

**Test Guidelines for the National Licensure Examination for
Nurses (NLEN) 2022, of Bachelor of Science in Nursing Program**

Revised on 2025

Effective from February 2025

Nepal Nursing Council
Kathmandu, Nepal

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Background

Nepal Nursing Council (NNC) is an autonomous body under the Nepal Nursing Council Act 2052 formulated by the Government of Nepal. It aims at promoting quality nursing and midwifery education in order to bring quality nursing and midwifery service in the country.

The National Licensure Examination for Nurses (NLEN) is an examination for nurses introduced by the NNC to qualify as nursing professionals. It is required for all new pre-service nursing graduates from Bachelor of Science in Nursing Programme. The examination is geared towards testing knowledge and practice in relation to the job functions most commonly required by entry-level professional nurses. The examination determines eligibility to earn a title of registered nurse in order to begin working as a professional nurse.

Aim:

To provide the necessary information regarding license examination.

Pre requisites for NLEN from Bachelor of Science (B.Sc.) in Nursing Program

Eligibility:

(A) Nepali citizen graduated from Nepal

To meet the educational requirement for licensure as a qualified professional nurse, the candidate must present satisfactory evidence of having completed pre-service nursing education programme approved by the NNC and must submit the documents as mentioned in Table 1.

(B) Nepali citizen graduated from other countries

Applicants, who have completed pre-service nursing education programme from other countries, are required to have their eligibility letter from Medical Education Commission, equivalence certificate from the concerned government authority. Applicants need to be graduated from the institute recognized from the respective nursing council or authorized government body and must submit the documents as mentioned in Table 2.

Exception

(A) Reporting prior convictions or disciplinary action against licensing

Applicants are required under 'Regulation of the **NLEN of Bachelor of Science in Nursing Program** to report all misdemeanor and felony convictions. Failure to report prior disciplinary action is considered falsification of application and is a ground for denial of licensure or revocation of license.

(B) Applicants with disability

Applicants, who are constitutionally provisioned for special consideration, will be provided opportunity to appear in the examination based on their limitations.

Documents required for Application

Table 1: List of required documents for Nepali citizen graduated from Nepal

| Items | Number |
|--|--------|
| 1. Submission of complete online personal information | 1 |
| 2. Uploading scanned original copies of the following documents (size not more than 2MB and must be in jpg format) <ul style="list-style-type: none">• SLC/SEE Mark sheet and Character Certificate• Citizenship• Academic Transcript or 10+2 Science or equivalent Mark sheets, and Character Certificate• Academic Transcript or Mark sheets and Character Certificate of B.Sc. Nursing Programme | 1 |
| 3. Uploading recent white background passport size photo (Size not more than 2MB and must be in jpg format) | 1 |
| 4. Online payment of Examination fee of NRs. 3,500/- | 1 |
| * All original academic certificates, citizenship and related documents need to bring for verification while receiving registration certificate from NNC. | |

Table 2: List of required documents for Nepalese citizen graduated from other countries

| Items | Number |
|---|--------|
| 1. Submission of complete online personal information | 1 |
| 2. Uploading scanned original copies of the following documents (size not more than 2MB and must be in jpg format) <ul style="list-style-type: none">• SLC/SEE Mark sheet and Character Certificate• Citizenship• Academic Transcript or 10+2 Science Mark sheets or equivalent, and Character Certificate• Academic Transcript or Mark sheets and Character Certificate of B.Sc. Nursing Programme• Eligibility Letter from Medical Education Commission (from 1st October 2020/2077 Ashoj15) | 1 |
| 3. Uploading original scanned copies of documents related to recognition/accreditation of institute from the respective nursing council or individual registration in the respective nursing council or in the authorized government body (only in case of non-existence of nursing council) of the respective country | 1 |
| 4. Uploading original scanned copy of Equivalency letter from National Examination Board/TU | 1 |
| 5. Uploading recent white background passport size photo (size not more than 2MB and must be in jpg format) | 1 |
| 6. Online payment of Examination fee of NRs. 3,500/- | 1 |
| * All original academic certificates, citizenship and related documents need to bring for verification during receiving registration certificate from NNC. | |

Application Process

1. The applicant must upload all the documents to online NLEN registration process within the time period mentioned in the notice.
2. The examination center, time and other important information will be notified on the online admit card. The admit card can be downloaded from online application site prior to date of examination.

ATTENTION!

- If an applicant changes her/his name and/or address after submitting an application for licensure, the applicant must notify the NNC prior to receiving License certificate. An applicant is required to submit legal documents for any changes in the certificate to the NNC immediately after the change occurs.
- Applicants must match EXACTLY as it appears on photo identification at the examination center.

Examination Process and Rules :

Licensure Examination will be of two and half hours (2:30 hours) duration. Applicants are not allowed to enter the examination room after 15 minutes of starting examination. Applicants can leave the room only after 1 hour of starting the examination.

Test Items

All of the test items are Multiple Choice Questions (MCQs) with four options. Applicants should select the most appropriate one option for each item. Distribution of test items according to subjects is given Table 3.

Table 3: Subject-wise Distribution of Test Items

| S.N. | Subject | Possible No. of Items |
|--------------|--|------------------------------|
| 1 | Integrated Health Sciences (Anatomy, Physiology, Microbiology, Pathology, Biochemistry and Pharmacology) | 14 |
| 2 | Management and Health Economics | 7 |
| 3 | Research and Biostatistics | 5 |
| 4 | Educational Science | 4 |
| 5 | Fundamentals of Nursing and Nursing Concepts | 30 |
| 6 | Adult and Geriatric Nursing | 26 |
| 7 | Midwifery and Gynecological Nursing | 20 |
| 8 | Community Health Nursing | 20 |
| 9 | Child Health Nursing | 14 |
| 10 | Behavioral Science and Psychiatric Nursing | 6 |
| 11 | Nutrition in Health and Illness | 4 |
| Total | | 150 |

Frequency of the NLEN

NNC conducts the NLEN three times a year. If applicant fails an examination, s/he will be allowed to apply for the next examination.

Scoring System

Each correct answer receives 1 score. There is no negative scoring system. It means when applicant gives wrong answer, no minus marking will be done.

Passing Standard

The grading system on the NLEN is either pass or fail. No numerical score will be provided. In order to pass the NLEN, the applicant must score at least 50% marks in aggregate.

Result of NLEN

The result of NLEN will be published on the day of examination unless and until there is a technical difficulty. Results will be published on the NNC notice board and on the NNC's website. NNC will not inform the candidates individually.

Registration Process

Once applicants have successfully passed NLEN they can apply for registration to get their License Certificate from the NNC with the registration fee of NPR 2000/ through online payment and they should also bring the admit card and all the original documents and citizenship certificate.

Syllabus for NLEN

Subjects

1. INTEGRATED HEALTH SCIENCES

A. ANATOMY

| Unit | Contents |
|------|--|
| 1 | Introduction <ul style="list-style-type: none">• Introduction to anatomy: Anatomical position and regions, planes and section,• Body cavities |
| 2 | Musculo-skeleton System <ul style="list-style-type: none">• Skeleton and its parts: Axial (skull and vertebral column) and appendicular skeleton (upper and lower limb)• Joints: Types of joints and their movements,• Muscles: Skeletal muscles including sterno-cleido-mastoid muscles and thorax, muscles of upper and lower extremities including deltoid, gluteal, and inguinal muscles and pelvic floor muscles |
| 3 | Gastro-intestinal System <ul style="list-style-type: none">• Structure of gastro-intestinal system and hepato-biliary apparatus, and peritoneum• Developmental anatomy of gastro-intestinal system/ congenital anomalies |
| 4 | Respiratory System <ul style="list-style-type: none">• Structure of respiratory tract• Structure and position of lungs including lobes, pleura, and pleural cavity,• Respiratory muscle• Blood supply to respiratory system |
| 5 | Blood, Lymphatic and Immune System <ul style="list-style-type: none">• Blood: Definition, composition, formation, lifespan and destruction of blood cells• Blood groups and Rhesus (Rh) factor• Lymph organs and tissue: Lymph nodes, spleen, thymus• Lymph and lymph vessels: Large and small vessels |
| 6 | Cardio-vascular System <ul style="list-style-type: none">• Development of heart and congenital anomalies• Heart: Position, gross and microscopic structure and blood vessels and blood supply to heart• Blood vessels (artery and vein)• Systemic blood circulation including pulmonary circulation and portal circulation |
| 7 | Endocrine System <ul style="list-style-type: none">• Endocrine system and structure of endocrine glands: Pituitary gland and hypothalamus, |

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| | thyroid gland and parathyroid gland, pancreatic islets of Langerhans, adrenal gland, ovaries and testes. |
| 8 | Urinary System <ul style="list-style-type: none"> • Structure of urinary system • Gross and microscopic structure of kidney • Developmental anatomy of uro-genital system |
| 9 | Reproductive System <ul style="list-style-type: none"> • Structure of reproductive system: male (scrotum, testes, spermatic cords, seminal vesicle, ejaculatory ducts, prostate gland, urethra and external genitalia) and female (external and internal genitalia, uterus, fallopian tubes, ovaries and breasts). |
| 10 | Nervous System <ul style="list-style-type: none"> • Developmental anatomy of nervous system • Structure of central nervous system: Brain and spinal cord, • Autonomic nervous system: Division and structure and neuro-transmitters of sympathetic and parasympathetic nervous system) • Structure of nerve cell (neuron): Sensory and motor nerve cells |
| 11 | Special Sensory and Integumentary System <ul style="list-style-type: none"> • Structure of special sensory systems: Eye and ear <ul style="list-style-type: none"> a) Eye and its parts b) Ear and its parts • Structure of skin including epidermis and dermis |

B. PHYSIOLOGY

| Unit | Contents |
|----------|---|
| 1 | Introduction <ul style="list-style-type: none"> • Cell: Structure (cell plasma and organelles) and cell division • Tissues and types • Membranes and glands: classification and structure • Basic principles of genetics: genotype & phenotype, mutation, dominant-recessive inheritance of gender, sex linked inheritance. • Physiology of tissue repair |
| 2 | Musculo-skeleton System <ul style="list-style-type: none"> • Function of skeleton including vertebral column, and limbs, • Functions of joint in body movements • Contraction of skeletal muscles and their functions • Correlation of bone, joint and muscles in motor functions • Physiology of the muscle exercises |
| 3 | Gastro-intestinal System <ul style="list-style-type: none"> • Functions of different parts of gastro-intestinal (GI) system, • Mechanism of formation of bile juice and contraction of gall bladder • Food ingestion, digestion, absorption and excretion form the GI system • Enzymes of the digestive system • Peristalsis and motility of GI tract |
| 4 | Respiratory System <ul style="list-style-type: none"> • Types of respiration (pulmonary and tissue respiration) • Respiration cycles (inspiration and expiration) • Functions of lungs, lung volume and capacity • 5Factors influencing respiration, Control of respiration: respiratory center and chemo-receptors • Compensatory mechanism of acid base balance |
| 5 | Blood, Lymphatic and Immune System |

