2024

Ethiopian Health Professionals Licensing Examination(EHPLE)

INFORMATION BOOKLET

PEDIATRIC AND CHILD HEALTH NURSING

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MINISTRY OF HEALTH-ETHIOPIA
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HEALTHIER CITIZENS FOR PROSPEROUS NATION!

Institute of
Educational Research

Message From the State Minister, Ministry of Health -Ethiopia

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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, AAU-IER, 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.

Acknowledgements
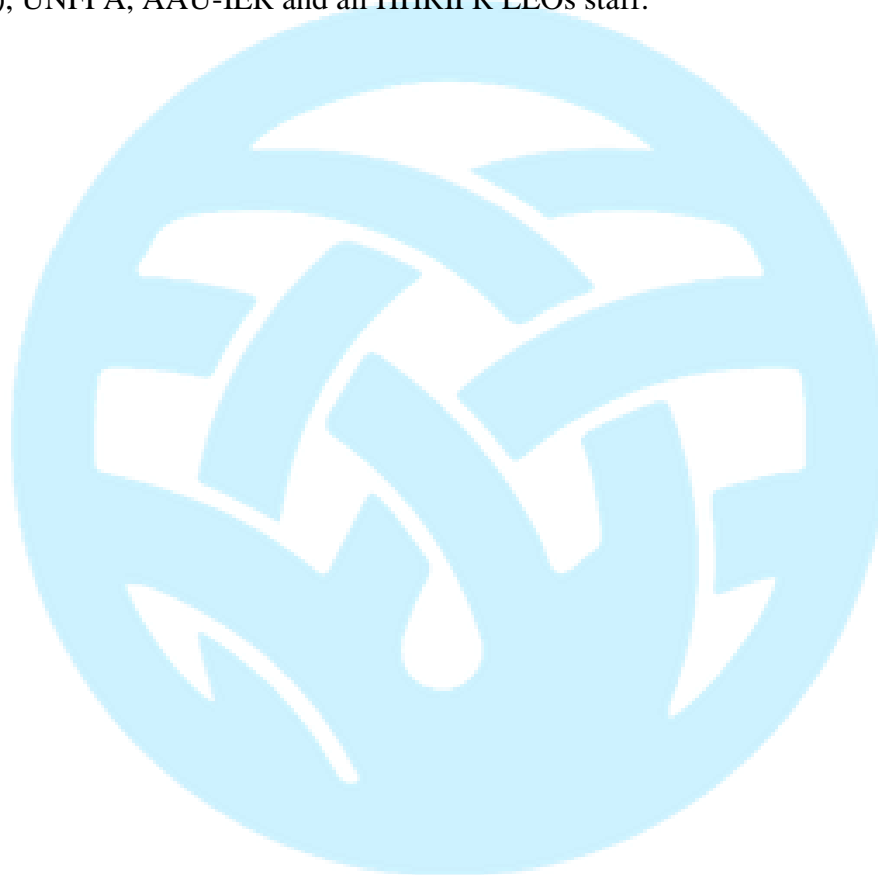
Acronyms and Abbreviations

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' Licensing 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

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 166,293 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 www.hple.moh.gov.et

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
    - o 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 **www.hple.moh.gov.et**. 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 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 Pediatric and Child Health nurses. The domains are further divided into discrete professional attributes that constitute sub-units (also referred to as sub-domains) defining the professional identity for Pediatric and Child Health nurses, 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

- *Patient Care (80.5%)*
- Scholar *(5.0%)*
- Professionalism *(5.5%)*
- Leadership and management *(5.0%)*
- Health promotion and disease prevention *(4.0%)*

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

Description: This domain encompasses the professional roles of Pediatric and Child Health 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. This is conducted in collaboration with patients and their families, other healthcare professionals, and the community. As patient care providers, nurses shall implement the Pediatric and Child Health 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 candidate shall apply such integrated knowledge in the following sub-areas:

- Systemic disorders (40.0%)
- Infectious disease (malaria and TB/HIV, vaccine preventable disease (4.0%)
- IMNCI (9.0%)
- EPI (5.0%)
- Neonatal Care (7.5%)

❑ Pediatrics emergency (5.0%)

❑ Growth and development (3.0%)

