

COURSE SYLLABUS



NURS2502

Pediatric Nursing

Fall 2019 – Spring 2020

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NURS2502 Pediatric Nursing Fall 2019 – Spring 2020

COURSE DESCRIPTION

This course addresses family-centered care to meet the needs of child rearing families, including community resources and patient teaching. Learners are provided with an introduction to common health issues of children and related nursing care using a body system approach.

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|-----------------|--|-----|
| PREREQUISITES | ENGL1201 English Composition; COMM1101 Interpersonal Relationships and Communication Skills; ANAT1101 Anatomy and Physiology; NURS1101 Nursing Arts; NURS1202 Nursing Foundation 1; NURS1301 Mathematical Principles of Medication Administration; NURS1302 Health Education: Personal Health and Wellness; NURS1102 Applied Pharmacology; NURS1103 Pathophysiology; NURS1201 Adult Health Assessment; NURS1203 Nursing Foundation 2 | |
| CO-REQUISITES | PSYC1201 Human Growth and Development across the Lifespan | |
| EQUIVALENTS | X | N/A |
| ANTI-REQUISITES | X | N/A |
| DELIVERY FORMAT | Classroom and online | |
| CREDITS | 3 | |
| HOURS | 45 | |

COURSE INSTRUCTOR

Please check welcome course page on D2L Brightspace.

COURSE ADMINISTRATOR

| | |
|-------|--|
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MODULES COVERED

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| Communicating with Children and Their Families | Care of a Child with a Cardiovascular System Disorder |
| Activities of Daily Living for Children | Care of a Child with a Blood and/or Lymph System Condition |
| Safety Measures for a Child | Care of a Child with a Gastrointestinal System Disorder |
| Assessment of a Child | Care of a Child with a Genitourinary System Condition |

| | |
|--|---|
| Care of a Child with a Fluid and Electrolyte Imbalance | Care of a Child with an Integumentary System Condition |
| Care of a Child with a Sensory and/or Neurological Condition | Care of a Child with an Endocrine System or Metabolic Condition |
| Care of a Child with a Musculoskeletal System Condition | Immunization and Communicable Diseases |
| Care of a Child with a Respiratory System Disorder | Pediatric Medication Delivery |

LEARNING OUTCOMES

UPON SUCCESSFUL COMPLETION OF THIS COURSE YOU WILL BE ABLE TO:

COLLEGE-WIDE OUTCOMES SUPPORTED

| 1 | Develop communication techniques related to the care of children and their families | 1, 4, 6, 10 |
|---|---|---------------------|
| 2 | Apply the Conceptual Framework to the healthcare of children and families | 1, 2, 4, 5, 6, 7, 8 |
| 3 | Recognize and document information pertinent to pediatric nursing | 1, 2, 4, 7, 8 |
| 4 | Follow routine practices to maintain safety of the child, equipment, and the environment | 1, 2, 6 |
| 5 | Identify the quantifiable differences between adult and pediatric medication administration | 1, 2, 3 |
| 6 | Apply knowledge of effects of disease processes on growth and development of children | 1, 2, 4, 5, 6, 7, 8 |

CLPNA COMPETENCIES

A - Nursing Knowledge
 B - Nursing Process
 C - Safety
 D - Communication and Interpersonal Skills
 E - Nursing Practice

F - Respiratory Care
 L - Pediatrics
 U - Medication Delivery
 V - Infusion Therapy
 W - Professionalism
 X - Leadership

COURSE SCHEDULE

Refer to Course Information/Schedule and General Readings on D2L Brightspace.

PERFORMANCE EVALUATION

| COURSE OUTCOME | ASSESSMENT STRATEGY | WEIGHT |
|------------------|---|--------------------|
| 1, 2, 3, 4, 5, 6 | Individual Assignment – Read a case study and complete accompanying questions | See course outline |
| 1, 2, 3, 4, 5, 6 | Group Assignment- Create an in class presentation | |
| 2, 3, 4, 5, 6 | Exam 1 - Evaluate comprehension of content covered to midterm | |
| 1, 2, 3, 4, 5, 6 | Final Exam - Evaluate comprehension of entire course content | |

EXAMS AND EVALUATIONS

Please refer to the Practical Nurse Program Content Guide for policies.

