Chapter 5

Infection control
Disease

- Pathological condition of the body, abnormal condition
Symptoms

- [SIM-tums]
- Diseases manifest their presence through symptoms
Symptoms

• **Objective**

• **Subjective**
Objective symptoms (signs)

- Evidence observed by someone other than the patient
- Eg. Edema (eh-DEE- mah)
Subjective symptoms

- Evidence of a disease reported by the patient
- Eg. Odontalgia (oh-dahn-TAHL-jee-ah) = toothache
Syndrome

- [SIN-drome]
- A collection of signs and symptoms grouped together characterizing a disease.
• [path-AHL-oh-jee]
• The study of disease is called pathology
Etiology

- [ee-tee-AHL-oh-jee]
- Pathologists search for the disease etiology or cause of the disease.
Diagnosis

• [die-agg-NO-sis]
• Denoting name of disease
Prognosis

• [prahg-NO-sis]
• A prediction about the course of disease
Diseases Terms

• The condition of a disease or its intensity are seen in various stages
Acute

- [ah-CUTE]
- Describes immediate symptoms
- such as high fever and pain or distress
Chronic

• [KRON-ick]
• Condition existing over a long time without an endpoint such as chronic fatigue and anemia.
Remission

• [ree-MISH-un]
• Temporary or permanent stop of a severe condition such as sinusitis or some stages of cancer.
Epidemic

• [ep-ih-DEH-mick]
• Condition prevalent over a wide population such as flu or typhoid in an area
Pandemic

- [pan-DEM-ic]
- A disease that is more widespread than an epidemic occurring over a large geographical area population.
Endemic

- [en-DEM-ick]
- Disease occurring continuously
- in the same population or locality.
Classification of diseases

• Diseases are classified according to their actions
Exogenous

[eks-æh-jehnus]  
Refers to causes outside the body.  
Eg. Illnesses arising from trauma, radiation, hypothermia
Endogenous

- [en-DAH-jeh-nuss]
- Refers to causes from within the body
- Eg. Infections, tumors, congenital and metabolic abnormalities
Degenerative

- [dee-JEN-er-ah-tiv]
- Conditions resulting from natural aging of the body
- Eg. arthritis
Congenital

- [kahn-JEN-ih-tuhl]
- Conditions inherited from parents
- Eg. Cystic fibrosis
Causes of disease and infection

• Diseases may be caused by a number of pathogenic microorganisms
• Eg. Bacteria, virus.
Bacteria
(plural form)

- Bacterium (singular form)
- One-celled, plant-like microorganisms lacking chlorophyll.
Forms of bacteria

- Oval/rounded
- Rod-shaped
- Spiral
Some characteristics of bacteria
Aerobic

- [air-OH-bick]
  Requires oxygen to live
Facultative aerobes

- Can live in the presence of oxygen but do not require it
**Obligate aerobes**

- Cannot survive without oxygen
- Eg. Diphtheria
anaerobic

- [an-ah-ROH-bick]
- Do not need oxygen for survival
Facultative anaerobes

- Grow best without oxygen but can survive in its presence
Obligate(strict) anaerobes

- Cannot live in the presence of oxygen
Flagella

- Small whip-like hairs providing movement for bacteria
Viruses

• Tiny parasitic organisms that cause diseases such as hepatitis, HIV and some other. Viruses need living matter to grow and reproduce.
Rickettsia

- Microbes smaller than bacteria but larger than viruses.
- Transmitted by vectors
- Eg. Fleas, lice, ticks
Disinfection

- To apply chemicals to kill, reduce and eliminate germs

Golbarg Kolahi
Wednesday, May 25, 2016
Disinfectant

• Chemical killing many microbes but not spore forming bacteria
Antiseptic

• A diluted disinfectant inhibiting growth of microbes
Bacterostatic

• Inhibiting or slowing down bacterial growth
Germicide

- Substance destroying germs
Holding solution

- Disinfectant solution containing biodegradable ingredients used for soaking instruments until they are cleaned and sterilized.
Ultrasonic cleaner

- Mechanical apparatus having a reservoir of a solution that cavitates or bubbles off debris, done before sterilization.
Methods of sanitation

• Many items, procedures and techniques are employed to obtain a sanitized, clean area with protection for patient and operator as well.
PPE
(personal protective equipment)

- Eg. gloves, eyeglasses, clinical attire, masks
- Also hepatitis vaccinations are included in PPE
Barrier techniques

- Drapes, covers, plastic instrument sleeves for preventing contamination.
SOP
(Standard Operating Procedures)

- For sanitation of operators and patients
- Including training and using proper handling and storing of dental equipment and supplies,
- Hand washing and transfer methods
- Use of evacuation methods and rubber dam
- Preoperative rinse of oral cavity with mouthwash
Standard precautions

• Treating each case as if the patient has a serious disease
Proper disposal techniques

- Disposing all contaminated items in a marked biohazard bag.
Sharps disposal units

- A container for collection and disposal of needles, broken glass and sharp items.
Biohazard container

- Labeled container for items contaminated with body fluids or life-threatening contaminates.
Hazardous waste container

• A container for used, unsanitary items.
Saturate-wipe-saturate

• Disinfection cleaning of operative area. Use of disposable cloth saturated with a disinfecting solution for wiping up instead of using spray-wipe-spray method.