Pediatric Variations of Nursing Interventions:
Theoretical Skills and Knowledge, Scientific Principles, Critical Thinking, Healthcare Promotion, Wellness and Illness, and Stress Adaptation

Lecture Objectives:

1. Identify those instances in which informed consent is required and in which minors may be considered emancipated.
2. Formulate general guidelines for preparing children for procedures including surgery.
3. Recognize and implement general hygiene and care procedures for hospitalized children.
4. Implement feeding techniques that encourage food and fluid intake.

Lecture Objectives: (cont.)

5. Describe methods of reducing temperature in a child with fever or hyperthermia.
6. Describe and utilize systems that can be used for infection control.
7. Describe safe methods of transport and restraining methods used to facilitate examination, perform diagnostic tests and therapeutic procedures for the pediatric client.
8. Describe procedures and methods for various specimen collections in infants and small children.
Lecture Objectives: (cont.)

10. Demonstrate correct procedures for postural drainage and care of patient with a tracheostomy.
11. Describe the procedures involved in administering an enema and ostomy care to children.
12. Describe the procedures involved in providing nutrition via gavage, gastrostomy, and parenteral routes.

Reading Assignment:


General Concepts

- Informed consent
  - Consent of parents or legal guardians
  - Consent of mature and emancipated minors
  - Consent of minor parents
  - Treatment without parental consent
General Concepts

- Informed consent
  - Age of majority/competence
  - Procedures and tests requiring consent
  - Who can obtain consent
  - Who can witness consent

Preparation for Procedures

Box 45-1, p. 1357

- Psychologic preparation
  - Age-specific guidelines for preparation
  - Based on developmental characteristics
- Establish trust
- Parental support
- Explanation to the child

Age Specific Guidelines

- Infant – Sense of trust
- Toddler – Sense of Autonomy
- Preschooler – Sense of Initiative
- School-Age Child – Sense of Industry
- Adolescent – Sense of Identity
Performing Procedures

- Expect success
- Involve child
- Distract the child
- Allow expression of feelings
- Praise the child
- Play Activities for Specific Procedures (Box 45-3, p. 1363)

Surgical Procedures

- Preoperative care
- Use of conscious sedation with children
- Concept of “deep sedation”

Postoperative Care

- Prepare equipment
- Baseline information
- Assessment of patient’s status
- Pain management
- Observe for complications
Nursing Diagnosis
Nursing Care Plan, p. 1365-1366

- Risk for injury related to surgical procedure, anesthesia.
- Anxiety/fear related to surgery, separation from support system.
- Pain related to surgical incision.
- Risk for fluid volume deficit related to NPO status, operative losses, vomiting, loss of appetite.

Nursing Care Plans

- Selection of appropriate nursing diagnoses
- Develop expected outcomes
- Nursing interventions/rationales
- Evaluation

General Hygiene and Care

- Skin care
  - Bathing
- Oral hygiene
- Hair care
- Feeding
- Fever/hyperthermia management
Safety
- Name bands
- Patient identity
- Environment
- Activity supervision

Infection Control
- Nosocomial infections
- Role of Centers for Disease Control and Prevention (CDC)
- Standard precautions
- Transmission-based precautions
- Airborne, droplet, and contact precautions

Environmental Safety Factors
- Furniture and home
- Electrical
- Fire prevention
- Sleep safety
- Toys
Restraining Methods
- Therapeutic hugging
- Jacket restraints
- Mummy or swaddle restraint
- Limb restraints

Positioning for Procedure
- Appropriate restraints
- Analgesia, sedation

Specimen Collection
- Urine
- Stool
- Blood
- Sputum
- Respiratory Secretions
- Throat Specimens
- Nasal washings
Medication Administration

- Determination of drug dosage
- Dosage usually based on specific dosage per kilogram of body weight
- Checking dosage
- Identification
- Family aspects

Administration

- Oral
- Intramuscular
- Subcutaneous and intradermal
- Intravenous

Intramuscular Injection Sites

- Preferred site for infants and small children
- Amount of medication
- Apply EMLA at least 60 minutes prior to Injection
Intramuscular Injection Site

- Infants and small or debilitated children
- Needle insertion and size
- Amount of medication
- Positioning

Child and adolescent
- Needle size and insertion
- Amount of medication
- Contraindications

Devices
- Peripheral lock/heparin lock/saline lock
- Central venous access devices
  - Short term/nontunneled catheter
  - Long-term tunneled catheter
  - Implanted infusion ports
- Peripherally inserted central catheters (PICCs)
Nasogastric, Orogastric, or Gastrostomy Administration of Medicines

- Advantages
- Disadvantages
- Logistics

Rectal Administration of Medications

- Advantages
- Disadvantages
- Technique

Optic, Otic, and Nasal Administration

- Eyedrops and ointments
- Techniques
- Infection control concerns
Measurement of Intake and Output

- Fluids to be measured
- Diaper weighing technique
- Tip: 1 g of wet diaper weight = 1 ml of urine

Parenteral Fluid Therapy

- Site selection
- Scalp vein IVs
- Intraosseous infusion
- Surgical cutdown

Equipment for Fluid Therapy

- Catheters
- Needleless systems
- Decreasing needlestick injuries
- Infusion pumps
Management of Peripheral Intravenous Lines (PIVs)

- Securing PIVs
- Removal of PIVs
- Complications
  - Infiltration
  - Extravasation

Inhalation Therapy

- Oxygen therapy delivery devices
  - Plastic hood/oxyhood
  - Nasal cannula prongs
  - Oxygen tents

Monitoring Oxygen Therapy

- Concerns about oxygen toxicity
- Concerns about oxygen
- Pulse oximetry
Aerosol Therapy

- Handheld nebulizers
- MDIs
- Others

Bronchial (Postural) Drainage and CPT

- Definition
- Technique

Artificial Airways

- Usually used with artificial ventilation
- Endotracheal intubation
  - Nasotracheal, oral, tracheostomy
  - Endotracheal tubes—uncuffed for children <8 years old (except in special circumstances)
Tracheostomy

- Surgical opening in the trachea
- May be emergency or elective procedure
- Tracheostomy care
- Tracheostomy suctioning
- Emergency management

Alternative Feeding Techniques

- Gavage feedings
  - NG
  - OG
- Gastrostomy feedings
- Jejunostomy feedings
- May be continuous drip or intermittent (bolus) feedings

Equipment for Alternative Feeding Methods

- NG/OG tubes
- Pumps
- Gastrostomy tubes/buttons
Improving Absorption of Feeds

- Use pacifier during alternative feeds
  - Nonnutritive sucking improves digestion
- Quiet, calm environment
- Consistent feeding techniques by caregivers/family members

Parenteral Feedings

- Provide nutrition through IV route
- Total parenteral nutrition (TPN)
- Hyperalimentation
- Lipid infusion

Procedures Related to Elimination

- Enemas
  - Purpose
  - Isotonic Solutions
- Ostomy management
  - Purpose
  - Techniques
  - Skin/stoma care