ASSIGNMENTS

Please refer to the Practical Nurse Program Content Guide for policies.

PERFORMANCE STANDARDS

The following are the course policies for NURS2502 Pediatric Nursing:

- In order to continue in the Practical Nurse Program, a grade point value of 2.0, letter grade C must be obtained in this course. Learners failing to achieve the grade point value will be required to repeat the course (see PN Program Content Guide).
- All course assessments and assignments must be completed to be eligible to pass the course. Course assessments and assignments are intended to officially evaluate learner understanding of the course material. These must be completed independently without collaboration, except for assignments designated as group projects.
- When late or absent, learners must contact your course facilitator.
- A learner who is concerned about the marking of a particular assignment is expected to seek clarification, or to express his/her concern to the facilitator within five days of receiving the grade - see the Practical Nurse Program Content Guide.
- Learners who miss an exam without prior notification will obtain zero percent (0%) for that exam.
- Reading/exercises are to be done prior to class; learners are expected to come prepared to discuss materials.

Please refer to the current Program Content Guide for policies and standards related to:

- Late assignments

- Exams
- Repeating courses
- Academic Honesty
- Appeal Policy
- Attendance Standards

TECHNICAL REQUIREMENTS**SCHOOL PROCEDURES**

Refer to the Practical Nurse Program Content Guide for policies.

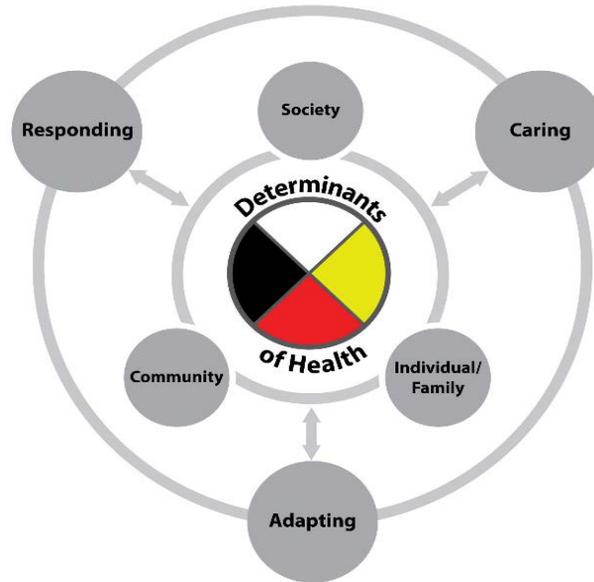
OTHER INFORMATION

Course Content

Bow Valley College Conceptual Framework: Spheres of Caring

The Bow Valley College Practical Nurse curriculum uses the four major concepts: health; the person or patient; the environment; and nursing as the basis for program’s Conceptual Framework – *The Spheres of Caring*. The Spheres of Caring shown here is a visual representation symbolizing our enduring values and beliefs about practical nursing.

To interpret the Conceptual Framework, it is essential to begin with the three foundational concepts of the individual, health care environment, and the role of the professional nurse. It places the individual and the family at its core, in an overlapping and complex interaction between the individual and family, community and society.



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The Conceptual Framework encapsulates an interactive process. The arrows on the diagram depict the active and interactive nature of the practical nurse scope of practice.

The Determinants of Health are used to describe factors influencing the environment of the individual and the family. The involvement of the practical nurse in the individuals’ environment also affects the individual’s health outcomes.

Relationships between the nurse and the individual/family are multifaceted and include committing to caring interaction, responding to the needs of the individual and adapting interactions to meet the changing needs of the individual. Throughout the practical nurse program, the learner develops a professional persona that reflects the key activities of caring, responding, and adapting in the provision of person-centered care.

