Higher Education Relevance and Quality Agency

National Accreditation and Quality Improvement Standards for Midwifery Degree Program

First Edition
July 2014
Higher Education Relevance and Quality Agency

National Accreditation and Quality Improvement Standards for Midwifery Degree Program

First Edition
July 2014
PREPARED BY

Yalewlayker Yilma, Ethiopian Midwives Association
Feven Alazar, Ministry of Health
Mulatu Ayele, Ethiopian Midwives Association
Yezabnesh Kibe, Addis Ababa University
Hone Belete, Strengthening Human Resources for Health Project, Jhpiego
Mintwab Gelagay, Strengthening Human Resources for Health Project, Jhpiego
Tesfaye Teshome, HERQA
Kassahun Kebede, HERQA
Yeromnesh Ayele, HERQA
Mulugeta Mekonnen, HERQA
Yemisrach Adamu, HERQA
Mihereteab Teshome, Strengthening Human Resources for Health Project, Jhpiego
Daniel Dejene, Strengthening Human Resources for Health Project, Jhpiego
Zerihun Wolde, Strengthening Human Resources for Health Project, Jhpiego
Tegbar Yigzaw, Strengthening Human Resources for Health Project, Jhpiego
Equlinet Misganaw, Strengthening Human Resources for Health Project, Jhpiego
Samuel Mengistu, Strengthening Human Resources for Health Project, Jhpiego
Sharon Kibwana, Strengthening Human Resources for Health Project, Jhpiego
Bekalu Asaminew, Strengthening Human Resources for Health Project, Jhpiego
Yodit Kidanemariam, Strengthening Human Resources for Health Project, Jhpiego
Assefa Bulcha, Strengthening Human Resources for Health Project, Jhpiego
Yohannes Molla, Strengthening Human Resources for Health Project, Jhpiego
Catherine Carr, Jhpiego
Julia Bluestone, Jhpiego
ACKNOWLEDGMENT

This National Accreditation and Quality Improvement Standard for the Ethiopian Midwifery Degree Program was developed by the Higher Education Relevance and Quality Agency (HERQA) in collaboration with the Federal Ministry of Health (FMOH), and the Strengthening Human Resources for Health Project. This document is made possible by the generous support of the American people through the United States Agency for International Development (USAID) under the Cooperative Agreement AID-663-A-12-00008. The contents are the responsibility of HERQA and do not necessarily reflect the views of USAID or the United States Government.
<table>
<thead>
<tr>
<th>ABBREVIATIONS</th>
<th>EXPLANATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPD</td>
<td>Continuing Professional Development</td>
</tr>
<tr>
<td>DVD</td>
<td>Digital Video Disk</td>
</tr>
<tr>
<td>EMA</td>
<td>Ethiopian Midwives Association</td>
</tr>
<tr>
<td>FMOH</td>
<td>Federal Ministry of Health</td>
</tr>
<tr>
<td>FMHACA</td>
<td>Food, Medicine and Health Care Administration and Control Authority</td>
</tr>
<tr>
<td>HEI</td>
<td>Higher Education Institution</td>
</tr>
<tr>
<td>HERQA</td>
<td>Higher Education Relevance and Quality Agency</td>
</tr>
<tr>
<td>HRH</td>
<td>Human Resource for Health</td>
</tr>
<tr>
<td>ICM</td>
<td>International Confederation of Midwives</td>
</tr>
<tr>
<td>ICT</td>
<td>Information Communication Technology</td>
</tr>
<tr>
<td>IQA</td>
<td>Internal Quality Assurance</td>
</tr>
<tr>
<td>LCD</td>
<td>Liquid Crystal Display</td>
</tr>
<tr>
<td>MNCH</td>
<td>Maternal New Born and Child Health</td>
</tr>
<tr>
<td>MSH</td>
<td>Management Sciences for Health</td>
</tr>
<tr>
<td>SOP</td>
<td>Standard Operating Procedure</td>
</tr>
<tr>
<td>TB</td>
<td>Tuberculosis</td>
</tr>
<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
</tr>
<tr>
<td>VHS</td>
<td>Virtual Host Storage</td>
</tr>
<tr>
<td>WFME</td>
<td>World Federation of Medical Education</td>
</tr>
</tbody>
</table>
# TABLE OF CONTENTS

**Introduction** ............................................................................................................................. 1

1. **Program Goals and Learning Outcomes** ............................................................................. 4  
   1.1 Program Goals/Aims............................................................................................................... 4  
   1.2 Participation in the Formulation of the Program Goals and Outcomes.......................... 5  
   1.3 Institutional Autonomy and Academic Freedom .............................................................. 5  
   1.4 Educational Outcomes/Graduate Profiles/Core Competencies of the Program .......... 6  

2. **Governance, Leadership, and Administration** ................................................................. 7  
   2.1 Governance of the Program ............................................................................................... 7  
   2.2 Academic Leadership of the Program ................................................................................ 7  
   2.3 Administrative Staff and Management .............................................................................. 8  
   2.4 Educational Budget and Resource Allocation ............................................................... 8  
   2.5 Interaction With the Health Sector .................................................................................. 9  

3. **Educational Resources** ...................................................................................................... 10  
   3.1 Lecture Halls/Classrooms ................................................................................................. 10  
   3.2 Office for Staff .................................................................................................................. 11  
   3.3 Skills Development Center/Laboratory .......................................................................... 11  
   3.4 Practical Training Facilities/Clinical Practice Sites ......................................................... 12  
   3.5 IT (Information Technology) Facilities .......................................................................... 13  
   3.6 Library ............................................................................................................................. 14  
   3.7 Student Amenities .......................................................................................................... 15  
   3.8 Financial Resources ....................................................................................................... 15  

4. **Academic Staff, Support Staff, and Preceptors** ............................................................... 17  
   4.1 Staff Recruitment, and Development and Retention Policy/Guidelines ...................... 17  
   4.2 Teaching Staff .................................................................................................................. 18  
   4.3 Preceptors ....................................................................................................................... 19  

5. **Student Admission and Support Services** ................................................................... 20  
   5.1 Student Admission And Selection .................................................................................... 20  
   5.2 Student Support Systems ............................................................................................... 21  
   5.3 Student Representation .................................................................................................. 22  

6. **Program Relevance and Curriculum** ............................................................................. 23  
   6.1 Program Relevance ......................................................................................................... 23  
   6.2 Curriculum Model and Instructional Methods ............................................................... 23  
   6.3 Scientific Methods ......................................................................................................... 24  
   6.4 Basic Biomedical Sciences ............................................................................................ 24  
   6.5 Behavioral and Social Sciences And Professional Ethics .......................................... 25  
   6.6 Midwifery Sciences and Skills ...................................................................................... 25  
   6.7 Curriculum Structure, Composition, and Duration ...................................................... 26  

National Accreditation and Quality Improvement Standards for Midwifery Degree Program
INTRODUCTION

Assuring the quality and relevance of higher education is recognized as a priority agenda both in the Education Sector Development Program IV and the Growth and Transformation Plan of Ethiopia. The Higher Education Proclamation 650/2009 mandated the Higher Education Relevance and Quality Agency (HERQA) to ensure that higher education institutions (HEIs) provide high-quality and relevant education. Moreover, in Article 22, the proclamation instructs all HEIs of Ethiopia to establish a reliable Internal Quality Assurance (IQA) system.

The ultimate goal of IQA is to have a culture of quality care that ensures that quality is a focus of all the activities of an institution at all levels and is incorporated into the everyday work of the whole institutional community. A robust and transparent quality assurance system conveys confidence in the quality of the provision of a HEI to its staff, students, employers, and other stakeholders.

Increased public expectation for quality and ethical health care is necessitating changes in what health professionals are taught and how they are taught. On the other hand, the increasing need to train more health workers, coupled with rapid expansion in medical knowledge, presents a serious challenge to the quality of education of health professionals including midwives. Despite these challenges, many HEIs training health care providers do not have well-functioning quality systems that have been cascaded to the department level.

In response, HERQA, in collaboration with the Federal Ministry of Health (FMOH) and Jhpiego (under the Strengthening Human Resources for Health Project funded by the U.S. Agency for International Development [USAID]), has developed these accreditation and quality improvement standards for the midwifery degree program. The standards will serve the following purposes:

- Provide a framework against which midwifery schools can measure themselves, identify the gaps, and implement quality enhancement programs.
- Guide regulatory authorities like HERQA to accredit midwifery degree programs.
- Provide a framework for HERQA to conduct program-level quality audits and develop tailored feedback.
- Inform higher education institutions about the quality improvement standards in specific areas and encourage them to achieve the standards.

USE OF STANDARDS

It is the opinion of HERQA that the set of standards presented can be used nationally as a tool for quality assurance and improvement of undergraduate midwifery education. This could be done in different ways, such as:

1. Midwifery School Self-Evaluation of the Institution and Its Program

The primary intention of HERQA in introducing the standards as an instrument for quality improvement is to provide a framework against which midwifery schools can measure themselves in voluntary self-evaluation and self-improvement of the program.
2. **External Evaluation or Peer Review**

The process described can be further developed by inclusion of evaluation and counseling from external peer-review groups.

3. **Combination of Self-Evaluation of Institution and Program and External Peer Review**

HERQA considers such a combination to be the most valuable method.

4. **Recognition and Accreditation**

Depending on local needs and traditions, the guideline can also be used by national or regional authorities/agencies dealing with recognition and accreditation of midwifery schools.

**DEFINITIONS**

The following terms are used frequently in this guideline. Hence it is important to define them to enhance understanding of the document.

**Areas** are defined as broad components in the structure, process, and outcome of midwifery education.

**Sub-areas** are defined as specific aspects of an area, corresponding to performance indicators.

**Standards** (one or more) are specified for each sub-area using two levels of attainment, and each standard is given a specific number. The standards are structured in 10 areas and 37 sub-areas.

**Basic standard.** This means that the standard must be met by every midwifery school and fulfilment demonstrated during evaluation of the school. **Basic standards are expressed by a “must.”**

**Standard for quality improvement** means that the standard is in accordance with international consensus about best practice for midwifery schools and basic midwifery education. Fulfilment of or initiatives to meet some or all of such standards should be documented by midwifery schools. Fulfilment of these standards will vary with the stage of development of the midwifery schools, their resources, and educational policy. Even the most advanced schools might not comply with all standards. **Standards for quality improvement are expressed by a “should.”**

Altogether, the document includes 213 basic standards and 118 quality improvement standards.

**Annotations** are used to clarify, amplify, or exemplify expressions in the standards. It should be strongly emphasized that the content of the annotations should not be seen as prescriptive for institutions. The annotations do not add new criteria or requirements. The listing of examples in annotations are in some cases exhaustive, in others not.
HERQA has identified the following 10 aspects of operation, which will form the focus points for a quality audit model at program level in Ethiopian HEIs. They are closely related to the focus areas the Agency has been using for the past 9 years for institutional quality. The benefits, we believe, are twofold. One, using this model will help the Agency transfer the experience, knowledge, and skills acquired during the institutional quality audits undertaken so far to the program-level audit. Two, it will enable the Agency to conduct program-level audits in keeping with international norms, as most quality assurance agencies seem to be comfortable with the use of all aspects of operation stated in the following 10 areas when assessing programs:

1. Program Goals and Learning Outcomes
2. Governance, Leadership, and Administration
3. Educational Resources
4. Academic and Support Staff
5. Student Admission and Support Services
6. Program Relevance and Curriculum
7. Teaching-Learning and Assessment
8. Student Progression and Graduate Outcomes
9. Continual Quality Assurance
10. Research, Development, and Educational Exchanges
I. PROGRAM GOALS AND LEARNING OUTCOMES

1.1 PROGRAM GOALS/AIMS

Basic Standards

The midwifery school must:

- Define its program goals and make them known to its constituency (B 1.1.1)
- Ensure that the goal of the program is in line with, and supportive of, the vision and mission of HEI (B 1.1.2)
- Outline in its statement of program goals that the trained midwives are:
  - Competent at a basic level and capable of undertaking the role of midwife as defined by the health sector (B 1.1.3)
  - Prepared and ready for postgraduate education (B 1.1.4)
  - Committed to lifelong learning (B 1.1.5)
- Ensure that the goal encompasses the needs of the community, the health care system, and other aspects of social accountability (B 1.1.6)

Quality Improvement Standards

The midwifery school should ensure that the program goal addresses:

- Aspects of global health (Q 1.1.1)
- Midwifery research attainment (Q 1.1.2)

Annotations

Program goals/outcomes are general statements of what the program intends to accomplish; they describe learning outcomes and concepts in general terms. They should also be consistent with the mission of the program and institution.

Constituency would include the leadership, staff, and students of the midwifery school as well as other relevant stakeholders.

Lifelong learning is the professional responsibility to keep up to date in knowledge and skills through appraisal, audit, reflection, or recognized continuing professional development (CPD). CPD includes all activities that midwives undertake, formally and informally, to maintain, update, develop and enhance their knowledge, skills, and attitudes in response to the needs of their patients.

Social accountability would include willingness and ability to respond to the needs of society, patients, and the health and health-related sectors and to contribute to the national and international developments in midwifery by fostering competencies in health care, midwifery education, and midwifery research. This would be based on the school’s own principles and in respect of the autonomy of universities. Social accountability is sometimes used synonymously with social responsibility and social responsiveness. In matters outside its control, the midwifery school would still demonstrate social accountability through advocacy and by explaining relationships and drawing attention to consequences of the policy.
Aspects of global health would include awareness of major international health problems, and also of health consequences of inequality and injustice.