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| | <ul style="list-style-type: none"> • Functions of blood plasma and blood cells, transportation of nutrients to cells, Mechanism of blood coagulation and role of thrombocytes and vitamin K in blood coagulation • Physiological basis of blood transfusion • Functions of lymph nodes, spleen, thymus • Defense substances in the body • Reticular-endothelial and immune system: T-lymphocytes and B-lymphocytes • Types of immunity: Cell-mediated, antibody-mediated and acquired immunity • Function of immune system: immune mechanism • Hypersensitivity reactions of body to an antigen |
| 6 | Cardio-vascular System <ul style="list-style-type: none"> • Control of blood flow: Vasodilatation and vasoconstriction • Blood supply for internal nutrition and cell nutrition • Heart rate and factors affecting heart rate • Cardiac cycles and cardiac output • Blood pressure: Control of BP, relationship between cardiac output and blood pressure • Pulse: Factors affecting pulse rate, relationship between pulse rate and blood pressure |
| 7 | Endocrine System <ul style="list-style-type: none"> • Hormones and their functions in the body • Regulatory mechanism of the secretion of different hormones • Stress and general adaptation syndrome • Stress and local adaptation syndrome |
| 8 | Urinary System <ul style="list-style-type: none"> • Function of urinary system: Kidneys, ureters, urinary bladder and urethra • Mechanism of urine formation and process of micturition • Fluid and electrolyte balance and urinary output |
| 9 | Reproductive System <ul style="list-style-type: none"> • Physiology of the different parts of male and female reproductive system • Pubertal changes in male and female • Menarche, menstrual cycle and menopause • Ejaculation of sperms |
| 10 | Nervous System <ul style="list-style-type: none"> • Properties of neuron • Function of the brain (Cerebrum, cerebellum, mid-brain, pons and medulla oblongata) • Reticular formation and its functions • Voluntary and involuntary muscle movements Spinal reflex • Functions of sensory and motor nervous system • Functions of autonomic nervous system and the effect of autonomic stimulation |
| 11 | Special Sensory and Integumentary System <ul style="list-style-type: none"> • Physiology of hearing, body balance, sight, taste and smell • Function of skin • Wound healing, conditions requiring wound healing, healing by first intention and healing by second intention |

C. BIOCHEMISTRY

| Unit | Contents |
|------|--|
| 1 | Introduction <ul style="list-style-type: none"> • Role of cell membrane in biological processes including replication, cell metabolism, and production of energy • Basic concept of types of solution, Osmosis, Diffusion, Ultrafiltration. |

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| | <ul style="list-style-type: none"> • Acid Base Balance: Concepts of pH, acid, base, salt, buffer solution, types of buffer present in human body. • Genetics: Genetic code, mutation as molecular basis of disease Deoxyribonucleic acid (DNA) and ribonucleic acid (RNA) technology |
| 2 | Musculo-skeleton System <ul style="list-style-type: none"> • Role of calcium, phosphorus and vitamin D in bone formation; hormonal control of calcium and phosphorus metabolism • Biochemistry of muscle contractions |
| 3 | Gastro-intestinal System <ul style="list-style-type: none"> • Liver, gall bladder function tests • Bilirubin metabolism and detoxification • Mal-absorption, starvation and obesity |
| 4 | Respiratory System <ul style="list-style-type: none"> • Buffers and their types and functions • Acidosis and alkalosis • Blood gas analysis and their significance |
| 5 | Blood, Lymphatic and Immune System <ul style="list-style-type: none"> • Blood pH, hemoglobin, plasma proteins • Metabolism of Erythrocytes, leucocytes, thrombocytes and reticulocytes • Anticoagulants and the mechanism of action of oxalate in inhibiting blood coagulation • Blood coagulation factors and their properties • Biochemical basis of hemorrhagic diseases |
| 6 | Cardio-vascular System <ul style="list-style-type: none"> • Lipoprotein their types and metabolism • Cardiac enzymes and their significance |
| 7 | Endocrine System <ul style="list-style-type: none"> • Biochemical aspects of hormones produced by different glands |
| 8 | Urinary System <ul style="list-style-type: none"> • Composition of urine: normal and abnormal constituents • Renal function tests • Metabolic acidosis and alkalosis • Urine examination for sugar, protein and ketone bodies |
| 9 | Reproductive System <ul style="list-style-type: none"> • Biochemical aspects of sex hormones |
| 10 | Nervous System <ul style="list-style-type: none"> • Biochemistry of cerebro-spinal fluid • Neuro-transmitters their types and functions |

D. MICROBIOLOGY

| Unit | Contents |
|------|--|
| 1 | Introduction <ul style="list-style-type: none"> • Introduction to microbiology • Normal bacterial flora, pathogens, opportunists, bacterial toxins • Factors promoting growth of microorganisms • Pathogenesis of microbial diseases • Bacteria: Reproduction, metabolism, staining, culture and sensitivity testing and their response in the production of diseases • Immune response to infection, type of immunity and their significance • Serological methods in diagnosing of infectious diseases and aseptic techniques in |

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| | diagnostic tests |
| 2 | Musculo-skeleton System <ul style="list-style-type: none"> • Staphylococcus and other bacteria causing osteomyelitis, arthritis, gas gangrene and leprosy • Viruses causing musculo-skeletal infections |
| 3 | Gastro-intestinal System <ul style="list-style-type: none"> • Normal bacterial flora of GI tract • Pathogenic organisms affecting GI tract: Salmonella, Shigella, Vibrio cholera, E. coli, Rotavirus • Parasites: Ascarislumbricoides, Ancylostomaduodenale, Stronglyidesstercoralis, Entamoebahistolytica, Giardia intestinalis, TaeniaSolonium |
| 4 | Respiratory System <ul style="list-style-type: none"> - Bacterial infections: Tuberculosis, Diphtheria, Pertussis, Streptococcal pyogenes, Streptococcus pneumonia, H. influenzae - Viral respiratory infection - Opportunistic infection: pneumocysticarinii |
| 5 | Blood, Lymphatic and Immune System <ul style="list-style-type: none"> - Bacteria producing: bacteriaemia, and septicemia - Malarial parasites, kala-azar (Leishmaniadonovani) - Filariasis (Wucheriabancrofti) - Antigen-antibody reactions, HIV/AIDS |
| 6 | Cardio-vascular System <ul style="list-style-type: none"> - Bacterial endocarditis - Streptococcal rheumatic fever Septicemia |
| 7 | Urinary System <ul style="list-style-type: none"> - Pathogens causing UTI - Urine collection methods: random specimens, first morning specimens, catheterized specimens, 24 hours specimens, pediatric specimens |
| 8 | Reproductive System <ul style="list-style-type: none"> - Causative agents of STDs: Bacteria, viruses, parasites - Microbial diseases of reproductive system: N. gonorrhoea, Syphilis, Chancroid, HIV/AIDS, Trichomonesvaginalis, Candida albicans |
| 9 | Nervous System <ul style="list-style-type: none"> - Bacteria and viruses causing meningitis, polio, rabies and tetanus |
| 10 | Special Sensory and Integumentary System <ul style="list-style-type: none"> - Staphylococcus aureus, streptococci, herpes virus and herpes simplex - Microbial infection of eye and ear |

E. PATHOLOGY

| Unit | Contents |
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| 1 | Introduction <ul style="list-style-type: none"> • Introduction to pathology • Cell injury: Causes and mechanism of cell injury • Inflammation: Acute and chronic inflammation • Hemodynamic disorders: Shock, edema, thrombosis, embolism and infarction, • Hypersensitivity reactions/ immunodeficiency diseases (AIDS) • Neoplasia including differences between benign and malignant tumors |
| 2 | Musculo-skeleton System <ul style="list-style-type: none"> • Rickets, osteomyelitis (pyogenic and tuberculous), osteoarthritis, gout • Muscular dystrophy • Soft tissue and bone tumors |
| 3 | Gastro-intestinal System <ul style="list-style-type: none"> • Oral pathology: pre-cancerous lesions, • Etiopathogenesis of peptic ulcer, TB abdomen, typhoid and • Pathology of intestinal obstruction, • Etiology of cirrhosis of liver, hepatitis, cholecystitis, chole-lithiasis and pancreatitis • Pathophysiology of carcinoma of stomach, colon and rectum |
| 4 | Respiratory System <ul style="list-style-type: none"> • Pathophysiology of upper respiratory tract and lower respiratory tract infectious • Pathophysiology of pneumonia, tuberculosis and lung abscess • Etiopathology of COPD (asthma, bronchitis, emphysema and bronchiectasis) • Lung collapse, pneumothorax and pleural effusion • Tumors of lung |
| 5 | Blood, Lymphatic and Immune System <ul style="list-style-type: none"> • Anemia: Iron deficiency anaemia, Megaloblasticaemia • Thrombocytopenia • Hemophilia • Leukaemia: etiology and classification • Causes of lymphadenitis • Lymphoma: Classification |
| 6 | Cardio-vascular System <ul style="list-style-type: none"> • Atherosclerosis, its causes, effects and complications • Pathogenesis of arteriosclerosis, Berger's disease, aneurysms • Pathology of myocardial infarction. • Congenital heart diseases: Cyanotic and acyanotic heart diseases • Rheumatic heart disease |
| 7 | Endocrine System <ul style="list-style-type: none"> • Conditions resulting from abnormal secretion of anterior pituitary hormone: Gigantism, acromegaly, dwarfism • Conditions resulting from abnormal secretion of thyroid hormone: Hypothyroidism, hyperthyroidism, Grave's disease and Hashimoto's thyroiditis • Tumors of thyroid gland and microscopic features of papillary carcinoma of thyroid • Other endocrine related disorders: Cushing's syndrome, Addison's disease, diabetes mellitus and diabetes insipidus. |
| 8 | Urinary System <ul style="list-style-type: none"> • Nephritis, nephrotic syndrome, renal failure • Renal calculi and hydronephrosis • Congenital anomalies: Polycystic kidney • Urinary tract infection • Tumors of kidney and urinary bladder: Renal cell carcinoma, urothelial carcinoma |
| 9 | Reproductive System <ul style="list-style-type: none"> • Pelvic inflammatory disorders • Tumor of ovary: Classification |