As a response to Truth and Reconciliation Commission of Canada’s Call to Action # 24, we have incorporated the teachings of an ancient tool used for healing by the Plains First Nations people since time immemorial. The Medicine Wheel is a powerful symbol that acknowledges every aspect of existence within its four quadrants. To the Indigenous people it represents the great Circle of Life. Its teachings “create a bio-psychosocial and spiritual foundation for human behavior and interaction. It is about walking the earth in a peaceful and good way and about helping those who seek it. It helps individuals move along the path towards mental, spiritual, emotional and physical enlightenment. It is a tool to be used on your healing and spiritual journey.” (Laframboise & Sherbina, 2018)

Module 1: Communicating with Children and their Families

With the growth and development of a child physically, cognitively and emotionally, communication goes through several changes. The practical nurse must be aware of the way children of various age groups communicate, so that nursing interventions can be successful and a therapeutic relationship developed between the child and the nurse. An important vehicle for communication with children is play. Play serves the purposes of releasing stress, providing a means of exercise, promoting interaction, creativity and learning for the child. Family members often have anxieties and fears of their own related to the child's illness and the quality of care they will receive. Indigenous families may have unique worries depending on their history within the health care system; practical nurses should focus on building trust and being willing to adapt to the child's, family's, or community's way of being (Potter et al., 2019). The practical nurse will learn to apply the philosophy of Family-Centered Care in building a trusting and supportive relationship with the child and family, which can assist in alleviating their worries and promoting trust in the health care team.

Learning Objectives

Learning is focused on and not limited to the following:

1. Describe the philosophy of Family-Centred Care and its application to nursing care of children and their families in health and illness
2. Identify and describe communication techniques that could be used to build therapeutic helping relationships with children for each age group
3. Describe the importance of play when a child is ill or hospitalized
4. Identify age appropriate toys for different age groups
5. Define and describe therapeutic play and play therapy
6. Identify information that should be reported and documented related to play activities for the child
7. Describe nursing interventions and health teaching to assist children and their families to cope with illness and hospitalization of a child, grounded in Family-Centred Care
8. Define the "Sixties scoop" as it pertains to Indigenous history
9. Describe how the legacy of the "Sixties scoop" may influence communication between Indigenous families and health care providers

Module 2: Activities of Daily Living for Children

Like adults, children must complete the activities of daily living to attain comfort and good health. Depending on the age and health of the child, the practical nurse may have to complete some of these activities for the child. It is important for the practical nurse to understand the child's needs, as well as his/her abilities in assisting her/him with the activities of daily living such as nutrition, hygiene, dressing and elimination.

Learning Objectives

Learning is focused on and not limited to the following:

1. Identify the nutritional requirements and dietary modifications for children in all age groups

2. Identify safety and comfort measures to be implemented when feeding infants and young children
3. Describe the importance of oral hygiene of children in various age groups
4. Identify information to be reported and documented related to a child's nutritional and oral care needs
5. Describe the clothing that is age appropriate for children in various age groups
6. Apply the philosophy of Family-Centred Care in describing health teaching related to activities of daily living for a child

Module 3: Safety Measures for a Child

Child safety is the focus of this unit. Accidents are the leading cause of death among children. Poisonings are common causes of morbidity in children, particularly in the toddler and preschool age groups. It is imperative for the nurse to be aware of safety issues related to the care of the child and to include this knowledge as part of health teaching. Some children are subjected to physical and emotional pain in the form of neglect, sexual, physical and emotional abuse. Nurses play a key role in identifying child abuse and acting as an advocate for the abused. You have a legal responsibility to report and document your observations to your supervisor and to the appropriate agency. At times, restraints are used with children. These are used only in very specific circumstances, following specific orders or agency policies. It is vital for the nurse to be aware of the safety and legal issues related to the use of restraints.

Learning Objectives

Learning is focused on and not limited to the following:

1. Describe safety concerns the practical nurse must be aware of when providing care and teaching to the child and parents
2. Identify the causes, signs and symptoms, nursing interventions and health teaching associated with poisonings in children
3. Describe the legalities, circumstances for use, and principles for the use of restraints and/or protective devices
4. Describe the safety and comfort issues related to the use of restraints/protective devices with a child
5. Demonstrate the skills of applying restraints/protective devices on children
6. Describe the information to be reported and documented relating to the use of restraints/protective devices for a child
7. Describe the signs of a potentially abused child according to the following:
 - a. child's appearance
 - b. child's behaviour
 - c. parent's or caretaker's behaviour
8. Identify the legal /ethical responsibilities and the protocol for the practical nurse when child abuse is suspected
9. Identify the emotional needs of a child who has been abused and the nursing measures used to meet those needs