1.2 PARTICIPATION IN THE FORMULATION OF THE PROGRAM GOALS AND OUTCOMES

Basic Standard
- The midwifery school must ensure that its principal stakeholders participate in formulating program goals and outcomes (B 1.2.1)

Quality Improvement Standard
- The midwifery school should ensure that the formulation of program goals and outcomes is based also on other relevant stakeholders (Q 1.2.1)

Annotations
Principal stakeholders include the students, faculty, Ministry of Education, professional associations, Ministry of Health, HERQA, education strategic center, and the public.

Other relevant stakeholders include community representatives, patient associations, and partners.

1.3. INSTITUTIONAL AUTONOMY AND ACADEMIC FREEDOM

Basic Standards
The midwifery school must have institutional autonomy to formulate and implement policies for which its faculty/academic staff and administration are responsible, especially regarding:
- Design of the curriculum (B 1.3.1)
- Use of the allocated resources necessary for implementation of the curriculum (B 1.3.2)

Quality Improvement Standards
The midwifery school should ensure academic freedom for its staff and students:
- In addressing the actual curriculum (Q 1.3.1)
- In exploring the use of new research results to illustrate specific subjects without expanding the curriculum (Q 1.3.2)

Annotations
Institutional autonomy would include appropriate independence from government and other counterparts (regional and local authorities, religious communities, private cooperations, the professional unions, and other interest groups) to be able to make decisions about key areas such as design of curriculum, assessments, student admissions, staff recruitment/selection and employment conditions, research, and resource allocation.

Academic freedom would include appropriate freedom of expression and freedom of inquiry and publication for staff and students.
1.4. EDUCATIONAL OUTCOMES/GRADUATE PROFILES/CORE COMPETENCIES OF THE PROGRAM

**Basic Standards**

The midwifery school must:

- Have clearly defined educational outcomes that are in line with and supportive of the program goals (B 1.4.1)
- Define the intended educational outcomes that students should exhibit upon graduation in relation to:
  - Their achievements at a basic level regarding knowledge, skills, and attitudes (B 1.4.2)
  - Their commitment and skills in lifelong learning (B 1.4.3)
  - The health needs of the community, the needs of the health care system, and other aspects of social accountability (B 1.4.4)
- Ensure appropriate student conduct with respect to fellow students, faculty members, other health care personnel, and patients and their relatives (B 1.4.5)
- Make the educational outcomes known to the students and faculty (B 1.4.6)

**Quality Improvement Standards**

The midwifery school should:

- Review the outcomes periodically in consultation with principal stakeholders to ensure that the educational outcomes are in line with the needs of the health sector and the society (Q 1.4.1)
- Specify outcomes related to engagement of the students in midwifery research (Q 1.4.2)
- Ensure that educational outcomes address aspects of global health (Q 1.4.3)

**Annotation**

*Educational outcomes* refers to statements of knowledge, skills, and attitudes that students are expected to demonstrate at the end of a period of learning.

Refer to annotations in 1.1 for *lifelong learning* and *aspects of global health*.

Refer to annotations in 1.2 for *principal stakeholders*. 
2. GOVERNANCE, LEADERSHIP, AND ADMINISTRATION

2.1. GOVERNANCE OF THE PROGRAM

Basic Standard
The midwifery school **must**:
- Define its governance structure and functions including its relationships within the HEI (B 2.1.1)

Quality Improvement Standards
The midwifery school **should**:
- In its governance structures, set out the committee structure, and reflect representation from:
  - Academic staff (Q 2.1.1)
  - Students (Q 2.1.2)
  - Principal stakeholders (Q 2.1.3)
- Ensure transparency of the work of governance and its decisions (through newsletters, web-information, disclosure of minutes, etc.) (Q 2.1.4)

Annotation
*Governance* means the act and/or the structure of governing the school. Governance is primarily concerned with policymaking, the processes of establishing general institutional and program policies, and also with control of the implementation of the policies. The institutional and program policies would normally encompass decisions on the mission of the midwifery school, curriculum, admission policy, staff recruitment and selection policy, and decisions on interaction and linkage with midwifery practice and the health sector as well as other external relations.

Refer to annotations in 1.2 for principal stakeholders.

2.2. ACADEMIC LEADERSHIP OF THE PROGRAM

Basic Standards
The midwifery school must
- Describe the responsibilities of its academic leadership for definition and management of the midwifery educational program (B 2.2.1)
- Have a designated leader (a midwife who has a master's or doctoral degree and 2 years of experience in the academic area) (B 2.2.2)

Quality Improvement Standard
The midwifery school **should**:
- Periodically evaluate its academic leadership in relation to achievement of its program goals and intended educational outcomes (Q.2.2.1)
Annotation

Academic leadership refers to the positions and persons within the governance and management structures being responsible for decisions on academic matters in teaching, research, and service and would include school leader, vice school leader, heads of departments/units, and chairs of standing committees.

2.3. ADMINISTRATIVE STAFF AND MANAGEMENT

Basic Standard

The midwifery school must:

- Have adequate administrative and professional staff that are appropriate to:
  - Support implementation of its educational program and related activities (B 2.3.1)
  - Ensure good management and resource deployment (B 2.3.2)

Quality Improvement Standard

The midwifery school should:

- Formulate and implement an internal program for quality assurance of the management, including regular review (Q2.3.1)

Annotations

Administrative staff in this document refers to the positions and persons within the governance and management structures being responsible for the administrative support to policymaking and implementation of policies and plans and would—depending on the organizational structure of the administration—include head and staff in the dean’s office or secretariat, heads of financial administration, staff of the budget and accounting offices, officers and staff in the admissions office, and heads and staff of the departments for planning, personnel, and information technology (IT).

Management means the act and/or the structure concerned primarily with the implementation of the institutional and program policies including the economic and organizational implications, i.e., the actual allocation and use of resources within the midwifery school.

2.4. EDUCATIONAL BUDGET AND RESOURCE ALLOCATION

Basic Standards

The midwifery school must:

- Have a clear line of responsibility and authority for resourcing the program, including a dedicated educational budget (B 2.4.1)
- Allocate the resources necessary for the implementation of the curriculum and distribute the educational resources in relation to educational needs (B 2.4.2)
- Ensure that the budget allocation matches with student enrollment (B 2.4.3)
Quality Improvement Standards

The program should:

- Have autonomy to direct/control the budget and resources in order to achieve its program goals and the intended educational outcomes of the curriculum (Q 2.4.1)
- Have a transparent system of responsibility and accountability in the allocation, distribution, and use of the budget and other resources (Q 2.4.2)
- In distribution of the resources take in to account development in midwifery sciences and health needs of the society (Q 2.4.3)

2.5 INTERACTION WITH THE HEALTH SECTOR

Basic Standards

The midwifery school must:

- Have constructive interaction with the health and health-related sectors of society and government (B 2.5.1)
- Formalize its collaboration (entering into formal agreements, stating content and forms of collaboration, and/or establishing joint contact and coordination committees as well as joint projects), including engagement of staff and students, with partners in the health sector (B 2.5.2)

Quality Improvement Standards

The midwifery school should:

- Periodically review its interaction with the health and health related sectors (Q 2.5.1)
- Interact with health and health-related sectors based on principles of mutual benefit and shared governance (Q 2.5.2)

Annotations

Constructive interaction would imply exchange of information, collaboration, and organizational initiatives that would facilitate education of midwives so as to equip them with the qualifications needed by society.

The health sector would include the health care delivery system, whether public or private, and research institutions.

The health-related sector would—depending on issues and local organization—include institutions and regulating bodies with implications for health promotion and disease prevention (e.g., with environmental, nutritional, and social responsibilities).

Mutual benefit would mean both parties in agreement gain value out of the interaction. For example, a midwifery school sends students to certain health institutions for practice; in exchange, staff at the health institutions are given educational opportunities at the same school.

Shared governance would mean working together to make decisions for the good of both parties involved.
3. EDUCATIONAL RESOURCES

3.1 LECTURE HALLS/CLASSROOMS

Basic Standards

The midwifery school must:

- Have lecture halls/classrooms for group, tutorial, and seminar activities with adequate space (1.4m²/student for group/tutorial and 1.6m²/student for seminar) (B 3.1.1)
- Ensure that the rooms are equipped with:
  - Sufficient and comfortable chairs and tables (movable arm chairs and/or chair with table) (B 3.1.2)
  - Clean projection wall/screen (B 3.1.3)
  - Writing board with different colors of markers/chalk and duster/board cleaner (B 3.1.4)
- Ensure that the rooms are well-illuminated (words written in pencil can be read in any corner of the room and screen-projected words, pictures, and videos can be seen clearly without reflection from every corner) (B 3.1.5)
- Ensure that the rooms have adequate Ventilation (open windows and/or AC, fans) (B 3.1.6)
- Have functional toilets separate for males and females near the classroom (B 3.1.7)
- Have a regular cleaning schedule and follow-up for the facility (B 3.1.8)
- Have a built-in overhead projector and/or LCD (liquid crystal display) with computer (B 3.1.9)
- Have a water source around/near the classroom (B 3.1.10)

Quality Improvement Standards

The midwifery school should have:

- A “smart classroom” (Q 3.1.1)
- Regular/scheduled facility inspection and maintenance services (Q 3.1.2)

Annotation

Smart classroom: A smart classroom is a traditional, lecture-style teaching space that has available technological equipment that can be used to aid and enhance instruction of a course. The traditional smart classroom is equipped with the basic technology that will enable students and/or teachers to connect their laptops to the video projector or to play a VHS (virtual host storage)/DVD (digital video disk) movie. The new standard TEC (technology-enhanced classroom) model includes:

- DVD/VHS combo
- RCA video and audio input
- Laptop VGA (video graphics array) and audio input
- Network connectivity
- Amplifier and speakers
High-powered projector (3,000 lumens)
Permanent projector screen (powered or pull-down)

3.2 OFFICE FOR STAFF

Basic Standards
The midwifery school must have:

- A school dean/head office equipped with:
  - Printer, scanner, photocopy machine, and duplicating machine (B 3.2.1)
  - Fax and telephone (B 3.2.2)
  - Conference (meeting) table with chairs (B 3.2.3)
- Office for teaching and administration staffs with adequate space (2.0m²/person) (B 3.2.4)
- The office for staff must be equipped with:
  - Computers with Internet access for each teaching staff (B 3.2.5)
  - Chairs and tables with drawers (B 3.2.6)
  - File cabinet and bookshelf (B 3.2.7)
  - Nearby toilets, separate for males and females (1 toilet for 20 instructors) (B 3.2.8)

Quality Improvement Standard
The midwifery school should have:

- A regular maintenance schedule for office equipment (Q 3.2.1)

3.3 SKILLS DEVELOPMENT CENTER/LABORATORY

Basic Standards
The midwifery school must:

- Have a skills lab/laboratory to practice skills in biomedical sciences and major areas of midwifery competencies including pre-conception care, ANC (antenatal care), labor and delivery, postnatal care, family planning, newborn care, child health care practices, and nursing care; in addition, the skills lab must be suitable to practice clerking, diagnosing, developing clinical decision-making skills, managing cases, and evaluating the treatment/care outcome (B 3.3.1)
- Ensure a learning environment, which is safe for staff, students, patients, and their careers (B 3.3.2)
  - Ensure that the skills lab/laboratory room has:
    - Adequate space to accommodate 25 students per session for skill demonstration, practice, and discussion (2.2 m²/student) (B 3.3.3)
    - An adequate supply of functional midwifery equipment and simulators to learn essential competencies (with the ratio of one piece of equipment for six students in each lab session) (See Annex I) (B 3.3.4)
    - Adequate supplies listed in the respective lab manuals (B 3.3.5)
    - A dedicated office (B 3.3.6)
- Safety manuals, posted safety precautions, a fire extinguisher, emergency shower, and infection prevention equipment (B 3.3.7)
- An uninterrupted water and power supply for each bench (B 3.3.8)
- An adequate number of movable chairs, tables for each station, a labeled shelf with locks, a dust bin in all the stations, and storage (B 3.3.9)
- Audiovisual aids including video sets (B 3.3.10)
- Adequate illumination and ventilation (B 3.3.11)
- Adequate and up-to-date learning materials (reference books, checklists for all skills, standard operating procedures[SOPs], wall charts, posters, flow charts, and electronic learning resources) (See Annex II for skill lab manuals) (B 3.3.12)
- A regular cleaning schedule and follow-up for the facility (B 3.3.13)

Quality Improvement Standards
The midwifery school should:
- Ensure that the skills lab/laboratory is properly organized, and managed by a dedicated skills lab manager (Q 3.3.1)
- Be accessible for students’ independent practice (Q 3.3.2)
- Have a system for tracking all materials and equipment after each practice (Q 3.3.3)
- Have a central research lab (core lab) where the staff and students undertake midwifery research activities (Q 3.3.4)
- Have a facility to house animals for the courses offered by the program and for research (Q 3.3.5)
- Have a regular maintenance schedule for the lab facility and equipment (Q 3.3.6)

Annotations
A safe learning environment would include provision of necessary information; protection from harmful substances, specimens and organisms; laboratory safety regulations; and safety equipment.

