

Laboratories of Nursing and Midwifery Department

Introduction

Nursing department is mainly dependent on the existence of laboratories in order to qualify and prepare students to be able to acquire the skills of nursing by the application within hospitals and health institutions so that integrates the theoretical side with the practical side.

Evidence Based practice has shown that a good preparation for nursing students in the practical laboratory contributes to bridge the gap between the theoretical and practical as well as enhances students' self-confidence.

Main Goal

Is to provide a suitable place simulates areal hospital environment which prepared with various equipment and devices that contribute to the preparation and training of students in the department of Nursing at various nursing skills.

Specific Objectives

1. Provide an environment simulated clinical field environment.
2. Enhance the student's self-confidence and bridge the gap between the theoretical and clinical side.
3. Providing opportunities to gain hands-on training of various skills.
4. Providing students with the necessary skills to work within an integrated health team.

Training Conditions in the Laboratory

Target Students:

- **first Year Nursing Students Starting Skill Lab Training in the Following Courses**
 1. Fundamentals of nursing I
 2. Fundamentals of nursing II
- **Second Year Nursing Students**

Health Assessment

The students are divided into groups within weekly schedule.
Students are subject to the practical and written exams.
Procedures Check List completed by the skills successfully.

Tools and Equipment Contained in the Lab:

- Patients Bed: 2 beds in each skill lab.
- Detection and screening devices such as stethoscope, medical lamp, all supplies and tools used for clinical examination
- Models - Pediatric, Adult, body systems and organs.
- Skeletons.
- Internal organs such as the heart - digestive system - the eye – the ear other.
- Tools to prepare and administer medications and medical disposables.
- The means of education to give educational lectures which includes computer and LCD , white board
- CPR and ACLS equipment

1. Fundamental Nursing Health Lab

Fundamental nursing health Laboratory contains all the materials and equipment's related to the nursing basics in accordance with the accreditation standards prior to train nursing students on the elementary skills that needed in the first year in order to prepare them well to appropriate engage in different training hospitals.

This laboratory uses a variety of ways in learning like videos and CDs that explains the process of Adult and pediatric nursing health care also a full training on a child's doll in response to the theoretical knowledge.

2. Adult Health Nursing Lab

Adult Health Nursing Laboratory contains on figurative human body parts and educational tools that allow the students to know the appropriate positive trends for the care of adults and their families, physiological responses , social and psychological individual's health problems in addition to actual and potential disorders that affects patterns of functional health.

The laboratory purpose to give the student practical experience before starting in the training field by providing the opportunity to provide fully nursing care for

each disruption in patterns of functional health using nursing process as a basis for the implementation of the plan of nursing care, the relevant skills in nursing process, decision-making skills, problem-solving and provide nursing care based on the theoretical knowledge at the nursing sciences.

3. Maternity Health Laboratory

Faculty of nursing has introduced Maternal health Laboratory according to the accreditation committee regulations to improve the practical aspects of the educational process. This laboratory uses a variety of ways in learning like videos and CDs that explains the process of pregnancy and childbirth also a full training on a pregnant woman's dolls, which demonstrate the process of normal delivery in response to the theoretical knowledge.

Main Goal

Is to provide a suitable place simulates a labor room in hospital prepared with various equipment and devices that contribute to the preparation and training of midwifery students on different nursing skills.

Specific Objectives:

- Training of midwifery students on the acquisition of practical skills.
- Provide an environment simulated areal environmental hospital field.
- To enhance the student's self-confidence and bridge the gap between the theoretical and practical side.
- Give students the necessary skills to work within an integrated health team.

Training Conditions in the Lab

Target:

Level I:

- First year midwifery students starts the application of the practical side **of the following courses:**
 - Fundamental of Nursing I
 - Fundamental of Nursing II
 - Clinical Evaluation of the Mother and Child

Level II and III:

- The Art of Midwifery and Obstetrics

Level IV:

- Health Care for Newborn Babies
- Health Care for the Mother after Birth Stage
- Recognize Complications in Childbirth and Post-Partum
- Students are Divided into Groups within Weekly Schedule
- Subject for Practical and Written Exams
- Procedure Check List of Nursing Skills to be Completed Successfully

Tools and Equipment Contained in the Lab

- A modern birth/labor bed-pregnant assessment bed-children examination bed.
- Detection and screening devices
- Models - Pediatric, Adult, manikin of a pregnant women and fetus delivery.
- Skeletons, Breast model, female genitalia
- Internal organs such as Heart, liver, spleen, gynecologic pelvis.
- Tools to prepare and administer medications and medical disposables.
- Family planning devices.
- The means of education to give educational lecture through computer and LCD projector.

4. Critical Care Nursing and Anesthesia Nursing Lab

An advanced training laboratory designed to provide high fidelity simulations for students who are learning about critical care or desire to refine their critical care skills. Also to provide an interactive system to teach both psychomotor skills and crisis resources management for both critical care nursing and anesthesia nursing master students.

Critical care Lab. dynamically illustrates anesthesia processes and procedures, giving students an opportunity to gain experience in advance of patient care. Certain patient situations are uncommon and therefore a trainee seldom gains experience in managing rare but clinically significant problems. With this advanced prepared nursing lab. Students will build skills and practice unusual events to achieve the best outcome in crisis management.

Tools and Equipment Contained in the Lab

1. Two advanced ICU beds.
2. Advanced simulation dolls adult, Pediatric and neonate to practice basic life support (BLS), advanced cardiac life support (ACLA), pediatric advanced life support (PALS), neonatal life support,
3. Adult airway management trainer, Pediatric airway management trainers, , neonatal airway management trainers
4. Physical examination equipment : stethoscope , laryngoscope, ophthalmoscope, and otoscope
5. Advanced airway management equipment: laryngoscope, ETT intubation, combitube, bougie, laryngeal mask, tracheostomy, Ambu bag different sizes, oropharyngeal Airway, nasopharyngeal airway, in-line suction catheters.
6. Ventilatory supply equipment's: portable ventilation device, cylinder of oxygen
7. Cardiopulmonary managing equipment's: Interactive ECG simulator, cardioversion device, AED.
8. Invasive central line: CVP, arterial line insertion and monitoring.
9. Invasive pulmonary equipment: Thoracentesis and chest tube insertion and monitoring.
10. Catheterization equipment.
11. Neurological procedure : LP , epidural anesthesia, spinal anesthesia
12. IV catheterization and phlebotomy practices , I.O (Intraosseous) insertion
13. I.V. fluid administration by using infusion pumps, syringe pumps
14. Transportation of the patient-stretchers.
 - **Anatomy models** : cardiovascular, respiratory, musculoskeletal, head model, Digestive System Models, Human Heart Models, Urology Models
15. Advanced teaching devices: LCD, video screen, internet based learning.
 - Also planning to integrate anesthesia and mechanical ventilation machines in order to enrich the students' skills regarding those advanced procedures.

5. Physical Examination Lab

Physical examination Laboratory contains of figurative human parts devices and special tools that enable students the opportunity to practice the real skills.

Starting from the comprehensive physical examination of patient, which provides students the ability to discriminate any changes in the status of the patient's health at the hospitals.