❑ Child nutrition (child feeding, malnutrition (7.0%)

Key role/ domain *2*: Scholar *(5.0%)*

Description: This domain encompasses the professional roles of Pediatric and Child Health nurses in generating and utilizing scientific data to improve the health and well-being of Ethiopians 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 *(5.5%)*

Description: This domain encompasses the professional commitment of Pediatric and Child Health nurses 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, medicolegal 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 Pediatric and Child Health nurses 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 *(4.0%)*

Description: This domain encompasses the professional roles of Pediatric and Child Health nurses 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: *Exam Content for Pediatrics and Child Health Nursing Profession*

Domain 1: Patient care	
Sub-domain 1.1: Systemic disorders	
Content	**Tasks**
Respiratory Disorder	Assess and develop nursing diagnosis for a child with common respiratory system disorders (Common Cold, Pneumonia, Reactive airway disease/Asthma, Croup, Epiglottitis, Pneumothorax, Hemothorax...)
	Provide nursing care for a child with respiratory system disorders (Common Cold, Pneumonia, Reactive airway disease/Asthma, Croup, Epiglottitis, Pneumothorax, Hemothorax...)
	Evaluate child's response for treatment and complication of common respiratory disorders (Common Cold, Pneumonia, Reactive airway disease/Asthma, Croup, Epiglottitis, Pneumothorax, Hemothorax...)
	Monitor child's condition during mechanical ventilation, oxygen administration, chest tube
	Diagnose and manage common respiratory system disorders
Cardiovascular and Hematologic Disorders	Assess and develop nursing diagnosis for a child with common cardiovascular and hematologic disorders (Anemia, Congenital heart disease, Heart failure, Infective endocarditis, Acute rheumatic fever, Rheumatic heart disease, Leukemia, Hemophilia ...)
	Provide nursing care for a child with cardiovascular and hematologic disorders (Anemia, Congenital heart disease, Heart failure, Infective endocarditis, Acute rheumatic fever, Rheumatic heart disease, Leukemia, Hemophilia ...)
	Monitor patient response to management for a child with common cardiovascular system disorders (Anemia, Congenital heart disease, Heart failure, Infective endocarditis, Acute rheumatic fever, Rheumatic heart disease, Leukemia, Hemophilia ...)
	Diagnose and manage common cardiovascular and hematologic system disorders
Gastrointestinal Disorders	Assess and make nursing diagnosis for a child with common gastro-intestinal system disorders (Pyloric stenosis, Hepatitis, Intestinal parasitosis, Bowel obstruction, Acute gastroenteritis, Constipation, Appendicitis, Hernia…..)
	Provide nursing care for a child with gastro-intestinal system disorders (Pyloric stenosis, Hepatitis, Intestinal parasitosis, Bowel obstruction, Acute gastroenteritis, Constipation, Appendicitis, Hernia…..)
	Monitor child's response for treatment and complication of common gastro-intestinal disorders (Pyloric stenosis, Hepatitis, Intestinal parasitosis, Bowel obstruction, Acute gastroenteritis, Constipation, Appendicitis, Hernia…..)
	Diagnose and manage common gastrointestinal system disorders
	Manage a child with dehydration
Renal Disorders	Assess and make nursing diagnosis for a child with common renal system disorders (Urinary tract infection, Nephrotic syndrome, Acute glomerulonephritis, Acute kidney injury, Nephroblastoma, Chronic kidney disease)
	Provide nursing care for a child with renal system disorders (Urinary tract infection, Nephrotic syndrome, Acute glomerulonephritis, Acute kidney injury, Nephroblastoma, Chronic kidney disease)

