NURSING CARE OF THE ADULT PATIENT EXPERIENCING INFECTIOUS DISEASES: SAFETY AND HEALTHCARE ENVIRONMENT

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READING ASSIGNMENT:


LECTURE OBJECTIVES:

1. Discuss the history of the control and prevention of infectious diseases.
2. Describe the major preventative measures in decreasing the spread of infectious diseases.
3. Identify the body's normal defenses against infection.
4. Identify clients most at risk for infection.
5. Identify the common routes of transmission of infectious disease.
LECTURE OBJECTIVES: (cont.)

6. Utilize the nursing process to describe the care of a client with a sexually transmitted disease.
7. Identify the most common nosocomial infections and the risk factors.
8. Describe the current recommendations to control infectious diseases.
9. Identify the most common infectious diseases affecting the current U.S. populations.

Infectious Disorders:
Process of Infection

- Agent: parasites, pathogens
- Environment
  - Contact
  - Droplet transmission
  - Airborne
  - Common vehicle transmission
  - Vector transmission
- Host: susceptible depending on characteristics and behavior

Outcome variances

- Colonization
- Latent period
- Incubation period
- Subclinical infection
- Communicability period
Host Defense: Lines of Defense

- First-line defenses
  - Physical barriers (e.g., skin)
  - Chemical barrier (e.g., saliva pH)
  - Normal flora (e.g., Candida albicans)
- Second-line defense
  - Inflammatory process
- Third-line defense
  - Immune response

Nosocomial Infections: Hospitalization Risks

- Urinary tract infections
- Pneumonia
- Surgical site infections
- Device-related infections and bacteremias

Nosocomial Infections: Hospitalization Risks (cont.)

- Other nosocomial infections
  - Human immunodeficiency virus (HIV), hepatitis B virus (HBV), tuberculosis (TB), etc.
  - Antibiotic-resistant microorganisms
    - Methicillin-resistant Staphylococcus aureus, (MRSA), vancomycin-resistant enterococci (VRE)
Infection: Prevention and Control

- Hand-washing (hand hygiene)
- Environmental measures
- Portal of exit prevention
- Immunizations programs
  - Active vaccination
  - Passive vaccination

Infection: Agency Prevention and Control

- Guideline adherence
  - Centers for Disease Control and Prevention (CDC) and Joint Commission on Accreditation of Healthcare Organizations (JCAHO)
  - Surveillance and reporting

Infection: Agency Prevention and Control (cont.)

- Barrier precautions
  - Standard precautions
  - Transmission-based precautions
  - Occupational health practices
Overview of Sexually Transmitted Diseases (STDs)

- Refers to any infection contracted primarily through sexual activities or contact
- Replaces term *venereal disease*
- Five widely known STDs are:
  - Chlamydia
  - Gonorrhea
  - Syphilis
  - Genital herpes
  - Genital warts

STD Characteristics

- Transmitted by any sexual activity
- Having one STD confers no immunity against reinfection with that STD or another
- Sexual partners need to be assessed
- Affects people everywhere
- Women have more STDs
- May coexist in same client

STD: Etiology and Risk Factors

- Caused by:
  - Bacteria
  - Viruses
  - Protozoa
  - Fungi
  - Ectoparasites
- Fetus and neonates may be infected
STD: Etiology and Risk Factors (cont.)

- Increase may be due to antibiotic-resistant strains of bacteria
- Use of intrauterine devices (IUDs) and contraceptives
- Lack of knowledge
- IV drug abuse
- High-risk sexual activity
- Poor hygiene

STD: Prevention

- Education
  - Detection of active disease
  - Effective diagnosis and treatment
  - Evaluation and treatment of sexual partners
- Preexposure vaccinations
- Screening high-risk people

STD: Pathophysiology and Clinical Manifestations

- Occurs when an individual is infected by an organism through sexual contact
- Depends on the organism involved
- Depends on the location of the infection
STDs

- Medical management
  - Varies

- Nursing management
  - Thorough health assessment
  - Note specific complaints

Diagnosis, Outcomes, Interventions

- Nursing diagnosis
  - Ineffective Health Maintenance related to lack of understanding of the causes, treatments and prevention of STDs

- Outcomes
  - Patient will understand the cause, treatment, and prevention of specific STDs

- Interventions
  - Teach about STDs

Diagnosis, Outcomes, Interventions (cont.)

- Nursing diagnosis
  - Anxiety related to threat to biologic integrity and threat to self-concept

- Outcomes
  - Patient will experience a decrease in anxiety

- Interventions
  - Support
  - Help with problem solving
Diseases Characterized by Urethritis or Cervicitis

- Chlamydial infections
  - Etiology and risk factors
  - Pathophysiology
  - Clinical manifestations
  - Medical management
  - Nursing management

Diseases Characterized by Urethritis or Cervicitis (cont.)

- Gonorrhea
  - Etiology and risk factors
  - Pathophysiology
  - Clinical manifestations
  - Medical management
  - Nursing management

Diseases Characterized by Ulcerations

- Syphilis
  - Etiology and risk factors
  - Pathophysiology
  - Clinical manifestations
  - Medical management
  - Nursing management
Diseases Characterized by Ulcerations (cont.)

- Genital herpes
  - Etiology and risk factors
  - Pathophysiology
  - Clinical manifestations
  - Medical management
  - Nursing management

Diseases Characterized by Ulcerations (cont.)

- Chancroid
  - Lymphogranuloma venereum
  - Granuloma inguinale

Infection with Human Papillomavirus

- Genital warts (condylomata acuminata)
  - Etiology and risk factors
  - Pathophysiology
  - Clinical manifestations
  - Medical management
  - Nursing management
Disease Characterized by Vaginal Discharge

- Trichomoniasis
  - Etiology and risk factors
  - Pathophysiology
  - Clinical manifestations
  - Medical management
  - Nursing management

Disease Characterized by Vaginal Discharge (cont.)

- Bacterial vaginosis
  - Etiology and risk factors
  - Pathophysiology
  - Clinical manifestations
  - Medical management
  - Nursing management

Additionally Sexually Transmitted Diseases

- Acquired immunodeficiency syndrome (AIDS)
- Vaccine-preventable diseases
  - Hepatitis A and Hepatitis B
- Diseases caused by infestations
  - Pediculosis pubis and scabies
  - Sexually transmitted enteric infections
Patients Reporting Sexual Abuse

- Immediate physical examination/tests
  - Pregnancy
  - Gonorrhea
  - Chlamydial infection
  - Trichomoniases
  - Human immunodeficiency virus (HIV)
  - Syphilis