




Almustaqbal University College of Nursing

Infection Control lec.3

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- ❖ **Infection control:** refers to the policy and procedures implemented to control and minimize the spread of infections in hospitals and other healthcare settings with the main purpose of reducing infection rates.
 - ❖ **Nosocomial Infection**—An infection contracted by a patient or staff member while in a hospital or health care facility (and not present or incubating on admission).

❖ **Disinfection**—The process of microbial inactivation that eliminates virtually all recognized pathogenic microorganisms, but not necessarily all microbial forms (spores).

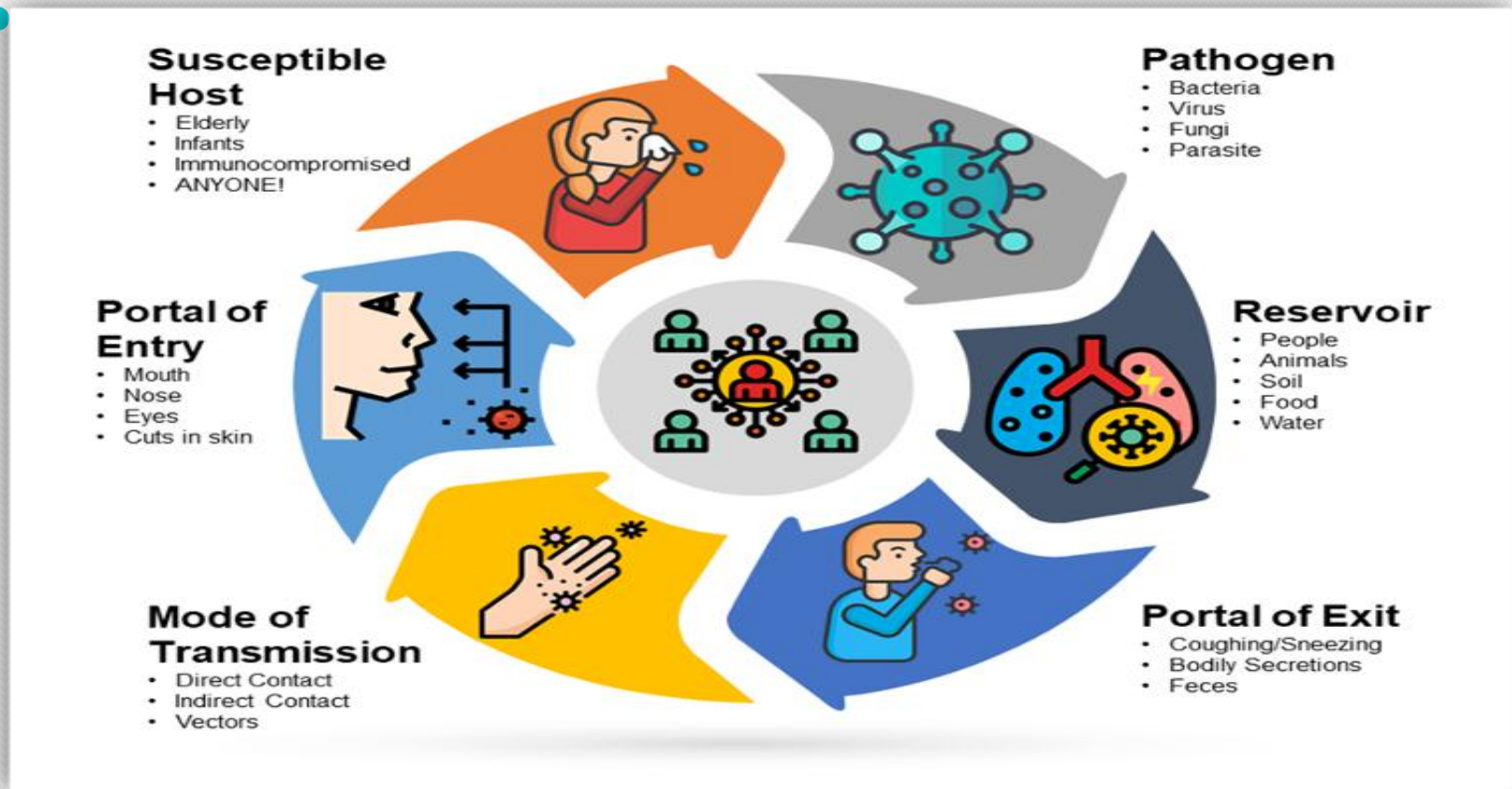
❖ **Sterilization**—The use of physical or chemical procedures to destroy all microbial life, including large numbers of highly resistant bacterial endospores. Procedures include—