3.4 PRACTICAL TRAINING FACILITIES/CLINICAL PRACTICE SITES

Basic Standards
The midwifery school must:
- Define appropriate clinical/practicum site selection criteria that encompass but are not limited to:
  ♦ Having an adequate client caseload and case mix as per the core competencies (B 3.4.1)
  ♦ Having sufficient staff who are willing to be preceptors (B 3.4.2)
  ♦ A range of clinical practice sites (primary, secondary, tertiary levels) and specialized research centers (B 3.4.3)
  ♦ A practice standard of practical training facilities that matches what is taught in the school (B 3.4.4)
• Have a sufficient number and variety of practicum sites for mandatory and elective midwifery practice experiences, including sites for practice in:
  ♦ Antenatal care practice (B 3.4.5)
  ♦ Labor and delivery (B 3.4.6)
  ♦ Postnatal care and family planning services and postabortion services (B 3.4.7)
  ♦ Neonatal and child care (inpatient department [IPD] and outpatient department [OPD] including expanded program on immunization [EPI]) (B 3.4.8)
  ♦ Medical care (IPD and OPD) (B.3.4.9)
  ♦ Surgical care (OPD, IPD, and operating room) (B 3.4.10)
  ♦ Gynecological care (OPD and IPD) (B 3.4.11)
  ♦ Specialty care for HIV, TB, and sexually transmitted infections (STIs) (B 3.4.12)
  ♦ Emergency services (B 3.4.13)
  ♦ Intensive care unit (ICU) services (B 3.4.14)
  ♦ Psychiatry unit/ward (B 3.4.15)
• Ensure the availability of necessary resources for giving the students adequate clinical experience, including national service delivery guidelines, personal protective equipment, learning tools (checklists, log books, SOPs) and other essential equipment (B 3.4.16)
• Ensure easy accessibility of clinical practice sites including transport facilities to distant sites (B 3.4.17)

Quality Improvement Standards
The midwifery school should
• Periodically assess the quality of sites and preceptors in light of achieving curricular needs and identify potential additional sites when needed (Q 3.4.1)
• Discontinue relationships with the sites that do not maintain the preset quality criteria and are unable to do so after implementation of a remediation plan (Q 3.4.2)
• Ensure that clinical practice sites have discussion rooms (Q 3.4.3)
• Ensure that clinical practice sites have a mini-library with essential reference books and guidelines (Q 3.4.4)
• Use accredited clinical practice sites (Q 3.4.5)

3.5 IT (INFORMATION TECHNOLOGY) FACILITIES

Basic Standards
The midwifery school must:
• Ensure students have access to computers with Internet connectivity(one computer for three students) (B 3.5.1)
• Have electronic educational resources available (B 3.5.2)
• Formulate and implement a policy that addresses effective use and evaluation of appropriate information and communication technology (ICT) for education (B 3.5.3)
Quality Improvement Standards

The midwifery school should:

- Have subscriptions to educational websites/resources for staff and students’ use (Q 3.5.1)
- Ensure that the IT center is accessible for student independent learning (outside of working hours) (Q 3.5.2)
- Have regular/scheduled IT facility inspection and maintenance services (Q 3.5.3)

3.6 LIBRARY

Basic Standards

The midwifery school must have access to a library with:

- A qualified librarian, an assistant, catalogue clerks, and other subordinates (B 3.6.1)
- A seating capacity to accommodate 25% of the total number of students at a time (B 3.6.2)
- A separate reading room for instructors (B 3.6.3)
- A catalogue system (B 3.6.4)
- Adequate illumination and ventilation, and be free from sound pollution (B 3.6.5)
- A nearby functional toilet with a water supply (B 3.6.6)
- Signs posted for appropriate behaviors (silence, no food and drinks, no smoking) (B 3.6.7)
- A schedule showing library working hours posted at the entry point (B 3.6.8)
- An adequate supply of recent midwifery textbooks (in a ratio of 1:5 students) and reference materials relevant to the courses taught (a ratio of 1:15 students) (see Annex II) (B 3.6.9)
- Access to up-to-date and peer-reviewed journals relevant to midwifery practice (local and international) (B 3.6.10)
- Copies of relevant and updated national service delivery guidelines and protocols on priority health issues in the country (see Annex II) (B 3.6.11)

Quality Improvement Standards

The midwifery school should have:

- An automated library system (system for recording and cataloging material and for ensuring the security of materials) (Q 3.6.1)
- A system to take feedback from users and update its services on a regular basis (Q 3.6.2)
- 24/7 access to services (Q 3.6.3)

Annotations

Catalogue system is a search and discovery tool that provides results from the library's online and print collections in a single search. It includes titles of printed books, journals, manuscripts, letters, and other material available at the library as well as links to the full text of millions of journal articles, digital images of graphics/illustrations, and manuscripts.
Automated library system: Library automation is the application of ICTs (information and communication technologies) to library operations and services. The functions that may be automated are any or all of the following: acquisition, cataloging, public access, indexing and abstracting, circulation, serials management, and reference.

3.7 STUDENT AMENITIES

Basic Standards

The midwifery/department must:

- Have an entity/unit responsible for student support, addressing academic, social, financial, and personal needs (B 3.7.1)
- Ensure safe and adequate student facilities including lounges, catering, student housing (if possible) and sports and recreational facilities (B 3.7.2)
- Allocate resources (budget, facilities, and qualified personnel) for student support programs (B 3.7.3)
- Ensure the availability of a student clinic, counseling, and social support units at institution level (B 3.7.4)
- Ensure that the different facilities in campus are accessible to students with disabilities (B 3.7.5)

Quality Improvement Standards

The school/department should have:

- Regular/scheduled facility inspection and maintenance services (Q 3.7.1)
- A student complex providing a variety of services (Q 3.7.2)

Annotations

Addressing social, financial, and personal needs would mean support in relation to social and personal problems and events, health problems, and financial matters, and would include access to health clinics, immunization programs, and health/disability insurance as well as financial aid services in the form of bursaries, scholarships, and loans.

3.8 FINANCIAL RESOURCES

Basic Standard

The midwifery school must:

- Deploy financial resources to:
  - Support all aspects of the goals and strategic plan and ensure stability in the delivery of the program (B 3.8.1)
  - Allow effective faculty and support staff recruitment, retention, and development (B 3.8.2)
  - Maintain and improve physical facilities, equipment, and other educational and research resources (B 3.8.3)
  - Measure, record, analyze, document, and distribute assessment and evaluation activities (B 3.8.4)
Ensure experiential learning and preceptor support for smooth curriculum implementation (B 3.8.5)

**Quality Improvement Standards**

The midwifery school **should**:

- Develop and maintain a broad base of financial support, including a program to acquire extracurricular funds through endowment income, consultancy services, grants, provision of continuing education, and other fundraising mechanisms (Q 3.8.1)
- Secure a budget for innovation in education, research, and other scholarly activities (Q 3.8.2)
- Allocate an uncommitted reserve of finance/budget to address unexpected issues (Q 3.8.3)
4. ACADEMIC STAFF, SUPPORT STAFF, AND PRECEPTORS

4.1 STAFF RECRUITMENT, AND DEVELOPMENT AND RETENTION POLICY/GUIDELINES

Basic Standard

The midwifery school must:

- Ensure the existence of a clearly stated, appropriate and effectively implemented policy and procedure for recruitment and promotion of staff that outline:
  - The type, responsibilities, and balance of the academic staff of the basic biomedical sciences, professional courses, and the behavioral and social sciences required to deliver the curriculum adequately (B 4.1.1)
  - The balance between staff teaching major and supportive courses, full-time and part-time staff, and academic and non-academic staff (B 4.1.2)
  - Equitable distribution of duties and responsibilities among the academic staff (B 4.1.3)
  - Promotion of staff to offices and academic ranks (B 4.1.4)
  - Criteria for scientific, educational, and clinical merit, including the balance between teaching, research, and service qualifications (B 4.1.5)
  - The specific responsibilities of its academic staff and mechanisms for monitoring them (B 4.1.6)

- Ensure the existence of mechanisms and procedures for professional development and career advancement of the academic staff such as advanced training, specialized courses, pedagogical training, etc. (B 4.1.7)

- Have mechanisms to identify the human resource needs of the program and training needs of the staff (B 4.1.8)

- Have a system for orienting and mentoring of new academic staff (B 4.1.9)

- Ensure that each instructor has a technical update in the field of instruction in the past 2 years with a minimum of 30 continuing education units (CEUs)/year (B 4.1.10)

- Have an evaluation system for academic staff performance that:
  - Is carried out regularly using standardized formats that are regularly updated (B 4.1.11)
  - Is performed by academic staff themselves, students, peers, and department heads (B 4.1.12)
  - Is specific and enables timely provision of constructive feedback to instructors (B 4.1.13)
  - Has documented results to be used for decision-making and staff development (B 4.1.14)
  - Encompasses technical knowledge, communication skills, teamwork, and attitudes/behavior (B 4.1.15)
Quality Improvement Standards
The midwifery school should:

- Formulate and implement a performance-based incentive system (based on performance evaluation results) for the academic staff (Q 4.1.1)
- Develop and implement a staff retention policy (Q 4.1.2)
- In its policy for staff recruitment and selection, take into account criteria such as relationship to its mission, including significant local issues (Q 4.1.3)

Annotation

Significant local issues would include gender, ethnicity, religion, language, and other issues of relevance to the school and the curriculum.

4.2 TEACHING STAFF

Basic Standards
The midwifery school must:

- Implement a ratio of academic staff to students of 1:20 for classroom teaching (B 4.2.1)
- Ensure that the number of students assigned for skills labs and practical attachments is feasible according to the specific profession and local context (B 4.2.2)
- Require the following qualifications of the academic staff:
  - Master’s Degree or above to teach major professional courses; in addition, the individual must also have at least 2 years’ experience in the related field (B 4.2.3)
  - Master’s Degree, or Bachelor’s Degree with at least 2 years’ working experience in a related field for supportive and common courses (B 4.2.4)
  - First degree and above for all instructors in the following distribution (Doctor of Philosophy [PhD] 30%, Master’s 50%, and first degree 20% or less) (B 4.2.5)
- Implement a ratio of full-time and part-time teaching faculty of 3:2 (60% and 40% respectively) (B 4.2.6)
- Assign one academic staff member to coordinate practical/clinical programs that facilitate practical learning (B 4.2.7)
- Assign a skills lab coordinator with a Bachelor’s Degree in the specific profession (B 4.2.8)
- Ensure that each instructor has taken a course on teaching methodology that enables him/her to teach and assess midwifery and nursing students effectively (B 4.2.9)

Quality Improvement Standards
The midwifery school should:

- Implement a ratio of academic staff to students of 1:5 for practical teaching (Q 4.2.1)
- Require that all instructors (classroom, practical, and skills lab) have qualifications of Master’s Degrees and above (Q 4.2.2)
- Ensure that instructors are involved in providing community services, preferably related to their specialty (Q 4.2.3)
4.3. PRECEPTORS

Basic Standards

The midwifery school must:

- Have a written guideline/criteria for selection of preceptors who are working at midwifery practice sites and providing service (B 4.3.1)

- Ensure that the preceptors:
  - Are at least Bachelor of Science graduates with minimum of 2 years of service or diploma graduates with a minimum of 3 years of clinical experience in the areas of maternal, newborn, and child health; in clinical midwifery practice sites, a specialist/medical practitioner in the respective ward can be assigned as preceptor (B 4.3.2)
  - Are registered midwives /have current license to practice midwifery (B 4.3.3)
  - Maintain competency by completing relevant CPD courses (30 CEUs per year) (B 4.3.4)
  - Have formal training for clinical teaching (B 4.3.5)

- Ensure that the preceptor-to-student ratio for the practice experience is sufficient to provide individualized instruction, guidance, and evaluative supervision (B 4.3.6)

Quality Improvement Standards

The midwifery school should:

- Establish a mechanism to support preceptors' CPD as educators and practitioners in line with their responsibilities in the program (Q 4.3.1)

- Implement incentive and recognition mechanisms for the preceptors (Q 4.3.2)

Annotations

Preceptors refers to qualified midwives and/or clinicians who are working on a full-time basis in the respective experiential practice sites and have signed a formal agreement with the higher education institutions to coach the students.

Guideline for selection of preceptor should include criteria such as desire to teach; having adequate time, teaching skills, and excellent communication skills; and having a clearly documented role and responsibilities.
5. STUDENT ADMISSION AND SUPPORT SERVICES

5.1. STUDENT ADMISSION AND SELECTION

Basic Standards

The midwifery school must:

- Have a written policy/guideline/document for student admission and selection that specifies:
  - Rationale, process of student selection, and minimum acceptance criteria/admission requirement according to the curriculum (B 5.1.1)
  - Course/credit exemption, course waiver (credits transfer), and substitution for non-generic students (B 5.1.2)
  - Existence of an entity responsible for student selection and admission that ensures transparency and fairness (B 5.1.3)
  - The process for transfer of students from other programs and institutions (B 5.1.4)
  - The process and criteria for selection of students with specials needs and from underserved populations (B 5.1.5)
  - The size of student intake in relation to its capacity and resource at all stages of the program (B 5.1.6)
  - A system for appeal for admission decisions (B 5.1.7)

- Ensure that the admission policy/guideline is in line with the institutional and national requirements (B 5.1.8)

- Ensure that student selection and admission process is transparent, free from discrimination, and in accordance with institutional polices and all applicable codes of laws (B 5.1.9)

- Be represented on the screening and selection committee/entity of the institution (B 5.1.10)

- Publish and disseminate to its constituency the admission policy and mechanism (B 5.1.11)

Quality Improvement Standards

The midwifery school should:

- State the relationship between selection, the mission of the school, the educational program and desired qualities of graduates (Q 5.1.1)

- Have a mechanism to assess the pre-entry knowledge, skill, and motivation of the applicants to be midwives, and use the result for selection of students (such as entrance exams and interviews, pre-exposure of the applicants to the actual professional practice, etc.) (Q 5.1.2)

- Have a system for student mobility, exchanges, and transfers, internationally (Q 5.1.3)

- Periodically review the admission policy/guideline and student intake in line with academic success of the students and the needs of the society in consultation with other relevant stakeholders and regulate it to the health needs of the community and society (Q 5.1.4)
Admission policy would imply adherence to possible national regulation as well as adjustments to local circumstances. If the midwifery school does not control the admission policy, it would demonstrate responsibility by explaining relationships and drawing attention to consequences, e.g., imbalance between intake and teaching capacity.