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| | <ul style="list-style-type: none"> • Pathological features of chronic cervicitis, leiomyoma, cancer of cervix • Tumors of breast: Classification • Pathological features of fibroadenoma and infiltrating ductal carcinoma • Benign prostatic enlargement |
| 11 | Nervous System <ul style="list-style-type: none"> • Hydrocephalus • Cerebro-vascular accidents (Stroke) • Meningitis (viral and bacterial), viral encephalitis, poliomyelitis • Inflammatory neuropathy • Brain tumor: Classification • Peripheral nerve sheath tumor classification |
| 12 | Special Sensory and Integumentary System <ul style="list-style-type: none"> • Otitis media, • Conjunctivitis • Classification of eye tumors, retinoblastoma • Dermatitis • Skin Infections • Skin tumors: Squamous cell carcinoma and basal cell carcinoma |

F. PHARMACOLOGY

| Unit | Contents |
|-------------|--|
| 1 | Introduction <ul style="list-style-type: none"> • Introduction to terminologies and abbreviations used in pharmacology • Calculation of dosage for children • Pharmacokinetics: Absorption, distribution, metabolism and excretion of drug • Common poisons and their antidotes: Organophosphate, aluminium phosphide, zinc phosphide, kerosene/ petroleum products, acid/ alkali, mushroom, belladonna/ datura poisoning, opoid and alcohol • Concept of essential drugs, essential drugs list and classification for different levels •—Emergency drugs: Definition and List of emergency drugs |
| 2 | Musculo-skeleton System <ul style="list-style-type: none"> • Neuro-muscular blocking agents and other skeletal muscle relaxants • Nonsteroidal anti-inflammatory drugs (NSAIDS) • Drugs used in gout, rheumatoid arthritis and osteoarthritis |
| 3 | Gastro-intestinal System <ul style="list-style-type: none"> • Drugs used in GI disorders • Emetics, antiemetics • Antispasmodics • Hepato-toxicity of drugs and alteration of drug action in liver disorder |
| 4 | Respiratory System <ul style="list-style-type: none"> • Drugs used in respiratory disorders including their mechanism of action and adverse effects: Antibiotics, bronchodilators, antihistamines, nasal decongestants, expectorants and mucolytic agents |
| 5 | Blood, Lymphatic and Immune System <ul style="list-style-type: none"> • Drugs used in the treatment of anemia: • Drugs affecting blood coagulation: Coagulants and anti-coagulants, thrombolytic agents and anti-platelet drugs • Immuno-modulating drugs |
| 6 | Cardio-vascular System <ul style="list-style-type: none"> • Drugs used in cardiovascular disorders: Cardiac glycosides, anti-angina drugs, anti-arrhythmic drugs, anti-hypertensive drugs and diuretics • Drugs used in cardio-vascular shock |

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| 7 | Endocrine System <ul style="list-style-type: none"> • Anterior pituitary hormones and their functions • Drugs used in hyperthyroidism and hypothyroidism and their mechanism of actions and adverse effects • Insulin and oral hypoglycaemic drugs • Corticosteroids: Glucocorticoids and mineralocorticoids |
| 8 | Urinary System <ul style="list-style-type: none"> • Urinary antiseptics, diuretics and anti-diuretics and nephrotoxic drugs |
| 9 | Reproductive System <ul style="list-style-type: none"> • Androgens and anabolic steroids • Estrogen and progesterone • Oral contraceptives • Drugs used to induce labor |
| 10 | Nervous System <ul style="list-style-type: none"> • Sedatives-hypnotics • Anti-epileptic drugs • Antidepressants • Antipsychotics • Cholinergic / anticholinergic drugs • Adrenergic / Antiadrenergic drugs • General and local anesthetics • Opioid analgesics and antagonists |
| 11 | Special Sensory and Integumentary System <ul style="list-style-type: none"> • Local application of drugs: Ointments, drops, pastes, lotions, dusting powders • Mydriatics and miotics • Antibiotics, antifungal agents, antiviral agents for topical application |

2. MANAGEMENT AND HEALTH ECONOMICS

| Unit | Contents |
|------|---|
| 1 | Introduction to Leadership and Management <ul style="list-style-type: none"> • Leadership: Characteristics of a leader, function of leadership, leadership theories and approaches to leadership and its uses • Management: Concept, principle, theories and functions of management and nursing management |
| 2 | Management Process <ul style="list-style-type: none"> • Assessment of client's needs and problems, staff needs, strengths and limitations and material and supplies resources • Prioritization of needs and problems of the client, Planning of patient care; staff scheduling, methods of clients care assignments • Implementation: Division of work and delegation of responsibilities, motivation and supervision of staff and staff development program; monitoring • Evaluation: Types, purpose and methods and client satisfaction and staff performance satisfaction |
| 3 | Human Resource Management in Health Services <ul style="list-style-type: none"> • Introduction: Elements, steps and process of human resource management • Personnel Management: Job description of different categories of health personnel, motivation and morale • Monitoring and supervision: Concept and process(planning, implementation and evaluation and feedback |

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| | <ul style="list-style-type: none"> • Discipline of personnel: Importance, means of effective discipline and principles and guidelines for disciplinary actions • Monitoring and Evaluation: Purpose and types of evaluation in management (client care satisfaction, staff performance and use of statistical records) and methods of evaluation • Conflict Management: Causes and types of conflict, and principles and process of conflict management |
| 4 | Planning, Policy and Procedure <ul style="list-style-type: none"> • Planning: Elements of planning, planning process (steps of planning), national health planning (short term and long term health plan of Nepal), benefits and limitations • Policy: Characteristics of policy, policies development procedure , nursing policy (hospital management and community management policy), national health policies and strategies of Nepal, legal implications of policies, benefits and limitations of policy • Procedures: Procedure manuals, benefits and limitations • National health policy and planning: Targets, indicators, strategies and policies; |
| 5 | Organization <ul style="list-style-type: none"> • Authority and power: Definition and types of power • Organization: Purpose and principles and elements • Organizational relationship: Group dynamics (characteristics and advantages and disadvantages), Organizational conflict (types and manager's role in managing organizational conflicts). • Organizational communication: Role of communication in organization, improving organizational communication • Organizational structure of Health care delivery system of Nepal including program: Federal level, provincial level and local level • Delegation: Process of delegation, Delegation of responsibilities, benefit and limitation of delegation, centralization and decentralization of authority • Patient care assignment: Objectives, principles and methods: Patient-centered, functional and team method |
| 6 | Organizational Change and Change Process <ul style="list-style-type: none"> • Forces and need for change in an organization • Change process |
| 7 | Quality Assurance <ul style="list-style-type: none"> • Indicator for quality service and quality improvement tools • Minimum service standard • National Policy and strategy on Quality Assurance |
| 8 | Disaster Management <ul style="list-style-type: none"> • Disaster and types of disaster: Natural disaster (earth quacks, landslides, flood, fires and famines) and man-made disaster (war, mass gathering) • Morbidity and mortality associated with disaster: Injuries, deaths and psychological stress (disaster stress syndrome) • Disaster management plan: Preparation of hospital for disaster (pre, during and post), triage and its function • Role of manager in disaster management |
| 9 | Health Information and Data Management <ul style="list-style-type: none"> • Health management information system and tools • Health Information Management System in Nepal <ul style="list-style-type: none"> - HMIS (Health Management information System) and DHIS (District Health Information Software) - FIS (Financial Information System) - LMIS (Logistic Management Information System) |
| 10 | Financial Management (Budgeting) <ul style="list-style-type: none"> • Budget: Type of budget and process of budgeting • Audit: internal and external • Importance of budgeting in nursing Administration |

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| 11 | Professional and Personal Development <ul style="list-style-type: none"> • Responsibility for personal and professional growth, in-service training, knowledge and skill updating • Professional correspondence: Letter of application, Letter of acceptance and letter of resignation |
| 12 | Health Economics <ul style="list-style-type: none"> • Concept and principle of economics • Tools of health economics <ul style="list-style-type: none"> - Scarcity and production - Supply and demand: Concept and laws of supply and demand • Characteristics of developing and industrialized economics • Factors influencing national income <ul style="list-style-type: none"> - Quality and quantity of production - State of technical knowledge - Political stability • Determinants of national income: Gross national product (GNP) and net national product (NNP) • Sources of national income in Nepal: National and foreign aid • Financial limitation of the government and its effect on health care delivery system • Payment system for health care: Govt. and private institutions: Direct and hidden charges for health care and sources of payment (health Insurance, medical benefits) • Concept, policy and strategies of health insurance and basic health service package |

3. RESEARCH AND BIOSTATISTICS

| Unit | Contents |
|-------------|---|
| 1 | Introduction <ul style="list-style-type: none"> • Basic terminologies used in research: • Significance of research in nursing: • Ethical considerations in nursing research |
| 2 | Types of Research <ul style="list-style-type: none"> • Basic, applied and action research • Historical, descriptive and experimental • Qualitative and quantitative |
| 3 | Research Process <ul style="list-style-type: none"> • Phases and steps of research process • Research problem: Sources, components and characteristics • Research Objectives: Types and components • Hypothesis: Sources, characteristics, significance and types of hypothesis • Variables: Types • Literature review: Purpose, sources, process and documentation of reviewed literature, APA and Vancouver style of referencing • Research design: Purpose, Factors influencing selection of research design and elements of good design. Types of research design: <ul style="list-style-type: none"> - Non-experimental (historical, case study, descriptive, comparative, correlation, cross-sectional and longitudinal) and - Experimental (true-experimental, quasi-experimental and pre-experimental designs) and threats to experimental validity • Population and Sampling: Types of population, purpose and types of sampling <ul style="list-style-type: none"> - Probability sampling techniques - Non-probability sampling techniques, Sample size estimation and factors affecting sample size • Data collection methods and instruments: <ul style="list-style-type: none"> - Direct observational method and instruments: checklist, rating scale including their |

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| | <ul style="list-style-type: none"> - merits and demerits - Indirect method: Self-administered and interview method including instruments and their merits and demerits - Levels of Measurement and types of questions - Establishment of validity and reliability of the instrument • Data analysis and interpretation <ul style="list-style-type: none"> - Data processing: Steps - Data analysis and presentation <p>Data interpretation: Discussion, conclusion and recommendations</p> |
| 4 | <p>Biostatistics in Research</p> <ul style="list-style-type: none"> • Purpose and limitations of statistical analysis • Levels of Measurement: Nominal, ordinal, interval and ratio: <ul style="list-style-type: none"> - Use of computer in data analysis - Descriptive statistics: Use of tables and graphs; frequency distribution: presentation of data in tabular and graphic form; Measures of central tendency; Measures of skewness and measures of dispersion (variability) including range and standard deviation, correlation analysis, and two-by- two contingency table analysis - Statistical interpretation and hypothesis testing |
| 5 | <p>Research Proposal</p> <ul style="list-style-type: none"> • Purpose and principles • Components of research proposal |
| 6 | <p>Research Report</p> <ul style="list-style-type: none"> • Purpose and types of research reports: • Steps in writing research report • Components • Principles of scholarly writing • Methods of dissemination of research result • Strategies to promote research utilization |