10. Describe the nursing care of an abused child and his/her family in the context of Family-Centred Care
11. Describe the information that should be included in health teaching related to safety measures, the use of restraints and child abuse

Module 4: Assessment of a Child

You have previously learned about the principles of growth and development from infancy to adult. You have also learned how to complete an adult physical assessment. In this unit, you will apply this knowledge to address the unique needs of a child in relation to physical assessment from infancy through adolescence. You will learn how the philosophy of Family-Centred Care is applied to pediatric nursing.

Learning Objectives

Learning is focused on and not limited to the following:

1. Describe the preparation required when performing a nursing assessment (health history and physical examination) of the infant, toddler, pre-school child, school-aged child and adolescent
2. Apply the philosophy of Family-Centred Care to the nursing assessment of the infant, toddler, pre-school child, school-aged child and adolescent
3. Describe how a hospital admission of children of varying ages might differ from that of an adult
4. Identify the differences in pain perception between children and adults
5. Describe the behavioural indicators of pain in infants and children
6. Differentiate between the pain assessment scales used with different age groups
7. Demonstrate the procedure for performing a nursing assessment of a child, including a pain assessment
8. Identify information about the nursing assessment that should be reported and documented
9. Describe the information about physical assessment of the child that should be included with health teaching
10. Demonstrate the skill of obtaining a urine specimen from an infant or small child
11. Identify the information to be reported and documented related to a urine or stool specimen from an infant or small child

Module 5: Care of a Child with a Fluid and Electrolyte Imbalance

Infants and children are very vulnerable to imbalances of fluid and electrolytes. The percentage of the body weight composed of water is highest in infants. Thus, children under the age of two are more dependent on adequate fluid intake. Imbalances in electrolytes caused by losses, such as vomiting and diarrhea, must be monitored closely and balances must be restored.

Learning Objectives

Learning is focused on and not limited to the following:

1. Describe the following common fluid and electrolyte imbalances by identifying the causes, signs and symptoms, and treatments of:
 - a. dehydration
 - b. edema
 - c. sodium imbalances
 - d. potassium imbalances
 - e. calcium imbalances
 - f. acid base imbalances
2. Apply the philosophy of Family-Centred Care to identify and describe the most appropriate medical interventions, physiological and psychological needs, nursing interventions and rationales for a child with fluid and electrolyte imbalances
3. Discuss the signs and symptoms, nursing interventions and rationales, and preventive measures for complications of fluid and electrolyte imbalances
4. Identify pertinent information to report and document related to fluid and electrolyte imbalances

Module 6: Care of a Child with a Sensory and/or Neurological Condition

The common health issues of the nervous and sensory systems produce a number of actual/potential issues for the child. Even if the issues are considered minor, they can result in life-threatening complications. Because neural tissue does not have the regenerative power of other body tissue, any nervous system degeneration is permanent. When caring for the child with common sensory and nervous system health issues, the practical nurse must have prevention as the highest priority. When degeneration has already occurred, the practical nurse must assess associated loss in mental or physical functioning and by applying the philosophy of Family-Centered Care, plan, implement and evaluate strategies to help the child and family understand and cope with the associated loss in mental or physical functioning. Knowledge of the rationale underlying each nursing intervention further enables the practical nurse to understand the significance of the nursing action.

Learning Objectives

Learning is focused on and not limited to the following:

1. Distinguish between the following diagnostic tests used to evaluate the sensory and nervous system:
 - a. lumbar puncture
 - b. electroencephalogram (EEG)
 - c. computed tomography (CT scan)
 - d. magnetic resonance imaging (MRI)
 - e. transillumination
2. Identify the following common sensory and nervous system disorders by comparing and contrasting the causes, signs and symptoms, and treatments of:

- a. seizure disorders
 - b. head injuries
 - c. bacterial meningitis
 - d. encephalitis
 - e. brain tumors
 - f. cerebral palsy
 - g. spina bifida
 - h. hydrocephalus
 - i. disorders of the eye
 - j. disorders of the ear
3. Apply the philosophy of Family-Centred Care to identify and describe the most appropriate medical/surgical interventions, physiological and psychological needs, nursing interventions and rationales for a child with common sensory and nervous system disorders
 4. Discuss the signs and symptoms, nursing interventions and rationales and preventable measures for complications related to common nervous system disorders:
 - a. hearing loss
 - b. mastoiditis
 - c. increased intracranial pressure
 - d. status epilepticus
 - e. febrile seizures
 5. Identify pertinent information to report and document related to common sensory and nervous system disorders

Module 7: Care of a Child with a Musculoskeletal System Condition

The musculoskeletal system provides support and movement for the body. Any issues with this system will lead to difficulties in the child's ability to sit, stand and walk. When caring for children, the practical nurse must be familiar with the pathophysiology and signs and symptoms of common musculoskeletal system health issues. This knowledge is necessary in order to collect data and identify when variations occur, so the philosophy of Family-Centered Care can be applied to meet the physiological and psychosocial needs of children and families.

Learning Objectives

Learning is focused on and not limited to the following:

1. Distinguish between the following diagnostic tests used to evaluate the musculoskeletal system:
 - a. Barlow's test
 - b. bone scans
 - c. computed tomography (CT)
 - d. magnetic resonance imaging (MRI)
 - e. ultrasound (U/S)
2. Describe the following common musculoskeletal system health issues by identifying the causes, signs and symptoms, and treatments of:

- a. club foot
 - b. developmental hip dysplasia
 - c. traumatic fracture
 - d. scoliosis
 - e. osteomyelitis
 - f. muscular dystrophy
 - g. juvenile idiopathic arthritis
3. Apply the philosophy of Family-Centred Care to identify and describe the most appropriate medical/surgical interventions, physiological and psychological needs, nursing interventions and rationales for a child with common musculoskeletal disorders
 4. Discuss the signs and symptoms, nursing interventions and rationales, and preventive measures for these complications related to common musculoskeletal disorders:
 - a. ambulation difficulties
 - b. impaired skin integrity and tissue perfusion
 - c. developmental delays
 - d. impaired circulation
 5. Describe appropriate nursing assessments, interventions and documentation for a child in a cast and/or traction
 6. Identify pertinent information to report and document related to common musculoskeletal system disorders

Module 8: Care of a Child with a Respiratory System Disorder

Respiratory difficulty for a person of any age is extremely frightening, but for a child it can be even more serious. Young children have small, narrow airways that may be easily obstructed. When caring for very young children, there is an additional disadvantage in that these patients are unable to verbalize how they feel. The practical nurse must be able to identify the respiratory needs of a child and apply the philosophy of Family-Centered Care to meet the physiological and psychosocial needs of the child and family.

Learning Objectives

Learning is focused on and not limited to the following:

1. Distinguish between the following diagnostic tests used to evaluate the respiratory system:
 - a. oxygen saturation
 - b. chest x-ray
 - c. arterial blood gases
2. Describe the following common respiratory system disorders by identifying the causes, signs and symptoms, and treatments of:
 - a. asthma
 - b. croup syndromes
 - c. Respiratory Syncytial Virus (RSV)
 - d. Cystic Fibrosis (CF)

3. Apply the philosophy of Family-Centred Care to identify and describe the most appropriate medical/surgical interventions, physiological and psychological needs, nursing interventions and rationales for a child with common respiratory system disorders
4. Discuss the signs and symptoms, nursing interventions and rationales, and preventive measures for these complications related to common respiratory system health issues:
 - a. hypoxia
 - b. atelectasis
 - c. secondary infections
 - d. rectal prolapse (Cystic Fibrosis)
 - e. deficiency of Vitamin A (Cystic Fibrosis)
 - f. respiratory distress
5. Identify pertinent information to report and document related to common respiratory system disorders

Module 9: Care of a Child with a Cardiovascular System Disorder

Cardiovascular development occurs from the 3rd to the 8th week of gestation. When the cardiovascular system does not develop as it should, heart defects occur. Since the cardiovascular system is responsible for transporting blood, oxygen, nutrients and waste products in the body, malfunction of this system can result in grave consequences. Congenital heart defects are the most common form of heart disease in children. Therefore, the practical nurse must be familiar with the pathophysiology, as well as the signs and symptoms of congenital heart defects. This knowledge is necessary in order to collect data and identify variations, so the philosophy of Family-Centered Care can be applied to meet the physiological and psychosocial needs of the child and his/her family.

