

# NURS1000: UNIT NOTES

## Safety, Infection Control and Hygiene

### Factors effecting safety:

- Age
- Lifestyle
- Sensory and perceptual alterations: people with sensory impairment (cannot perceive danger)
- Mobility: people with impaired mobility (poor balance or coordination)
- Emotional state: effects person's perception of the environment & thinking patterns/reaction times

### Types of accidents:

- ❖ Personal behaviour accidents: occur when the person's behaviour or actions precipitate the incident  
- EG: poisoning, burn, falls, self-inflicted cuts/bruises
- ❖ Therapeutic procedure accidents: occur during the delivery of medical or nursing interventions  
- EG: medication errors, trauma/falls during transfers, contamination of instruments/wounds
- ❖ Equipment Accidents: result from the malfunction or improper use of medical equipment  
- EG: electrocution or fires

**Culturally unsafe practises** = are practises that diminish, demean or disempower cultural identity and well-being of an individual.

**Culturally SAFE practises** = include actions which recognise and respect the cultural identities of other.

**Cultural Safety** = is an environment that is spiritually, socially and emotionally and physically safe for people, where there is no assault, challenge or denial of their identity of who they are and that they need.

- About shared respect, meaning and knowledge and experience of learning together
- change in thinking about power relationships and patients' rights

### Strategies that enhance ability to be culturally safe:

- Reflecting on own culture, attitudes and beliefs about "others"
- Clear, value-free, open and respectful communication
- Developing trust
- Recognising and avoiding stereotypical barriers
- Being prepared to engage with other in a 2-way dialogue where knowledge is shared
- Understanding the influence of cultural shock

## INFECTION-CONTROL PRINCIPLES

- Individual safety in the health care environment required the reduction of micro-organism transmission
- infection control practises are directed at controlling/eliminating sources of infection

### Agent, host and environment:

- The interaction between agent, host and environment causes disease

**AGENT**= is an entity that is capable of causing disease

#### 3 types of agents:

- 1) Biological agents= living organisms that invade the host, such as bacteria, viruses, fungi, protozoa and rickettsia
- 2) Chemical agents= substances that can interact with the body, such as pesticides, food additives, medications and industrial chemicals
- 3) Physical agents= factors in the environment that are capable of causing disease, such as heat, light, noise, radiation and machinery

**HOST**= is a simple or complex organism that can be affected by an agent (eg: human)

- Susceptible hosts= is a person who lacks resistance to an agent and is thus vulnerable to disease

-Compromised host= is a person whose normal defence mechanisms are impaired and who is therefore susceptible to infection

**ENVIRONMENT**=consists of everything other than the gent and host

- environmental factors affect the chain of infection are water, food, plants, animals, housing conditions, chemicals
- Many of the conditions that promote the transmission of microorganisms are = **Anthropogenic** (caused by humans), reflecting change in the relationship between human and their environment

### Pathogens, Infection & colonisation:

**Pathogenicity** = is the ability of a microorganism to produce disease

**Pathogens** = are microorganisms that cause disease in humans

- 5 types of pathogenic microorganisms: bacteria, viruses, fungi, protozoa, rickettsia

Virulence = is the degree of pathogenicity of an infectious microorganism (pathogen)

### **\*Terms infection and colonisation are not synonymous\***

**INFECTION** = is an invasion and a multiplication of microorganisms in the body tissue that results in cellular injury

- these microorganisms are called = **infectious agents**
- Infectious agents are capable of being transmitted to a person by DIRECT or INDIRECT contact through vehicle (or vector) or airborne route = also called **communicable agents**
- COMMUNICABLE DISEASES**= disease produced by communicable agents

**COLONISATION** = is the multiplication of microorganisms on or within a host that does not result in cellular injury

-FLORA : are microorganisms on the human body (synonymous with colonisation)

2 types of FLORA:

- 1) Resident flora = are microorganisms that are always present, usually without altering the person health
  - Hand washing with soap will not remove resident flora (must considerable friction)
- 2) Transient Flora = are microorganisms that are episodic
  - They attach to the skin for a brief amount of time but do not continually live on the skin
  - Flora is usually acquired from direct contact with microorganisms on environmental surface
  - Handwashing is an effective way of removing T flora

### Chain of infection

-Describes the phenomenon of developing an infectious process

- there must be an interactive process that involves the agent, host and environment