4. EDUCATIONAL SCIENCE

| Unit | Contents |
|------|---|
| 1 | <p>Introduction to Education</p> <ul style="list-style-type: none"> • Introduction to Education: Definition, aims, functions and importance of education • Concept of Philosophy and implications of philosophy in education: Naturalism, idealism, realism and pragmatism • Development of education in Nepal • Development of nursing / midwifery education in Nepal: <p>Teaching and Learning</p> <ul style="list-style-type: none"> • Learning: Concept, purposes, characteristics and principles of learning, factors affective learning: facilitating and hindering factors, principles of learning, learning theories: Stimulation-response theory and Gestalt theory and learning process: Elements of learning Teaching: Concept and purpose, role of teacher, qualities of an effective teacher and teaching ethics (Commitment to self and students) and ethical issues in teaching • Instructional objectives (meaning, types of objectives, classification, taxonomy, characteristics of a good objective, • Lesson plan: Meaning and determinants of lesson planning (Learner need and level of understanding, availability of time and student size), Components of lesson planning: Objectives, content, teaching learning activities, time and evaluation and advantages and limitations of lesson planning • Teaching Learning Environment: Concept, elements of teaching learning environment, teacher student relationship, environment of clinical setting |
| 3 | <p>Method and Media of Teaching and Learning</p> |

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| | <ul style="list-style-type: none"> • Role of methods and media of teaching and learning • Methods of teaching and learning (including their purposes, advantages, disadvantages and process) • Media of teaching learning (including their purposes, preparation process and advantages/disadvantages): Audio, visual and combined audio-visual aids • Criteria for selection of methods and media |
| 4 | Evaluation System <ul style="list-style-type: none"> • Evaluation: Meaning, purpose, and types (formative and summative) Evaluation tools: Verbal/ oral report, written test and observation tools • Criteria for selection of evaluation tools • Concept of objective structured practical examination (OSPE) and objective structured clinical examination (OSCE) |
| 5 | Curriculum <ul style="list-style-type: none"> • Concept and meaning of curriculum • Models of curriculum: Subject-centered, learner-centered, integrated, competency-based and problem -based • Curriculum development: Determinants, and components of curriculum, process of curriculum development • Resources for curriculum implementation • Curriculum evaluation |

5. FUNDAMENTALS OF NURSING

| Unit | Contents |
|----------|--|
| 1 | Introduction to Nursing and Hospital <ul style="list-style-type: none"> • Definition of terms, Qualities of nurse • Code of ethics • Patient's right • Hospital and its purpose and type • Admission and Discharge from the Hospital |
| 2 | Basic Human Need <ul style="list-style-type: none"> • Meaning of basic need • Maslow's hierarchy of basic need • Ways of meeting basic needs |
| 3 | Stress and Coping <ul style="list-style-type: none"> • Stress and stressors • Effect of stress on health • Coping strategies • Measures to reduce stress |
| 4 | Nursing Process: <ul style="list-style-type: none"> • Definition • Components of nursing process <ul style="list-style-type: none"> ➤ Assessment ➤ Nursing diagnosis ➤ Planning ➤ Implementation ➤ Evaluation • Development of Nursing care plan |

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| 5 | <p>Assessment of the Patient</p> <ul style="list-style-type: none"> • Vital signs; Meaning, types, measurement : Body temperature, pulse, respiration and blood pressure • Height and weight measurements • Other assessment methods: Lab examination, X-ray examinations, Ultrasonography (USG), magnetic resonance imaging (MRI), computerized tomography scanning (CT scanning) and endoscopy |
| 6 | <p>Comfort, Rest and Sleep</p> <ul style="list-style-type: none"> • Meaning of comfort, rest, sleep and exercise • Factors promoting rest and sleep • Comfort measures • Psychological support <p>Bed making</p> <ul style="list-style-type: none"> • Principles of bed making • Types of bed: Occupied bed, unoccupied bed, cardiac bed, orthopedic bed and postoperative bed • Positioning the patient in the bed |
| 7 | <p>Personal Hygiene Needs</p> <ul style="list-style-type: none"> • Personal hygiene needs of the patient: Oral hygiene care, skin care: bath, back care and back rub • Care of hair, nail, eye, ear and nose, care of the feet |
| 8 | <p>Safety Needs</p> <ul style="list-style-type: none"> • Introduction • Factors affecting safety • Promoting safety in health care setting • Preventing from procedural, equipment and environment related accident • Restraining a patient • Body mechanics: Principles of body mechanics, normal body alignment, and use of body mechanics while lifting or moving • Helping the client in ambulation: Assisting the patient out of bed and assisting the patient to walk • Impaired mobility and active and passive exercise, range of motion exercise, breathing and coughing exercise and postural drainage • Common devices to support and protect a client with impaired mobility • Turning and moving a client with impaired mobility • Clearing the respiratory passage: Cleaning nostrils, positioning and suctioning |
| 9 | <p>Nutritional Needs</p> <ul style="list-style-type: none"> • Nutritional needs of clients • Fluid intake and output • Fluid and electrolyte balance and Restoration of fluid imbalance • Feeding problems associated with illnesses • Nurse's responsibility in meeting the client's nutritional needs <p>Feeding a client through naso-gastric tube</p> |
| 10 | <p>Elimination Needs</p> <ul style="list-style-type: none"> • Common problems in bowel and bladder movement: Constipation, diarrhoea, urinary incontinence and retention • Catheterization: Purpose and procedure of non-retention and retention catheterization • Types of catheters and their care • Measures of relieving constipation: Fluid and food, suppository enema and its types, • Sitz bath • Management of diarrheal dehydration: Oral rehydration therapy and IV infusion |

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| 11 | Infection Prevention <ul style="list-style-type: none"> • The infection cycle • Nosocomial infection • Universal precautions/standard precaution • Hospital waste management • Isolation technique and precautionary measure while caring the patient • Infection prevention measures: Medical and surgical asepsis • Hand washing, cleaning agents and hand washing technique • Gowning and gloving techniques • Decontamination and cleansing of articles • Methods of disinfecting and sterilizing equipment and supplies • Handling sterile objects |
| 12 | Hot and Cold Applications <ul style="list-style-type: none"> • Definition of hot and cold application • Purpose, principle and methods of hot and cold applications • Precautionary measures and nursing responsibilities |
| 13 | Administration of Drugs and Oxygen <ul style="list-style-type: none"> • Abbreviation used in administering drug, and principles • Routes of drug administration: Oral, intradermal, subcutaneous intramuscular, intravenous and rectal and vaginal routes • Topical application and instillation of drug into eye, ear and nose • Steam and drug inhalation • Oxygen administration: Purpose, technique and methods of oxygen administration • Oxygen delivery system: tent, cannula, mask, ventury mask • Blood transfusion: grouping, components of blood • Role of nurse in blood transfusion: pre, during, post |
| 14 | First Aid Management <ul style="list-style-type: none"> • Meaning and principles of first aid • Emergency conditions and their first aid treatment: Drowning, choking, burns, frost bite, fracture, epistaxis, hemorrhage, shock, poisoning, foreign body in ear, nose, eye and throat, and snake, insect and dog bites • First aid management of the victim • Qualities of a good first-aider • Cardio-pulmonary resuscitation: Purpose and procedure • Basic life support, |
| 15 | Dressing and Bandaging <ul style="list-style-type: none"> • Definition of wound, dressing and bandaging • Wound care and dressing • Bandage: Types and application • Pressure sore: Common sites for pressure sore, sign of pressure sore, factors predisposing pressure sore and its prevention and treatment |

6. NURSING CONCEPTS

| Unit | Contents |
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| 1 | Health and Illness <ul style="list-style-type: none"> • Concept of health and illness and Health and illness continuum • Maintaining balance : Homeostasis, biological rhythm, circadian • Factors affecting health status: Internal environmental factors and external environmental factors • Level of wellness • Concepts of health promotion and maintenance • Stages of illness: Transition from health to illness, • Convalescence and tasks of convalescence: Reassessment of life's meaning, reintegration of body image and resolution of role changes |
| 2 | Communication <ul style="list-style-type: none"> • Nurse- patient relationship: <ul style="list-style-type: none"> ➢ Therapeutic relationship ➢ Non therapeutic relationship • Communication among health professional |
| 3 | Crisis <ul style="list-style-type: none"> • Difference between stress and crisis • Crisis of separation and loss: Stages of dying, loss, grief and mourning and factors influencing mourning process • Adaptation strategies: General and local adaptation syndromes • Nurses' role in crisis resolution |
| 4 | Pain Management <ul style="list-style-type: none"> • Pain: Concept and physiological process • Factors affecting pain perception • Assessment of pain: Objective and subjective assessment • Pain Management: Non pharmacological and pharmacological measures • Nurses role in pain management • Therapeutic and palliative treatment of pain |
| 5 | Nursing Profession and Philosophy of Nursing <ul style="list-style-type: none"> • Profession- Criteria of a profession for nursing • Philosophy: Basic philosophies influencing nursing profession |
| 6 | Rehabilitation <ul style="list-style-type: none"> • Meaning, concepts and goals of rehabilitation • Rehabilitation process • Nursing approaches to clients with mobility problems, communication problems, elimination problems and threats to body image • Discharge planning of disabled person • Community responsibility towards disabled persons |
| 7 | Holistic Approaches in Nursing <ul style="list-style-type: none"> • Concept of holistic health and holistic nursing • Holistic health practices by nurses: Therapeutic touch, reiki, acupuncture / acupressure, bio-feedback, relaxation/meditation and yoga |
| 8 | Creativity <ul style="list-style-type: none"> • Creativity: Meaning, characteristics of creative person • Stages of creative problem solving • Methods of being creative in nursing |
| 9 | Ethical and Legal Aspects of Nursing <ul style="list-style-type: none"> • Ethics and ethical issues in nursing |

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| | <ul style="list-style-type: none"> • Ethical responsibilities of the nurse • Difference between ethical and legal aspects of nursing • Legal terms (Consent, liability, negligence and suit) • Legal issues in nursing and nurse's responsibilities • Legal control of nursing practice: Nursing practice act, Licensure/ registration and Nepal Nursing Council |
| 10 | Nursing Theories and their Application <ul style="list-style-type: none"> • Importance of nursing theory in clinical practice, education & research • Nursing theories and their application: <ul style="list-style-type: none"> ○ Florence Nightingale's environmental theory ○ Virginia Henderson's need theory ○ Dorothea Orem's self-care theory ○ Hildegard E Peplau's interpersonal relationship theory ○ Neuman's system theory |