Learning Objectives

Learning is focused on and not limited to the following:

1. Distinguish between the following diagnostic tests used to evaluate the cardiovascular system:
 - a. cardiac catheterization
 - b. chest x-ray
 - c. echocardiography
 - d. electrocardiogram
2. Describe the following common cardiovascular system disorders by identifying the causes, signs and symptoms, and treatments of:
 - a. Atrial Septal Defect (ASD)/Ventricular Septal Defect (VSD)
 - b. Tetralogy of Fallot
 - c. Kawasaki Disease
3. Apply the philosophy of Family-Centred Care to identify and describe the most appropriate medical/surgical interventions, physiological and psychological needs, nursing interventions and rationales for a child with common cardiovascular system disorders.

4. Discuss the signs and symptoms, nursing interventions and rationales, and preventive measures for these complications related to common cardiovascular system disorders:
 - a. hypoxia
 - b. cerebral thrombosis
 - c. bacterial endocarditis
 - d. iron deficiency anemia
 - e. congestive heart failure
 - f. polycythemia
5. Identify pertinent information to report and document related to common cardiovascular system health issues

Module 10: Care of a Child with a Blood and/or Lymph System Condition

Blood is vital to all body functions. Any disruptions in the homeostasis of the blood may have consequences for all of the body's tissues. These consequences may be temporary or permanent. Childhood is a time of growth and maturation of many of the body's systems. The blood is what supplies the growing tissues with the nutrients and oxygen required and provides the ability to fight off infections. Any disturbance to the blood that interferes with its ability to supply tissues with nutrients and oxygen will affect a child's ability to grow and develop. When caring for the child with a blood or lymphatic system disorder, the practical nurse must be familiar with the pathophysiology, as well as the signs and symptoms. This knowledge is necessary in order to collect data and identify variations, so the philosophy of Family-Centered Care can be applied to meet the physiological and psychosocial needs of the child and his/her family.

Learning Objectives

Learning is focused on and not limited to the following:

1. Distinguish between the following diagnostic tests used to evaluate the blood and lymphatic systems:
 - a. bone marrow aspiration
 - b. lumbar puncture
 - c. partial thromboplastin time (PTT)
2. Describe the following common blood and lymphatic system disorders by identifying the causes, signs and symptoms, and treatments of:
 - a. leukemia
 - b. hemophilia
 - c. iron-deficiency anemia
 - d. sickle cell disease
3. Apply the philosophy of Family-Centred Care to identify and describe the most appropriate medical/surgical interventions, physiological and psychological needs, nursing interventions and rationales for a child with common blood and lymphatic system disorders

4. Discuss the signs and symptoms, nursing interventions and rationales, and preventive measures for these complications related to common blood and lymphatic system disorders:
 - a. hematoma
 - b. hemorrhage
 - c. anemia
 - d. pathologic fractures
 - e. secondary infections
 - f. immunosuppression
5. Identify pertinent information to report and document related to common blood and lymphatic system disorders

Module 11: Care of a Child with a Gastrointestinal System Disorder

Gastrointestinal system disorders commonly affect, in varying degrees, the structures along the alimentary canal. Each of the disorders, in one way or another, interferes with the physiological processes of ingestion and absorption of nutrients or the elimination of wastes. These processes are vital to the survival of the child. A study of common gastrointestinal system disorders enables the practical nurse to understand the actual and potential issues created by these disorders. The practical nurse is then able to apply the philosophy of Family-Centered Care to the nursing process to assist the child and family to meet physiological and psychological needs.