Admission criteria should include interest, pre-requisite knowledge and skills, background education, physical fitness, national exam grade requirements, and criteria for upgrading student selection.

The health needs of the society would include consideration of intake according to gender, ethnicity, and other social requirements (socio-cultural and linguistic characteristics of the population), including the potential need for a special recruitment, admission, and induction policy for underprivileged students and minorities.

5.2 STUDENT SUPPORT SYSTEMS

Basic Standards
The midwifery school must:

- Ensure that midwifery students have access to the following services:
  - Counseling on academic, health, and social issues that could otherwise affect their success in the program (B 5.2.1)
  - Student support addressing academic e.g., remedial support, peer-assisted learning), social and financial needs (B 5.2.2)
  - Access to basic 24/7 clinic services (B 5.2.3)

- Have a mechanism for students to appeal on matters related to student support services (B 5.2.4)

- Ensure that new students are effectively oriented about the program, academic rules and regulations, and the student support systems (B 5.2.5)

- Ensure support to extracurricular activities like student associations for sport, gender, and HIV (B 5.2.6)

Quality Improvement Standards
The midwifery school should:

- Provide career guidance and advice on progression after completing the program (Q 5.2.1)

- Have a system/mechanism to evaluate and ensure the adequacy, effectiveness, and safety of the available student support services (Q 5.2.2)

- Ensure that midwifery students have a student handbook that clearly indicates:
  - Student support systems and how to access them (Q 5.2.3)
  - Rights, responsibilities, and obligations of students in the school (Q 5.2.4)
  - School profile: brief history, organizational structure, etc. (Q 5.2.5)

- Support establishment of charity clubs (Q 5.2.6)
Annotations

*Academic counseling* would include questions related to choice of electives, clerkship trainings, postgraduate specializations, and career guidance. Organization of the counseling would include appointing academic mentors for individual students or small groups of students.

*Addressing social, financial, and personal needs* would mean support in relation to social and personal problems and events, health problems, and financial matters, and would include access to health clinics, immunization programs, and health/disability insurance as well as financial aid services in forms of bursaries, scholarships, and loans.

5.3 STUDENT REPRESENTATION

**Basic Standard**

The midwifery school **must**:

- Formulate and implement a policy that ensures participation of student representatives and appropriate participation in the design, management, and evaluation of the curriculum, and in other matters relevant to students (B 5.3.1)

**Quality Improvement Standard**

The medical school **should**:

- Encourage and facilitate student activities and student organizations (Q 5.3.1)

Annotations

*Participation of student representatives* would include student self-governance and representation on the curriculum committee, other educational committees’ scientific and other relevant bodies, as well as social activities and local health care projects.

To *facilitate student activities* would include consideration of providing technical and financial support to student organizations.
6. PROGRAM RELEVANCE AND CURRICULUM

6.1 PROGRAM RELEVANCE

Basic Standards
The program must:

- Identify and address national health priorities, the needs of the society, the present and emerging role of the practitioner, and professional and legal requirements for practice (B 6.1.1)
- Be consistent with a basic scientific foundation (B 6.2.2)

Quality Improvement Standards
The midwifery school should:

- Conduct a need/market assessment, in consultation with key stakeholders and international trends, to revise the program to ensure that it addresses the priority health care needs of the society (Q 6.1.1)
- Ensure that the program is consistent with international standards of the profession (Q 6.1.2)

6.2. CURRICULUM MODEL AND INSTRUCTIONAL METHODS

Basic Standards
The midwifery school must:

- Clearly define the curriculum model that enables the students to achieve the graduate competencies (B 6.2.1)
- Clearly state the instructional and learning methods employed in the curriculum based on contemporary education principles (B 6.2.2)

Quality Improvement Standards
The midwifery school should:

- Organize the curriculum around sets of functions/competencies (competency-based) and oriented to professional practice based on the future occupational practice of graduates (Q 6.2.1)
- Periodically review the curriculum to address societal needs and international developments in midwifery practice (Q 6.2.2)
- Ensure that the curriculum has instructional methods that foster the ability of students to participate in scientific development and innovations (Q 6.2.3)

Annotations
Curriculum refers to the educational program and includes a statement of the intended educational outcomes, the content/syllabus, and experiences and processes of the program including a description of the structure of the planned instructional and learning methods and assessment methods. The curriculum should set out what knowledge, skills, and attitudes the student will achieve.
Curriculum models would include models based on disciplines, organ systems, clinical problems/tasks, or disease patterns as well as models based on modular or spiral design.

Instructional methods encompass lectures, small-group teaching, hospital ward rounds, problem-based or case-based learning, peer-assisted learning, clinical practice, skills lab practices, bedside teaching, demonstrations, field exercises in the community, and web-based instruction.

Contemporary educational principles would mean principles that:
- Stimulate, prepare, and support students to take responsibility for their learning
- Are student-centered and promote self-learning
- Prepare students to be professionals as well as lifelong learners

6.3. SCIENTIFIC METHODS

Basic Standards
The midwifery school must, throughout the curriculum, teach:
- The principles of scientific method, including analytical and critical thinking (B 6.3.1)
- Midwifery research methods (B 6.3.2)
- Evidence-based medicine (B 6.3.3)

Quality Improvement Standard
The midwifery school should, throughout the curriculum:
- Include elements of original or advanced research and ensure that students engage in research activities (Q 6.3.1)

Annotations
To teach the principles of scientific method, medical research methods, and evidence-based medicine/evidence-based midwifery requires scientific competencies of teachers. This training would be a compulsory part of the curriculum and would include that the midwifery students conduct or participate in minor research projects.

Elements of original or advanced research would include obligatory or elective analytic and experimental studies, thereby fostering the ability to participate in the scientific development of midwifery as professionals and colleagues.

6.4. BASIC BIOMEDICAL SCIENCES

Basic Standard
- The midwifery school must identify and incorporate in the curriculum:
  - The contributions of the biomedical sciences to create understanding of the scientific knowledge (B 6.4.1)
  - Concepts and methods fundamental to application in midwifery practice (B 6.4.2)
Quality Improvement Standard

- The midwifery school should, in the curriculum, adjust and modify the contributions of the biomedical sciences to the:

  ♦ Scientific, technological, and clinical developments and (Q 6.4.1)
  ♦ Current and anticipated needs of the society and the health care system (Q 6.4.2)

Annotation

The basic biomedical sciences would include anatomy, biochemistry, physiology, immunology, microbiology (including bacteriology, parasitology, and virology), clinical lab methods, pathology or pathophysiology, and pharmacology.

6.5. BEHAVIORAL AND SOCIAL SCIENCES AND PROFESSIONAL ETHICS

Basic Standard

- The midwifery school must identify and incorporate in the curriculum the contributions of the behavioral sciences and social sciences, and professional ethics that enable effective communication, program-specific decision-making and ethical practices (B 6.5.1)

Quality Improvement Standard

- The midwifery school should, in the curriculum, adjust and modify the contributions of the behavioral and social sciences as well as medical ethics to:

  ♦ Scientific, technological, and clinical developments (Q 6.5.1)
  ♦ The current and anticipated needs of the society and the health care system (Q 6.5.2)
  ♦ The changing demographic and cultural contexts (Q 6.5.3)

Annotations

Behavioral and social sciences would—depending on local needs, interests, and traditions—include biostatistics, management, epidemiology, hygiene, global health, anthropology, psychology, sociology, public health, and social sciences.

Professional ethics deals with moral issues in midwifery practice such as values, rights, and responsibilities related to midwives’ behavior and decision-making.

6.6. MIDWIFERY SCIENCES AND SKILLS

Basic Standards

The midwifery school must:

- Identify and incorporate professional midwifery courses in the curriculum to ensure that students acquire sufficient knowledge and professional skills to assume responsibility after graduation (B 6.6.1)
- Ensure that a reasonable part of the program is spent in practicing the essential skills in relevant settings (B 6.6.2)
- Specify the amount of time spent in training in major professional courses (B 6.6.3)
Quality Improvement Standards

The midwifery school should:

- Adjust and modify in the curriculum the contributions of the professional midwifery courses to:
  - Scientific, technological, and clinical developments (Q 6.6.1)
  - The current and anticipated needs of the society and the health care system (Q 6.6.2)
- Structure the different components of the professional skills training according to stages of the study program and in a manner that ensures early exposure of students to practice (Q 6.6.3)

Annotations

Professional midwifery courses include obstetrics, gynecology, family planning and reproductive health, obstetrics practicum, gynecology practicum, internship in midwifery practice and community practice, neonatology, pediatrics, neonatology and pediatrics practicum, obstetrics ultrasound, psychiatry for midwifery, and medical/surgical nursing.

A reasonable part would mean about one-third of the program.

Essential midwifery skills: Graduates from a midwifery program must have an interest in health and a desire to assist women, newborns, children, their family groups, and populations in improving and enhancing health status, through the effective management of midwifery knowledge and skill. In addition, they need information-gathering skills, critical thinking, cognitive skills, and psychomotor skills. They must also demonstrate the emotional health required for full use of their intellectual abilities in the context of the physical, emotional, and mental demands of the program.

6.7. CURRICULUM STRUCTURE, COMPOSITION, AND DURATION

Basic Standards

The midwifery school must:

- Describe the content, extent, and sequencing of courses and other curricular elements to ensure appropriate coordination between biomedical, behavioral, social, and professional subjects (B 6.7.1)
- Clearly define the balance between theory and practice (at least one-third of the training time is dedicated to practical teaching) (B 6.7.2)
- Ensure that the total duration of training, credit hours per semester, and duration of practical attachments are clearly defined and consistent with the national standards (B 6.7.3)

Quality Improvement Standards

The midwifery school should, in the curriculum:

- Ensure horizontal integration of associated sciences, disciplines, and subjects (Q 6.7.1)
- Ensure vertical integration of the professional sciences with the biomedical and the behavioral and social sciences (Q 6.7.2)
Allow optional (elective) content and define the balance between the core and optional content as part of the educational program (Q 6.7.3)

Define inter-professional educational opportunities (Q 6.7.4)

Ensure early and longitudinal exposure of students to a variety of practice sites and community-based practices (Q 6.7.5)

Describe the interface with complementary midwifery practice (Q 6.7.6)

Annotations

**Horizontal integration** outlines the relationship between subjects taught at the same level of the program.

**Vertical integration** describes the process of taking information used at any one level and extending that through other levels of the program. It can also be used to articulate the relationship between fundamental, discipline-specific knowledge and professional practice.

**Core and optional (elective) content** refers to a curriculum model with a combination of compulsory elements and electives or special options.

**Inter-professional educational opportunities** refers to occasions when students from two or more health professions learn together during all or part of their professional training, with the object of cultivating collaborative practice for providing client- or patient-centered health care.

**Complementary midwifery** would include unorthodox, traditional, or alternative midwifery practices.

### 6.8 PROGRAM MANAGEMENT

**Basic Standards**

The midwifery school must:

- Have a functional curriculum committee under the education development center, which has the responsibility and authority for designing, implementing, and reviewing the curriculum to achieve its intended educational outcomes (B 6.8.1)

- In its curriculum committee, ensure representation of students and staff from all units/course teams of the school/department (B 6.8.2)

- Periodically review and update the curriculum at appropriate intervals and based on emerging evidence and the needs of the society, students’ performance assessment results, and feedback from students and other stakeholders (B 6.8.3)

- Communicate and ensure that the curriculum is available to staff, students, and other stakeholders (B 6.8.4)

- Prepare and implement an academic calendar that indicates dates of registration, course adds/drops, practical attachments, final exams, class ends, vacation, graduation, and other major events (B 6.8.5)

- Ensure that the average time for graduation is in line with the program standard (5 years for regular and at least 6 years for evening programs, with the final year totally dedicated to clerkship) (B 6.8.6)
Quality Improvement Standards
The midwifery school should:

- Plan and implement innovations in the curriculum by its curriculum committee (Q 6.8.1)
- Ensure representation of other stakeholders on the curriculum committee (Q 6.8.2)

6.9 LINKAGE WITH MIDWIFERY PRACTICE AND THE HEALTH SECTOR

Basic Standard
The midwifery school must:

- Ensure operational linkage between the educational program and the subsequent stages of training or practice after graduation (B 6.9.1)

Quality Improvement Standards
The midwifery school should:

- Ensure that the curriculum committee seeks input from the environment in which graduates will be expected to work, and modifies the program accordingly (Q 6.9.1)
- Considers program modification in response to opinions in the community and society (Q 6.9.2)

Annotations
The operational linkage implies identifying health problems and defining required educational outcomes. This requires clear definition and description of the elements of the educational programs and their interrelations in the various stages of training and practice, paying attention to the local, national, regional, and global context. It would include mutual feedback to and from the health sector and participation of teachers and students in activities of the health team. Operational linkage also implies constructive dialogue with potential employers of the graduates as a basis for career guidance.

