

Ethiopian Health Professionals Licensing Examination(EHPLE)

# INFORMATION BOOKLET

# **NURSING**





## Message From the State Minister, Ministry of Health - Ethiopia



### Mrs. Frehiwot Abebe

Improving healthcare quality is a global priority for sustainable development, with high quality healthcare being a key component of universal health coverage. One strategy to maintain health care standards is through provision of health professional competency assessment. Consequently, in 2019, the Ministry of Health Ethiopia, initiated the Ethiopian Health Professionals Licensing Examination (EHPLE) for undergraduates in seven health disciplines, which has since expanded to include 13 health disciplines.

The main goal of this competency assessment is to identify health professionals with minimal competencies necessary to perform their duties safely and competently, thus enhancing the quality of health care services. This initiative is overseen by a dedicated Health and Health Related Institutions and Professionals' Regulatory Lead Executive Office (LEO), comprising four desks, which plays a pivotal role in strengthening the system and enabling the LEO to conduct the competency exam more extensively and with improved organization and quality.

It is important to note that this competency assessment differs significantly from traditional academic or employment examinations. Hence, this information booklet has been created to address the informational needs of both examinees and teaching faculty regarding the Ethiopian Health Professionals' Licensure Examination. Additionally, it aims to facilitate the assessment process, while promoting transparency and ensuring the sustainability of the program.

The preparation of this guideline involved the collaboration of esteemed experts from various higher education institutions, the Ministry of Health, JHPIEGO-Ethiopia, Amref/HWIP, Health Professionals' Associations, and the Ministry of Education. Their invaluable contributions are acknowledged with sincere gratitude, alongside appreciation for the Ministry of Health staff for their unwavering commitment and hard work throughout the project.

Nursing

# Acknowledgements

This Information Booklet for Ethiopian Health Professional's Licensure Examinations is a contribution from several educators, researchers, students and concerned individuals with a genuine interest to propel Ethiopia's medical and health sciences education forward.

The Ministry of Health is grateful for the contribution of many individuals and institutions in realizing this endeavor. Among these are Professional Associations, Student Association, Higher Education Institutions (both public and private), JHPIEGO-Ethiopia, AMREF/HWIP, MOE (Ethernet), UNFPA, AAU-IER and all HHRIPR LEOs staff.



# **Acronyms and Abbreviations**

EHPLE Ethiopian Health Professionals Licensing Examination

ETA Educational and Training Authority

HEIs Higher Education Institutions

HHrIPR-LEO Health and Health-related Institutions and Professionals Regulatory Lead Executive

Office

HSTP-II Health Sector Transformational Plan-II

MCQ Multiple Choice Question

MoH Ministry of Health

WHO World Health Organization

# **Purpose of the Information Booklet**

The Ethiopian Health Professionals' Licensure Examination (EHPLE) Information Booklet serves as a comprehensive guide for those individuals seeking information about the exam. It typically outlines basic information for candidate registration, exam development and administration processes and procedures, result notification, and the licensing process. It also includes information on the exam framework, i.e., the exam domain, sub-domain, content, process, and task, with sample exam items specific to each profession.

The publication of this Booklet is crucial for the following reasons:

- Clarity and guidance: It provides clear information about the exam by ensuring candidates understand the necessary information to prepare them.
- Accessibility: It serves as a readily accessible resource for individuals pursuing to take the exam, consolidating essential information in one document and facilitating easy access to necessary details. It also helps other stakeholders who might be interested in such resources.
- Transparency: It promotes transparency in the examination process and fosters trust among stakeholders about the exam.

In summary, the publication of this Booklet is essential for creating a transparent, standardized, and accessible framework that guides candidates through the EHPLE process.

# **Contents**

Message From the State Minister, Ministry of Health -Ethiopia	
Acknowledgements	i
Acronyms and Abbreviations	ii
Definition of terms	v
1. Introduction	
1.1. Background	
1.2. The Rationale of EHPLE	
2. Key processes of EHPLE	2
2.1. Registration of candidates	2
2.2. Task Analysis	3
2.3. Exam Blueprint	3
2.4. Item Development	3
2.5. Item Review	
2.6. Standard setting method	
2.7. Exam Administration	
2.8. Scoring and post exam analysis	5
2.9. Result notification and appeal management	
2.10. Licensing	
3: Exam Framework	
Sample questions	
Sample Reference	
List of contributors	
Contact Us	23

### **Definition of terms**

- **Domain:** a broad category or area of knowledge or skills of a profession
- **Sub-domain:** a subset of a broader domain that focuses on knowledge or skills related to the overarching domain
- Content: a more specific subcategory, which is a breakdown of the sub-domain
- Task: the responsibility, knowledge, skill, and attitude of a junior undergraduate professional in an actual work environment
- **Process:** a systematic sequence of steps or actions designed to achieve a specific outcome
- Learning outcome: a clear and measurable statement that describes what the examinee is expected to know or be able to do
- Relative emphasis: the proportional importance or weight assigned to different content areas or categories within the assessment
- Item: a particular multiple-choice question
- Item developer: a subject matter expert responsible for writing test items or questions that make up the examination
- Item reviewer: a subject matter expert responsible for reviewing and refining the test items or questions that make up the examination
- Standard setting: a process of determining a cut-off point or passing score for an exam
- Item difficulty index: a statistical measure that indicates the proportion of examinees who answered a particular test item correctly
- **Discrimination index:** a statistical measure that evaluates how well a particular test item differentiates between high-performing and low-performing examinees
- Admission paper: a printout paper generated by the system after completing registration that contains the examinee's photo, QR code, and necessary information

### 1. Introduction

### 1.1. Background

Competency assessment is one of the strategies for controlling the standard of healthcare services provided in healthcare facilities. The World Health Organization (WHO) recommends all healthcare professionals to have necessary competencies. In Ethiopia, the Health Sector Transformational Plan-II (HSTP-II) states competency assessment of all graduates before joining the health workforce as one of the strategic initiatives.

The Ministry of Health (MoH) launched the Ethiopian Health Professionals Licensing Examination (EHPLE) for undergraduates in 2019. The Health and Health-related Institutions and Professionals Regulatory Lead Executive Office (HHrIPR-LEO) of the Ministry of Health was given a mission to implement the ministry's objective to achieve competency-related goals. It has the responsibility to ensure that the EHPLE meets technical, professional, and legal standards, and to protect the health, safety, and welfare of the public by assessing candidates' abilities to practice competently.

Currently, the exam is given for 13 health professions (Medicine, Nursing, Public Health, Pharmacy, Medical Laboratory Science, Anesthesia, Midwifery, Dental Medicine, Medical Radiology Technology, Environmental Health, Psychiatric Nursing, Pediatric and Child Health Nursing, and Emergency and Critical Care Nursing). Since its introduction until February 2024, a total of 166293 examinees took the exam in 14 rounds.

#### 1.2. The Rationale of EHPLE

One of the critical functions of the MoH is to guarantee the efficiency, quality, and equity of healthcare delivery and to protect the public from any undesirable consequences in healthcare delivery practices. As professionals' competence is a significant determinant of the quality of health, evaluation of health professionals' competence has now been given due attention. The licensing examination for health professionals serves as a crucial step to ensure that individuals entering the field meet specific competency standards. The sole aim of the competency assessment is to safeguard public health by verifying that health professionals have the minimal basic knowledge, attitude, and skill required to provide safe and effective care.

Licensing exams act as a preventive measure, ensuring that only competent professionals join the health workforce, which, in turn, contributes to reducing the occurrence of medical errors and enhancing overall patient safety. By setting standards through examinations, regulatory bodies strive to minimize the risk of medical errors caused by incompetence.