	Monitor treatment outcome and complication of common renal disorders (Urinary tract infection, Nephrotic syndrome, Acute glomerulonephritis, Acute kidney injury, Nephroblastoma, Chronic kidney disease)
	Monitor common fluid and electrolyte imbalance
	Diagnose and manage common renal system disorders
Reproductive System Disorders	Assess and make nursing diagnosis for a children with common reproductive system disorders (Sexually transmitted infections, Child sexual abuse, Menstrual problem, Hydrocele)
	Provide nursing care for children with reproductive system disorders (Sexually transmitted infections, Child sexual abuse, Menstrual problem, Hydrocele)
	Monitor child's response to treatment with common reproductive system disorders (STI, Child sexual abuse, Menstrual problem, Hydrocele)
	Diagnose and manage common reproductive system disorders
HEENT Disorders	Assess and make nursing diagnosis for a child with common HEENT disorders (Tonsillitis, Ear problem, Eye infection, Allergic rhinitis)
	Provide nursing care for a child with HEENT disorders (Tonsillitis, Ear problem, Eye infection, Allergic rhinitis)
	Monitor child's response to treatment with common HEENT disorders (Tonsillitis, Ear problem, Eye infection, Allergic rhinitis)
	Diagnose and manage common HEENT disorders
Endocrine System Disorders	Assess and make nursing diagnosis for a child with common endocrine system disorders (Diabetes Mellitus, Hypothyroidism)
	Provide nursing care for a child with endocrine system disorders (Diabetes Mellitus, Hypothyroidism)
	Monitor child's response for treatment and complication of common endocrine disorders (Diabetes Mellitus, Hypothyroidism)
	Diagnose and manage Diabetes Mellitus
Neurologic Disorders	Assess and develop nursing diagnosis for a child with common neurologic disorders (Meningitis, Encephalitis, Hydrocephalus, Seizure disorders)
	Provide nursing care for a child with neurologic disorders (Meningitis, Encephalitis, Hydrocephalus, Seizure disorders)
	Monitor child's response for treatment and complication of common neurologic disorders (Meningitis, Encephalitis, Hydrocephalus, Seizure disorders)
	Diagnose and manage common neurologic system disorders
Integumentary System Disorders	Assess and make nursing diagnosis for a child with common integumentary system disorders (Eczema, Dermatophytes, Impetigo, Scabies, Cellulitis)
	Provide nursing care for a child with integumentary system disorders (Eczema, Dermatophytes, Impetigo, Scabies, Cellulitis)
	Monitor treatment outcome and complication of common integumentary disorders
	Diagnose and manage common integumentary system disorders
	Provide wound care
Musculoskeletal Disorders	Assess and make nursing diagnosis for a child with musculoskeletal disorders (Pyomyocitis, Dislocation, Osteomyelitis, Fracture, Septic arthritis)
	Provide nursing care for a child with musculoskeletal disorders (Pyomyocitis, Dislocation, Osteomyelitis, Fracture, Septic arthritis)
	Monitor child's response for treatment and complication of common musculoskeletal disorders (Pyomyocitis, Dislocation, Osteomyelitis, Fracture, Septic arthritis)
	Diagnose and manage common musculoskeletal system disorders
Child Disability	Assess and diagnose a child with disability (Cerebral palsy, Down's

	syndrome, Intellectual disability, Autism, Hearing impairment, Vision loss and Behavioral disorder)
	Provide nursing care for a child with disability (Cerebral palsy, Down's syndrome, Intellectual disability, Autism, Hearing impairment, Vision loss and Behavioral disorder)
	Monitor a child's response to the treatment of disability (Cerebral palsy, Down's syndrome, Intellectual disability, Autism, Hearing impairment, Vision loss and Behavioral disorder)
	Diagnose a child with disability (Cerebral palsy, Down's syndrome, Intellectual disability, Autism, Hearing impairment, Vision loss and Behavioral disorder)

Sub-domain 1.2: Infectious disease (malaria and TB/HIV, vaccine preventable diseases)

Content	Tasks
Infectious Disease(malaria and TB, HIV infection)	Assess and make nursing diagnosis for a child with TB, HIV and/or Malaria infection
	Provide nursing care for a child with TB, HIV and/or Malaria infection
	Monitor treatment outcome and complication of TB, HIV and/or Malaria infection
	Diagnose and manage Malaria, TB and/or HIV
Vaccine Preventable Diseases	Assess and make nursing diagnosis for a child with vaccine preventable diseases (measles, poliomyelitis, tetanus, pertussis, diphtheria....)
	Provide nursing care for a child with vaccine preventable diseases
	Monitor complication of a child with vaccine preventable diseases (measles, poliomyelitis, tetanus, pertussis, diphtheria...)
	Diagnosis and manage a child with vaccine preventable diseases (measles, poliomyelitis, tetanus, pertussis, diphtheria ….)