Learning Objectives

Learning is focused on and not limited to the following:

1. Distinguish between the following diagnostic tests used to evaluate the gastrointestinal system:
 - a. colonoscopy
 - b. sigmoidoscopy
 - c. endoscopy
 - d. flat plate of abdomen
2. Describe the following common gastrointestinal system disorders by identifying the causes, signs and symptoms, and treatments of:
 - a. thrush
 - b. pyloric stenosis
 - c. Hirschsprung's disease (aganglionic megacolon)
 - d. cleft lip and palate
 - e. failure to thrive
 - f. vomiting and diarrhea
 - g. gastroesophageal reflux
 - h. constipation
 - i. celiac disease
 - j. appendicitis

3. Apply the philosophy of Family-Centred Care to identify and describe the most appropriate medical/surgical interventions, physiological and psychological needs, nursing interventions and rationales for a child with common gastrointestinal system disorders
4. Discuss the signs and symptoms, nursing interventions and rationales, and preventive measures for complications of gastrointestinal disorders
5. Identify pertinent information to report and document related to common gastrointestinal system disorders

Module 12: Care of a Child with Genitourinary System Condition

Genitourinary system disorders commonly affect, in varying degrees, the structure of urine formation, storage and elimination, as well as the reproductive system. You will see that there are similarities in the causes, as well as the signs and symptoms of genitourinary system health issues in the adult and child. There are also some health issues unique to children. When caring for infants/children, the practical nurse must be familiar with the pathophysiology and signs and symptoms of common genitourinary system disorders. This knowledge is necessary in order to collect data and identify when variations occur, so the philosophy of Family-Centered Care can be applied to meet the physiological and psychosocial needs of the child and his/her family.

Learning Objectives

Learning is focused on and not limited to the following:

1. Distinguish between the following diagnostic tests used to evaluate the genitourinary system:
 - a. urine for culture and sensitivity
 - b. routine and microscopic urinalysis
 - c. intravenous pyelogram
2. Describe the following common genitourinary system disorders by identifying the causes, signs and symptoms, and treatments of:
 - a. hypospadias/epispadias
 - b. hydrocele
 - c. cryptorchidism
 - d. urinary tract infections
 - e. hemolytic uremic syndrome
 - f. nephrotic syndrome
 - g. Wilms tumor
3. Apply the philosophy of Family-Centred Care to identify and describe the most appropriate medical/surgical interventions, physiological and psychological needs, nursing interventions and rationales for a patient with common genitourinary system disorders.
4. Discuss the signs and symptoms, nursing interventions and rationales, and preventive measures for these complications related to common genitourinary system disorders:
 - a. sterility
 - b. inguinal hernia
 - c. testicular torsion

- d. testicular tumors
- e. edema
- f. infection
- g. hypertension

Module 13: Care of a Child with Integumentary System Condition

The skin is the first line of defense against infection entering the body. The skin of children is much more easily damaged than the skin of adults. The epidermis of infants and young children is thin. This results in increased absorption of substances through the skin, which allows infections to occur more readily. When caring for infants or children the practical nurse must be familiar with the pathophysiology and signs and symptoms of common skin disorders. This knowledge is necessary in order to collect data and identify when variations occur, so that the physiological and psychosocial needs of the child may be met.

Learning Objectives

Learning is focused on and not limited to the following:

1. Describe the following common integumentary system health issues by identifying the causes, signs and symptoms, and treatments of:
 - a. burns
 - b. infantile eczema (atopic dermatitis)
 - c. acne vulgaris
2. Apply the philosophy of Family-Centred Care to identify and describe the most appropriate medical/surgical interventions, physiological and psychological needs, nursing interventions and rationales for children with common integumentary disorders
3. Discuss the signs and symptoms, nursing interventions and rationales, and preventive measures for complications related to integumentary system disorders
4. Identify pertinent information to report and document related to integumentary system health issues

Module 14: Care of a Child with an Endocrine System or Metabolic Condition

Hormones play a critical role in maintaining body homeostasis. Fluid and electrolytes, reproduction, body defenses, human reproduction and development are all influenced by hormones. The practical nurse must base nursing care of the child with endocrine disorders on knowledge of the pathophysiology of the endocrine systems. The practical nurse is then able to apply the philosophy of Family-Centered Care to the nursing process to assist the child and family to meet physiological and psychological needs.