### 2. Key processes of EHPLE

EHPLE involves several key processes to ensure the quality and reliability of the examination.

### 2.1. Registration of candidates

EHPLE has a mandatory online registration system for both new and repeat candidates, which can be found at <a href="https://www.hple.moh.gov.et">www.hple.moh.gov.et</a>

Please note these important notes during registration.

#### **New Test Takers:**



- The list of eligible candidates from governmental and private Higher Education Institutions (HEIs) will be sent from Ministry of Education (MoE) to MoH and uploaded to the online registration system by MoH.
- Once the name of the candidate is uploaded to the system and registration has
  opened for the current exam round, the candidate must register at
  www.hple.moh.gov.et by uploading the necessary documents listed below.
  - ✓ a scanned original or temporary degree
  - ✓ a scanned government-issued ID, passport, driving license, or any other legal ID
  - ✓ a passport-size photo of the candidate
  - ✓ For international candidates:
    - o Equivalence document from ETA
    - Completing an externship attachment according to assignment by the regulatory body
    - o Externship attachment completion letter

### **Repeat Test Takers:**



• Since the information about re-exam candidates already exists in the system, the candidate should register by directly going to <a href="www.hple.moh.gov.et">www.hple.moh.gov.et</a>. There is no need for re-exam candidates to upload their documents.

### **Both new and repeat candidates:**



- After completing the registration, the candidate must download and print the admission paper by logging into his/her account using his/her email address and password
- The candidate can change the exam center by logging into his/her account only during the registration period
- Once an examinee has selected his/her exam center during the registration period, an application for center change will not be allowed

### 2.2. Task Analysis

The first step of exam development involves conducting a comprehensive task analysis study, which identifies the tasks, knowledge, skills, and abilities required from a junior undergraduate professional in the specific profession. The analysis is typically done through surveys, interviews, or observations of practitioners in the actual work environment, as well as through the Delphi method with subject matter experts.

### 2.3. Exam Blueprint

Based on the task analysis findings, a test blueprint is created that outlines the content areas to be covered in the examination and the weight or emphasis given to each area. This ensures that the exam reflects the key competencies and knowledge needed for competent practice in that specific profession. Blueprint or test specification is the matrix or chart that shows the number and type of test questions represented across the topics in the content area, consistent with the learning outcome and relative weight of the test given to each content area. The blueprint also identifies the percentage weighting of cognitive dimensions as the level of competence tested in each knowledge domain.

Key components of a blueprint are:

- Domain
- Sub-domain
- Content
- Task
- Process
- Learning outcome
- Assessment methods
- Assessment tools/instrument (test format)
- Relative emphasis (in percentage)

### 2.4. Item Development

The items are developed following specific guidelines to ensure clarity, relevance, and fairness. Subject matter experts with experience in the field are selected from HEIs to develop test questions (items) that align with the test blueprint. The exam questions will focus mainly on "knows how" according to the competency level of the Miller's pyramid. The items are produced in a secure location on designated computers that are free from internet connectivity. The items are scenario-based and constructed with stem, lead-in, and four options/alternatives. All items will have a single-best-answer type of Multiple Choice Question (MCQ) that addresses the learning outcome defined in each content area. Standard text books, updated guidelines, and standards are used as reference materials.

#### 2.5. Item Review

Once developed, the items undergo a rigorous review process by item reviewers. The main purpose of the exam review process is to evaluate content relevance, technical accuracy, clarity, and sensitivity related to culture and religion. More experienced subject matter experts as well as psychometric experts will do the review to ensure the items meet psychometric standards. Subject matter experts shall review the items to confirm that they are accurate, clearly stated, and correctly keyed using the checklist. Psychometric experts shall reviews the items to ensure that they are not technically flawed. They also work on editorial review to check grammar, punctuation, and spelling errors. This helps ensure the reliability and validity of the items.

### 2.6. Standard setting method

The standard setting or cut-off point of the EHPLE is determined using the Modified-Angoff method, which is one of the most widely used and legally defensible standard setting approaches to set a cut-off point for high-stake competency examinations.

The method involves a panel of subject matter experts who evaluate each test question and then estimate the probability that a minimally competent examinee would answer each test item correctly. The average of the experts' predictions for a test question becomes its predicted difficulty. The average of the predicted difficulty values across all items on a test is the recommended cut-off point. This point indicates the minimum level of knowledge and skill required to pass.

#### 2.7. Exam Administration

The EHPLE is administered following established protocols and guidelines. Proper test administration procedures, appropriate security measures, and appropriate consideration for test-takers who need special support will be applied during exam administration at exam centers. The exam is administered in selected HEIs nationally, where candidates can choose based on their convenience at the time of registration. The exam schedule will be posted ahead of time on the MOH website and official Facebook page. Examinees who have a valid admission paper are eligible to sit for the exam. The mode of exam administration is computer-based testing.

#### **CAUTIONS**

### Candidates are allowed



- Attend the orientation session in order to sit for the exam
- · Arrive at the exam center on time
- Bring a legal ID and admission paper
- Complete the exam within the allotted time frame

#### > Candidates are **NOT** allowed



- To bring reference materials, blank paper, or notes into the exam center
- To smoke, eat, or drink in the exam room
- To bring mobile phones, tablets, smart watches, camera devices, eyeglasses, calculators or any type of electronic device into the exam center
- To bring their personal belongings to the exam center
- To bring weapons and sharp materials into the exam center
- To give or receive assistance to or from other candidates during the examination

### 2.8. Scoring and post exam analysis

Once the exam is completed, the scoring process begins. The exam scoring process involves computerized scoring using software.

Post-exam analysis is the process of analyzing examinees' responses to individual test items in order to assess the quality of the items and the exam as a whole. This phase helps to identify any poorly performing items that may need revision or removal from the exam. The item difficulty index, discrimination index, and reliability coefficient are elements of exam analysis.

### 2.9. Result notification and appeal management

After scoring and analysis, individual score reports are generated and provided to examinees through the website *www.hple.moh.gov.et*. After result notification, examinees can submit their appeal through phone or email within 10 working days after result notification.

### 2.10. Licensing

The list of examinees who passed the exam will be sent to regional and city administration regulatory bodies. A license is obtained from the regional/zonal health bodies where he/she permanently lives.

Requirements for professional licensing are:



- Passing the EHPLE
- Original or temporary degree
- Educational documents (10th and 12th certificates)
- Medical certificate
- Government issued ID
- Additional prerequisites based on the requirements of regional regulatory bodies

#### 3: Exam Framework

The key broader professional roles, also known as domains or main knowledge areas serve as a building framework for the licensing examination content for *Nursing professionals*. The domains are further divided into discrete professional attributes that constitute sub-units (also referred to as sub-domains) defining the professional identity of for *Nursing professionals*. specifying the performance level of each sub-domain serve as the final characteristic of the professional duties on which the licensing exam focuses.

The contents of the licensing examination are presented below, structured into key roles (domains), sub-units (sub-domains), and tasks. The examination emphasis for each domain and sub-domain, out of the total 100% questions, is indicated in brackets.