Sub-domain 1.3: IMNCI

Content	Tasks
IMNCI	Assess and classify young infants (0 to 2 months) based on IMNCI protocol
	Treat and follow young infants (0 to 2 months) based on IMNCI protocol
	Assess and classify children (2 months to 5yrs) based on IMNCI protocol
	Treat and follow children (2 months to 5 years) based on IMNCI protocol

Sub-domain 1.4: EPI

Content	Tasks
EPI	Provide vaccines
	Monitor immunization program

Sub-domain 1.5: Neonatal Care

Content	Tasks
Neonatal Care	Provide essential newborn care
	Provide neonatal resuscitation
	Assess and classify newborns (birth weight and gestational age)
	Assess and develop nursing diagnosis for neonatal problems (perinatal asphyxia, hypothermia, hypoglycemia, sepsis, neonatal bleeding disorders, neglected tropical diseases, abdominal wall defect, club foot, cleft lip or palate, jaundice, respiratory distress, necrotizing enterocolitis, feeding problem)

	Provide nursing care for neonatal problems (perinatal asphyxia, hypothermia, hypoglycemia, sepsis, neonatal bleeding disorders, neglected tropical diseases, abdominal wall defect, club foot, cleft lip or palate, jaundice, respiratory distress, necrotizing enterocolitis, feeding problem)
	Monitor neonatal responses for treatments and complications of common neonatal problems
	Counsel the mother on infant breast feeding, replacement feeding, hygiene and follow up
	Diagnose and manage common neonatal problems (Perinatal asphyxia, hypothermia, hypoglycemia, sepsis, neonatal bleeding disorders, neglected tropical diseases, abdominal wall defect, club foot, cleft lip or palate, jaundice, respiratory distress, necrotizing enterocolitis, feeding problem)

Sub-domain 1.6: Pediatrics emergency

Content	Tasks
Pediatrics emergency	Assess and make nursing diagnosis for a child with poisoning, bite injury, trauma, airway obstruction, shock, drowning, unconsciousness and foreign body aspiration
	Provide nursing care for a child with poisoning, bite injury, trauma, airway obstruction, shock, drowning, unconsciousness and foreign body aspiration
	Monitor the response of treatment for poisoning, bite injury, trauma, airway obstruction, shock, drowning, unconsciousness and foreign body aspiration
	Diagnose and manage a child with emergency condition poisoning, bite injury, trauma, airway obstruction, shock, drowning, unconsciousness and foreign body aspiration
	Assess and make nursing diagnosis for a child with burn
	Provide nursing care for a child with burn
	Monitor the response of treatment for burn
	Manage a child with burn

Sub-domain 1.7: Growth and development

Content	Tasks
Growth and development	Assess growth of children (height, weight, head and chest circumference and body mass index for age)
	Assess childhood development
	Provide nursing intervention for children with growth and developmental problems
	Monitor children growth and development

Sub-domain 1.8: Child nutrition (child feeding, malnutrition)

Content	Tasks
Child nutrition	Assess infant and young child feeding practices
	Assess a child with common nutritional disorders (Protein energy malnutrition, Vitamin A deficiency, Vitamin D deficiency, Iodine deficiency, Iron deficiency)
	Provide nursing care for a child with nutritional disorders (Protein energy malnutrition, Vitamin A deficiency, Vitamin D deficiency, Iodine deficiency, Iron deficiency)at inpatient and outpatient setup
	Monitor treatment outcome of nutritional disorder (Protein energy malnutrition, Vitamin A deficiency, Vitamin D deficiency, Iodine deficiency, Iron deficiency) at inpatient and outpatient setup

	Diagnose and manage a child with common nutritional problems

Domain-2 Health promotion and disease prevention

Contents	Tasks
Surveillance, Screening, Nutritional assessment, Traditional practice, communicable diseases control, Outbreaks, Epidemic, Diseases transmission, Non-communicable disease control, Violence	Assess community health status (surveillance and screening for emerging and re-emerging issues)
Intervention, Palliative care, First aid	Intervene for community health problems in school, prison, refuge, palliative, and other health care services (including first aid, Provide home-based care)
Disaster	Promote disaster and accident prevention (education)