7. ADULT AND GERIATRIC NURSING

A. ADULT NURSING

| Unit | Contents |
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| 1 | Introduction <ul style="list-style-type: none"> • Adult age periods (young, middle) • Developmental needs and tasks of adulthood • Developmental needs adult: Physiological and psychological needs • Role of nurses in health promotion of adults |
| 2 | Preoperative Care <ul style="list-style-type: none"> • Preoperative patient assessment: Assessment of all systems, age, pain, nutritional status, fluid and electrolyte balance, infection and immunity, hematological function, estimating medical risks, anesthesia and anesthetic risk • Preoperative care: Preparation of skin and GI tract, nutritional therapy, preoperative anxiety reduction, deep breathing and coughing exercises • Immediate preparation on the day of surgery: Consent for surgery, preoperative medications transferring to OT |
| 3 | Operation Theatres Nursing <ul style="list-style-type: none"> • Function and management of OT • Responsibilities of the scrub nurse, circulating nurses and recovery nurse • Surgical safety |
| 4 | Post-operative <ul style="list-style-type: none"> • Immediate Postoperative care: Post anesthesia care, immediate assessment- airway, breathing, circulation and others (level of consciousness), nursing care in post anesthesia care unit: Airway maintenance, monitoring BP and return of consciousness, • Subsequent postoperative nursing care: Assessment of respiratory status, blood circulation, neurological status, wound dressing, intravenous therapy, monitoring drainage tubes, reducing pain and discomfort and discharge instructions |
| 5 | Respiratory Disorders Signs and symptoms, investigation, treatment and nursing management of patients with respiratory disorders <ul style="list-style-type: none"> • Disorder of pleura and pleural space: pleurisy, pneumothorax, hem thorax, thoracic empyema, pleural effusion • Respiratory infections: Pneumonia • Atelectasis • Asthma • Chronic Obstructive Pulmonary Disease (COPD) |

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| | <ul style="list-style-type: none"> • Acute bronchitis • Bronchiectasis • Chest trauma • Lung abscess • Pulmonary edema • Pulmonary embolism • Pulmonary heart disease (cor pulmonale) • Acute Respiratory Distress Syndrome (ARDS) • Respiratory failure <p>Special diagnostic and therapeutic procedures and nursing management of disorder of respiratory problems</p> <ul style="list-style-type: none"> • Sputum culture • Pulmonary function test • Bronchoscopy • Thoracentesis, chest tube drainage • Arterial Blood Gas (ABG) analysis • Chest physiotherapy (percussion, vibration, deep-breathing exercise, postural drainage, incentive spirometry) • Nebulizer therapy • Oxygen therapy • Suctioning of airways • Mechanical ventilator • Tracheostomy • Thoracotomy and pneumonectomy |
| 6 | <p>Gastrointestinal Disorders</p> <p>Signs and symptoms, investigation, treatment, nursing management of patients with gastrointestinal disorders</p> <ul style="list-style-type: none"> • Disorder of salivary gland • Disorders of esophagus: hiatus hernia, gastro-esophageal reflux disease (GERD), esophageal varices, diverticula • Gastric and duodenal disorders: gastritis, peptic ulcer, GI bleeding, peritonitis • Intestinal and rectal disorders: appendicitis, hernia, intestinal obstruction, inflammatory bowel disease, diverticulum • Anorectal disorders: anorectal abscess, anal fistula, hemorrhoids, pilonidal sinus/cysts, bowel incontinence • Hepatic and pancreatic dysfunction: jaundice, hepatitis, hepatic cirrhosis, liver abscess, hepatic encephalopathy, pancreatitis • Biliary disorders: cholecystitis, cholelithiasis, choledocholithiasis • Common poisonings • Gastrointestinal surgery: liver transplantation, whipple's Surgery <p>Specific nursing care of patients</p> <ul style="list-style-type: none"> • Gastric analysis • Gastric lavage • Barium swallow/meal and barium enema • Esophageal manometry • Liver function test (LFT)/Liver biopsy • Abdominal paracentesis • Endoscopy, proctoscopy, sigmoidoscopy, colonoscopy, Endoscopic Retrograde Cholangiopancreatography (ERCP) • Ultrasonography • Computed Tomography (CT)/Magnetic Resonance Imaging (MRI)/Positron Emission Tomography (PET) scan |

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| | <ul style="list-style-type: none"> • Care of patient with tube feeding • Total parenteral nutrition • Colostomy care and feeding including meeting psychological need of the individual |
| 7 | <p>Musculoskeletal Disorders signs and symptoms, investigation, treatment, nursing management of patients with muscular and skeletal disorders</p> <ul style="list-style-type: none"> • Musculoskeletal injury: sprain, strain, dislocation, fracture • Musculoskeletal infection: osteomyelitis • Metabolic bone disorder: osteomalacia, osteoporosis, Arthritis (osteoarthritis, rheumatoid arthritis (review), septic and gouty arthritis) • Muscular disorder: Rhabdomyolysis • Polytrauma • Kyphosis <p>Specific nursing care of patients with Closed and open reduction, Immobility problem (pressure sore, respiratory complication, urinary stasis, calculi, contracture /deformities and cardiovascular problems), prevention of immobility proper positioning and turning and exercise (deep breathing and range of the motion exercise)</p> <p>Use of special orthopedic equipment: Bed and frames, traction, splints, plaster, cradles, sand bag, crutch, walker, bars</p> <ul style="list-style-type: none"> • Surgical procedures: amputation, joint and knee replacement surgery, discectom |
| 8 | <p>Cardiovascular and Hematologic Disorders Signs and symptoms, investigation, treatment, nursing management of patients with cardiovascular and hematologic disorders Inflammatory cardiac diseases: pericarditis & pericardial effusion, myocarditis, endocarditis</p> <ul style="list-style-type: none"> • Rheumatic heart disease • Coronary artery diseases/Ischemic heart disease: angina pectoris, myocardial infarction • Cardiomyopathy • Conduction disorders: dysarrhythmia, heart block • Heart failure • Valvular disorders of the heart • Cardiac emergencies: cardiac tamponade, cardiogenic shock, cardiac arrest • Vascular disorders: hypertension, varicose vein, peripheral vascular disease, Burger's disease, aneurysm <p>Special diagnostic and therapeutic procedures and nursing management of cardiovascular problems</p> <ul style="list-style-type: none"> • Electrocardiography, echocardiography, stress test, Ambulatory Blood Pressure (ABP) • Pericardiocentesis • Angiogram and percutaneous intervention (angioplasty) • Percutaneous trans mitral commissurotomies (PTMC) • Electrophysiological study (EPS) and radio frequency ablation • Cardioversion and defibrillator • Pacemaker implantation |
| 9 | <p>Urinary System Disorders Signs and symptoms, investigation, treatment, nursing management of patients with, urinary system disorders</p> <ul style="list-style-type: none"> • Upper and lower Urinary tract infection • Glomerulonephritis and Nephrotic syndrome • Calculi • Genitourinary trauma • Renal failure: Acute Kidney Injury (AKI) and Chronic Renal Failure (CRF) |

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| <p>9</p> | <p>Special diagnostic and therapeutic procedures and nursing management of Urinary System</p> <ul style="list-style-type: none"> • Renal Function test (RFT), 24-hour urinalysis • X-Ray Kidney, ureter, bladder (KUB) • Cystoscopy • Intravenous pyelogram • Retrograde pyelography • Renal scan, renal biopsy • Bladder irrigation • Renal replacement therapy <ul style="list-style-type: none"> ○ Dialysis (Hemodialysis and peritoneal dialysis) ○ Renal transplantation <p>Specific nursing care of patients with fluid replacement, intravenous therapy, dialysis haemo/ peritoneal dialysis, bladder irrigations renal transplantation</p> |
| <p>10</p> | <p>Nervous System Disorders Signs and symptoms, investigation, treatment, nursing management of patients with nervous system disorders</p> <ul style="list-style-type: none"> • Intracranial infection: meningitis, encephalitis • Seizure disorder: epilepsy and status epilepticus • Transient ischemic attack (TIA), Stroke • Neurologic trauma: Head injury, Spinal cord Injury • Prolapse of Intervertebral Disc (PIVD) • Neurocysticercosis • Aneurysm • Disorder of Peripheral Nervous System: GuillianBarre syndrome, Myasthenia Gravis and Peripheral neuropathies • Cranial nerve disorders: Trigeminal neuralgia, Bell's palsy • Degenerative neurological disorder (review geriatrics) <p>Special diagnostic and therapeutic procedures and nursing management of Nervous System</p> <ul style="list-style-type: none"> • Myelogram • Lumbar puncture • Electroencephalogram (EEG) • Cerebral angiography • Extra ventricular drain and lumbar drain • Care of patient undergoing intracranial surgery |
| <p>11</p> | <p>Endocrine Disorders signs and symptoms, investigation, treatment, nursing management of patients with endocrine disorder</p> <ul style="list-style-type: none"> • Pituitary disorders: Gigantism, acromegaly, dwarfism, diabetes insipidus • Thyroid disorders: hyperthyroidism, hypothyroidism, goiter • Parathyroid Disorders: Hyperparathyroidism, hypoparathyroidism • Adrenal Disorders: Addison's disease, Cushing's Syndrome • Diabetes mellitus <p>Special diagnostic and therapeutic procedures and nursing management of endocrine System</p> <ul style="list-style-type: none"> • Test for: growth hormone, thyroid function, parathyroid, adrenal • Thyroid scan • Glucose tolerance test <p>Specific care of patients in insulin therapy and cortisone therapy</p> |

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| 12 | <p>Skin Disorders Signs and symptoms, investigation, treatment, nursing management of patients with Skin disorders Special nursing care of patient with burn</p> <ul style="list-style-type: none"> • Dermatitis • Psoriasis • Leprosy • Gas gangrene • Skin infections: herpes simplex, herpes zoster, impetigo, scabies (review) |
| 13 | <p>Eye, Ear, Nose and Throat Disorders: Signs and symptoms, investigation, treatment, nursing management of patients with eye, ear, nose and throat disorders</p> <p>Eye Disorders:</p> <ul style="list-style-type: none"> • Refractive errors • blepharitis, chalazion, trichiasis, • conjunctivitis, trachoma • corneal ulcer, xerophthalmia • Cataract & glaucoma • Uveitis • Retinal detachments, retinoblastoma, diabetic retinopathy • Ocular trauma, Foreign body • Visual impairments, Blindness • Nursing management of the client undergoing eye surgery <p>Ear Disorders:</p> <ul style="list-style-type: none"> • Otitis externa, foreign body, impacted wax • Otitis Media, Mastoiditis, • meiniers disease, labyrinthitis • Hearing impairment and aural rehabilitation • Diagnostic procedures (tuning Fork Test, autoscopy, audiogram, tympanometry) • Nursing management of the client undergoing ear surgery <p>Nose and throat Disorders:</p> <ul style="list-style-type: none"> • DNS, Sinusitis, Rhinitis, foreign body, Epistaxis, Nasal Polyps • Nursing management of the client undergoing nose and throat surgery • Nursing care of patient with tracheostomy |
| 14 | <p>Communicable Diseases Signs and symptoms, investigation, treatment, nursing management of patients with common communicable diseases: Water borne diseases, Vector borne diseases and air borne diseases</p> <ul style="list-style-type: none"> • Droplet-infection • Sexual transmitted infections • Trans placental diseases: Human Immuno Deficiency Virus (HIV)/Acquired Immuno Deficiency Syndrome (AIDS), Hepatitis • Emerging and reemerging diseases e.g. COVID-19 , Severe Acute Respiratory Syndrome (SARS) • Tuberculosis • Flu (swine flu, bird flu etc) • Kala-azar • Enteric fever • Severe Acute Respiratory Syndrome (SARS) |