- Steam sterilization
- Heat sterilization
- Chemical sterilization

Why Infection Control? (1)

- Hospital acquired infections are a common problem—prevalence about 9%
- Hospital acquired infections contribute to antimicrobial agent
 - Overuse of antimicrobials (development)
 - Poor infection control practices (spread)

- **Chain of infection:**
is a set of 6 intertwined links that allow for communicable diseases to spread.




Basis Causes of Nosocomial Infections

- Lack of training in basic infection control
- Inadequate sterilization and disinfection practices and inadequate cleaning of hospital.
- Inadequate facilities and techniques for hand hygiene
- Lack of isolation precautions and procedures
- Use of advanced treatments without adequate training and supporting structure, including—
 - Intravenous catheters, fluids, and medications
 - Urinary catheters
 - Mechanical ventilators

The general principles of infection prevention and control

1. Achieving optimum hand hygiene
2. Using personal protective equipment
3. Safe handling and disposal of sharps
4. Safe handling and disposal of clinical waste
5. Managing blood and bodily fluids

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6. Decontaminating equipment
 7. Achieving and maintaining a clean clinical environment
 8. Appropriate use of devices
 9. Training/education.

Hand Hygiene

- Hand hygiene strategy consider as the cornerstone and key point in the infection control protocols, the hands of healthcare providers being the essential vehicle to transmit the infection to the patient.

Hand washing according to WHO should be:

- cleaned properly before patient contact.
- before aseptic task.
- after contact with body fluid.
- after patient contact.
- after contact with the environment which surround the patient

Hand Hygiene

- **Characteristic of health care hand before procedure should:**
 - ◆ keep nails short, clean and polish free
 - ◆ avoid wearing wrist watches and jewellery, especially rings.
 - ◆ artificial nails must not be worn
 - ◆ cuts and abrasions should be covered with dressing

Personal protective equipment (PPE)

- Designed to protect the health care workers from injury or transmission of infection or illness it includes (gloves, face shields, goggles, facemasks or respirators and gowns or aprons). PPE is usually used in health care settings such as hospitals, clinics ,and clinical labs.

Personal protective equipment (PPE)

- **Disposable gloves:** The healthcare providers should wear gloves if there is a risk of exposure to secretions, blood, excretions or body fluid if dealing with contaminated or dirty equipment.
Disposable gown: should be worn whenever there is a risk of contaminating clothing with blood and body fluids and when a patient has a known infection, for example, direct patient care.
- **Masks, visors and eye protection:** should be worn when a procedure is likely to cause blood and body fluids or substances to splash into the eyes, face or mouth

Safe handling and disposal of sharps

- Sharps include needles, scalpels, stitch cutters, glass ampoules and any sharp instrument. The main hazards of a sharps injury are hepatitis B, hepatitis C and HIV

Safe handling and disposal of sharps

The basic principles steps to deal with the sharp disposal):

- Stop to passé the sharp object directly from hand to hand.
- Avoid to re- cap and never try to bend the needles.
- Avoid to separate needles from their syringes, think to disposed it as one pace.
- Ensure that the sharps containers sealed when (2/3) of its capacity full.
- Date and place should be documented on all sharps boxes before disposing them.

Training

- All health care staff should receive required infection control training as part of their induction and on an ongoing annual basis.

Training should include:

- ◆ practical hand washing sessions/use of alcohol hand sanitizer
- ◆ aseptic technique
- ◆ the importance of environmental/equipment cleaning and whose responsibility
- ◆ who to go to for advice/ more information
- ◆ trust infection and prevention policies
- ◆ what you can do to help yourself, your colleagues and your patients (uniform, hair, general hygiene).



Thank you