Chapter 4
Infection Control, Safety, Health, and Hygiene

Susan G. Salvo

Introduction

• Massage therapy is safe and noninvasive, but therapists do serve patients under medical supervision
• Therapists must consider patients' conditions and medications before beginning treatment
• Safety and sanitation procedures protect both therapists and patients

Disease Awareness: Introduction to Pathology

• Therapist will encounter clients who have disease or medical conditions
• Therapist must have:
  – Awareness of disease and its transmission
  – Fundamental overview of pathology

Health and Homeostasis

• Homeostasis—constancy of the body's internal environment
• Two major systems regulate homeostasis:
  – Nervous system
  – Endocrine system

Role of Feedback Systems

• The body regulates internal environment through feedback systems:
  – Negative feedback system—reverses a disruption in a controlled condition
  – Positive feedback system—strengthens or reinforces a change in a controlled condition

Body in Disease

• Terms defined:
  – Disorder—any functional abnormality
  – Disease—any illness characterized by certain signs and symptoms
  – Signs—objective changes in the body that can be observed and measured
  – Symptoms—subjective changes in the body known only to the person experiencing them
Body in Disease

- Syndrome—a group of signs and symptoms that occur to present a pattern that defines a particular disease or abnormality
- Local disease—a disease affecting only one area of the body
- Systemic disease—a disease affecting large areas of the body
- Exacerbation—period of full-blown symptoms
- Remission—period of partial or complete disappearance of symptoms

Types of Diseases

- Autoimmune
  - Not contagious
  - Excessive or inappropriate immune response
  - Results from an attack by the body’s own immune system
- Cancerous
  - Not contagious
  - Exposure to carcinogens a potential cause
  - Can be benign or malignant
  - Can travel to other body parts by metastasis

Types of Diseases

- Deficiency
  - Not contagious
  - Caused by the lack of an essential vitamin or nutrient
  - Often interferes with growth and development
- Degenerative
  - Not contagious
  - Involves tissue breakdown caused by overuse or as a result of aging

Types of Diseases

- Genetic
  - Not contagious
  - Caused by imperfect genetic code in the chromosomes
  - May be passed from generation to generation
- Infectious (or communicable)
  - Highly contagious
  - Caused by a pathogen transmitted either directly or indirectly

Types of Diseases

- Metabolic
  - Not contagious
  - Involves abnormal activities of cells and/or tissues
Types of Disorders

• Congenital
  – Not contagious
  – Present at birth
  – Causes include genetic abnormalities, deficient maternal diet, or in utero exposure to harmful substances

• Traumatic
  – Not contagious
  – Injuries that can disrupt homeostasis

Agents of Disease

• Pathogens are biological agents capable of causing disease
• Contamination—when pathogenic agent resides in or on an organism

Agents of Disease: Bacteria

• Most not pathogenic; many are helpful
• Direct transmission from person, animal, or fomite
• Exposure through improper hygiene or food handling
• Bacterial diseases include boils, tuberculosis, strep

Agents of Disease: Fungi

• Molds and yeasts—most not pathogenic
• Transmitted by a fomite or person to person
• Promoted by a warm, moist environment
• Typically superficial but tenacious
• Can be systemic and life threatening in a weak host
• Infestations include ringworm and Candida albicans

Agents of Disease: Protozoa

• Single-celled organisms that can only survive in a living host
• Transmitted through contaminated food, water, or feces
• Protozoal diseases include amebic dysentery, malaria, and African sleeping sickness

Agents of Disease: Viruses

• Considered nonliving entities
• Can easily mutate; antibiotics relatively ineffective
• Transmitted person to person, insect to person, or animal to person
• Viral diseases include the common cold, AIDS, rabies, viral hepatitis, and Ebola
Agents of Disease

- Parasites—organisms that live in or on a host
- Can enter the body and cause disease

Modes of Transmission

- Direct physical contact
  - Mucous membranes
  - Intact or broken skin
- Indirect physical contact
  - Ingestion
  - Inhalation

Host-Pathogen Relationship

- Body reacts to fight off the pathogen
  - Pathogen’s success depends on gaining access, areas attacked, ability to spread and replicate itself, and resistance to host’s defenses
- Pathogen tries to overcome the body’s defenses
  - Body’s defenses are physical and chemical barriers, inflammation, and immune response

Host-Pathogen Relationship

- Signs of immune response include fever, mild nausea, altered metabolism, cardiovascular changes, anemia, elevated white blood cell count
- Immune system can be depressed or weakened by chronic stress, malnutrition, radiation, some medications, and certain preexisting illnesses

Infection Control

- Risk of transferring pathogens:
  - Therapist to client
  - Client to client
  - Tools, linens, lubricant to client
- Learning, implementing, and practicing universal precautions will decrease risk

Infection Control

- Universal Precautions
  - Established by the CDC to reduce transmission of communicable disease
  - Include both routine and strict sanitary practices
  - Mandatory when performing invasive medical procedures or handling body fluids
  - Protects both the client and the therapist
Guidelines of Sanitation

• Sanitary procedures:
  – Use standard hand washing procedure
  – Avoid wearing ornate jewelry
  – Keep fingernails clean, short, and unpolished
  – Keep hair clean and out of the way
  – Use clean linens, and launder after use
  – Adhere to safe method of handling contaminated linens and massage tools
  – Treat any unidentified substance as unsafe
  – Wear clean uniform each day

• Sanitary procedures (cont’d.):
  – Use pump dispenser or clean single-use dish for massage lubricant
  – Use gloves when appropriate
  – Do not perform massage when ill or when experiencing coldlike symptoms
  – Avoid working while taking alcohol or recreational drugs
  – Avoid massaging clients who are ill

Safety Guidelines for the Massage

• Obtain training in first aid and CPR
• Keep first aid kit on premises
• Wipe client’s feet after massage
• Identify endangerment sites and contraindications

Glove Use

• Gloves should be worn under certain conditions
• Discuss reasons for glove use with client
• Both latex and vinyl gloves have assets and liabilities
• Use a water-based massage medium with latex gloves.
• Oil-based lubricants are OK to use with vinyl gloves.

Glove Use in Massage Therapy

• Proper removal and disposal methods:
  A. Pull off one glove
  B. Place removed glove in palm of gloved hand
  C. Remove other glove with first glove inside
  D. Dispose of used gloves

Hand Washing

• Best measure to prevent the spread of infection
• Therapists must wash their hands before and after each massage using the recommended procedures for health care professionals
• Using gloves does not preclude washing hands
**Hand Washing**

• Hand washing procedure:

A. Turn on water

B. Wet hands, forearms, and elbows

C. Clean beneath nails

D. Soap the hands

**Hand Washing**

• Hand washing procedure (cont’d.):

E. Rinse

F. Dry the hands

G. Turn off water

• Scrubbing for 15 seconds is sufficient

• Broken skin or contact with any bodily fluid: increase soaping time to two minutes.

**Health and Hygiene for Massage Therapists**

• Subscribe to habits that promote proper health and good hygiene

• Three primary elements of health: nutrition, exercise, relaxation

• Self-care allows therapists to be better caregivers

• Hygiene: collective principles of health preservation

**Summary**

• Pathology—the study of disease as it is exhibited biologically and physically

• The six types of disease are infectious, deficiency, metabolic, genetic, cancerous, and autoimmune

• Massage therapists must be familiar with correct sanitary procedures, including hand washing, glove use, and disinfecting equipment