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| 15 | <p>Oncology Disorders Warning signs and symptoms, investigation, treatment, nursing management of patients with oncology disorders</p> <ul style="list-style-type: none"> • Primary, secondary and tertiary prevention and control • Cancer treatment modalities and nursing management: Chemotherapy, radiotherapy, immunotherapy, hormonal therapy and surgery • Psychosocial aspects of terminally ill patient • End of life care |
| 16 | <p>ICU, CCU and Emergency Nursing</p> <ul style="list-style-type: none"> • Management of clients with critical condition/cardiac condition • Care of unconscious patient • Resuscitation • Use of various medical gadgets and monitoring parameters • Specific investigation, treatment and nursing Management • Prevention of complication/problems such as ventilator associated pneumonia etc.in critical care settings |

B: GERIATRIC NURSING

| Unit | Contents |
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| 1 | <p>Introduction</p> <ul style="list-style-type: none"> • Definition of terms: Elderly adult, aging, gerontology, geriatric nursing • Theories of aging: Biologic, psychosocial and developmental theory • Ageing population in Nepal with national and international concern • Needs and developmental tasks of elderly people • Health assessment of elderly clients: Physiological and psychological need assessment • Health promotion activities: <ul style="list-style-type: none"> - Activities of daily living and exercise, - Nutrition, - Health check up, - Safety measures and - Drug therapy - Religious activities |
| 2 | <p>Physical Problem of Elderly</p> <ul style="list-style-type: none"> • Aging nervous system: Physiological changes and health problems and their nursing implications (Multiple sclerosis, Parkinson's disease and Alzheimer's disease) • Aging gastrointestinal (GI) system: Physiological changes and health problems and nursing implications indigestion, constipation, diarrhoea, anorexia, lactose intolerance, belching, flatus, fecal incontinence, rectal prolapse, hiatus hernia, diverticulitis and cancer of GI tract • Aging cardiovascular system: Physiological changes and health problems and their nursing implications Congestive cardiac failure, arteriosclerosis, atherosclerosis, arrhythmias, cor pulmonale, myocardial infarction and hypertension • Aging respiratory system: Physiological changes and health problems and their nursing implications of COPD, asthma and emphysema • Aging genitourinary system: Physiological changes and health problems and their nursing implications (Benign prostate hypertrophy, impotence, UTI, senile vaginitis, uterine prolapse, cystocele, rectocele, incontinence of urine and urinary calculi) • Aging endocrine system: Physiological changes and health problems and their nursing implications: Diabetes mellitus, and thermo-regulation disorders • Aging special sensory system: Physiological changes and health problems and their nursing implications (Decubitus ulcer, dermatitis, senile cataract, glaucoma, blurring vision, hearing deficit) • Aging musculo-skeletal system: Physiological changes and health problems and their |

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| | nursing implications (Osteoporosis, osteoarthritis, rheumatoid arthritis, gout, fracture and injuries) |
| 5 | Psycho-Social Problems <ul style="list-style-type: none"> • Psychosocial changes and health maintenance • Psychosocial problems and their management: <ul style="list-style-type: none"> - Depression, suicidal tendencies, paranoia, anxiety and senile dementia, insomnia, auscultative behavior, and sun down syndrome -Elderly abuse - Social isolation, loneliness and Bereavement |
| 6 | Rehabilitation of Elderly Clients <ul style="list-style-type: none"> • Concept and goals of rehabilitation • Disability in elderly people • Sensory deficit and communication problems • Home care of disabled elderly clients • Institutionalization of elderly people: Geriatric home • National program to support elderly people: Pension, elderly allowance and health care and social facilities including transportation concession |

8. MIDWIFERY AND GYNAECOLOGICAL NURSING

A. MIDWIFERY I (ANTENATAL CARE)

| Unit | Contents |
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| 1 | Introduction to Midwifery <ul style="list-style-type: none"> • Midwifery regulations: <ul style="list-style-type: none"> ○ ICM code of ethics ○ Legal aspect of Midwifery Services -NNC(Nepal Nursing Council) ○ Right of women to safe motherhood ○ Respectful maternity care |
| 2 | Reproductive Health and Safe Motherhood <ul style="list-style-type: none"> • Concept, components and strategies of Reproductive Health • Reproductive Health Indicators • Safe motherhood and elements of safe motherhood |
| 3 | Female Pelvis and Fetal Skull <ul style="list-style-type: none"> • Female pelvis • Fetal skull • Feto-pelvic relationship |
| 4 | Pre-Conceptional Care <ul style="list-style-type: none"> • Pre-conceptional counseling and care • Chromosomal abnormalities and Genetic Counseling |
| 5 | Conception and Fetal Development <ul style="list-style-type: none"> • Conception, Fetal development process, Placental development, Anatomical variations of placenta and cord, Fetal Circulation |
| 6 | Physiological changes during pregnancy <ul style="list-style-type: none"> • Physiological changes in reproductive system and other body system • Normal psychological changes during pregnancy • Diagnosis of pregnancy |
| 7 | Antenatal/ Prenatal care <ul style="list-style-type: none"> • Introduction, purposes, importance • Assessment of the pregnant women • Birth preparedness & complication readiness • Prevention of mother to child transmission of HIV/AIDS(PMTCT) • Antenatal Care (components) • Assessment of fetal wellbeing, risk and danger sign |

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| 8 | <p>Minor Discomforts during Pregnancy</p> <ul style="list-style-type: none"> • Morning sickness • Backache • Constipation and Hemorrhoids • Heart burn • Indigestion • Itching • Pica • Varicose vein • Tocophobia <p>Major Disorders of Pregnancy</p> <ul style="list-style-type: none"> • Hyperemesis gravidarum • Hypertensive disorders in pregnancy <ul style="list-style-type: none"> ○ Pregnancy induced hypertension <ul style="list-style-type: none"> ▪ Gestational hypertension ▪ Pre-eclampsia and severe pre-eclampsia ▪ Eclampsia ○ Essential hypertension • HELLP syndrome • Disseminated Intravascular Coagulation (DIC) including bedside clotting test <p>Vaginal Bleeding in pregnancy: Early and Late</p> <p>Common Medical Diseases during pregnancy</p> <ul style="list-style-type: none"> • Anemia, Cardiac disease, Renal disease, Urinary tract infection, Diabetes, Malaria, Jaundice/Hepatitis, Tuberculosis, Epilepsy, Thyroid disorder |
| 9 | <p>Infectious Diseases, Effects in Pregnancy and Management</p> <ul style="list-style-type: none"> • Sexually Transmitted Infections/Reproductive Tract Infections (STIs/RTI), HIV/ AIDS, Viral infections, TORCH infections |
| 10 | <p>Complicated Pregnancy</p> <ul style="list-style-type: none"> • Multiple Pregnancy, Amniotic fluid disorders, Rh iso-immunization and ABO incompatibility, Teenage Pregnancy, Intra uterine Growth Retardation |
| 11 | <p>Drugs Used in Obstetrics</p> <ul style="list-style-type: none"> • Tocolytics • Teratogenic agents • Hematinics • Anticonvulsants • Others: oxytocin, ergot derivatives, prostaglandins etc. |

B. MIDWIFERY II (NATAL CARE)

| Unit | Contents |
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| 1 | <p>Introduction</p> <ul style="list-style-type: none"> • Introduction to labor: Definition of labor, true and false labor, normal and abnormal labor • Stages of labor and duration of first, second and third stage of labor, and sign and symptoms of different stages of labor • Onset of labor, factors influencing labor (Power, passage and passenger), theories and causes of onset labor, signs and symptoms of onset of labor • Labor pain: Physiology of labor pain, psychological response to pain, and pain reduction measures (psychological support, alternative methods and drugs) • Maternal and fetal distress |
| 2 | <p>Care of Woman in first stage Labor</p> <ul style="list-style-type: none"> • Admission of woman in labor: Admission procedure |

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| | <ul style="list-style-type: none"> • Physiological changes during the first stage of labor • Management of first stage of labor • Monitoring maternal and fetal wellbeing and progress of labor through abdominal and vaginal examination and partograph recording • Identification and management of deviations from normal • Danger signs of first stage of labor |
| 3 | Care of Woman in second stage labor <ul style="list-style-type: none"> • Physiological changes of second stage of labor • Signs and symptoms of second stage of labor • Mechanism of labor • Management of second stage of labor • Process of conducting delivery of baby (step by step) • Episiotomy: Concept of restricted episiotomy, its indications, types and method • Danger signs and complication of second stage of labor and their management • Recording reporting |
| 4 | Care of Woman in Third and Fourth Stage of Labor <ul style="list-style-type: none"> • Physiological changes during third stage of labor • Active management of third stage of labor: Administration of oxytocics controlled cord traction Clamping and cutting the cord • Examination of birth canal, placenta and membranes and blood loss • Repair of episiotomy and second degree perineal and low vaginal tear • Care of woman in Fourth stage of labor: Assessment of mother and newborn, meeting basic needs, observation for danger signs of third stage of labor , recording and reporting |
| 5 | Care of the Newborn at Birth <ul style="list-style-type: none"> • Physiological adaptation of newborn to extra-uterine life: Breathing, heart rate, color, thermoregulation • Essential care of newborn: Definition and purpose, eight steps of immediate newborn care • Newborn resuscitation: Overview of fetal hypoxia, asphyxia & meconium aspiration, steps of newborn resuscitation and care after resuscitation |
| 6 | Malpositions and Malpresentations <ul style="list-style-type: none"> • Common malpositions and malpresentations and their diagnosis and management: Occipito-posterior position, face, brow, breech and shoulder presentation, unstable lie, • Technique of delivering baby with breech presentation |
| 7 | Obstetric Emergencies <ul style="list-style-type: none"> • Concept of essential obstetric care (EOC) and emergency obstetric care (EmOC) • Obstetric emergencies and their life saving management: intrapartum and postpartum haemorrhage, placenta previa, cord presentation and prolapsed, shoulder dystocia, rupture of uterus, inversion of uterus shock • Retained placenta: Manual removal of placenta, bimanual and aortic compression, placenta accrete/ adherent placenta • Vulval hematoma • Severe vaginal and cervical tear |
| 8 | Abnormal Labor <ul style="list-style-type: none"> • Types of abnormal labor: Pre-term and post-term labor, premature rupture of membranes, abnormal (hypo and hypertonic) uterine contractions, precipitated, prolonged and obstructed labor andcephalo-pelvic disproportion • Management of abnormal labor: Trial labor • Induction and augmentation of labor • Instrumental Delivery: Vacuum delivery and forceps delivery • Operative delivery: <ul style="list-style-type: none"> - Caesarean section - Destructive operations: Embryotomy, craniotomy, evisceration, decapitation and cleidotomy |