Domain 3: Leadership and management

Contents	Tasks
Planning, Management, Manager and leader, Skill, Health care delivery system, Supervision, Primary Health Care	Manage health care system (planning, organizing, staffing, directing, and controlling)
Communication, Decision, Health team, Conflict, health care insurance	Coordinate and lead pediatric and child health care team
Monitoring/Evaluation, Infection prevention and control, Risk management	Create a safe and conducive environment for staff, client, attendant and bystanders
Service audit	Organize pediatric and child care service quality audits

Domain 4: Scholar

Contents	Tasks
Research planning	Develop research proposal and report
Field work	Collect quantitative and qualitative data and information
Analysis/report	Analyze and interpret quantitative and qualitative data and information
Teaching aids, methods, Lesson plan	Mentor students or other health professionals with application of basic principles of teaching methods

Domain 5: Professionalism

Contents	Tasks
Standards, Roles, Ethical dilemmas, Bills of right, motivated respectful and compassionated	Adhere to standard of practice (for pediatric and child health nursing practicing in Ethiopia), legal and ethical principles pertaining to nursing practice (including ethical dilemmas, motivated respectful and compassionated at all levels and settings)
Documentation	Produce and maintain accurate documentation of activities, procedures, results and prepare report
Communication, Consents	Establish and maintain effective communication at all levels (including Advocacy for patients and the pediatric and child health nursing profession)

Sample questions

1. A seven-year-old female child was brought by her mother to a hospital with a complaint of sudden onset of loss of consciousness. Her mother reported that the child had suddenly fallen on the ground, and was with moving hands and legs forcefully, clenching jaw, had abdominal and chest muscle rigidity, and was crying. The child also had a history of similar events more than two times within the last 24 hours.

   What is the most likely type of seizure in this case?
   A. Tonic clonic
   B. Atonic seizure
   C. Absence seizure
   D. Myoclonic seizure

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

Explanation:- The patient manifested tonic clonic seizure characterized by sudden onset, which begins when the child loses consciousness and fails to the ground, the eyes roll upward or deviate to one side, the pupils dilate, and there may also be bladder or bowel incontinence. The tonic phase of the seizure usually persists for 10 to 30 seconds. During the clonic phase, jerking movements are produced as a result of contraction and relaxation of the muscles.

2. An 18-year-old male adolescent has come to a pediatric OPD with a complaint of burning sensation during urination for three days. On assessment, he has skin lesions at chest, significant weight loss, erythema on the tip of the genitalia. He is sexually active with infrequent use of condoms. Urine analysis report reveals trace leukocytosis.

   What is the most important information that helps to counsel this adolescent?
   A. Benefit of HIV testing
   B. Proper and consistent use of condom
   C. Partner notification and management
   D. Abstinence from sex until all symptoms resolve

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

Explanation: Among the four alternatives the most important information to be addressed primarily is counseling or advising about the benefit or importance of HIV testing. Because from the history this person has at high risk of developing sexually transmitted infection since he had developed major symptoms about sexually transmitted infection. However the other options might be considered in the management phases of the case.

3. A 13-year-old child was brought to a pediatric OPD with a complaint of pruritic skin lesion of one-month duration. The child reported that the lesion started from the hairline and gradually covered the whole face and the neck. On examination, the lesion was well-demarcated, symmetric plaques, brightly erythematus with silver scaly appearance.

   What is the most likely diagnosis of this child?
   A. Ringwarm of the body
   B. Pythriasisversicolar
   C. Contact eczema
   D. Psoriasis

Answer Key:- The answer is **D**
Explanation: Though there are different types of skin diseases, psoriasis has typical clinical features beside the other common clinical manifestations such as pruritus, erythematous papules that coalesce to form plaques with sharply demarcated, irregular borders. If it is not treated promptly and appropriately, a thick silvery or yellow-white scale will also develop.

4. A nurse is giving a postoperative care for a four-year-old child who had undergone surgical incision of the eardrum (Myringotomy). The nurse has admitted the child in the recovery ward immediately after the surgery for further nursing management.