### Key professional roles/domains

☐ Scholar (4.0%)

 $\square$  Professionalism (5.0%)

☐ Leadership and management (5.0%)

 $\square$  Health promotion and disease prevention (5.5%)

### **Key role/ domain 1: Patient care (80.5%)**

**Description**: This domain encompasses the professional roles of nurses in the provision of high-quality, safe, and patient-centered holistic nursing care within their scope of practice. The provision of up-to-date, ethical, and resource-efficient nursing care requires the application of integrated knowledge of biomedical, fundamental nursing, clinical, behavioral, and social sciences. As patient care providers, nurses shall implement the nursing care process by collecting and interpreting information, making clinical decisions, carrying out diagnostic and therapeutic nursing interventions, providing nursing care, and evaluating interventions. To demonstrate competence in this domain, candidates shall apply such integrated knowledge in the following sub-areas:

$\Box$	Adult	Health	Nursing	(36.5%)	١
--------	-------	--------	---------	---------	---

- ☐ Child Health Nursing (27.0%)
- ☐ Maternal Health Nursing (9.5%)
- ☐ Mental Health Nursing (7.5%)

#### **Key role/ domain 2: Scholar (4.0%)**

**Description**: This domain encompasses the professional roles of *Nursing professionals* in generating and utilizing scientific data to improve the health and well-being of the community and broaden their scientific knowledge within the *healthcare system and community setting*. Providing this service requires the application of integrated knowledge in research methods, measurements of health and disease, biostatistics, epidemiology, clinical audit, evidence-based practice, and research ethics. To demonstrate competence in this domain, candidates must possess applied knowledge in planning, problem

identification, data collection, analysis, interpretation, report write-up, and dissemination of research outputs.

### **Key role/ domain 3: Professionalism (5.0%)**

**Description**: This domain encompasses the professional commitment of *Nursing professionals* to promoting the health and well-being of individuals and society through adhering to ethical standards, maintaining personal integrity, and upholding high standards of competence in all areas of *practice*. To exhibit competence in this domain, candidates must possess applied knowledge of ethical principles, medico-legal practices, effective communication, accountability to the profession and society, maintenance of professional excellence and personal health, and professional values such as compassion, respect, integrity, honesty, altruism, and humility.

### **Key role/ domain 4: Leadership and management (5.0%)**

**Description**: This domain encompasses the professional roles of *Nursing professionals* in envisioning a high-quality healthcare system through self-awareness, active participation in healthcare teams, leading teams, and managing health systems. Providing this service requires the application of integrated knowledge in continuous quality improvement, effective health system leadership, management, and healthcare ethics. To demonstrate competence in this domain candidate shall possess applied knowledge to plan, organize, staff, lead, execute, monitor, and control healthcare resources and activities.

#### **Key role/ domain 5: Health promotion and disease prevention (5.5%)**

**Description**: This domain encompasses the professional roles of *Nursing professionals* in enhancing the health and well-being of patients, communities, and the larger populations they serve through health advocacy, disease prevention, health promotion and the promotion of health equity. Providing this service takes an integrated understanding of determinants of health, health informatics, epidemiology, communicable disease control, health education.

Table 1 Exam content for Nursing profession

Domain 1: Patient care	
Subdomain 1.1: Adult he	alth nursing
Contents	Tasks
	Assess and make nursing diagnosis for a patient with respiratory disorders (Pharyngitis, laryngitis, tonsillitis, acute bronchitis, TB, Bronchial Asthma, pleural conditions, Pneumonia, COPD etc.)
	Diagnose and manage patients with common respiratory disorders ((Pharyngitis, laryngitis, tonsillitis, acute bronchitis, TB, Bronchial Asthma, Pneumonia etc)
Respiratory system Disorders	Provide nursing care for patients with common respiratory disorders (Pharyngitis, laryngitis, tonsillitis, acute bronchitis, TB, Bronchial Asthma, pleural conditions, COVID 19, etc.)
	Provide nursing care for a patient with diagnostic and therapeutic procedures (Bronchoscopy, thoracentesis, tracheostomy, chest drainage system etc)
	Provide basic and advanced cardiac life support (chocking, airway obstruction, cardio-respiratory arrest etc)
	Monitor patients' response for treatment (Pharyngitis, laryngitis, tonsillitis, acute bronchitis, TB, Bronchial Asthma, Pneumonia, pleural conditions, COPD etc)
	Assess and make nursing diagnosis for a patient with Gastrointestinal disorders
	Diagnose and manage patients with common GI disorders (Oral disorder, GERD, PUD, Gastritis, Constipation, diarrhea, Acute abdomen, Hemorrhoid, BO, accessory organ disorders etc.)
Gastrointestinal system Disorder	Provide nursing care for patients with common GI disorders (Oral disorder, Achalasia, GERD, PUD, Gastritis, Constipation, diarrhea, Acute abdomen,
	Hemorrhoid, BO, accessory organ disorders etc.)  Provide nursing care for a patient with diagnostic and therapeutic procedure of GI
	disorder (endoscopic procedures, abdominal paracentesis etc.)
	Monitor patients' response for treatment (Oral disorder, Achalasia, GERD, PUD,
	Gastritis, Constipation, diarrhea, Acute abdomen, BO, accessory organ disorders etc.)
1	Assess and make nursing diagnosis for a patient with Integumentary system disorders (Burn, Viral, Bacterial, fungal, and inflammatory skin disorders etc.)
	Diagnose and manage patients with common integumentary disorders (Burn, Viral, Bacterial, fungal, and inflammatory skin disorders)
Integumentary system Disorder	Provide nursing care for patients with common Integumentary system disorders (Burn, Viral, Bacterial, fungal, and inflammatory skin disorders)
	Provide wound care (Suturing, dressing, irrigation, abscess drainage, debridement etc)
	Monitor patients' response for treatment of common integumentary disorders
	Assess and make nursing diagnosis a patient with common musculoskeletal system
	disorders (Soft tissue injury, Orthopedic emergencies, infectious bone disease,
	degenerative bone disease etc.)  Provide nursing care for patients with common musculoskeletal system disorders
	(Soft tissue injury, Orthopedic emergencies, infectious bone disease, degenerative
	bone disease etc.)
Musculoskeletal system	Provide perioperative nursing care (including pain management)
Disorder	Apply infection prevention and control measures in patient care
	Counsel a client with Musculoskeletal related disorders
	Teach patients about mobility aids and body mechanics
	Monitor patients' response for treatment with soft tissue injury, Orthopedic
	emergencies, infectious bone disease, degenerative bone disease, fixation, traction,
	cast etc.)
Genitourinary system	Assess and make nursing diagnosis a patient with genitourinary system disorders (Glomerulonephritis, Urinary tract infections, Renal failure, BPH, Nephrolithiasis,
Disorder System	Urolithiasis etc)
	Diagnose and manage patients with common genitourinary diseases (UTI)
	0 1

