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# HEALTH FOR LIFE **TECHNICAL BRIEF**

STRONGER SYSTEMS, HEALTHIER LIVES

JANUARY 2017

## **Auxiliary Nurse Midwife Pre-service Education Curricula Revision**

### **Background**

In 2011, the Government of Nepal committed to increasing institutional deliveries attended by skilled birth attendants (SBAs) to 68.5 percent by 2020 to achieve the Sustainable Development Goals, and to 90 percent by 2030. In preparation, the number of birthing centers at peripheral health facilities has been significantly increased in the past few years. Auxiliary Nurse Midwives (ANMs) are the main providers of maternal and neonatal health services at such facilities, so it is imperative that they have the requisite SBA skills and that they are supported by clinical supervision, coaching and mentoring. Health for Life, USAID's systems strengthening project in Nepal, has been collaborating with the Ministry of Health on a number of objectives, including making revisions to the ANM curricula to include core SBA competencies and to reflect the latest knowledge and techniques.

Working closely with the Center for Technical Education and Vocational Training (CTEVT), Health for Life sought to identify which changes needed to be made to the existing curricula to focus on the best techniques and latest knowledge, with particular emphasis on SBA skills. It must be noted that there are two types of ANM courses with different curricula under the CTEVT):

1. Pre-School Leaving Certificate (SLC) course: taught at ANM schools run directly by the CTEVT for those who have not yet completed secondary (grades 11 and 12) schooling (and in particular, to give opportunities to students from marginalized and disadvantaged groups)
2. Post-SLC course: taught at other schools affiliated with the CTEVT.

ANM courses are designed to prepare students to be competent health workers, particularly in maternal, child and newborn health/family planning (MNCH/FP) and community health. Pre-service education plays a crucial role in developing the skills and knowledge students need to become competent ANMs. To attain this, the curricula are periodically updated to reflect the latest knowledge and approaches, and teaching techniques are strengthened to reflect changes to the curricula.

### **Curricula Revision Process**

Health for Life began by conducting a rapid assessment of ANM pre-service education and curricula with regard to SBA competencies, and collected feedback from key stakeholders to identify gaps and gather recommendations on training ANMs to become SBAs. Among the key findings were that while the curricula were generally comprehensive, needing relatively minor changes, the main challenges were



**Ensuring that Auxiliary Nurse Midwives get the skills and knowledge they need to deliver healthy babies**

that knowledge and skills among faculty were low, skills acquisition among students was poor (particularly in regard to pregnancy, delivery and post-partum complications), implementation of the full curricula was uneven, and practicums were often poorly coordinated and supervised, meaning that ANM students had very limited opportunities to acquire practical skills during on-the-job training. This was compounded by environmental factors such as poor human resource management and a lack of teaching materials.

Focusing on the curricula, however, recommendations were made to key stakeholders and a meeting was convened by the CTEVT to discuss improvements to the existing ANM curricula regarding SBA core skills and to identify key partners in conducting a revision.

The actual process of revision began in September 2013 and engaged a variety of stakeholders ranging from representatives from the Ministry of Health to professional organizations. With technical assistance from Health for Life, the CTEVT organized a series of meetings and workshops to review the existing curricula, analyze current workplace needs and to incorporate suggestions into the revised curricula.

By March of 2014, draft curricula for both pre- and post-SLC ANM students were prepared with Health for Life's assistance and with the participation of stakeholders. In addition to updates to the content, a number of significant changes were made in the course structure itself. The revised drafts were circulated for feedback in April and, following approval by the CTEVT Technical Committee, were submitted to the CTEVT Board for final approval in July, 2014.

## Changes to the ANM Curricula

The general structure and topics covered by the existing curricula were, as noted, comprehensive. The changes made primarily reflect the stronger emphasis on SBA skills.

### Key additions and deletions to the curricula

SUBJECT	KEY DELETIONS	KEY ADDITIONS
Anatomy and Physiology	Neck muscles; formation of urinary system and mechanism of urination; neurons; axons; dendrites	
Fundamentals of Nursing	History of nursing and professional development; orientation at hospital wards; pulse characteristics; gastric lavage and aspiration	ICN and NNC codes of conduct; location for taking a pulse; universal precautions; use of various types of gloves; health care waste management
Community Nursing		Use and care of the home visit bag; breast milk expression and storage
Epidemiology	Health and illnesses; various health indicators and calculations; STIs; (Infection prevention moved to Fundamentals of Nursing)	Host; agents and environment; communicable and non-communicable diseases; prevention and disease control; immunity (details added)
Reproductive Health (RH)		Introduction to RH; scope and its component; national policy and RH strategy; RH and factors affecting women's health; sub-fertility
Treatment of simple disorders	Factors affecting health or causative factors of disease and nutritional deficiency	
Management		Level of health care; employment policies
Midwifery B		Neo-natal resuscitation; management of 3rd and 4th stage of labor; care within one hour of delivery; time allocation for partograph

