, Kapilvastu, Dang, Banke, Jumla and Doti) to establish a baseline.

Objectives
- measure the core competences (knowledge and skills) related to skilled birth attendance of graduating ANMs and instructors
- explore the environmental factors relevant to ANM pre-service education

Method and Tools
A total of six ANM Schools were selected for assessment. Participants included 63 students (all in their final semester), 19 faculty members as well as practicum and on-the-job training (OJT) preceptors. In addition to testing core SBA competencies (clinical skills and knowledge), the study included assessments of classrooms, clinical teaching, skill labs, practicum sites and clinical practice at OJT sites. The environmental factors assessed included caseload and opportunities to practice at practicum and OJT sites, the quality of MNCH services, physical factors and other factors such as infrastructure and the qualifications and experience of faculty members.

The twelve researchers, from both clinical and non-clinical (sociological) backgrounds, conducted their assessments concurrently in June and July 2014. They assessed environmental factors using qualitative...
techniques such as in-depth interviews, focus group discussions and observation. Knowledge and clinical skills were assessed using multiple-choice questionnaires and anatomic models.

The students who participated in the study averaged 20 years old; 57 percent had passed the School Leaving Certificate (SLC), 33 percent had passed Intermediate; 43 percent were Chhetri/Thakari, 33 percent were Janajati, 11 percent were Bahun and 10 percent were Dalit. Among the instructors who participated, 14 of 19 had completed a Proficiency Certificate Level in nursing, 4 had completed a Bachelors in nursing, while one instructor had passed SLC; 10 were Janajati, 5 were Chhetri/Thakari and 4 were Bahun.

Findings

Knowledge

As ANMs are the backbone of the FP/MNCH program in Nepal, the expectation is that ANM graduates are competent enough to implement quality programs. The assessment tested their ability to respond correctly to at least 80 percent of questions in ten different knowledge areas. The assessment, however, revealed strikingly low levels of knowledge: the score of graduating students ranged from an average of 45.7 percent (in post-partum complications) to 75.4 percent (in immunization); among teachers, correct responses ranged from an average of 42.1 percent (in immunization) to 87.7 percent (in family planning). In each of the ten subject areas, average student scores fell below 80 percent, the level at which sufficient competence is demonstrated; even more distressingly, the average scores for teachers fell below 80 percent in all but three areas.

There was little consistency, with none of the students demonstrating competency in active management of third stage of labor, but 58.7 percent of students demonstrating competency in immunization. Similarly, only 10.5 percent of teachers demonstrated competency in active management of third stage of labor, while 78.9 percent demonstrated competency in family planning and pregnancy complications.

Clinical Skills

The assessment also examined the clinical skills of graduating ANM students and teachers. Findings revealed similarly low skill levels, with graduates on average scoring between 10.2 percent for newborn resuscitation to 63.6 percent for hand washing.

Nor is the situation encouraging among teachers: average scores ranged from 34.7 percent for newborn resuscitation to 74.1 percent in use of a partograph.
The findings indicate that in several clinical skills, including newborn resuscitation, immediate newborn care, immediate postpartum care to mother, and normal delivery – none of the students demonstrated competency. Teachers fared little better, also failing to demonstrate sufficient clinical skills in the same four areas.

**Practicum**

The opportunity to work in a real-world setting is meant to complement classroom knowledge and enhance clinical skills. The assessment of students’ engagement during practicum looked at how many students performed every required action for each activity. For example, while conducting an ANC examination, only 12 percent of students performed all the required steps. Those activities based on observing procedures during practicum such as “observation of normal delivery” were the most likely to be performed correctly as they require the least engagement by the students. Thus, 84 percent of students completed all required steps during observation of episiotomy and suturing, yet only 20 percent successfully performed episiotomy with supervision.

**Environmental factors**

As part of the assessment, the researchers evaluated conditions in the environment, including physical readiness of schools, how human resources were handled and what teaching resources were available to the students. Generally, most schools met the minimum requirements for readiness, the notable gaps being in availability of a suitably large meeting hall (2 of 6 schools) and in maintaining a library (3 of 6 schools).

In terms of how faculty, staff and other human resources were managed, schools had a number of shortcomings. None of the schools met criteria for principals, and issues surrounding faculty qualifications, training and performance evaluation also came to light as a result of the assessment.
Equipment for teaching was often missing, with classrooms containing an average of less than a quarter of the materials they should have. Using a checklist of 13 teaching materials, the researchers found that blackboards and chalk or whiteboards and markers were the only item found at all six schools. Other items, including flip chart boards, overhead projectors, transparency pens and televisions were absent from all schools. For Skill labs were better equipped, with an overall average of 70 percent of the required equipment present.

Conclusion and Recommendations

The study findings revealed that students had very low competency in terms of knowledge and skills related to pregnancy, delivery and post-partum complications. This is compounded by a lack of competency among teachers, environmental factors such as poor human resource management and lack of teaching materials, as well as a lack of opportunities at practicum sites and during OJT. Findings from the Rapid Assessment of ANM Pre-Service Education and Curriculum with Regards to SBA in Nepal conducted by Health for Life in 2013 were in line with the findings from this study.

Based on the findings of this assessment, the following key recommendations were made to enhance the competency of ANM graduates in core SBA skills.

Fully implement the revised ANM curriculum

The revised ANM curriculum is very thorough, yet it is not always implemented as intended, with the result that graduates do not acquire all competencies by the end of the course.

- ANM schools need to work with the Family Health Division (FHD) and the National Health Training Center to train teachers on SBA and clinical training and skills training
- ANM skill labs must be well-equipped to enable students to prepare themselves before their assignment to practicum sites
- ANM students must be given high priority at practicum sites
- OJT sites must be standardized and preceptors properly prepared

Accreditation and monitoring of ANM schools

With the privatization of ANM schools, adherence to standards set by the CTEVT and Nepal Nursing Council (NNC) varies widely from one institution to another.

- The CTEVT and NNC need to formulate a unified standard of accreditation, assessing ANM schools on an annual basis
- With support from the Ministry of Health, the NNC should be implement stricter licensing procedures that test skills in addition to knowledge
- The CTEVT, together with the NNC, must monitor and accredit all ANM schools on a periodic basis, focusing specifically on clinical knowledge and skills of both teachers and students

Strengthen coordination among stakeholders

Support for the ANM schools needs to come from all stakeholders involved in maternal and newborn health, including not only the CTEVT and NNC, but also the FHD, NHTC, Child Health Division (CHD) and other key stakeholders. There is a need to develop a mechanism that maximizes ANM student’s full exposure for their competency during practicum and OJT.

- The FHD should support standardization of ANM practicum and OJT sites, ensuring that preceptors are properly trained
- The CTEVT and NNC along with the FHD, National Health Training Center (NHTC) and other stakeholders should develop and implement a system to monitor the quality of ANMs.
- All the external development partners and key stakeholders working on maternal and newborn health (particularly in ANM pre-service education) should financially support the development of a master plan to strengthen ANM pre-service education.