	Provide nursing care for patients with common Genitourinary system disorders (genitourinary infection, urinary tract infection, Renal failure, Benign Prostatic
	Hyperplasia, Nephrolithiasis, Urolithiasis)
	Monitor patients' response for treatment (Genitourinary infection, Urethritis, pyelonephritis, cystitis, Renal failure, BPH, Nephrolithiasis, Urolithiasis etc)
	Assess and make nursing diagnosis for a patient with Cardiovascular disorders
	(Shock, hypertension, coronary artery disease, valvular, Heart failure, anemia,
	bleeding disorders etc)
Cardiana	Diagnose and manage patients with common cardiovascular diseases (Anemia,
Cardiovascular and Hematology system	Shock, hypertension, coronary artery disease (CAD), Heart failure etc)  Provide nursing care for patients with common cardiovascular system and
Disorder System	hematologic disorders (Shock, hypertension, coronary artery disease (CAD),
Disorder	valvular, heart failure, anemia, bleeding disorders, and including the management of
	blood and blood products transfusion, Fluid, electrolyte, and acid-base disturbance)
	Monitor patients' response for treatment (Shock, hypertension, coronary artery
	disease (CAD), valvular, Heart failure, anemia, bleeding disorders etc)
	Assess and make nursing diagnosis for a patient with neurologic system problem
	(Cerebrovascular accident, Peripheral nerve dysfunction, Increased Intra Cranial
	Pressure (ICP), neurologic trauma, meningitis, headache, seizure disorders etc)
Neurologic system	Diagnose and manage (Epilepsy, Headache etc )
problem	Provide nursing care for patients with neurologic disorders (CVA, Peripheral nerve
	diseases, Increased ICP, neurologic trauma, meningitis, headache, seizure disorder
	etc.)
/	Monitor patients' response for treatment (CVA, Peripheral nerve diseases, Increased ICP, neurologic trauma, meningitis, seizure disorder etc)
	Assess and make nursing diagnosis for a patient with endocrine system disorders
	(Diabetes mellitus, Thyroid, parathyroid, adrenal gland disorders)
	Diagnose and manage (Diabetes mellitus, Thyroid disorders etc.)
	Provide nursing care for patients with common endocrine system disorders (Diabetes
Endocrine Disorder	mellitus, Thyroid parathyroid, adrenal gland disorders, perioperative care for a
	patient undergoing thyroid gland surgery etc )
	Monitor patients' response for treatment and complications (Diabetes mellitus,
	Thyroid, parathyroid, adrenal gland disorders etc)
	Assess and make nursing diagnosis for a patient with Ear, Eye and Nose (EEN)
	disorders (Conjunctivitis, Glaucoma, cataract, Otitis media, Otitis external,
	mastoiditis, Nose bleeding, trachoma, visual impairment etc)
Ear, Eye and Nose	Diagnose and manage patients with (Conjunctivitis, Glaucoma, cataract, Otitis media, Otitis external, mastoiditis, Nose bleeding, trachoma etc)
Disorder (EEN)	Provide nursing care for patients with common Ear, Eye and Nose Disorder (EEN)
Disorder (EE/11)	(Conjunctivitis, Glaucoma, cataract, Otitis media, Otitis external, mastoiditis,
	trachoma, Nose bleeding etc)
	Monitor patients' response for treatment and complications (Glaucoma, cataract,
	Nose bleeding etc)
	Assess and make nursing diagnosis for a patient with immune system disorders (HIV,
	hypersensitivity disorders etc)
Immune system	Diagnose and manage HIV/AIDs
Disorder	Provide nursing care for a patient with common immune system disorders (HIV,
	hypersensitivity disorders)
	Monitor patients with immune system disorders for treatment and complications (HIV, hypersensitivity disorders)
	Assess and diagnose common communicable disease (Acute febrile illness, measles
	sexually transmitted infection (STI) etc)
	Manage common communicable disease (Acute febrile illness, measles sexually
	transmitted infection (STI) etc)
	Monitor patients' response for common communicable disease (Acute febrile illness,
Communicable Disease	measles, and sexually transmitted infection (STI) etc).)

Subdomain 1.2: Child hea	alth nursing
Contents	Tasks
Growth, Development, and Malnutrition	Assess and monitor the growth, development, and nutritional status of a child (including a child with failure to thrive)
	Diagnosis and manage a child with growth, development, and nutrition problems
and Mamuti tion	Provide nursing care for a child with growth, development and nutrition problems
	Monitor response to management of growth, development and nutrition problems
	Assess and make nursing diagnosis for a neonate with neonatal problems (Birth injuries, common congenital anomalies, low birth weight, preterm, Neonatal sepsis, Neonatal tetanus, Hemorrhagic disease of the newborn, neonatal jaundice, hypothermia, Hypoglycemia, Birth asphyxia)  Provide nursing care for a neonate with problems of (Low birth weight and preterm,
NT 4.7	
Neonatal care	common congenital anomalies, Birth injuries, Neonatal sepsis, Neonatal tetanus, Hemorrhagic disease, neonatal jaundice, hypothermia, Hypoglycemia etc)
	Provide neonatal resuscitation
	Monitor neonates' response for treatment of (Low birth weight and preterm, common
	congenital anomalies, Birth injuries, Neonatal sepsis, Neonatal tetanus, Hemorrhagic
	disease, neonatal jaundice, hypothermia, Hypoglycemia, resuscitation etc)
	Plan and monitor immunization (Estimating vaccine needs, Calculation of target
Immunization	population, EPI coverage, Vaccine dropout rate and Missed opportunities.)
Illillullization	Provide vaccination and Manage vaccine cold chain
	Assess and make nursing diagnosis for a child with common respiratory system
	disorders (TB/HIV, Pneumonia, tonsillopharyngitis, Reactive airway disease,
	middle ear infection, croup, Epiglottitis, pertussis)
	Provide nursing care for a child with common respiratory system disorders (TB, HIV,
	Pneumonia, tonsillitis, Reactive airway disease, Middle ear infection, croup,
Respiratory system	Epiglottitis, pertussis etc.)
Disorder	Provide basic life support for a child with common emergencies (foreign body
	aspiration, choking, poisoning, drowning) and monitor progress
	Monitor child's response for treatment and complication of common respiratory
	disorders (severe pneumonia, tonsillopharyngitis, reactive airway disease, ear
	infection, croup, Epiglottitis)
	Assess and make nursing diagnosis for a child with cardiovascular disorders
	(congenital heart disease, rheumatic heart disease, congestive heart failure, anemia etc)
Cardiovascular system	Provide nursing care for a child with congenital heart disease, rheumatic heart
Disorders	disease, congestive heart failure, anemia etc
	Monitor child's response to treatment for cardiovascular system disorders (congenital
	heart disease, rheumatic heart disease, congestive heart failure, anemia etc)
	Assess and make nursing diagnosis for a child with gastrointestinal disorders
	(diarrheal disease, pyloric stenosis, appendicitis, intussusceptions, hernia etc)
GIT system Disorders	Provide nursing care for a child with common gastrointestinal disorders (diarrhea
	disease, pyloric stenosis, appendicitis, Intussusceptions, Rectal prolapse, hernia etc)
	Monitor child's response to treatment for GI disorders
<b>GUT system Disorders</b>	Assess and make nursing diagnosis for a child with genitourinary system disorders
	(urinary tract infection, acute glomerulonephritis, nephrotic syndrome, Wilm's tumor
	etc)
	Provide nursing care for a child with genitourinary system disorders (urinary tract
	infection, acute glomerulonephritis, nephrotic syndrome, Wilm's tumor etc)
	Monitor child's response to treatment for genitourinary system disorders
	Assess and make nursing diagnosis for a child with diabetes mellitus (DM) and
Endocrine Disorders	Iodine deficiency diseases
	Provide nursing care for a child with Diabetes mellitus (DM) and Iodine deficiency
	diseases)