Subsequent stages of training would include postgraduate training and continuing professional development (CPD).
7. TEACHING-LEARNING AND ASSESSMENT

7.1 TEACHING-LEARNING

Basic Standards

The midwifery school must:

- Use contemporary teaching principles that stimulate, prepare, and support students to take responsibility for their learning including active learning methods, a student-centered approach, demonstration, and facilitative practice in the classroom, skills lab, clinical, and community practice setting (B 7.1.1)

- Ensure that instructors devote much of the time to work with students individually or in small groups to guide learners, facilitate learning, evaluate each student’s performance, and provide timely feedback (B 7.1.2)

- Ensure that instructors effectively plan and prepare for teaching (B 7.1.3)

- Ensure that instructors use appropriate and relevant educational materials including national service delivery guidelines (B 7.1.4)

- Ensure the acquisition of knowledge, skills, and attitudes (KSA) for core competencies (B 7.1.5)

- Ensure that each course/module instructor provides a standardized syllabus for the course on the first day of class and thoroughly discusses it with the students (B 7.1.6)

- Ensure that instructors prepare and use a session plan that contains session objectives, outline of key points, questions, and other group activities, with needed materials for the students (B 7.1.7)

- Ensure that instructors identify and inform students about resources for in-depth reading on the session (B 7.1.8)

- Ensure that educational materials used during classroom and practical teaching are/have:
  - Content that agrees with the learning outcomes (content must be mapped with the learning outcomes) (B 7.1.9)
  - Up-to-date, factual, and technically correct (B 7.1.10)
  - Regularly revised (B 7.1.11)

- Ensure that instructors announce and use consultation hours to work with students individually or in small groups and support student learning (B 7.1.12)

- Prepare and implement a schedule for clinical practice/practical attachments (B 7.1.13)

- Have a mechanism to monitor and evaluate the teaching-learning process by instructors, preceptors, and students and use the results/feedback to improve learning (B 7.1.14)

Quality Improvement Standards

The midwifery school should:

- Clearly define in the curriculum and demonstrate use of learning methods that may include:
  - Peer-assisted learning (Q 7.1.1)
  - Problem/case-based learning or case scenario (Q 7.1.2)
  - Reflective learning using a portfolio (Q 7.1.3)
Web-based instruction (Q 7.1.4)

Field exercises in the community (community-based activities) (Q 7.1.5)

Offer students the opportunity for an early immersion and longitudinal exposure to clinical/practical experience and community-based learning under supervision of senior professionals (Q 7.1.6)

Annotations

Standardized syllabus is a document that contains all the basic information about the course. It should contain the course name and description, objectives, course logistics, teaching and assessment methods, course schedule that indicates the learning activities of each week/date, exam and assignment due dates, reading materials, course policy, grading system, and name and contact address of the course instructor.

Educational materials include handouts, textbooks, reference books, electronic learning media, and learning tools (SOPS, checklists, charts).

Schedule for clinical practice would mean a program that clearly indicates duration of attachment, names of students at each site, names of supervisors and preceptors for each group, rotation system, case presentation dates, and schedule of major activities. It should be prepared in consultation with the practice sites and communicated to supervisors, preceptors, and students before deployment.

Peer-assisted learning can be defined as the acquisition of knowledge and skills through active help and support among individuals of equal status or matched companions.

Problem/case-based learning is a teaching strategy in which students use “triggers” from the problem case or scenario to define their own learning objectives. Subsequently, they do independent, self-directed study before returning to the group to discuss and refine their acquired knowledge.

Reflective portfolio is defined as the collection of evidence that attests to achievement as well as personal and professional development through a critical analysis and reflection of its contents.

Web-based instruction is anywhere, anytime instruction delivered over the Internet or a corporate intranet to browser-equipped learners.

7.2 ASSESSMENT

Basic Standards

The midwifery school must:

- Have assessment policies/guideline that clearly define:
  - A range of assessment methods used for formative and summative evaluation (B 7.2.1)
  - The frequency and timing of exams (B 7.2.2)
  - Criteria for setting pass marks (B 7.2.3)
Grading, promotion, repetition, dismissal and re-admission, and number of allowed retakes (B 7.2.4)

A system for appeal for assessment results (B 7.2.5)

The quality assurance process for assessment practices (B 7.2.6)

- Use a variety of methods for both knowledge and performance assessment:
  - At least two of the following methods are used for knowledge assessment: oral exam, written exams (multiple-choice question, essay, short answer), assignments, project works, case presentations, seminars (B 7.2.7)
  - At least one of the following methods is used for performance assessment: structured observation, review of the portfolio, or evaluation of tasks performed by students (B 7.2.8)

- Administer both formative and summative assessment on a continuous basis:
  - The final exam of each course is comprehensive and accounts for not more than 40% of the total mark and the remaining is based on continuous assessment (B 7.2.9)
  - Each instructor provides timely, specific, constructive, and positive feedback to students on the basis of assessment results (B 7.3.10)
  - A mechanism is in place to provide special support to students with poor performance based on assessment results (B 7.3.11)

- Ensure confidentiality and security of student assessment processes and assessment results/academic records (B 7.3.12)

- Ensure autonomy of the school and its academic staff in the management of student assessment (B 7.3.13)

**Quality Improvement Standards**

The midwifery school **should:**

- Have an exam committee that ensures the validity and reliability of student assessment through:
  - Ensuring that each method of assessment and exam questions are prepared as per the standard (Q 7.3.1)
  - Supporting the staff to prepare a blueprint for each assessment to ensure that assessment methods match the learning outcomes and cover all portions of the course (Q 7.3.2)

- Support staff to conduct item analysis and use the result for decision-making (Q 7.3.3)

- Establish and run a functional exam bank (Q 7.3.4)

- Use the following methods for performance assessment:
  - Objectively structured practical exam (Q 7.3.5)
  - 360-degree evaluation (Q 7.3.6)

- Ensure that the majority (>50%) of written assessment items/questions test higher-order cognitive domains/problem-solving ability (Q 7.3.7)

- Adjust the number and nature of examinations of curricular elements to encourage both acquisition of the knowledge base and integrated learning (Q 7.3.8)
Administer a comprehensive qualifying exam before students are deployed for internship/clerkship to prepare them for the national licensure exam (Q 7.3.9)

Annotations

Formative and summative assessment: Formative assessment is assessment used to improve student learning and performance by giving feedback, while summative assessment is used to decide if the student has to move to the next stage of learning. Both should be conducted on continual basis.

Higher-order cognitive domains include application, synthesis, and evaluation.

Portfolio is a collection of papers and other forms of evidence that learning has taken place. It provides evidence for learning and progress toward learning objectives. Reflecting upon what has been learned is an important part of constructing a portfolio.

Validity is the ability of an assessment to measure what it is supposed to measure. Validity is not about the method but refers to the evidence presented to support or refute the meaning or interpretation assigned to assessment results.

Reliability is the reproducibility or consistency or generalizability of assessment scores. An assessment result is said to be reliable if students will get the same score if they re-take the exam.

Blueprint is a clear, written recipe for an exam that ensures all content (knowledge, skills, and attitudes) is covered fairly and the test is a balanced sample of all the learning objectives that students have to master.

Item analysis refers to a statistical technique that helps instructors identify the effectiveness of their test items. In the development of quality assessment and specifically effective multiple-choice test items, item analysis plays an important role in contributing to the fairness of the test along with identifying content areas that may be problematic for students.

Objectively structured practical exam is a performance-based exam. During the exam, students are observed and evaluated as they go through a series of eight or more stations. It allows assessment of multiple competencies. It is objective, because examiners use a checklist for evaluating the trainees; structured, because every student sees the same problem and performs the same tasks in the same time frame; and practical, because the tasks are representative of those faced in real, practical situations.

360-degree evaluation consists of measurement tools completed by multiple people in a student’s sphere of influence. Evaluators usually are faculty, other members of the health care team, peers, patients, families, and community members. It can be used to assess interpersonal and communication skills, teamwork ability, management skills, decision-making professional behaviors, and some aspects of patient care.

Encouragement of integrated learning would include consideration of using integrated assessment, while ensuring reasonable tests of knowledge of individual disciplines or subject areas.
8. STUDENT PROGRESSION AND GRADUATE OUTCOMES

Basic Standards
The midwifery school must:

- Have a mechanism to monitor student performance and progress regularly (B 8.0.1)
- Trace level of and reasons for student attrition and take actions to minimize it (B 8.0.2)
- Ensure that the final qualifications achieved by the graduates are in line with the formulated and expected learning outcomes of the program (B 8.0.3)

Quality Improvement Standards
The midwifery school should:

- Have a system to link the program and potential employers and facilitate graduate employment (Q 8.0.1)
- Have a mechanism to trace employability, performance at the workplace, and satisfaction of its graduates/employers and use the findings to influence the curriculum (Q 8.0.2)
- Implement strategies and programs to broaden the professional horizons of students and enhance their performance in areas such as scientific inquiry, scholarly concern for the profession, and the relevance and value of research through:
  - Inviting guest lecturers (Q 8.0.3)
  - Participating in curricular and extracurricular activities (Q 8.0.4)
  - Arranging panel discussions with senior experts in different areas of midwifery practice (Q 8.0.5)
  - Supporting students and academic staff to participate in national and international scientific conferences (Q 8.0.6)
  - Organizing midwifery uniform /gown ceremonies that welcome students into the profession of midwifery (Q 8.0.7)
9. CONTINUAL QUALITY ASSURANCE

Basic Standards

The midwifery school must:

- Have a functional internal quality assurance unit leading the quality assurance system with clearly defined duties/responsibilities and lines of communication (B 9.0.1)
- Allocate an adequate budget to the quality assurance unit to carry out its responsibilities (B 9.0.2)
- Assign a qualified person to lead the unit (minimum of 2 years of teaching experience, training in educational quality assurance, and training on teaching and assessment of health care providers) (B 9.0.3)
- Conduct quality assessment using the internal quality standard tool (at least annually), and develop and implement clear strategies/work plans to fill the gaps identified (B 9.0.4)
- Have a system for regular curriculum evaluation and review (at least every 5 years) (B 9.0.5)
- Seek external quality audit and verification by HERQA or peer institutions and work on the recommendations given to ensure continual quality (B 9.0.6)

Quality Improvement Standards

The midwifery school should:

- Have a well-organized, functional, and vibrant internal quality assurance unit that is responsible for monitoring and evaluation of input, process, output, and impact of the educational program (Q 9.0.1)
- Systematically seek, analyze, and respond to teacher and student feedback (collect student and instructor comments using a structured questionnaire or suggestion book, take corrective action, and document) (Q 9.0.2)
- Conduct external verification by peer institutions/schools every 2 years (Q 9.0.3)
- Conduct review meetings with representatives from practice sites, industries, and professional bodies annually to evaluate the effectiveness of learning experiences (Q 9.0.4)
- Develop the structure, governance, and management of the organization to cope with changing circumstances and needs and, over time, accommodate the interests of the different groups of stakeholders (Q 9.0.5)
10. RESEARCH AND DEVELOPMENT, AND EDUCATIONAL EXCHANGES

Basic Standards
The midwifery school must:

- Formulate and implement a staff development policy that allows a balance of capacity between teaching, research, and service functions (B 10.0.1)
- Have a clearly set research agenda for academic staff as well as students in line with the country’s priority health care and developmental needs (B 10.0.2)
- Allocate a sufficient budget and facility to support research and staff exchange (B 10.0.3)
- Ensure that each academic staff member as a part of a research team undertakes research and publishes one article in national/international journal at least every 2 years (B 10.0.4)
- Ensure that the research findings of the school are used to improve learning, community services, and program and professional development (B 10.0.5)
- Allocate a budget for students’ research/directed studies (for transportation, data collection, chemical/reagent purchase, stationery) (B 10.0.6)

Quality Improvement Standards
The midwifery school should:

- Have thematic research areas in line with the country’s priority health care and developmental needs (Q 10.0.1)
- Ensure that each academic staff member as a part of a research team undertakes research and publishes at least one article in a reputable journal every year (Q 10.0.2)
- Formulate and implement a policy for national and international collaboration with other educational institutions, industries, and research centers (Q 10.0.3)
- Facilitate regional and international exchange of staff and students by providing appropriate resources, and ensure that the exchange is purposefully organized, taking into account the needs of staff and students (Q 10.0.4)
- Support active participation of staff in relevant professional conferences, seminars, workshops, and other academic activities at national and international levels so as to improve education and research (Q 10.0.5)
<table>
<thead>
<tr>
<th>S. No</th>
<th>Skills Lab Materials</th>
<th>Standards to Number of Students</th>
<th>Competencies</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Records (client/patient charts)</td>
<td>1 chart/students</td>
<td>History taking and client communication</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Table and chairs</td>
<td>1 table/6 students 1 chair/student</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Register</td>
<td>6 registration book/competencies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Lab request papers</td>
<td>1 pad from each type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Gloves</td>
<td>1 pair per students</td>
<td>Physical examination</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Examination table/bed</td>
<td>6 beds for 6 stations</td>
<td></td>
<td>With foot stool or steps stool; wooden/plastic /steel; adjustable on castors Dressing gown and cover sheets Screen</td>
</tr>
<tr>
<td>7.</td>
<td>BP (blood pressure) apparatus</td>
<td>1 per 6 students</td>
<td></td>
<td>Sphygmomanometer and stethoscope</td>
</tr>
<tr>
<td>8.</td>
<td>Thermometer</td>
<td>1 per 6 students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Reflex hammer</td>
<td>1 per 6 students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Disposable tongue depressor</td>
<td>1 per 6 students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>Light source/examination light or flashlight</td>
<td>1 per 6 students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>Weighing scale</td>
<td>1 per room</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>Gauze</td>
<td>1 per station</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>Cotton</td>
<td>1 roll per station</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>Sharps containers</td>
<td>1 per station</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td>0.5% chlorine solution</td>
<td>1 per station</td>
<td></td>
<td>Receptacle for decontamination</td>
</tr>
<tr>
<td>17.</td>
<td>Dust bin</td>
<td>1 per station</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>Microscope</td>
<td>1 per 2 students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td>Tourniquet</td>
<td>1 per table</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td>Cuvette</td>
<td>1 per 2 students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21.</td>
<td>Microscope slides</td>
<td>1 per table</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22.</td>
<td>Cotton wool swab</td>
<td>1 per table</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23.</td>
<td>Laboratory forms</td>
<td>different types</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24.</td>
<td>Hand sanitizers/disinfectants</td>
<td>1 per table</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25.</td>
<td>Slide containers</td>
<td>1 per table</td>
<td></td>
<td></td>
</tr>
<tr>
<td>26.</td>
<td>Cold storage</td>
<td>1 per room</td>
<td></td>
<td>Or simulation, to preserve specimens</td>
</tr>
<tr>
<td>27.</td>
<td>Adhesive tape</td>
<td>1 per station</td>
<td></td>
<td></td>
</tr>
<tr>
<td>28.</td>
<td>Hemoglobin measurement</td>
<td>1 per table</td>
<td></td>
<td>e.g., Hemacue</td>
</tr>
<tr>
<td>S. No</td>
<td>Skills Lab Materials</td>
<td>Standards to Number of Students</td>
<td>Competencies</td>
<td>Remarks</td>
</tr>
<tr>
<td>-------</td>
<td>----------------------</td>
<td>---------------------------------</td>
<td>--------------</td>
<td>---------</td>
</tr>
<tr>
<td>29.</td>
<td>Health education and counseling</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30.</td>
<td>Table and chairs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31.</td>
<td>Wall charts relevant to the topic: for example: normal changes of pregnancy; prenatal complications; nutritional requirements of mother, newborn, and infant; fetal growth and development; family planning charts; maternal and child immunizations; health education programs</td>
<td>1 per room</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Family Planning</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32.</td>
<td>Wall charts</td>
<td>1 per room</td>
<td></td>
<td>Female reproductive anatomy Male reproductive anatomy Contraceptive methods</td>
</tr>
<tr>
<td>33.</td>
<td>Flip chart and markers</td>
<td>1 per station</td>
<td></td>
<td>Condoms, implant, injectables/ hormonal IUD, oral contraceptive pills (variety of packaging)</td>
</tr>
<tr>
<td>34.</td>
<td>Family planning samples</td>
<td>1 per station</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35.</td>
<td>Condom demonstration: Penis model on base; condoms; tissue, waste bin, hand washing facilities or hand rub (may be locally produced by midwife) or soap</td>
<td>1 per 6 students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>36.</td>
<td>Implant insertion kit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>37.</td>
<td>Anatomic model – female arm for implant insertion  Equipment for insertion: small Rampley sponge-holding forceps, bowl/basin, 2x curved mosquito forceps, scalpel – handle #4, waste disposal bin, handwashing facilities or hand rub or soap, gloves, cotton swabs, iodine solution in a bottle</td>
<td>1 per 6 students</td>
<td>Clean gloves for simulation, sterile gloves for use with clients</td>
<td></td>
</tr>
<tr>
<td>38.</td>
<td>IUD insertion kit, anatomic models, pelvis (ZOE or similar), cervix and uterus, equipment for insertion, tenaculum ring forceps, uterine sound, IUD in drive tube, cotton swabs, iodine solution in a bottle, waste bin, hand washing facilities or handrub, gloves</td>
<td>1 per 6 students</td>
<td>Clean gloves for simulation, sterile gloves for use with clients</td>
<td></td>
</tr>
<tr>
<td>39.</td>
<td>Injectables, anatomic model, 18–20 gauge needles, 3 cc syringe</td>
<td>1 model per 6 students 1 needle per student 3</td>
<td>e.g., arm, orange, or grapefruit Depo-</td>
<td></td>
</tr>
<tr>
<td>S. No</td>
<td>Skills Lab Materials</td>
<td>Standards to Number of Students</td>
<td>Competencies</td>
<td>Remarks</td>
</tr>
<tr>
<td>-------</td>
<td>---------------------------------------------</td>
<td>---------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>40.</td>
<td>Antenatal care equipment</td>
<td></td>
<td></td>
<td>Provera (simulated)</td>
</tr>
<tr>
<td>41.</td>
<td>Pelvic model</td>
<td>1 per 6 students</td>
<td></td>
<td>ZOE with landmarks</td>
</tr>
<tr>
<td>42.</td>
<td>Bony pelvis</td>
<td>1 per 6 students</td>
<td>Ligaments, plane, and reproductive organs and with female genital mutilation</td>
<td></td>
</tr>
<tr>
<td>43.</td>
<td>Breast model</td>
<td>1 per 6 students</td>
<td>Alternately, small ball with appropriate size socks</td>
<td></td>
</tr>
<tr>
<td>44.</td>
<td>Non-pregnant female model</td>
<td>1 per 6 students</td>
<td>Model with non-pregnant abdomen</td>
<td></td>
</tr>
<tr>
<td>45.</td>
<td>Wall charts</td>
<td>1 per room</td>
<td></td>
<td>Normal changes of pregnancy, prenatal discomforts, fetal growth and development, danger signs, chart on comfort measures during labor, basic food groups, chart with positioning of the placenta in the uterus</td>
</tr>
</tbody>
</table>

**History-Taking Equipment**

| 46.   | Pregnant abdomen                           | 1 per table                     |                                                                             |                                                                                               |
| 47.   | Antenatal care records                     | 1 book                          | Consistent with local clinical practice                                     |                                                                                               |
| 48.   | Age calculator                             | 1 per students                  | Gestational age wheel                                                        |                                                                                               |
| 49.   | Physical examination                       |                                 |                                                                             |                                                                                               |
| 50.   | Measuring tape                             | 1 per students                  |                                                                             |                                                                                               |
| 51.   | Vagina speculums, various sizes           | 1 per 6 students                |                                                                             |                                                                                               |
| 52.   | Lubricant, water-soluble                   | 1 per 6 students                |                                                                             |                                                                                               |
| 53.   | Sterile vaginal swabs                      | 1 per 6 students                |                                                                             |                                                                                               |
| 54.   | Fetoscope or Doppler                       | Fetoscope 1 per student         | Doppler 1 to 6 students                                                      |                                                                                               |
| 55.   | Urine testing kit                          | 1 pack                          | for protein and sugar                                                        |                                                                                               |
| 56.   | Urine specimen bottles                     | 1 bottle                        |                                                                             |                                                                                               |
| 57.   | HIV (Human Immunodeficiency Virus) testing kit, (KHB 50), Stat Pak (20), Uni-Gold (20), lancet, capillary | 3 pack for KHB, 2 for Uni-Gold, and Stat Pak for one class/group | Per country protocol                                                                     |                                                                                               |
| 58.   | Personal protective equipment              | 1 per students                  | Waterproof apron, boots, long gloves, goggles, mask, cape, long gown, disinfectants, decontamination materials |                                                                                               |
| 59.   | Syringes and needles                       | 1 per students                  |                                                                             |                                                                                               |

38 National Accreditation and Quality Improvement Standards for Midwifery Degree Program
<table>
<thead>
<tr>
<th>S. No</th>
<th>Skills Lab Materials</th>
<th>Standards to Number of Students</th>
<th>Competencies</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>60.</td>
<td>Ultrasound</td>
<td>1 room</td>
<td></td>
<td></td>
</tr>
<tr>
<td>61.</td>
<td>Wall clock</td>
<td>1 per room</td>
<td></td>
<td></td>
</tr>
<tr>
<td>62.</td>
<td>Cotton swabs in bowl</td>
<td>1 per table</td>
<td></td>
<td></td>
</tr>
<tr>
<td>63.</td>
<td>Laboratory test forms</td>
<td>1 per station</td>
<td></td>
<td></td>
</tr>
<tr>
<td>64.</td>
<td>Examination gloves</td>
<td>1 per student per session</td>
<td></td>
<td></td>
</tr>
<tr>
<td>65.</td>
<td>Referral forms</td>
<td>1 per station</td>
<td></td>
<td></td>
</tr>
<tr>
<td>66.</td>
<td>Medications used in the antepartum period: hematenics, tetanus toxoid, vitamins, lifesaving medications, iron tablets, immunization set</td>
<td>1 per station</td>
<td>Simulation: antimalarial, antibiotics, anticonvulsants, antihypertensive, and antiretroviral</td>
<td></td>
</tr>
<tr>
<td>67.</td>
<td>Advanced childbirth simulator</td>
<td>1 per 6 students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>68.</td>
<td>Cloth pelvic model (Health Edco item)</td>
<td>1 per 6 students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>69.</td>
<td>Vinyl pelvic model (Health Edco item)</td>
<td>1 per 6 students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>70.</td>
<td>Placenta/cord /amnion/chorion model</td>
<td>1 per 6 students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>71.</td>
<td>Cervical dilation easel display (Health Edco item)</td>
<td>1 per table</td>
<td>Cervical dilation model</td>
<td></td>
</tr>
<tr>
<td>72.</td>
<td>Third trimester fetal model</td>
<td>1 per 6 students</td>
<td>Developmental series model</td>
<td></td>
</tr>
<tr>
<td>73.</td>
<td>Bony pelvis</td>
<td>1 per 6 students</td>
<td>Landmarks identified</td>
<td></td>
</tr>
<tr>
<td>74.</td>
<td>Adult resuscitation model</td>
<td>1 per table</td>
<td></td>
<td></td>
</tr>
<tr>
<td>75.</td>
<td>Fetal skull</td>
<td>1 per 6 students</td>
<td>Landmarks identified</td>
<td></td>
</tr>
<tr>
<td>76.</td>
<td>Pelvic model</td>
<td>1 per table</td>
<td></td>
<td></td>
</tr>
<tr>
<td>77.</td>
<td>Vagina speculums</td>
<td>2 per table</td>
<td>Various sizes</td>
<td></td>
</tr>
<tr>
<td>78.</td>
<td>Lubricant</td>
<td></td>
<td>Water-soluble</td>
<td></td>
</tr>
<tr>
<td>79.</td>
<td>Sterile examination gloves</td>
<td>1 pair per student for each session</td>
<td>(May simulate with non-sterile gloves)</td>
<td></td>
</tr>
</tbody>
</table>