### Changes to Class Hours

SUBJECT	CLASS HOURS					
	THEORETICAL			PRACTICAL		
	PREVIOUS	NEW	+/-	PREVIOUS	NEW	+/-
Anatomy and Physiology	51	60	+9			
Fundamentals of Nursing	102	110	+8	255	280	+25
Reproductive Health	51	51		612	600	-12
Community Health Nursing	102	106	+4			
Epidemiology and Communicable Diseases	51	51				
Treatment of Simple Disorders	51	51				
Health Management	51	51				
Midwifery A	53	55	+2	200	200	
Midwifery B	53	55	+2	200	200	
Midwifery C	47	50	+3	161	160	-1
Subtotal	612	640	+28	1428	1440	+12
<b>New Total (Theoretical &amp; Practical)</b>	<b>2080</b>					
<b>On-the-Job Training</b>	<b>480 (120 at a HP; 120 at a PHCC; 240 at a hospital)</b>					
<b>GRAND TOTAL</b>	<b>2560</b>					

## Introduction of revised curriculum to ANM Schools

The CTEVT, along with Health for Life, introduced the revised ANM curricula in the 2014-15 school year, starting with two-day orientations for instructors representing all the ANM schools in Nepal. The orientations explained the gaps identified during the rapid assessment, introduced the revised content and course structure and reviewed how to transfer specific knowledge and skills such as use of a partograph, newborn care, newborn resuscitation and Kangaroo Mother Care to prevent hypothermia.

## Providing clinical coaching and supplemental reading materials to ANM schools

Based on an in-depth assessment of ANM pre-service education, the action plans at ANM schools identified several gaps, including the need for SBA and clinical skills training, plus the lack of various equipment and anatomic models. In response, Health for Life provided support for a round of clinical coaching for faculty members and preceptors.

Additionally, Health for Life supported the CTEVT in developing supplemental reading materials related to MNCH/FP. Once these materials are printed, they will be distributed to ANM schools across the country.

## Lessons Learned

### Curriculum Revision

- The strong leadership shown by the Curriculum Development Division at the CTEVT played a key role in the successful revision, finalization, approval and introduction of the curricula
- A clear understanding between the Curriculum Development Division and Health for Life was helpful in clarifying the process and roles of each partner
- Review and revision of the curricula in their entirety informed changes to the course structure
- In addition to experts, the engagement of newly-graduated ANMs as well as ANMs working at peripheral service sites and teachers from ANM schools was very useful in defining the content and structure of the curricula during the revision process.
- Revising the curricula wasn't the issue so much as their implementation; the problem may lie with faculty

### Implementation of Curriculum

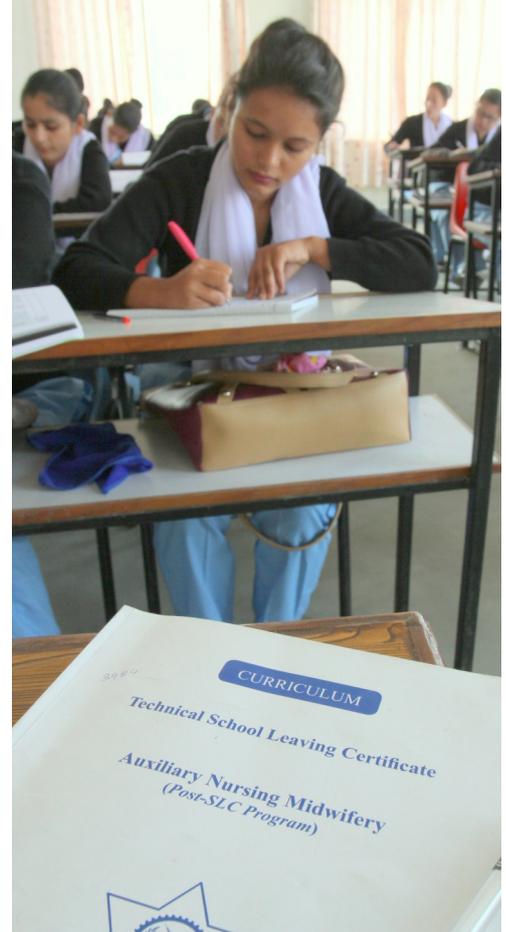
- Introducing the curricula to ANM schools by organizing orientations was more effective than distributing them through courier services. This approach provided the opportunity for faculty members to interact directly with CTEVT officials and experts, allowing faculty members to get a better understanding of the key changes in the content and structure. Furthermore, it allowed the CTEVT and Health for Life staff to organize selected skills transfer sessions
- Although a thorough understanding of the updated curricula is very important, it is not sufficient to improve knowledge and skills. ANM schools prepared action plans to address the gaps identified in the assessment, but it was difficult for them to arrange key trainings and materials to improve readiness and other factors affecting teaching.

## Recommendations

The main problem lies with implementing the curricula as intended. This problem is due to several factors, including poor competency among teachers, a lack of adequate resources in skill labs and classrooms, and the barriers to students acquiring knowledge and skills through practicum. ANM schools need to train faculty members on all key aspects of the curricula and have mechanisms to retain them, as well as properly equipping skill labs. ANM students must be given priority at practicum sites, and on-the-job training should be standardized.

Another issue is one of consistency across ANM schools. The CTEVT and Nepal Nursing Council should develop an accreditation system that evaluates ANM schools annually to assess whether standards for classrooms, skill-labs, teachers, teaching materials and equipment, practicum and on-the-job training are met so that the curricula can be implemented as intended.

Finally, there needs to be broad-based, multi-sectoral support from all stakeholders involved in maternal and newborn health to ensure that ANM schools as well as practicum and on-the-job training sites get the support they need.



## Health for Life

RTI International | Oasis Complex, Patan Dhoka | Lalitpur, Nepal | Tel: +977-1-500-4530 | Fax: +977-1-500-4534