	Monitor the progress of a child with diabetic and iodine deficiency diseases
Neurologic Disorders	Assess a child with neurologic disorders (neurologic assessment) seizure disorders
	and Meningitis
	Provide nursing care and monitor the progress of a child with seizure disorders and
	Meningitis
Musculoskeletal system Disorder	Assess and make nursing diagnosis for a child with musculoskeletal system disorders
	(Osteomyelitis and septic arthritis etc.
	Provide nursing care for a child with common musculoskeletal disorder
	Monitor child's response to treatment for musculoskeletal system disorders
	(Osteomyelitis and septic arthritis)
	Assess and make nursing diagnosis for a child with integumentary system disorder (
	burns, eczema, cellulitis, Impetigo, Scabies, Superficial fungal infections)
To do a servicio de la companya de l	Diagnose and Manage (burns, eczema, cellulitis, Impetigo, Scabies, Superficial
Integumentary system Disorder	fungal infections etc)  Provide pureing core for a child with integration question disorder (huma accome)
Disorder	Provide nursing care for a child with integumentary system disorder (burns, eczema, Impetigo, Scabies, Superficial fungal infections, measles etc)
	Monitor child's response to treatment for common integumentary system disorder
	(burns, eczema, Impetigo, Scabies, Superficial fungal infections, measles etc)
	Manage a child age below two months using IMNCI protocol
IMNCI	Manage a child age two to 59 months using IMNCI protocol
Subdomain 1. 3: Materna	i i
Contents	Tasks
	Assess and diagnose pregnancy
	Provide antenatal nursing care for normal and abnormal pregnancy (Prevention of
ANC	Mother to Child Transmission (PMTCT), pregnancy induced hypertension, anemia,
	gestational diabetes Miletus, antepartum hemorrhage), including nutritional advice
	etc.
	Assess and diagnose labor
Labor and Delivery	Provide nursing care for a laboring mother using partograph, including referral
Labor and Denvery	management
	Conduct and manage normal labor
	Perform postnatal assessment
	Provide essential newborn care
Postnatal care	Provide postnatal nursing care (counseling and education to mothers and families
	(successful breastfeeding, puerperal danger signs, PPH, newborn danger signs,
	traditional malpractices, vaccination, adverse birth outcome, post Cesarean section
Family Planning	(C/S) care)
Family Planning	(C/S) care) Assess eligibility and provide family planning (including counseling)
Family Planning	(C/S) care) Assess eligibility and provide family planning (including counseling) Provide comprehensive abortion care
Family Planning	(C/S) care) Assess eligibility and provide family planning (including counseling) Provide comprehensive abortion care Provide nursing care for mothers with common tumors of reproductive organs
	(C/S) care)  Assess eligibility and provide family planning (including counseling)  Provide comprehensive abortion care  Provide nursing care for mothers with common tumors of reproductive organs (Cervical, endometrial, breast, Ovarian etc.)
Family Planning  Gynecologic care	(C/S) care) Assess eligibility and provide family planning (including counseling) Provide comprehensive abortion care Provide nursing care for mothers with common tumors of reproductive organs
	(C/S) care)  Assess eligibility and provide family planning (including counseling)  Provide comprehensive abortion care  Provide nursing care for mothers with common tumors of reproductive organs (Cervical, endometrial, breast, Ovarian etc.)  Provide nursing care to mothers with Abnormal uterine bleeding (AUB)
Gynecologic care	Assess eligibility and provide family planning (including counseling)  Provide comprehensive abortion care  Provide nursing care for mothers with common tumors of reproductive organs (Cervical, endometrial, breast, Ovarian etc.)  Provide nursing care to mothers with Abnormal uterine bleeding (AUB) (Dysmenorrhea, amenorrhea, polymenorrhea, oligomenorrhea.)  Provide nursing care for mothers with sexual and reproductive health problems (fistula, pelvic inflammatory disease (PID)
Gynecologic care  Subdomain 1. 4: Mental	Assess eligibility and provide family planning (including counseling)  Provide comprehensive abortion care  Provide nursing care for mothers with common tumors of reproductive organs (Cervical, endometrial, breast, Ovarian etc.)  Provide nursing care to mothers with Abnormal uterine bleeding (AUB) (Dysmenorrhea, amenorrhea, polymenorrhea, oligomenorrhea.)  Provide nursing care for mothers with sexual and reproductive health problems (fistula, pelvic inflammatory disease (PID)  Health
Gynecologic care	Assess eligibility and provide family planning (including counseling)  Provide comprehensive abortion care  Provide nursing care for mothers with common tumors of reproductive organs (Cervical, endometrial, breast, Ovarian etc.)  Provide nursing care to mothers with Abnormal uterine bleeding (AUB) (Dysmenorrhea, amenorrhea, polymenorrhea, oligomenorrhea.)  Provide nursing care for mothers with sexual and reproductive health problems (fistula, pelvic inflammatory disease (PID)  Health  Tasks
Gynecologic care  Subdomain 1. 4: Mental	Assess eligibility and provide family planning (including counseling)  Provide comprehensive abortion care  Provide nursing care for mothers with common tumors of reproductive organs (Cervical, endometrial, breast, Ovarian etc.)  Provide nursing care to mothers with Abnormal uterine bleeding (AUB) (Dysmenorrhea, amenorrhea, polymenorrhea, oligomenorrhea.)  Provide nursing care for mothers with sexual and reproductive health problems (fistula, pelvic inflammatory disease (PID)  Health  Tasks  Performing comprehensive psychiatric assessment and make nursing diagnosis for
Gynecologic care  Subdomain 1. 4: Mental	Assess eligibility and provide family planning (including counseling)  Provide comprehensive abortion care  Provide nursing care for mothers with common tumors of reproductive organs (Cervical, endometrial, breast, Ovarian etc.)  Provide nursing care to mothers with Abnormal uterine bleeding (AUB) (Dysmenorrhea, amenorrhea, polymenorrhea, oligomenorrhea.)  Provide nursing care for mothers with sexual and reproductive health problems (fistula, pelvic inflammatory disease (PID)  Health  Tasks  Performing comprehensive psychiatric assessment and make nursing diagnosis for patients with mental illnesses including pediatrics behavioral disorders
Gynecologic care  Subdomain 1. 4: Mental	Assess eligibility and provide family planning (including counseling)  Provide comprehensive abortion care  Provide nursing care for mothers with common tumors of reproductive organs (Cervical, endometrial, breast, Ovarian etc.)  Provide nursing care to mothers with Abnormal uterine bleeding (AUB) (Dysmenorrhea, amenorrhea, polymenorrhea, oligomenorrhea.)  Provide nursing care for mothers with sexual and reproductive health problems (fistula, pelvic inflammatory disease (PID)  Health  Tasks  Performing comprehensive psychiatric assessment and make nursing diagnosis for patients with mental illnesses including pediatrics behavioral disorders  Diagnose and manage (Mild and Moderate anxiety and mood disorders)
Gynecologic care  Subdomain 1. 4: Mental  Contents	Assess eligibility and provide family planning (including counseling)  Provide comprehensive abortion care  Provide nursing care for mothers with common tumors of reproductive organs (Cervical, endometrial, breast, Ovarian etc.)  Provide nursing care to mothers with Abnormal uterine bleeding (AUB) (Dysmenorrhea, amenorrhea, polymenorrhea, oligomenorrhea.)  Provide nursing care for mothers with sexual and reproductive health problems (fistula, pelvic inflammatory disease (PID)  Health  Tasks  Performing comprehensive psychiatric assessment and make nursing diagnosis for patients with mental illnesses including pediatrics behavioral disorders  Diagnose and manage (Mild and Moderate anxiety and mood disorders)  Provide nursing care for patients with mental illnesses
Gynecologic care  Subdomain 1. 4: Mental  Contents	Assess eligibility and provide family planning (including counseling)  Provide comprehensive abortion care  Provide nursing care for mothers with common tumors of reproductive organs (Cervical, endometrial, breast, Ovarian etc.)  Provide nursing care to mothers with Abnormal uterine bleeding (AUB) (Dysmenorrhea, amenorrhea, polymenorrhea, oligomenorrhea.)  Provide nursing care for mothers with sexual and reproductive health problems (fistula, pelvic inflammatory disease (PID)  Health  Tasks  Performing comprehensive psychiatric assessment and make nursing diagnosis for patients with mental illnesses including pediatrics behavioral disorders  Diagnose and manage (Mild and Moderate anxiety and mood disorders)  Provide nursing care for patients with mental illnesses  Monitor progress of patients to treatment for common mental illnesses (Follow-up)
Gynecologic care  Subdomain 1. 4: Mental Contents  Mental Illnesses	Assess eligibility and provide family planning (including counseling)  Provide comprehensive abortion care  Provide nursing care for mothers with common tumors of reproductive organs (Cervical, endometrial, breast, Ovarian etc.)  Provide nursing care to mothers with Abnormal uterine bleeding (AUB) (Dysmenorrhea, amenorrhea, polymenorrhea, oligomenorrhea.)  Provide nursing care for mothers with sexual and reproductive health problems (fistula, pelvic inflammatory disease (PID)  Health  Tasks  Performing comprehensive psychiatric assessment and make nursing diagnosis for patients with mental illnesses including pediatrics behavioral disorders  Diagnose and manage (Mild and Moderate anxiety and mood disorders)  Provide nursing care for patients with mental illnesses  Monitor progress of patients to treatment for common mental illnesses (Follow-up and adjust treatment to respond for the emerging need of patients)
Gynecologic care  Subdomain 1. 4: Mental  Contents	Assess eligibility and provide family planning (including counseling)  Provide comprehensive abortion care  Provide nursing care for mothers with common tumors of reproductive organs (Cervical, endometrial, breast, Ovarian etc.)  Provide nursing care to mothers with Abnormal uterine bleeding (AUB) (Dysmenorrhea, amenorrhea, polymenorrhea, oligomenorrhea.)  Provide nursing care for mothers with sexual and reproductive health problems (fistula, pelvic inflammatory disease (PID)  Health  Tasks  Performing comprehensive psychiatric assessment and make nursing diagnosis for patients with mental illnesses including pediatrics behavioral disorders  Diagnose and manage (Mild and Moderate anxiety and mood disorders)  Provide nursing care for patients with mental illnesses  Monitor progress of patients to treatment for common mental illnesses (Follow-up)