### Intrapartum Care

<p>| 80.   | Forms and records                                                                   | 1 per station                    |                                                                              |                                                                              |
| 81.   | Partograph                                                                          | 1 per student                    |                                                                              |                                                                              |
| 82.   | Equipment and supplies for intrapartum and immediate postpartum care of the mother | 1 per station                    |                                                                              |                                                                              |
| 83.   | Intravenous supplies                                                                | 1 per station                    |                                                                              |                                                                              |
| 84.   | Alcohol handrub                                                                     | 1 per station                    |                                                                              |                                                                              |
| 85.   | Cannula                                                                             | 1 per station                    |                                                                              |                                                                              |</p>
<table>
<thead>
<tr>
<th>S. No</th>
<th>Skills Lab Materials</th>
<th>Standards to Number of Students</th>
<th>Competencies</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>86.</td>
<td>Mayo scissors</td>
<td>1 per station</td>
<td></td>
<td></td>
</tr>
<tr>
<td>87.</td>
<td>Fixing dressings and tapes</td>
<td>1 per station</td>
<td></td>
<td></td>
</tr>
<tr>
<td>88.</td>
<td>Ring forceps (3)</td>
<td>1 per station</td>
<td></td>
<td></td>
</tr>
<tr>
<td>89.</td>
<td>Large hemostats</td>
<td>1 per station</td>
<td></td>
<td></td>
</tr>
<tr>
<td>90.</td>
<td>Kochers forceps or amniotomy hook</td>
<td>1 per station</td>
<td></td>
<td></td>
</tr>
<tr>
<td>91.</td>
<td>Artery forceps (7 1/2 in.)/(3)</td>
<td>1 per station</td>
<td></td>
<td></td>
</tr>
<tr>
<td>92.</td>
<td>Catheter (Foleys) size 14–16 cm</td>
<td>1 per station</td>
<td></td>
<td></td>
</tr>
<tr>
<td>93.</td>
<td>Sharps container</td>
<td>1 per station</td>
<td></td>
<td></td>
</tr>
<tr>
<td>94.</td>
<td>Basins for decontamination</td>
<td>3 basins per table</td>
<td></td>
<td></td>
</tr>
<tr>
<td>95.</td>
<td>Plastic graduated measuring jug</td>
<td>1 per station</td>
<td></td>
<td></td>
</tr>
<tr>
<td>96.</td>
<td>Episiotomy, perineal laceration, and repair set</td>
<td>1 set per table</td>
<td>(Ideally one set per student)</td>
<td></td>
</tr>
<tr>
<td>97.</td>
<td>Absorbable suture commonly available locally</td>
<td>1 per student</td>
<td>e.g., Chromic catgut 2-0</td>
<td></td>
</tr>
<tr>
<td>98.</td>
<td>Semi-curved surgical scissors</td>
<td>1 per station</td>
<td></td>
<td></td>
</tr>
<tr>
<td>99.</td>
<td>Adhesive bandages</td>
<td>1 per station</td>
<td></td>
<td></td>
</tr>
<tr>
<td>100.</td>
<td>Needle driver/holder</td>
<td>1 per station</td>
<td></td>
<td></td>
</tr>
<tr>
<td>101.</td>
<td>10-cc syringe</td>
<td>1 per student</td>
<td></td>
<td></td>
</tr>
<tr>
<td>102.</td>
<td>18-gauge needle</td>
<td>1 per student</td>
<td></td>
<td></td>
</tr>
<tr>
<td>103.</td>
<td>Pick-ups</td>
<td>1 set per table</td>
<td>(Plain dissecting forceps), sterile</td>
<td></td>
</tr>
<tr>
<td>104.</td>
<td>Drapes (delivery)</td>
<td>2 per table</td>
<td></td>
<td></td>
</tr>
<tr>
<td>105.</td>
<td>Sanitary pad</td>
<td>1 per station</td>
<td></td>
<td></td>
</tr>
<tr>
<td>106.</td>
<td>Medications used in the intrapartum period (simulations); local anesthetic</td>
<td>1 per station</td>
<td>e.g., Xylocaine/ lidocaine 1%, analgesic (e.g., Pethidine)</td>
<td></td>
</tr>
<tr>
<td>107.</td>
<td>Oxytocin or alternative uterotonic</td>
<td>1 per station</td>
<td>According to country protocol</td>
<td></td>
</tr>
<tr>
<td>108.</td>
<td>Misoprostol</td>
<td>1 per station</td>
<td></td>
<td></td>
</tr>
<tr>
<td>109.</td>
<td>Ringer's lactate solution</td>
<td>1 set per table</td>
<td></td>
<td></td>
</tr>
<tr>
<td>110.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>111.</td>
<td>Dextrose 5% normal saline 0.9%</td>
<td>1 set per table</td>
<td></td>
<td></td>
</tr>
<tr>
<td>112.</td>
<td>Equipment and supplies for immediate care of the newborn</td>
<td>1 per station</td>
<td></td>
<td></td>
</tr>
<tr>
<td>113.</td>
<td>Plastic cord clamp/string</td>
<td>1 per station</td>
<td></td>
<td></td>
</tr>
<tr>
<td>114.</td>
<td>Table with flat and accessible working surface</td>
<td>1 per station</td>
<td></td>
<td></td>
</tr>
<tr>
<td>115.</td>
<td>Mucus extractor</td>
<td>1 per table</td>
<td></td>
<td></td>
</tr>
<tr>
<td>116.</td>
<td>Pediatric ID band</td>
<td>1 per station</td>
<td></td>
<td></td>
</tr>
<tr>
<td>117.</td>
<td>Infant blanket</td>
<td>2 per station</td>
<td>Thermoregulation</td>
<td></td>
</tr>
<tr>
<td>118.</td>
<td>Infant warmer</td>
<td>1 per station</td>
<td>Thermoregulation</td>
<td></td>
</tr>
<tr>
<td>119.</td>
<td>Hot water bottles</td>
<td>1 per table</td>
<td>Thermoregulation</td>
<td></td>
</tr>
<tr>
<td>120.</td>
<td>Heating pad</td>
<td>1 per station</td>
<td>Thermoregulation</td>
<td></td>
</tr>
<tr>
<td>S. No</td>
<td>Skills Lab Materials</td>
<td>Standards to Number of Students</td>
<td>Competencies</td>
<td>Remarks</td>
</tr>
<tr>
<td>-------</td>
<td>---------------------------------------------</td>
<td>---------------------------------</td>
<td>-----------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>121.</td>
<td>Towels</td>
<td>2 per table</td>
<td></td>
<td>For warming and stimulation</td>
</tr>
<tr>
<td>122.</td>
<td>Charts on health education</td>
<td>1 per room</td>
<td>Postpartum care</td>
<td>Family planning method Attachment of baby to breast Nutrition and handwashing</td>
</tr>
<tr>
<td></td>
<td>Medications Used in the Postpartum Period (simulations)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>123.</td>
<td>Hematinics</td>
<td>1 per station</td>
<td></td>
<td>For anemia</td>
</tr>
<tr>
<td>124.</td>
<td>Antiretroviral drugs (ARVs)</td>
<td>1 per station</td>
<td></td>
<td>ARVs for HIV-positive mothers</td>
</tr>
<tr>
<td>125.</td>
<td>Antipyretics</td>
<td>1 per station</td>
<td></td>
<td></td>
</tr>
<tr>
<td>126.</td>
<td>Antibiotics</td>
<td>1 per station</td>
<td></td>
<td></td>
</tr>
<tr>
<td>127.</td>
<td>Analgesics</td>
<td>1 per station</td>
<td>Immediate Newborn and Infant Care</td>
<td></td>
</tr>
<tr>
<td>128.</td>
<td>Full-term baby doll with sutures</td>
<td>1 per table</td>
<td></td>
<td></td>
</tr>
<tr>
<td>129.</td>
<td>CPR infant manikin replacement face shield/lungs</td>
<td>1 per table</td>
<td></td>
<td></td>
</tr>
<tr>
<td>130.</td>
<td>Baby weighing scale</td>
<td>1 per station</td>
<td></td>
<td></td>
</tr>
<tr>
<td>131.</td>
<td>Infant stethoscope</td>
<td>1 per student</td>
<td></td>
<td></td>
</tr>
<tr>
<td>132.</td>
<td>Newborn record</td>
<td>1 per station</td>
<td></td>
<td></td>
</tr>
<tr>
<td>133.</td>
<td>Thermometer</td>
<td>1 per student</td>
<td></td>
<td></td>
</tr>
<tr>
<td>134.</td>
<td>Wall charts</td>
<td>1 per room</td>
<td></td>
<td>APGAR score, gestational age, examination of the baby, immunization schedule, resuscitation, how to position baby to breastfeed</td>
</tr>
<tr>
<td>135.</td>
<td>Eye care medications (simulation)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>136.</td>
<td>Povidone iodine 2.5% solution</td>
<td>Optional</td>
<td></td>
<td></td>
</tr>
<tr>
<td>137.</td>
<td>Cotton swabs</td>
<td>1 per 6 students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>138.</td>
<td>Tetracycline eye ointment</td>
<td>1 per 6 students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>139.</td>
<td>Silver nitrate 1%</td>
<td>Optional</td>
<td></td>
<td>NeoNatalie full model</td>
</tr>
<tr>
<td>140.</td>
<td>Infant resuscitation</td>
<td>1 per 6 students</td>
<td></td>
<td>Newborn</td>
</tr>
<tr>
<td>141.</td>
<td>Self-inflating bag</td>
<td>1 per 6 students</td>
<td></td>
<td>Newborn</td>
</tr>
<tr>
<td>142.</td>
<td>Mucus extractor</td>
<td>1 per table</td>
<td></td>
<td>Term and premature sizes, oxygen source with flow meter (may simulate)</td>
</tr>
<tr>
<td>143.</td>
<td>Resuscitation bag and mask</td>
<td>1 per table</td>
<td></td>
<td></td>
</tr>
<tr>
<td>144.</td>
<td>Stethoscope</td>
<td>1 per 6 students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>145.</td>
<td>Clock</td>
<td>1 per table</td>
<td></td>
<td></td>
</tr>
<tr>
<td>146.</td>
<td>Baby towel</td>
<td>2 per table</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S. No</td>
<td>Skills Lab Materials</td>
<td>Standards to Number of Students</td>
<td>Competencies</td>
<td>Remarks</td>
</tr>
<tr>
<td>-------</td>
<td>----------------------</td>
<td>---------------------------------</td>
<td>--------------</td>
<td>---------</td>
</tr>
<tr>
<td></td>
<td>Infant Immunization</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>147.</td>
<td>Needles and syringes</td>
<td>1 per station</td>
<td></td>
<td></td>
</tr>
<tr>
<td>148.</td>
<td>Antiseptic solution</td>
<td>For each students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>149.</td>
<td>Simulated tissue</td>
<td>1 per table</td>
<td></td>
<td>e.g., Firm foam rubber for injection</td>
</tr>
<tr>
<td>150.</td>
<td>Vials of vaccine (simulated)</td>
<td>1 per station</td>
<td></td>
<td></td>
</tr>
<tr>
<td>151.</td>
<td>Immunization record</td>
<td>1 per station</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Well Baby Care</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>152.</td>
<td>Rectal thermometer</td>
<td>1 per station</td>
<td></td>
<td></td>
</tr>
<tr>
<td>153.</td>
<td>Infant stethoscope</td>
<td>1 per station</td>
<td></td>
<td></td>
</tr>
<tr>
<td>154.</td>
<td>Wall clock with seconds hand</td>
<td>1 per room</td>
<td></td>
<td></td>
</tr>
<tr>
<td>155.</td>
<td>Clothing/cap/diaper</td>
<td>1 per station</td>
<td></td>
<td></td>
</tr>
<tr>
<td>156.</td>
<td>Baby immunization record book</td>
<td>1 per station</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Postabortion-Related Care</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>157.</td>
<td>Vaginal speculum</td>
<td>2 per student</td>
<td></td>
<td></td>
</tr>
<tr>
<td>158.</td>
<td>Needle and 10 ml syringe for paracervical block</td>
<td>1 per 6 students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>159.</td>
<td>Intravenous equipment and supplies</td>
<td>1 per 6 students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>160.</td>
<td>Manual vacuum aspiration (MVA) kit</td>
<td>1 per 6 students</td>
<td>Can obtain from IPAS as MVA Plus (reusable)</td>
<td></td>
</tr>
<tr>
<td>161.</td>
<td>Silicone for lubricating the syringe</td>
<td>1 per 6 students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>162.</td>
<td>Set of dilators</td>
<td>1 per 6 students</td>
<td>Tapered dilator, such as Pratt or Denniston, are the best</td>
<td></td>
</tr>
<tr>
<td>163.</td>
<td>Sponge-holding forceps</td>
<td>1 per 6 students</td>
<td>Straight</td>
<td></td>
</tr>
<tr>
<td>164.</td>
<td>Ring forceps 9.5 in or 24.2 cm</td>
<td>1 per 6 students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>165.</td>
<td>Long dressing forceps</td>
<td>1 per 6 students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>166.</td>
<td>Uterine sound</td>
<td>1 per 6 students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>167.</td>
<td>Tenaculum</td>
<td>1 per 6 students</td>
<td>A traumatic and/or single-tooth</td>
<td></td>
</tr>
<tr>
<td>168.</td>
<td>Mosquito artery forceps</td>
<td>1 per 6 students</td>
<td>Curved and straight</td>
<td></td>
</tr>
<tr>
<td>169.</td>
<td>Large curved hemostat, 7 in (artery forceps)</td>
<td>1 per 6 students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>170.</td>
<td>Bowls (various sizes)</td>
<td>1 per 6 students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>171.</td>
<td>Container and strainer for tissue inspection</td>
<td>1 per 6 students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>172.</td>
<td>Strong light source or big flashlight</td>
<td>1 per 6 students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>173.</td>
<td>Delivery bed</td>
<td>6 beds for 6 station</td>
<td>Additional skills lab equipment</td>
<td>Fenestrated</td>
</tr>
<tr>
<td>174.</td>
<td>Baby doll with placenta</td>
<td>1 per station</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S. No</td>
<td>Skills Lab Materials</td>
<td>Standards to Number of Students</td>
<td>Competencies</td>
<td>Remarks</td>
</tr>
<tr>
<td>-------</td>
<td>----------------------</td>
<td>---------------------------------</td>
<td>--------------</td>
<td>---------</td>
</tr>
<tr>
<td>175.</td>
<td>Drums</td>
<td>1 per station</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Different sizes</td>
</tr>
<tr>
<td>176.</td>
<td>Pieces of cloth (baby towel)</td>
<td>2 per station</td>
<td></td>
<td>1m x 1m, 9 pieces for drying and wrapping baby</td>
</tr>
<tr>
<td>177.</td>
<td>Audiovisual materials</td>
<td>1 per station</td>
<td></td>
<td></td>
</tr>
<tr>
<td>178.</td>
<td>Vacuum sets with vacuum doll (fetal baby, umbilical cord and placenta for vacuum)</td>
<td>1 per table</td>
<td></td>
<td>CD, LCD projectors, TV</td>
</tr>
<tr>
<td>179.</td>
<td>Trolley</td>
<td>1 per station</td>
<td></td>
<td></td>
</tr>
<tr>
<td>180.</td>
<td>White board</td>
<td>1 per room</td>
<td></td>
<td></td>
</tr>
<tr>
<td>181.</td>
<td>Washing sink</td>
<td>1 per room</td>
<td></td>
<td></td>
</tr>
<tr>
<td>182.</td>
<td>IV stand</td>
<td>1 per station</td>
<td></td>
<td></td>
</tr>
<tr>
<td>183.</td>
<td>Cupboards</td>
<td>1 per station</td>
<td></td>
<td></td>
</tr>
<tr>
<td>184.</td>
<td>Antenatal care bed</td>
<td>1 per station</td>
<td></td>
<td></td>
</tr>
<tr>
<td>185.</td>
<td>Postnatal bed</td>
<td>1 per station</td>
<td></td>
<td></td>
</tr>
<tr>
<td>186.</td>
<td>Baby coach</td>
<td>1 per station</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## ANNEX II. TEXTBOOKS AND REFERENCES