   What is the most priority nursing intervention for this child?
   A. Relieving pain
   B. Facilitating drainage
   C. Preventing complications
   D. Providing emotional support

Answer Key:- The answer is **A**.
Explanation: Basically, surgical incision of the eardrum is necessary to alleviate severe pain of acute otitis media or otitis media externa; and to drain infected middle ear fluid in the presence of complication. As the child had undergone surgical incision of the eardrum (Myringotomy), Relieving pain is the immediate intervention form among the most common nursing interventions including (1) relieving pain, (2) facilitating drainage when possible, (3) preventing complications or recurrence, (4) educating the family in care of the child, and (5) providing emotional support to the child and family.

5. A five-year-old known HIV positive male child was presented to a pediatric OPD with a compliant of persistent diarrhea and fever of 21 days duration. On assessment, he had persistent cough, chest discomfort, oral hairy leukoplakia and oral candidiasis. In addition, his gene X-pert was positive.

   What is the most likely AIDS stage of this child as per the WHO criteria?
   A. Stage 1
   B. Stage 2
   C. **Stage 3**
   D. Stage 4

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

Explanation: From the history and the assessment result of the child, the clinical manifestations of Stage 3 are observed. According to WHO stages of AIDS classification, the signs and symptoms of stage 3 include: unexplained anemia, oral hairy leukoplakia, pulmonary tuberculosis, lymph node tuberculosis, unexplained persistent fever, severe recurrent bacterial pneumonia, acute necrotizing ulcerative gingivitis, unexplained persistent diarrhoea (>14 days), and persistent oral candidiasis (after first 6 weeks of life).

6. A nine-year-old child has been brought to a hospital with a complaint of edema of one-week duration. The clinician has found that the child has proteiuria, hypovolumia, hypernatermia, and hyperlipidemia. The clinician has put the child on prednisone treatment.

   What is the priority nursing intervention for this child?
   A. Fluid restriction
   B. Position the child frequently
   C. Elevate the child's head to reduce edema
   D. Bath the child frequently and apply powder

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

Explanation: As the child has edema and is on prednisone treatment, fluid restriction is the immediate priority nursing intervention. The restriction is carefully calculated and small amount of fluid is offered at regular intervals based on the urine output of the previous day plus estimated insensible losses. The fluid is accurately measured in graduated containers, and the total intake and output is determined every 8 hours of the day and evening. In children who are not toilet trained, a fairly accurate record of output can be obtained by weighing diapers before and after voiding and recording other causes of fluid loss.

7. A nurse in a delivery ward attended the delivery of a newborn whose birth weight was 2500gm. The new born had a strong cry and active muscle tone. The nurse dried the newborn, stimulated breathing and covered head while the newborn was on his mother's abdomen.

   What is the most appropriate next step in the management of this new born baby according to IMNCI?
   A. Manage cord   C. Initiate breast feeding
   B. Give vitamin K   D. Apply tetracycline eye

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

Explanation:- As can be understood from the scenario, the nurse performed the first and the second cares which are drying and covering and respiratory stimulation respectively, cord care is

the third step consisting of clamping the cord approximately 1-3 minutes after birth and cutting in between two clampers. These are among the ten standardized procedures in essential newborn care given to all newborn at birth to optimize their chances of survival.

8. A 12-month-old child was brought to a health center for vaccination. The child had no history of vaccination to measles. The nurse educated the mother on the importance of first and second dose immunization schedules. The nurse has planned to give the necessary immunization.

   What is the most appropriate immunization schedule in this case?
   A. Measles first dose at contact and measles second dose at 15-18 months of age
   B. Measles first dose not applicable, but second dose can be givenat15 months of age
   C. Measles first dose at contact and second dose one month after first dose administration
   D. Measles first dose not applicable and measles second dose at 15-18 months of age

Answer Key:- The answer is **A**
Explanation:- In Ethiopian context, measles-one is given at the age of 9 months or after that if the child comes late, and measles-two is given at the age of 15 months and the recommended minimum interval between measles one and two should be 1 month. If the child's age is in between 12-14 months and he/she has not received measles vaccine, he/she can take the first dose at the contact, and measles second dose in between 15-18 months of age.

9. A five-day- old baby has been brought to a hospital with a complaint of coldness of the body since birth. On examination, the baby does not feed actively and has axillary temperature of $30^{O}C$.