Learning Objectives

Learning is focused on and not limited to the following:

1. Distinguish between the diagnostic tests used to evaluate the endocrine system
 - a. Bone Age
 - b. Blood Glucose Test

- c. Neonatal screening
 - d. Thyroid Function Test
 - e. Growth hormone tests
2. Describe the following common endocrine system disorders by identifying the causes, signs and symptoms, and treatments of:
 - a. Disorder of Pituitary Function
 - hypopituitarism
 - hyperpituitarism
 - b. Cushing's Disease
 - c. Addison's Disease
 - d. Diabetes Mellitus
 - e. Diabetes Insipidus
 - f. Disorder of the Thyroid Function
 - juvenile hypothyroidism
 - goitre
3. Apply the philosophy of Family-Centred Care to identify and describe the most appropriate medical/surgical interventions, physiological and psychological needs, nursing interventions and rationales for a child with common endocrine system disorders.
4. Discuss the signs and symptoms, nursing interventions and rationales, and preventive measures for complications of endocrine disorders
5. Identify pertinent information to report and document related to common endocrine system disorders

Module 15: Immunization and Communicable Diseases

Communicable diseases were the leading cause of mortality in children prior to the development of immunization. Today, the incidence of many communicable diseases in children has dramatically decreased because of the use of immunization. An increasing number of parents are choosing not to immunize their children. Some reasons for this include a knowledge deficit in parents, a fear of adverse reactions, misunderstandings about contraindications and failure to track or follow up on immunization records. Some parents believe that because these communicable diseases have been eliminated or are thought to no longer exist, children do not need to be immunized. Because air travel has become commonplace, rapid transmission of communicable disease from around the world has made immunizations more important than ever before. The practical nurse must educate parents about the importance of immunization against communicable diseases.

Learning Objectives

Learning is focused on and not limited to the following:

1. Describe the recommended schedule for immunization of children in Alberta
2. Discuss how the Code of Ethics will apply to families who have diverse values, and beliefs around immunizations

3. Identify the following communicable diseases by comparing and contrasting the causes, signs and symptoms, and incubation and contagious period:
 - a. Chicken Pox (Varicella)
 - b. Rubella (German Measles)
 - c. Rubeola (Measles)
 - d. Roseola
 - e. Mumps (Parotitis)
 - f. Infectious Mononucleosis
4. Identify and describe the most appropriate medical/surgical interventions, physiological and psychological needs, nursing interventions and rationales for a child with a common communicable disease
5. Discuss the signs and symptoms, nursing interventions and rationales, and preventive measures for complications of communicable disease
6. Identify pertinent information to report and document related to communicable diseases
7. Apply the philosophy of Family-Centred Care to health teaching for health promotion and illness prevention related to communicable disease

Resource: <http://www.phac-aspc.gc.ca/im/iyc-vve/is-cv-eng.php>

Module 16: Pediatric Medication Delivery (self-study module)

Practical Nurses administering medications to children need to consider developmental stages, as well as the pharmacokinetics of drugs being administered. Patient teaching must be adapted to the language and understanding level of the child, and must always include the family. Fluid balance knowledge is critical in the delivery of intravenous medication delivery for the child

Learning Objectives

Learning is focused on and not limited to the following:

1. Outline the changes in pharmacokinetics for the child:
 - a. absorption
 - b. distribution
 - c. metabolism
 - d. excretion
 - e. calculating dosages:
 - per kilogram
 - per meter square
2. Discuss the nursing assessments required before, during and after medication delivery to the child:
 - a. calculation of pediatric dosages
 - b. developmental considerations
 - c. vital signs and baseline data
 - d. fluid balance

3. Determine the position and methods to immobilize patients for the safe delivery of medications.
4. Outline the routes of administration of medications to the child and the developmental considerations:
 - a. oral
 - b. rectal
 - c. ophthalmic and otic
 - d. inhalation
 - e. topical
 - f. subcutaneous
 - g. intramuscular
 - h. intravenous
5. Apply the philosophy of Family-Centred Care to develop patient teaching for pediatric medication delivery.
6. Identify pertinent information to report and document for pediatric medication delivery