<table>
<thead>
<tr>
<th>S. No</th>
<th>Book Title</th>
<th>Standard</th>
<th>Types of Reference</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Margaret F. Myles</td>
<td>1:5 students/textbook</td>
<td>Textbook</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>African Myles Textbook for Midwives</td>
<td>1:5 students/textbook</td>
<td>Textbook</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Obstetrics Illustrated (Hanretty, Obstetrics Illustrated)</td>
<td>Optional</td>
<td>Textbook</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Principles and Practice of Pediatric Infectious Disease Revised Reprint: Text with CD-ROM (Principles and Practice of Pediatric Infectious Diseases)</td>
<td>1:5 students/textbook</td>
<td>Textbook</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Surgical Technology: Principles and Practice</td>
<td>1:5 students</td>
<td>Textbook</td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Manual of Obstetrics (Four Colours)</td>
<td>1:5 students</td>
<td>Textbook</td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>The Developing Human: Clinically Oriented Embryology with STUDENT CONSULT Online Access</td>
<td>1:5 students</td>
<td>Textbook</td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>Williams Obstetrics</td>
<td>1:5 students</td>
<td>Textbook</td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>Clinical Guidelines For Midwifery &amp; Women's Health</td>
<td>1:5 students</td>
<td>Textbook</td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td>Medical Embryology (Langman's)</td>
<td>1:5 students</td>
<td>Textbook</td>
<td></td>
</tr>
<tr>
<td>S. No</td>
<td>Book Title</td>
<td>Standard</td>
<td>Types of Reference</td>
<td>Remark</td>
</tr>
<tr>
<td>-------</td>
<td>------------------------------------------------</td>
<td>----------</td>
<td>--------------------</td>
<td>----------------------------</td>
</tr>
<tr>
<td>23.</td>
<td>Illustrated Textbook of Paediatrics</td>
<td>1:15 students</td>
<td>Reference book</td>
<td></td>
</tr>
<tr>
<td>24.</td>
<td>Introduction to Surgical Instruments and Procedures</td>
<td>1:15 students</td>
<td>Reference book</td>
<td></td>
</tr>
<tr>
<td>25.</td>
<td>Obstetrics and Gynecology (with CD)</td>
<td>1:15 students</td>
<td>Reference book</td>
<td></td>
</tr>
<tr>
<td>26.</td>
<td>Pediatric Physical Examination and Health Assessment</td>
<td>1:15 students</td>
<td>Reference book</td>
<td></td>
</tr>
<tr>
<td>30.</td>
<td>Obstetrics &amp; Gynaecology Hand Gook Emergencies in Obstetrics &amp; Gynecology</td>
<td>1:15 students</td>
<td>Reference books</td>
<td></td>
</tr>
<tr>
<td>31.</td>
<td>Current Diagnosis and Treatment Obstetrics &amp; Gynecology</td>
<td>1:15 students</td>
<td>Reference book</td>
<td></td>
</tr>
<tr>
<td>32.</td>
<td>Treatment Obstetrics &amp; Gynecology Danforth's Obstetrics and Gynecology</td>
<td>1:15 students</td>
<td>Reference books</td>
<td></td>
</tr>
<tr>
<td>34.</td>
<td>Family planning books</td>
<td>1:15 students</td>
<td>Reference books</td>
<td></td>
</tr>
</tbody>
</table>

**Other Needed Materials**

<table>
<thead>
<tr>
<th></th>
<th>Brochures</th>
<th>1:30 students</th>
<th>Other needed materials</th>
<th>Published within a year</th>
</tr>
</thead>
<tbody>
<tr>
<td>35.</td>
<td>Journals Health-related indictors</td>
<td>1:30 students</td>
<td>Other needed materials</td>
<td></td>
</tr>
<tr>
<td>S. No</td>
<td>Book Title</td>
<td>Standard</td>
<td>Types of Reference</td>
<td>Remark</td>
</tr>
<tr>
<td>-------</td>
<td>------------</td>
<td>----------</td>
<td>--------------------</td>
<td>--------</td>
</tr>
<tr>
<td>37.</td>
<td>Guidelines:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Basic emergency obstetric and newborn care (BEmONC)</td>
<td>1 per 5 students from each listed</td>
<td>Other needed materials</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Prevention of mother-to-child transmission of HIV (PMTCT)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Infection prevention guidelines</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Obstetrics shock management</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• IMNCI (integrated management of neonatal and childhood illness)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• National drug formulary</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• HIV/AIDS, malaria</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• TB</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Sexually transmitted infections</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Family planning</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Nutrition</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>38.</td>
<td>Leaflets</td>
<td>1 per 30 students</td>
<td>Other needed materials</td>
<td>Obstetrics-related</td>
</tr>
<tr>
<td>39.</td>
<td>Protocols:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Focused antenatal care protocol (FANC)</td>
<td>1 per station from each listed</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Active management of third stage of labor (AMTSL)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Postpartum hemorrhage (PPH) management protocol</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Manual removal of placenta</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Magnesium sulfate administration</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Newborn resuscitation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Obstetrics shock management</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40.</td>
<td>Articles</td>
<td>1 per 30 students</td>
<td>Other needed materials</td>
<td>Obstetrics-related</td>
</tr>
</tbody>
</table>
ANNEX III. MIDWIFERY (GRADUATION REQUIREMENTS) FOR DEGREE PROGRAM

Graduation requirement will be according to each university’s rules and regulations. Thus, a student enrolled in the BSc midwifery program is eligible for graduation if and only if he/she:

- Has taken all the required courses for the program as follows:
  - General education courses: 11 credit hours
  - Supportive courses: 41 credit hours
  - Professional courses: 94 credit hours
  
  Total: 146 credit hours

- Obtained a minimum CGPA (cumulative grade point average) of 2.

- Is able to pass the school’s comprehensive exam, both in theory and practice, before graduation.

- Can pass the comprehensive exam, in order to sit for the external examination administered by external examiners (Ministry of Health).

- If not able to pass both the internal and/or external exam, she/he will be delayed for a minimum of 3 months and then shall sit for the re-exam.

- Has not scored an “F” grade in any course, and should not score a “D” grade in any practicum or professional course.

- Successfully passes and completes the internship/professional practice program.

- Has carried out a student research project on a selected and agreed-upon topic of a research problem and scored a minimum of “C” grade in his/her thesis report.

MIDWIFERY GRADUATION PROFILE (LEARNING OUTCOME COMPETENCIES)

1. Demonstrate knowledge, skill, and attitudes of care in pre-pregnancy
2. Demonstrate knowledge, skill, and attitudes of care in pregnancy
3. Demonstrate knowledge, skill, and attitudes of care in labor and birth
4. Demonstrate knowledge, skill, and attitudes of family-centered care for a women in the postpartum period
5. Demonstrate knowledge, skill, and attitudes in family planning
6. Demonstrate knowledge, skill, and attitudes in providing family-centered care in the management of the newborn, neonate, and child up to the age of 5 years
7. Demonstrate knowledge, skill, and attitudes of postabortion-related care
8. Apply social, epidemiologic, cultural, and behavioral context of maternal and newborn care, including public health and population nursing
9. Adhere to the legal and ethical principles and the midwifery professional code of conduct relevant to the practice of midwifery
10. Demonstrate midwifery skills and attitudes (including practical procedures, treatment and prevention of disease, health promotion, rehabilitation, clinical reasoning, and problem solving
11. Apply knowledge and skills in social sciences, behavioral sciences, public health, and ethics that form the basis for quality, culturally relevant, and appropriate care for women, newborns, infants, and childbearing families

12. Demonstrate promotive care for women during pregnancy and management of women during labor and delivery to ensure the safety of the mother and baby

13. Apply skills and principles of lifelong learning and professional development

14. Communicate effectively in verbal and written forms with peers, clients (women, children, families, etc.), superiors, and society at large

15. Demonstrate teamwork, leadership, and interpersonal and social skills in midwifery practice;

16. Apply evidence-based practice and conduct research
ANNEX IV. INDICATIVE SOURCES OF EVIDENCE FOR VERIFICATION OF STANDARDS

Indicative sources of evidence for verification of the standards for Area 1: Program goals and outcomes

- Employer survey
- Curriculum
- Academic brochures and prospectus or bulletin
- Documentation on stakeholders’ input (proceedings)
- Institution’s website
- Matrix of mission and vision of the HEI program goals
- Matrix of programs aims and educational outcomes
- Interviews with stakeholders, senior management, academic staff, and students
- Matrix of educational outcomes with the national scope of practice for pharmacy professionals

Indicative sources of evidence for verification of the standards for Area 2: Governance, leadership, and administration

- School/institute legislation and personnel policy
- Staff recruitment, promotion, development and appraisal policies, procedures/criteria
- Staff job description and workload document
- Memorandum of Understanding signed with stakeholders
- Minutes of meetings at school, departmental/unit, and different standing committee levels
- Interviews with management staff, school leaders, department/unit heads, administrative/academic staff, and student representatives
- Staff statistics

Indicative sources of evidence for verification of the standards for Area 3: Educational resources

- Document on asset inventory
- Interviews with school leader, librarian, department heads, academic staff, coordinator of experiential program, students, and administration staff
- Observation/survey of offices, classrooms, computer lab, skills lab, library, storage for skills lab materials, conference rooms, practice site, and other facilities indicated in the standard
- Document indicating facility cleaning and maintenance schedule
- Memorandum of Understanding signed with practicum sites
- Proceedings of review meetings conducted with clinical practice sites
- Documents indicating strategic plan, operational work plan, and budget plan
Indicative sources of evidence for verification of the standards for Area 4: Academic staff, support staff, and preceptors

- Legislation, policy, and guidelines
- Staff recruitment, promotion, development, and appraisal procedure/criteria
- Documentation of staff job descriptions and workload
- Documented evidence on academic staff engagement in teaching, research, and community services
- Documents on academic staff and preceptors’ evaluation results and feedback
- Minutes of meetings at departmental, school, and standing/ad-hoc committee level
- Interviews with senior management, deans, department heads, coordinator of the experiential training, academic staff, and students’ representatives
- Guidelines and tools for experiential training/placement evaluation
- Staff statistics
- Student enrollment data
- Lecture timetable
- Filled-in staff appraisal form

Indicative sources of evidence for verification of the standards for Area 5: Student admission and support services

- Student handbooks
- Documents on student counseling, career guidance, etc.
- Student enrollment statistics
- Student admission policy/guideline
- Policies on student transfer, credit transfer, course exemption, and waiver
- Interviews with senior management, dean of students, student council, students, and academic and administration staff
- School website
- Infrastructure for student support services (clinic, sport, and lounge, etc.)
- Documentation on announcements about admission
- Documentation on appeal mechanism
- Documentation on orientation program
- Documentation on tutorial and supportive courses

Indicative sources of evidence for verification of the standards for Area 6: Program relevance and curriculum

- Curriculum development guideline/procedures
- Minutes of meetings of committees dealing with curriculum development, approval, monitoring, and review at department, school/institute level
- Curriculum review reports
Course catalogues (showing the structure and aims of each program; course aims, descriptions, indicative activities; book lists)

Interviews with senior management, school leader, department heads, academic staff, students, graduates, and employers

**Indicative sources of evidence for verification of the standards for Area 7: Teaching-learning and assessment**

- Curriculum
- Syllabus for major and supportive courses
- Handouts of major and supportive courses
- Schedule for clinical practice
- Guideline for experiential training
- Consultation hours posted on offices
- Exam papers of major and supportive courses
- Checklist for skill teaching and assessment
- Legislation of the HEI/school
- Examination and assessment guideline
- Report of external examiners
- Academic calendar
- Examination committee reports and minutes
- Reports of reviews of teaching, learning, and assessment
- Observation of classroom sessions, practice sessions, skills lab sessions,
- Interviews with school leader, department heads, academic staff, coordinator of experiential program, students, and preceptors

**Indicative sources of evidence for verification of the standards for Area 8: Student progression and graduate outcomes**

- Registrar’s office reports
- Data on student attrition and graduation rates
- Reports on graduate tracer studies
- Reports on employer satisfaction studies
- Employer feedback reports
- Lists of employer contacts
- Records on students’ years of stay in the school (enrollment to graduation)
- Records on engagement of students in scholarly and extracurricular activities
- Formal documents on educational and scholarship linkages, students’ extracurricular activities, etc.
- Interviews with senior management, registrar, coordinator of experiential training, academic staff, students, graduates, employers, etc.
Indicative sources of evidence for verification of the standards for Area 9: Continual quality assurance

- Internal Quality Audit manual for pharmacy program
- IQA guideline
- Assessment results and intervention strategy documents on IQA
- Minutes of meetings of IQA unit
- Reports on curriculum review/appraisal
- Legislation of the HEI/school
- Interviews with school leader, department heads, academic staff, coordinator of experiential program, students, and preceptors

Indicative sources of evidence for verification of standards for Area 10: Research, development, and educational exchanges

- Policy documents on budget and facility allocation for academic staff/student research
- Document on identified priority research areas of the school/institute and the country
- Policy on research and obligatory publication in reputable national/international journals for each academic staff for existence, appraisal, and promotion
- Reports and dissemination documents of research findings of academic staff/students
REFERENCES


