Chapter 8  Safety and Infection Control

Safety in Nursing

Environmental Safety
- Safety hazards exist everywhere
  - Health care institutions
  - Home
  - Community

Types of Hazards
- Fires – RACE [corresponds to Figure 8-1]
- Infectious waste
- Hazardous waste
  - Material Safety Data Sheets (MSDS) [corresponds to Box 8-1]
- Excessive noise
- Electrical equipment
- Radiation
- Equipment

Hospital and Institutional Safety

- Disaster planning
  - External disasters, internal disasters
  - Nurse’s role in a disaster
    - Triage
    - Teamwork
  - Communication
  - Emergency codes [corresponds to Box 8-2]
  - Emergency nursing and first aid
- Client safety
  - Factors that affect safety
    - Age and development [corresponds to Box 8-3]
    - Lifestyle
    - Mobility and health status
    - Sensory-perceptual alterations
    - Cognitive awareness
    - Emotional state
    - Ability to communicate
    - Safety awareness
- Preventing specific hazards
  - Scalds and burns
  - Falls [corresponds to Table 8-1 and Box 8-4]
  - Restraints [corresponds to Box 8-5]
    - Legal implications of restraints [corresponds to Box 8-6]
    - Selecting a restraint
      - Least restrictive
      - Does not interfere with treatment
      - Readily changeable
      - Safe for the client
Kinds of restraints [corresponds to Figure 8-4]
Bed exit monitoring device [corresponds to Procedure 8-1]
Monitoring of client in restraints [corresponds to Box 8-7]
  - Reassessment
  - Release
  - Reporting
  - Re-evaluating need

Emergency Responses
  ° Suffocation or choking (asphyxiation)
    o Heimlich maneuver [corresponds to Figure 8-7]

Personal Safety for Nurses
  ° Body mechanics
    o Lifting
    o Pushing and pulling
    o Pivoting
  ° Preventing back injuries [corresponds to Box 8-8]
    o Low back sprain and strain
    o Principles related to body mechanics [corresponds to Table 8-2]

Infection Control

title=Microorganisms
  ° Bacteria, viruses, fungi, parasites
  ° Harmless microorganisms
    o Resident flora
    o Colonization
    o Common organisms [corresponds to Table 8-3]
  ° Harmful actions of microorganisms
    o Infection
      o Pathogens, disease
        • Opportunistic organisms
        • Virulence
        • Communicable disease
        • Vector

Infection
  ° Terms: local infection, systemic infection
  ° Nosocomial infections [corresponds to Table 8-4]
    o Handwashing
      • Soap and water for visible dirt or contamination or body fluids [corresponds to Procedure 8-2]
      • Alcohol-based hand rub for routine decontamination in other situations
    o Responsible use of antibiotics
    o Correct technique with medical devices
    o Drug-resistant pathogens
      • Resistant organisms
  ° Chain of infection
Infectious agent
  • Carrier
  • Reservoir [corresponds to Table 8-5]
  • Portal of exit
  • Mode of transmission
    • Direct contact
    • Indirect contact
    • Airborne
  • Portal of entry
  • Susceptible host
  • Factors that increase susceptibility to infection
    • Age
    • Heredity
    • Stress
    • Nutrition
    • Medication
    • Other diseases

Defenses Against Infection
  ° Nonspecific defenses [corresponds to Box 8-9]
    • Anatomic barriers
    • Body secretions
    • Inflammatory response
      • Vascular and cellular
      • Exudate
      • Reparative
  ° Specific or immune defenses
    • Terms: antigens, immunity (active or passive)
    • Acquired immunity [corresponds to Table 8-6]
    • Antibody-mediated defense
    • Cell-mediated defense

Controlling Microorganisms in the Environment
  ° Antiseptics, disinfectants
  ° Bactericidal agents, bacteriostatic agents [corresponds to Box 8-10]
  ° Asepsis, sepsis
  ° Medical asepsis
    • Clean vs. dirty
    • Use of disinfectants
  ° Surgical asepsis
    • Sterile technique
  ° Standard Precautions [corresponds to Figure 8-13]
    • Handwashing
    • Barrier devices
    • Disposal of contaminated equipment
  ° Transmission-based precautions
    • Isolation
    • Personal protective equipment [corresponds to Procedures 8-3 and 8-4]
o Transporting client with infection
  o Reverse isolation
  o Removal of contaminated items
  ° Laboratory tests
  ° Care of equipment
    o Personal protective equipment
    o Cleaning reusable equipment
    o Disposal of used or soiled equipment - bagging
  ° Sterile procedures
    o Creating and maintaining a sterile field [corresponds to Procedure 8-5 and Box 8-11]

Nursing Care
  ° Risk assessment
  ° Cultural factors related to infection and safety [corresponds to Box 8-12]
  ° Nursing Process Care Plan: Client with Fractured Hip

Critical Thinking Care Map: Caring for a Client with Risk for Injury