   What is the most appropriate nursing intervention needed for this newborn?
   A. Provide dextrose to treat hypoglycemia
   B. Advise the mother on skin to skin contact
   C. Place the neonate on warmed radiant warmer
   D. Counsel the mother for kangaroo mother care

Answer Key:- The answer is **C**
Explanation:- Due to the fact that the baby does not feed actively and has axillary temperature of $30^{O}C$, the neonate is classified as severe hypothermia. For severely hypothermic child the priority nursing intervention is to warm the neonate by using radiant warmer. Newborn survival can be improved by preventing of excessive heat loss. Heat loss can be minimized by keeping newborns in thermo neutral environment. Newborns may lose heat by convection, radiation conduction and evaporation mechanisms. Hypothermia based on its severity could be classified

as; mild (cold stress) = 36^0C -36.4^0C, moderate = 32^0C -$35.9\ ^0$C and severe (neonatal cold injury) < 32^0C.

10. A mother has brought two-year-old child to a pediatric emergency with complaints of fever and irritability of three days duration. To calm her child the mother gave small toy to play with it. Accidentally the child swallowed it and developed sudden onset of breathing difficulty, looked blue and stridor.

    What is the most appropriate initial step in the management of this child?
    A. Back slaps
    B. Head tilt chin lift
    C. Administer oxygen
    D. Perform gastric lavage

Answer Key:- The answer is **A**
Explanation: In this scenario, a two-year-old child swallowed a toy and developed sudden onset of breathing difficulty, looked blue and stridor. The appropriate initial management of chocking for children above one year is giving five blows (Back slaps) to the middle of their back with the heel of the hand. Foreign-body aspiration is the inhalation of any object into the respiratory tract. Commonly aspirated items among children include nuts, grapes, popcorn, hard candy, dried beans, bones, and coins, parts of toys, screws, and balloons. If the obstruction persists perform Heimlich maneuver five times. If the obstruction persists, check the child's mouth for any obstruction that can be removed. If necessary, repeat this sequence with back blows.

11. A pediatric nurse is monitoring a four-year-old child admitted to a hospital with severe acute malnutrition. On assessment, the nurse has found out that the child did not gain appetite, failed to gain weight, edema did not disappear, and had been taking IV drugs one week on previous treatment. The nurse has suspected treatment failure.

    What is the most likely reason for the suspicion of the nurse in this case?
    A. Failure to gain weight
    B. Edema did not disappear
    C. Failure to regain appetite
    D. Failure to get free from infections

Answer Key: - The answer is **C**
Explanation: Some patients after receiving treatments of malnutrition may fail to respond. The most frequent causes of failure to respond to treatments are related to lack of adherence to treatment protocols, poor environment for the patient, inadequately trained staff or incorrect feeding. Standardized criteria for failure to respond on treatment are four days after admission if the patient failed to regain appetite or unable to start to lose edema and ten days after admission if the edema is still present or failed to gain at least 5 g/kg body weight. Based on the finding in the scenario, the child failed to gain appetite for one week and the criteria of failure to gain appetite has been witnessed.

12. A pediatric and child health nurse has been assigned to a certain elementary school to give health education on the cause, mode of transmission, sign and symptoms, prevention and control mechanism of scabies for the students.

What is the most appropriate component of school health service to be given in this scenario?
   A. Counseling
   B. Health screening
   C. Health promotion
   D. Case management

Answer Key:- The answer is **C**
Explanation: The pediatric and child health nurse's assignment is school health promotion, which is one of the community health services that promote the well-being of the children and their education for healthy life style. A school health program refers to all activities that contribute to the initiation, maintenance and improvement of the health of school children and personnel. In school community the nurse will practice six basic elements of health practices promotion of health, prevention of health problems, treating of disorders, rehabilitation care, evaluation and research. Promotion of health includes all efforts that seek to move a child closer to optimal well-being or higher level of wellness. It is the combination of health education and environmental supports for action and conducive conditions that promote health.

13. A nurse is taking care of a 15-year-old girl who recently lost her mother. During their conversation the nurse in charge sits facing the girl with uncrossed legs and arm. Leans towards the girl with intermittent eye contacts. Both the nurse in charge and the girl are relaxed and satisfied with their communication.