	Provide nursing care for patients with trauma and stress-related disorders (post-traumatic stress disorder (PTSD), Acute stress disorder, adjustment disorder etc)  Monitor progress of patients to treatment for stress-related disorders
	Assess and make nursing diagnosis for a patient with addiction and substance abuse
Substance related and	disorders
Addictive Disorder	Provide nursing care for patients with addiction and substance abuse disorders
	Monitor progress of patients with addiction and substance abuse disorders
	Assess and make nursing diagnosis for a patient with neurocognitive disorders
Neuro-cognitive	(delirium, dementia etc)
disorder	Provide nursing care for patients with neurocognitive disorders (delirium, dementia
	etc)

### **Domain 2: Management and Leadership**

#### **Tasks**

Manage health care system (planning, organizing, staffing, directing, and controlling)

Create a safe and comfortable environment for clients and staff

Lead nursing team

Conducting nursing service quality audits

#### **Domain 3: Scholar**

#### **Tasks**

Develop research proposal

Collect quantitative and qualitative data and information

Analyze and interpret quantitative data and information

Utilize evidence-based practice in clinical decision making

#### **Domain 4: Professionalism**

### **Tasks**

Adhere to legal and ethical principles pertaining to nursing practice (including ethical dilemmas, managing triaging, and liaison)

Establish and maintain a positive, respectful, and collaborative working relationship with clients, client families nursing team, and other working colleagues

Produce and maintain accurate documentation of activities, procedures, and results

Demonstrate commitment to continuous professional development (CPD)

Adhere to the standard of practice for nurses practicing in Ethiopia

Advocate for patients and the nursing profession

#### **Domain 5: Community Health Nursing**

#### **Tasks**

Assess and diagnose community health status (Including surveillance and screening for emerging and re-emerging issues)

Intervene for community health problems (school, prison, refuge, palliative, and other health care services)

Provide home-based care

### **Sample questions**

1. A 40-year-old female patient was admitted to a medical ward after she is presented with generalized edema, fever and headache. She had history of treatment for tonsillitis four weeks back. On urinalysis, her urine is brown in color and she has proteinuria of 3.7g/day.

What is the most likely diagnosis of the patient?

(A) Glomerulonephritis
(B) Nephrotic syndrome
(C) Pyelonephritis
(D) Urolithiasis

**Answer Key:** The answer is **B** 

**Explanation.** In this scenario the patient was presented with generalized edema, fever, headache and proteinuria which are the general manifestation of glomerular diseases. Generally, loss of up-to 150 mg/day of protein in urine is normal. Protein loss greater than 2.5g/day in urine is usually an indication of glomerular diseases. But, proteinuria greater than 3.5gm/day is typical indication of nephrotic syndrome. Whereas, proteinuria between 2.5-3.5g/day is also indication of glomerulonephritis. Patients with both nephrotic syndrome and glomerulonephritis have edema but edema in patients with nephrotic syndrome is generalized. Fever and headache are non specific symptoms. Patients with glomerular diseases may have Brown to black urine color but not specific. There is nothing mentioned in this case scenario that indicates urolithiasis.

2. A 48-year-old male client visited outpatient department with complaint of chest pain and is diagnosed for atherosclerosis. On history, client used one pack of cigarette per day for the last ten years and he was a finance officer for a long period of time. The patient has no finding on laboratory investigation.

What is the most appropriate management for this client?

(A) Cessation of smoking (C) Reduce duration of seating (B) Treating hyperlipidemia (D) Prescribe high dose aspirin

**Answer Key:** The answer is **A** 

**Explanation:** in this case the patient visits the hospital with complaint of chest pain secondary to atherosclerosis. The management of atherosclerosis involves modification of risk factors, a controlled exercise program to improve circulation, anti-hyperlipidemic agents, thrombolytic and interventional or surgical graft procedures. But in this case the laboratory investigation was normal so we don't have any evidence to start anti hyperlipedemic agents and anti thrombolytic drugs. The only risk factor that was mentioned in the case scenario was smoking more than one pack of cigarette per day. The best method of treatment for this patient is modification of risk factors. A nurse needs to engage the patient in smoking cession program.

3. A 36-year-old female client visited a clinic for a routine cardiovascular risk assessment. She was tested for underlying metabolic abnormalities. The patient has fasting blood sugar level of 130mg/dl, Blood pressure 130/80 mmHg, waist circumference 36 cm and hip circumference 67cm.

What examination finding of the patient is suggestive for her metabolic abnormality?

(A) Fasting plasma glucose

(C) Waist to hip ratio

(B) Waist circumference

(D) Blood pressure

**Answer Key:** The answer is **A** 

**Explanation:** In this scenario the patient came for cardiovascular risk assessment. To diagnose whether or not a patient has a metabolic syndrome, at least three of the following criteria should be fulfilled. These include insulin resistance (fasting plasma glucose more than 100 mg/dL or abnormal glucose tolerance test), central obesity (waist circumference more than 35 inches in women, more than 40 inches in men), dyslipidemia (triglycerides more than 150 mg/dL,HDL less than 50 mg/dL in women, less than 40mg/dL in men), Blood pressure persistently>130/85 mmHg, proinflammatory state (high levels of C-reactive protein) and Prothrombotic state (high fibrinogen level). In this case scenario the finding that suggests the patient has metabolic abnormality is fasting blood glucose level of 130mg/dl.

4. A 29-year-old man was presented to an ophthalmologic OPD with complaints of difficulty of focusing and blurred vision. The nurse utilized Snellen chart to assess visual acuity and the finding was 20/70.