C. MIDWIFERY III (POSTNATAL CARE)

| Unit | Contents |
|------|---|
| 1 | The Normal Puerperium <ul style="list-style-type: none"> Anatomical and physiological changes of reproductive and other systems during puerperium Psychological changes in puerperium Parent infant bonding |
| 2 | Postnatal Care <ul style="list-style-type: none"> Postnatal Examination Danger Signs Postnatal care: Goals, component and principles, nurses roles/responsibilities in meeting physical, psychological and emotional needs of the mother including cultural aspects of car |
| 3 | Management of Lactation <ul style="list-style-type: none"> Anatomy and physiology of breast Components and properties of breast milk Early and exclusive breast feeding Steps of successful breastfeeding Concept of baby friendly hospital initiative Common breast problem and it's management |
| 4 | Disorders of Puerperium <ul style="list-style-type: none"> Minor disorders of puerperium Major disorders of puerperium |
| 5 | Normal Newborn Care <ul style="list-style-type: none"> Characteristic of normal newborn Assessment of the newborn Newborn danger signs Role of health care provider in neonatal care at different level of health care Status of Neonatal Health in Nepal and Government's Policies and Strategies |
| 6 | Care of newborn with Problems <ul style="list-style-type: none"> Minor and major disorders of newborns Care for small and large babies: Low birth weight baby, Premature baby, Postmature baby Discharge instructions for home care |

D. GYNECOLOGICAL NURSING

| Unit | Contents |
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| 1 | Assessment of Women with Gynaecological Problems <ul style="list-style-type: none"> History taking Physical examination: systemic & gynecological Diagnostic procedures and investigations |
| 2 | Congenital Abnormalities of Reproductive Organs |
| 3 | Menstrual Disorders <ul style="list-style-type: none"> Amenorrhea, Dysmenorrhea Abnormal Uterine Bleeding: Dysfunctional Uterine Bleeding |
| 4 | Safe Abortion Services and National law for abortion |

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| 5 | Infections of Female Reproductive Organs <ul style="list-style-type: none"> • Vulva, Vagina, Uterus, Fallopian tubes, Ovaries, Pelvic Inflammatory Diseases, Sexually Transmitted Infection |
| 6 | Genital Prolapse and its Management <ul style="list-style-type: none"> • Vaginal • Uterine |
| 7 | Genito-urinary fistula <ul style="list-style-type: none"> • Rectovaginal fistula • Vesicovaginal fistula |
| 8 | Sub-fertility <ul style="list-style-type: none"> • Introduction, Assisted Reproduction with advance techniques |
| 9 | Menopause |

8. COMMUNITY HEALTH NURSING

| Unit | Contents |
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| 1 | Introduction <ul style="list-style-type: none"> • Concept of community, health (WHO), optimum health, family health, community health and community health nursing • Institutional versus community health nursing • Determinants of health • Responsibility for health <ul style="list-style-type: none"> - Individual/family responsibility - Community responsibility - National and International responsibility |
| 2 | Primary Health Care, Universal Health Coverage and Sustainable Development Goal <ul style="list-style-type: none"> • Concept of primary health care: Definition, elements and principles • Primary health care approach in current national health plan • Roles and responsibilities of nurse in primary health care • Measurement of universal coverage of health and its impact on population • Sustainable development goals |
| 3 | Communication <ul style="list-style-type: none"> • Meaning, purpose and types of communication • Elements and barriers of communication process • Tools of communication: Language, observation, perception, non -verbal behavior of listening • Principles of effective communication • Interview: Aims, kinds and technique |
| 4 | Home Visit <ul style="list-style-type: none"> • Introduction, principles, advantages and purposes of home visiting • Steps in home visiting • Home visiting bag technique and its maintenance |
| 5 | Community Diagnosis <ul style="list-style-type: none"> • Concept of community diagnosis: Definition, purposes and components of community diagnosis • Steps and process of community diagnosis |
| 6 | Environmental Sanitation <ul style="list-style-type: none"> • Environment: Definition and components • Environmental pollution: Its sources and effects (Global warming, green-house effect, ozone layer depletion, nuclear accidents and toxic hazards) • Role players in environmental health (positive/negative) <ul style="list-style-type: none"> - Individual citizen - Governmental organizations |

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| | - Non-governmental organizations |
| 7 | Water <ul style="list-style-type: none"> • Definition of safe and wholesome water, Uses of water and its daily requirement and sources of water supply • Water related impurities: Biological and chemical impurities and purification of water in small scale and large scale • Hardness of water: Meaning, disadvantages and treatment procedures |
| 8 | Noise and Air Pollution <ul style="list-style-type: none"> • Noise: Meaning, sources and properties of noise and effects of noise exposure to human health: Auditory and non-auditory effects • Air pollution: Meaning and sources of air pollution (Auto mobiles, industries, domestic and miscellaneous), effects of air pollution and prevention and control of air pollution: Containment, replacement, dilution, legislation and international action |
| 9 | Housing <ul style="list-style-type: none"> • Meaning and basic criteria for healthful housing • Different housing needs and housing standards for better health • Effect of poor housing on human health • Effects of overcrowding in health and development |
| 10 | Refuse, Human Excreta and Sewage Disposal <ul style="list-style-type: none"> • Refuse disposal: Meaning, sources, health hazards and methods of refuse disposal • Human excreta disposal: Health hazards of improper disposal of human excreta, transmission of fecal-borne diseases and sanitation barrier in sewage disposal and methods of disposal of excreta (Service type and non-service type i.e. bore hole, dug well and water-seal latrine) • Sewage disposal: Meaning of sewage, health hazards of improper sewage disposal and methods of sewage disposal i.e. primary treatment (Screening, grit chamber and primary sedimentation), secondary treatment (trickling filter method and activated sludge method) and other methods (sea outfall, river outfall, land treatment and oxidation of ponds) |
| 11 | Epidemiology <ul style="list-style-type: none"> • Introduction: Terms (Infection, contamination, communicable and non- communicable diseases, epidemiology, epidemic, endemic, pandemic, sporadic, eradication, elimination, virulence and surveillance), aims and uses of epidemiology • Epidemiological approach to solve problem • Concepts of disease causation: Agent, host and environment • Dynamics of disease transmission: Sources or reservoir, modes of transmission and susceptible host • Levels of disease prevention and modes of intervention • Investigation of an Epidemic Outbreak: Introduction and objectives and steps of epidemic investigation |
| 12 | Family Health Nursing <ul style="list-style-type: none"> • Concept of family health nursing • Typology of family health problems: Health threat, health deficit, foreseeable crisis • Roles and functions of nurse in family health nursing • Nurse-family contacts: Types (home visit, clinic visit and group conference), purpose and principles • Concept of holistic care |
| 13 | Maternal and Newborn Care at Different Levels <ul style="list-style-type: none"> • Objectives, targets and strategies of maternal and newborn care • Maternal and neonate health care at different service levels <ul style="list-style-type: none"> - Home and community level - Primary health care level - First referral level (District hospital) • Essential maternal care <ul style="list-style-type: none"> - Primary maternal care |

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| | <ul style="list-style-type: none"> - Basic emergency obstetric care - Comprehensive obstetric care • Antenatal care <ul style="list-style-type: none"> - Objectives and importance - Antenatal assessment - Teaching/counseling on antenatal care - Preparation for child birth • Natal care <ul style="list-style-type: none"> - Objectives and importance - Care during birth • Postnatal care management <ul style="list-style-type: none"> - Objectives - Postnatal care components - Teaching and counseling on care during normal and complicated conditions - Referrals • Newborn care management <ul style="list-style-type: none"> - Objectives and importance - Immediate and subsequent care - Breast feeding • Danger signs of mother and new born: Care and referrals |
| 14 | <p>Child Health Services</p> <ul style="list-style-type: none"> • MCH clinic: Objectives, purposes and functions • Growth monitoring (road-to-health card): Concept, use, plotting and interpretation • Health education: <ul style="list-style-type: none"> - Purpose and principles - Methods including advantages, disadvantages and process: Individual, group and mass - Media including advantages, disadvantages and process: Audio, visual and audio-visual • Integrated management of childhood illnesses: Concept, Classification of childhood illnesses and their management |
| 15 | <p>Risk Approach to Maternal and Child Health</p> <ul style="list-style-type: none"> • Terminology used in risk approach: Risk factors, population at risk and relative risk • Common maternal, newborn and childhood risk factors • Relationship between risk factors and outcome • Assessment of risk factors at various level (individual, family and community levels) • Role of nurse in dealing with the risk factors at various levels |
| 16 | <p>Vital and Health Indicators</p> <ul style="list-style-type: none"> • Vital indicators: Birth rate, death rate, population growth rate and life expectancy • Health indicators (calculation, interpretation and uses): Morbidity, mortality and fertility Statistical sources: Bureau of Statistics, Public Health Division, Epidemiological Section, records of hospitals, clinics and health post |
| 17 | <p>Immunization</p> <ul style="list-style-type: none"> • Concept of national immunization program and recommended immunizations for mother and children • Indication and contraindication of vaccines • Preparation and administration of vaccines • Maintenance and storage of vaccines • Side effects of vaccines and their management |
| 18 | <p>Family Planning</p> <ul style="list-style-type: none"> • Concept of family planning/ contraception, child spacing and fertility control • Objectives and targets of family planning (FP) • FP methods including their action, indicator, contra indicators and benefit and side effects <ul style="list-style-type: none"> - Temporary methods: Behavioral, chemical, mechanical and physiological - Permanent methods: Male and female |

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| | <ul style="list-style-type: none"> - Emergency Contraception • Contraception for adolescent • Contraception for women over 35 • Post abortion Contraception <p>Roles and responsibilities of a nurse in management of FP services</p> <ul style="list-style-type: none"> • Preparation of family planning clinic set up • Client assessment and counseling of clients using “ABHIBADAN” process and audio visual aids • Informed choices • Referral of clients • Preparation of client for operate procedure • Assisting in FP operation |
| 19 | <p>School Health Programme</p> <ul style="list-style-type: none"> • Introduction, concept, objectives and activities of school health programme • Identification of common health problems of school age children • High-risk school children and counseling of parents programme • Child-to-child programme • Planning, implementation and evaluation of school health programme |
| 20 | <p>Occupational Health</p> <ul style="list-style-type: none"> • Occupational health: Occupational environment, health of the worker, • Occupational hazards (Physical, chemical, biological, mechanical and psychosocial) • Occupational diseases and their prevention |