What is the most likely therapeutic communication technique exercised by the nurse?
   A. Sharing of observations
   B. Attentive listening
   C. Sharing empathy
   D. Sharing of humor

Answer Key: - The answer is **B**
Explanation: The nurse has conveyed attentive listening (option B) through a posture of involvement, sitting arrangement, eye contact, and other non-verbal communication, which are part of therapeutic communication techniques. This includes facing patients, sitting closure to patient by showing respect, and maintaining proper eye contact. Sharing of observation (option A) is not expressed by the nurse so it can't be the answer. Sharing empathy (option C) is an act of sharing feeling of other and it is not manifested in the stem, and can't be the answer. Similarly, sharing humor (option D) is professional act of decreasing emotional pain by easing feeling and helping client to feel and see funny side of life challenges. However, this is not the case in the presentation and can't be the answer.

14. A head nurse in a pediatric ward who works in a comprehensive specialized hospital gathered all essential information required to develop a plan for the wise management of human resources and material resources. Afterward, the director observed and approved the plan that mainly emphasized on budgets, quotas and schedule.

What is the most appropriate type of planning explained in this scenario?
A. Tactical planning
B. Strategic planning
C. Contingency planning
D. Operational planning

Answer Key:- The answer is **D**
Explanation:- The planned and approved plan in this case is operational planning, which is mostly developed by first-line managers. Operational planning is most concerned with budgets, quotas and schedules. These are refinements of tactical objectives in which work is defined and results are measured in small increments. The time horizon for operational planning is very short. Most plans at this level reflect operational cycles. The manager must spend scarce materials and human resources wisely to avoid waste, confusion and error. Whereas tactical plans are often specified in one-year increments and done by middle level management for translating strategic plans into shorter-term tactics.

15. An instructor has practically shown to students on neonatal resuscitation care on real patient and he/she critically analyzed all conditions that may occur on that patient. He has explained the management principles of neonatal resuscitation care on hypothetical patient.

What is the most appropriate teaching method employed in this case?
A. Discussion
B. Demonstration
C. Brain storming
D. Clinical simulation

Answer Key:- The Answer is **D**
Explanation: Clinical simulation is a method of teaching that presents the learners with a carefully planned representation of a real or hypothetical patient care management situation. In the scenario the instructor used real patient to teach his/her students about neonatal resuscitation management. So, that clinical simulation is the best answer for the scenario. However, option A is means of sharing ideas, thoughts, questions, and answers in a group setting; option B the method that presents the steps necessary for the completion of a procedure or clinical task; and option C method is exchange of ideas, thoughts, or alternative solutions that focus on a specific topic to generate solutions to problems.

Sample References

- Potts, N. L., & Mandleco, B. L. (2012). Pediatric Nursing: Caring for Children and Their Families (3rd ed.).
- White, L., et al. (2011). Foundations of Maternal & Pediatric Nursing (3rd ed.).
- Kliegman, M. R. (2020). Nelson Textbook of Pediatrics (21st ed.).
- Hockenberry, M., & Wilson, D. (2013). Wong's Essentials of Pediatric Nursing (9th ed.). Elsevier
- National Comprehensive HIV Prevention, Care and Treatment Training for Healthcare Providers. (2021).
- Lippincott Manual of Nursing (9th ed.).
- Federal Ministry of Health of Ethiopia. (2014, November). Neonatal Intensive Care Unit (NICU) Training.
- EFMOH. (2020). EPI Policy Implementation Guideline Revised Edition.
- Federal Ministry of Health. (November, 2014). Neonatal Intensive Care Unit (NICU) Training Participants' Manual.
- Pocket Book of Hospital Care for Children: Guidelines for the Management of Common Childhood Illnesses (2nd ed.). (2013). Ethiopia.
- MOH. (2019, May). National Guideline for the Management of Acute Malnutrition in Ethiopia.
- Daniel, M., & Equlinet, M. (2006). Community Health Nursing Lecture Notes for Nursing Students. University of Gondar.
- Potter, P. A., Perry, A. G., et al. (Eds.). Fundamentals of Nursing (8th ed.).
- Cherie, A., & Gebrekidan, B. (2005). Nursing Leadership and Management (Lecture Notes for Nursing Students).
- Effective Teaching: A Guide for Educating Health Care Providers.

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