What is the most likely diagnosis for this finding?

(A) Normal vision

(C) Total blindness

(B) Legal blindness

(D) Visual impairment

**Answer Key:** The answer is **D** 

**Explanation:** In this scenario the nurse tried to assess the visual acuity of the patient by using Snellen's chart. This technique is used to assess the patient's ability to see things from far and near. Normal vision is 20/20. Visual impairment is any kind of vision loss. Legal blindness is 20/200. An example of findings is that the patient who identifies all the letters correctly on the line marked 30 has a visual acuity of 20/30. This means that the patient can see at 20 feet what the average individual can see at 30 feet.

5. A 38-year-old female patient came to health center with complaint of abdominal pain, vaginal discharge and severe pruritis. Microscopic examination of vaginal discharge revealed pseudohyphae.

What is the most likely explanation for this finding?

- (A) The patient has genital ulcer
- (B) The patient has genital herpes
- (C) The patient has trichomonas vaginalis
- (D) The patient has vulvo vaginal candidiasis

**Answer Key:** The answer is **D** 

**Explanation**: In this scenario the patient comes with abdominal pain and vaginal discharge. So the possible causes of vaginal discharge include Neisseria gonorrhea, Chlamydia trachomatis, Trichomonas vaginalis, Gardnerella vaginalis (Polymicrobial) and Candida albicans. Patient with vulvo vaginal candidiasis is characterized by severe vulvar pruritis (prominent feature), vaginal discharge (scanty, whitish, yellow, thick to form curds, non-offensive, sore vulva due to itching. From the scenario the patient has abdominal pain, vaginal discharge and Microscopic examination showed pseudohyphae which are the etiologic agent of vaginal candidiasis.

6. A mother, who has been lactating for six months, came to a family planning clinic upon return of her menstrual period. The nurse discussed with her about contraception options, their side effects and benefits. After discussion the mother preferred the injectable method of contraception.

What is the appropriate route to administer the contraceptive she chose?

(A) Intra dermal

(C) Subcutaneously

(B) Intra muscular

(D) Intra venous

**Answer Key:** The answer is **B** 

**Explanation:** In this scenario the major intention of the question is to select appropriate route of administration of Depo-Provera. It can be administered through intramuscular and subcutaneously, but it cannot be given through intravenous route because the absorption should be slow. Depo-Provera should be absorbed slowly over 3 months. Most of the time the drug administered through subcutaneously should not be greater than 1 ml and the actual dose of Depo-Provera is 2ml. which can't be administered through subcutaneously.

7. A 46-year-old man, with a history of excessive alcohol consumption for ten years, was hospitalized because of seizure and increased hand tremor. Symptoms follow three days after cessation of alcohol as part of his repeated unsuccessful effort to stop alcohol consumption. He has no identified medical illness.

What is the most likely admission diagnosis for this patient?

(A) Alcohol abuse disorder

(C) Alcohol withdrawal

(B) Alcohol dependency

(D) Alcohol intoxication

**Answer key:** The answer is **C** 

**Explanation**: This patient has been heavy consumer of alcohol for long time. The patient's manifestation and the time in which the manifestation occurred are more related to the possible diagnosis of alcohol withdrawal. According to DSM-5, Alcohol withdrawal is diagnosed using two of the four criteria which include cessation of alcohol, development of sign or symptom short after cessation of alcohol. Symptoms are not related to other medical illness and the symptoms cause significant impairment in normal functioning of the patient. Alcohol abuse and alcohol intoxication are related with recent intake of alcohol, and a strong desire or urge to use alcohol.

8. A premature neonate was admitted to neonatal intensive care unit for the treatment of very low birth weight and inability to gain wait for the first three weeks. The neonate has weak suckling reflex, absence of grasping and tonic neck reflexes.

What is the most appropriate nursing diagnosis of this case?

(A) Impaired parenting

(C) Ineffective breast feeding

(B) Altered growth pattern

(D) Delayed growth and development

**Answer key:** The answer is **C** 

**Explanation:** In this scenario, the objective and subjective data for the neonate are low birth weight, inability to gain weight and weak suckling reflex and absence of grasping. Based on these, a nurse can formulate a nursing diagnosis of ineffective breast feeding related to weak sucking reflex and Risk for altered growth pattern related to low birth weight. To formulate a nursing diagnosis of impaired parenting, the nurse must further identify maternal knowledge and effort to breast feed. Neonates with asymmetric tonic neck reflex and uncoordinated hand movement in the first month of life are in normal Growth and developmental stage.

9. The nurse evaluates a two-year-old child who was admitted for the treatment of failure to thrive secondary to severe acute malnutrition. The child had good appetite and no edema for the last ten consecutive days. The nurse decided to discharge the child.

What is the most likely additional finding that could support the nurse's decision?

(A) Weight for age >85%

(C) Weight for height >80%

(B) Weight for age >90%

(D) Weight for height > 85%

**Answer Key:** The answer is **D** 

**Explanation**: For a child admitted in phase two severe acute malnutrition treatments, the nurse can make evaluation to discharge or transfer the child. To discharge a child aged from 6 to 59 months and who completed phase two treatment, the child must have weight for length greater or equal to 85% and no edema for 10 days. The nurse can also measure the weight achieved if the child has been admitted with MUAC criteria. In contrary, weight for age measurement is not sufficient enough to indicate the child's health status during severe acute malnutrition treatment evaluation.

10. A two-year-old male baby was brought to a health center with a complaint of barking cough, which is aggravated during night time and when crying. Physical examination result revealed persistent low-grade fever and slightly increased respiratory rate. He has no drooling and pain during swallowing.

What is the most likely diagnosis of this child?

(A) Whooping cough

(C) Croup

(B) Epiglottitis

(D) Pertussis

**Answer key:** The answer is **C** 

**Explanation:** The chief complaint of this child, specifically barking cough and low grade fever mainly suggest the possible diagnosis of Croup. A child with croup can be further identified by slight increment of respiratory rate and often recurrence with decreasing intensity for several days. Epiglottitis can be differentiated by progressive and fulminating course of high fever with sore throat, difficulty in swallowing and dyspnea. Whooping cough or Pertussis mainly manifest by congestion and rhinorrhea with sneezing and lacrimation in the Catarrhal stage. The cough of pertussis is characterized by dry, intermittent, bursting and uninterrupted on single exhalation.

11. A seven-year-old child was brought to a pediatric OPD with a complaint of hematuria. On examination, the patient had edema, hypertension and oliguria. The clinician wanted to know the possible risk factor for this case.

What is the most likely underlying cause for the disease?

- (A) History of recurrent croup
- (B) History of recurrent pneumonia
- (C) History of recurrent tuberculosis
- (D) History of recurrent tonsillo-pharyngitis

**Answer key:** The answer is **D** 

**Explanation**: A child in age group of 5-12 years with hematuria can be presented with a number of additional symptoms to indicate specific diseases. For this child, the hematureia is accompanied by edema, hypertension and renal insufficiency which make the most likely diagnosis to be post streptococcal glomerulonephritis. Previous recurrent history of streptococcal infection of the tonsils or pharynx is one of the causative factors that predispose the child for glomerulonephritis. This recurrent infection results in immune mediated complex formation, complement activation glomerular injury, and hematuria. However, pneumonia, tuburclosis and croup are not associated with immune mediated antigen antibody complex formation.

12. A flood disaster occurred and high morbidity and mortality led to mass displacements of populations from the area in a woreda. After the incident, disaster preparedness and management team wanted to identify the immediate factors which led to highest morbidity and mortality in the area.