9. CHILD HEALTH NURSING

| Unit | Contents |
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| 1 | <p>Introduction to Child Health Nursing</p> <ul style="list-style-type: none"> • Concept of child health and child health nursing • Concepts related to child health: Child-to-child programme, integrated management of new-born childhood illnesses (IMNCI), Saving newborn lives (SNL) programme, Exclusive breast feeding and baby friendly hospital • Role of nurse in the care of children |
| 2 | <p>Growth and Development of Children</p> <ul style="list-style-type: none"> • Concept of growth and development • Growth of body systems from infancy to adolescence • Developmental milestones and tasks • Promotion of optimum growth and development • Parental concerns and counseling |
| 3 | <p>Care of Newborn</p> <ul style="list-style-type: none"> • Newborn's physiological changes • Mother-newborn bonding • Care of newborn • Prevention and management of newborn problems: Asphyxia, sepsis, hypothermia, hyperthermia and neonatal jaundice • High risk newborn |
| 4 | <p>Assessment of Children</p> <ul style="list-style-type: none"> • History taking • Physical examination • Nutritional assessment |
| 5 | <p>Care of Children in Special Conditions</p> <ul style="list-style-type: none"> • Medical and surgical nursing care of children |

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| | <ul style="list-style-type: none"> • Stressful and crisis events and their management • Care of children with chronic and terminal illnesses • Parental coping with impending death of children and nurses' role |
| 6 | Care of Children with Gastro-intestinal Disorders <ul style="list-style-type: none"> • Dental caries • Diarrhoeal disorders including dysentery and dehydration • Worm infestations • Nutritional deficiencies: Protein-energy malnutrition, vitamin and mineral deficiencies • Acute abdomen, intestinal obstruction • Congenital defects: Hare lip and cleft palate, oesophageal atresia, pyloric stenosis, Hirschprung's disease and imperforated anus |
| 7 | Care of Children with Respiratory Disorders <ul style="list-style-type: none"> • Respiratory infections: Upper and lower respiratory tract • Bronchial asthma • Tuberculosis |
| 8 | Care of Children with Cardiovascular and Blood Disorders <ul style="list-style-type: none"> • Rheumatic heart diseases • Congenital heart disorders: Acyanotic and cyanotic disorders • Anaemia, thalassaemia, haemophilia • Purpura, leukaemia, Hodgkin's disease |
| 9 | Care of Children with Genito-urinary Disorders <ul style="list-style-type: none"> • Urinary tract infection • Nephritis, nephrotic syndrome • Acute and chronic renal failure, • Urinary calculi • Hypospadias, epispadias, undescended testes • Wilm's tumor |
| 10 | Care of Children with Central Nervous System Disorders <ul style="list-style-type: none"> • Meningitis, encephalitis • Brain tumor • Hydrocephalus, spina bifida, meningocoele, meningomyelocoele, neuroblastoma, • Head injury, cranio-cerebral trauma • Epilepsy, febrile convulsions <ul style="list-style-type: none"> - Mental retardation, Down's syndrome and cerebral palsy |
| 11 | Care of Children with Endocrine Disorders <ul style="list-style-type: none"> • Dwarfism, gigantism, juvenile diabetes mellitus, diabetes insipidus, cretinism • Addison's disease, Cushing's syndrome, precocious puberty |
| 12 | Care of Children with Musculo-skeletal Disorders <ul style="list-style-type: none"> • Rickets • Cerebral palsy • Congenital defects: Club foot, scoliosis • GB syndrome |
| 13 | Care of Children with Eye, ENT and Skin Disorders <ul style="list-style-type: none"> • Congenital cataract, conjunctivitis • Squint, vision defect • Otitis media, hearing defect • Deviated nasal septum, tonsillitis • Speech problem • Burn, scabies, impetigo, boils |
| 14 | Pediatric Procedures <ul style="list-style-type: none"> • Inhalation therapy • Restraining and positioning |

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| | <ul style="list-style-type: none"> • Collecting pediatric specimens • Tube feeding • Newborn resuscitation • Care of newborn in incubator |
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10. BEHAVIOURAL SCIENCE AND PSYCHIATRIC NURSING

A. BEHAVIORAL SCIENCE

| Unit | Contents |
|------|---|
| 1 | Sociology and Anthropology <ul style="list-style-type: none"> • Introduction, nature and scope of sociology and anthropology |
| 2 | Individual and Society <ul style="list-style-type: none"> • Meaning, characteristics and elements of society • Relation between individual and society |
| 3 | Culture and Health <ul style="list-style-type: none"> • Introduction and characteristics of culture and elements of culture • Relation of culture with personality characteristics and health • Child bearing and rearing practices specific to different ethnic groups |
| 4 | Socialization and Social Learning <ul style="list-style-type: none"> • Significance of socialization • Social learning in health |
| 5 | Health and Illness <ul style="list-style-type: none"> • Health and sickness in different stages of evolution of society. • Significance of interpersonal relationship • Effective nurse consumer relationship |
| 6 | Therapy Patterns <ul style="list-style-type: none"> • Therapies: Personalistic therapy, naturalistic therapy, self medication and other health care practices in Nepal • Communication patterns of modern and indigenous health care providers |
| 7 | Social Control <ul style="list-style-type: none"> • Meaning, purpose and need for social control • Means of social control- Informal / formal • Change in relation to health behavior |
| 8 | Psychology Applied to Nursing <ul style="list-style-type: none"> • Branches of psychology- educational, clinical, developmental & social psychology. • Study of behavior from different perspectives |
| 9 | Sensation, Attention and Perception <ul style="list-style-type: none"> • Introduction and factors affecting perception • Perceptual errors: Hallucinations and illusions |
| 10 | Emotion <ul style="list-style-type: none"> • Emotional development throughout lifespan • Effect of emotion on health. • Measures to control emotion. |
| 11 | Motivation <ul style="list-style-type: none"> • Types of motive: Biological and Social • Role of motivation in learning and health education in relation to behavioral change. • Motivation towards utilizing health facilities |
| 12 | Learning, Intelligence and Memory <ul style="list-style-type: none"> • Introduction • Intelligence test: Stanford-Binet Intelligence scale, Weschler tests |

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| 13 | Personality <ul style="list-style-type: none"> • Determinants of personality: Hereditary, psychological, & sociological factors. • Personality theories • Assessment of personality |
| 14 | Frustration and Conflict <ul style="list-style-type: none"> • Sources of frustration • Types of conflict |

B. PSYCHIATRIC NURSING

| Unit | Contents |
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| 1 | Introduction <ul style="list-style-type: none"> • Major Classification of mental illness: Diagnostic Statistical Manual of Mental Disorders (DSM), International Classification of Diseases |
| 2 | Mental Health Assessment <ul style="list-style-type: none"> • Psychiatric History taking • Mental status examination • Diagnostic Investigations • Psychological tests |
| 3 | Therapeutic relationship <ul style="list-style-type: none"> • Therapeutic communication techniques • Phases of therapeutic relationship • Therapeutic barriers |
| 4 | Personality Development <ul style="list-style-type: none"> • Determinants of personality development • Personality development theories • Defense mechanisms |
| 5 | Neurotic and stress related disorders <ul style="list-style-type: none"> • Generalized anxiety disorder, Panic disorder, Dissociative and conversion disorder, Phobic neurosis, • Obsessive compulsive disorder, • Post-traumatic stress disorder |
| 6 | Mood/Affective disorders <ul style="list-style-type: none"> • Major depressive disorders • Bipolar mood disorders |
| 7 | Thought disorders (Psychotic disorders) <ul style="list-style-type: none"> • Acute transient psychotic disorder (ATPD) • Schizophrenia • Organic mental disorders |
| 8 | Personality disorders <ul style="list-style-type: none"> • Histrionic personality disorder, Narcissistic personality disorder, Schizoid personality disorder, Antisocial personality disorder, Paranoid personality disorder, • Borderline personality disorder, Obsessive compulsive personality disorder |
| 9 | Substance and alcohol related disorders <ul style="list-style-type: none"> • Alcohol use disorder • Commonly used substances |
| 10 | Psychiatric Emergencies <ul style="list-style-type: none"> • Types of psychiatric emergencies and their management |
| 11 | Psychosexual and Psychosomatic Disorders <ul style="list-style-type: none"> • Psychosexual disorders • Psychosomatic disorders |
| 12 | Treatment modalities in Mental Health Nursing |

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| | <ul style="list-style-type: none"> • Psychotropic drug , Electroconvulsive therapy(ECT), Counseling , Psychotherapy, Family therapy, Group therapy, Cognitive behavior therapy, Occupational therapy , Milieu therapy, Rehabilitation , Restraining |
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11. NUTRITION IN HEALTH AND ILLNESS

| Unit | Contents |
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| 1 | Food and Nutrients <ul style="list-style-type: none"> • Food belief and practice, food safety, food adulteration and food fortification • Food groups: Plant group (cereals, pulses, vegetables and fruits) and animal group (egg, meat, ghee and milk) • Nutrients: Types, sources and function • Absorption and metabolism of carbohydrate, protein and fat • Daily requirements of nutrients for neonate, low birth weight baby, infant, toddler, school children, adolescent and adult and elderly people • Nutritive value of common foods • Preservation of nutritive value in food • Food enrichment and food fortification • Storage of food: Purpose and methods (cold storage, freezing, smoking, salting, canning and irradiation) • Food safety: Food hygiene and safe food practices in cooking, handling and storing) and milk pasteurization • Food contamination and its effect on health • Factors affecting family nutrition • Weaning and supplementary feeding of infant • Anthropometrical parameters of nutritional status |
| 2 | Nutritional Disorders <ul style="list-style-type: none"> • Protein-energy malnutrition • Vitamin deficiencies (vitamin A, B, C, D E and K deficiencies) • Mineral deficiencies (Iron, iodine and calcium deficiencies) • Over-nutrition (Obesity) • Prevention and management |
| 3 | Nutritional Assessment and Programs <ul style="list-style-type: none"> • Nutritional assessment of children and adults • National programs on nutrition: Supplementation of iodine (Iodized salt), vitamin A supplementation, deworming and treatment protocols, iron prophylaxis, and growth monitoring • National targets, indicators and strategies for reduction of nutritional deficiencies diseases |
| 4 | Diet in Health and Illness <ul style="list-style-type: none"> • Balanced diet: Purpose and components • Special diet: Meaning and purpose • Types of special diet and their role in health • Therapeutic Diet: Renal diet, Diabetic diet |