What is the most likely disaster consequence in this scenario?

(A) Child abuse

(C) Mental health disorders

(B) Diarrheal illness

(D) Sexual transmitted disease

**Answer key:** The answer is **B** 

**Explanation:** During flood disaster, the community suffers from multiple causes resulting in displacement of the population. In this community water-borne disease related to hygiene and shortage of clean water supply is an immediate factor that led the population to high morbidity, mortality and displacement. Diarrheal illness is one of the commonest water related illness that mostly occurs following flooding. Because of its severity and communicability, diarrheal disease requires an immediate intervention. Displacement of the population due to child abuse, sexual

transmitted disease and mental disorder, are rare during disaster and the fatality and severity of these problems do not exceed diarrhea.

13. In a cardiac center of a hospital, more than 5000 children and other cardiac patients are on waiting list for cardiac surgery because of resource scarcity. Along with solving the budget constraint and training of health professionals, the hospital management team decided to give service in their order of visit.

What is the most appropriate principle applied in this context?

(A) Justice

(C) Beneficence

(B) Autonomy

(D) Nonmaleficence

**Answer Key:** The answer is **A** 

**Explanation:** Health care personnel are expected to treat every client equally and ethically. In this scenario, the hospital management has been committed to render service based on order of visit. This means the hospital is fair for all clients. Justice is an act of treating all patients equally, irrespective of their sex, education, income or other personal background. Thus, the principle of justice is visibly applied in this scenario. Beneficence and non-malefincense are also ensured indirectly. On the other hand, the issue of autonomy is less entertained in the scenario.

14. A staff recruitment committee in a hospital designed sound human resource management system. During the course of planning, the committee anticipates changes in the present work force in terms of entry of new professionals and departures of the employees for different reasons regularly. Due to this the hospital has sufficient information about the number and mix of human resources.

What is the most appropriate step of human resource planning done by the committee?

(A) Profiling

(C) Forecasting

(B) Estimating

(D) Inventorying

**Answer Key:** The answer is **C** 

**Explanation**: Human resource management is the process of acquiring and retaining the organization's human resource. To acquire appropriate mix of human resource, human resource planning precedes the other acquiring activities to determine staffing needs. Human resource planning involves five steps; profiling (i.e. profile the personnel need of the organization at some future point), estimating (i.e. projecting the type and number of personnel needed), inventorying (i.e. human resource audit of present employees), forecasting (i.e. anticipating changes in the present work force in terms of entries and exits and the final step is ensuring the right number of personnel with appropriate prerequisite knowledge and skill.

15. A research finding on diarrhea status among children of 6-23 months showed 47% mild diarrhea, 36 % moderate diarrhea and 17% severe diarrhea. Finally, the researcher planned to present the data in graphs.

What is the most likely type of graph to be used by this researcher?

(A) Bar graph

(C) Histogram

(B) Line graph

(D) Ogive curve

**Answer Key:** The answer is **A** 

**Explanation:** Bar graph is one of the data presentation methods used for the categorical variables. The research finding on the diarrhea status was categorized into mild, moderate and severe categories which entails bar graph as the best method of presentation. But the other types of graphs are important for numeric type of variable presentation methods. Line graph is useful for presenting numeric variables over the passage of time; histogram is for continuous measurement variables; ogive curve similar with histogram to present cumulative frequencies of a distribution. Therefore, the correct answer for the question is option A.

# **Sample Reference**

- Williams, L. S. (2006). Understanding Medical Surgical Nursing (3rd ed.). F.A. Davis Company.
- Smeltzer, S. C., et al. (2010). Brunner and Suddarth's Textbook of Medical-Surgical Nursing (12th ed.). Lippincott Williams & Wilkins.

- Alemayehu, M. (2009). Communicable Diseases Control Lecture Notes for Nursing Students. Hawassa University.
- Federal Democratic Republic of Ethiopia (FDRE) National Guidelines for the Management of Sexually Transmitted Infections Using Syndromic Approach. (2015).
- Food, Medicine and Healthcare Administration and Control Authority of Ethiopia. (2014). Standard Treatment Guidelines for General Hospital.
- World Health Organization (WHO). (2018). FP: A Global Handbook.
- American Psychiatric Association. (2013). Diagnostic and Statistical Manual of Mental Disorders (5th ed.). American Psychiatric Publishing.
- Cox, S. (2007). Clinical Applications of Nursing Diagnosis: Adult, Child, Women's, Mental Health, Gerontic, and Home Health Considerations. F.A.Davis
- Kely, T., & Carman, S. (2012). Essentials of Pediatric Nursing (2nd ed.). Philadelphia, Wolters Kluwer Health/Lippincott Williams & Wilkins.
- Federal Ministry of Health. (2013). Chart Booklet of Severe Acute Malnutrition (1st ed.).
- Sena, L., & Woldemichael, K. (2006). Disaster Prevention and Preparedness: Lecture Note. Jimma University.
- Cherie, A., & Gebrekidan, B. (2005). Nursing Leadership and Management: Lecture Notes for Nursing Students.
- D., Getu, & T., Fasil. (2005). Biostatistics Lecture Note for Health Sciences Students. University of Gondar.

### List of contributors

Mr. Endalkachew Tsedal MoH/ HHRIPR LEO

Dr. Meron Yakob MoH/ HHRIPR Exam Development and Administration Desk Lead

Ermias G/Yohannes MoH/ HHRIPR

Bethelhem Buzuayehu MoH/ HHRIPR

Dr. Wudasie Teshome MoH/ HHRIPR

Dr. Melese Achamo MoH/ HHRIPR

Tsedale Tafesse MoH/ HHRIPR

Mekonnen Desie MoH/ HHRIPR

Abera Bezabih MoH/ HHRIPR

Fikadie Dagnaw MoH/ HHRIPR

Lemeneh Wondimu MoH/ HHRIPR

Melkamu Gereme MoH/ HHRIPR

Tadele Asefa MoH/ HHRIPR

Nibretie Chalachew MoH/ HHRIPR

Demeke Getu MoH/ HHRIPR

Mebrat Tadesse MoH/ HHRIPR

Neway H/Michael MoH/ HHRIPR

Mebrahtu Tarekegn MoH/ HHRIPR

Milkoman Ayele MoH/ HHRIPR

Bethelhem Shikabew MoH/ HHRIPR

Amanuel Tesfay MoH/ HHRIPR

Dr. Alemseged Woretaw Jhpiego/HWIP

Dr. Yohannes Molla Jhpiego/HWIP

Bekalu Assamnew AMREF HWIP project

Dr. Equlinet Misganaw AMREF HWIP project

Dr Belay Hagos AAU- IER

Dr Birhanu Abera AAU- IER

Dr Girma Lema AAU- IER

Dr Daneal Desta AAU- IER

Dr Firdisa jebessa AAU- IER

Dr Wessenu Yimam AAU- IER

Dr. Abdnasir Ahmed AAU- IER

Tamirat Tekilu Ethiopian Health Students Association

Meseret Yitayew Ethiopian Nusing Association

Sindew Mohammed Minilik II Medical and Health Science College

Eyasu Tamiru Debre Birhan University

Wassie Negash Debre Birhan University

Sisay Shunie Debre Birhan University

Agezegn Asegeid Wachemo University

### **Contact Us**

Ministry of Health – Ethiopia

Street Address: - 1234 Sudan Street, Addis Ababa – Ethiopia

Telephone: +251-118275936

Hotline service: - 952

Website: https://www.moh.gov.et

**EHPLE Information Booklet 2024**