

Virginia Western Community College

DNH 146

Periodontics for the Dental Hygienist

Prerequisites

Successful completion of DNH 111, 115, 120, 130 and 141

Course Description

Introduces the theoretical and practical study of periodontal disease applying the dental hygiene process of care and evidence-based decision-making. Presents etiology, microbiology, histopathology, diagnosis, treatment, and prognosis of periodontal disease entities.

Semester Credits: 2

Lecture Hours: 2

Lab/Clinical/Internship Hours: 0

Required Materials

Textbook:

Foundations of Periodontics for the Dental Hygienist. Nield-Gehrig, Jill S., and Willmann, Donald E. Lippincott, Williams & Wilkins 2016. ISBN: 9781451194159

Clinical Practice of the Dental Hygienist. Wilkins, Esther. 8th Edition. Lea & Fibiger. ISBN: 0781763223

Dental Hygiene Concepts; Cases, and Competencies. Daniel, Susan, and Harfst, Sherry. Mosby 2008. ISBN: 9780323043526

Course Outcomes

At the completion of this course, the student should be able to:

- Recognize the dental hygiene process of care as a systematic approach to client care that establishes the framework for delivery of care, and permits the dental hygienist to use his/her educational preparation, scientific knowledge, and clinical judgement and skills to guide individualized treatment choices.
- Recall the five key behaviors of the dental hygiene process of care: assessment, dental hygiene diagnosis, planning, implementation, and evaluation
- Discuss the elements of each of the five key behaviors in the dental hygiene process of care as they relate to your clinical caseload
- Compare the effectiveness of task-oriented treatment and client-centered care in meeting the risks of persons with periodontal diseases
- Recognize the professional, moral, and legal accountability that exists for dental hygiene diagnostic decisions and dental hygiene actions

- Recognize that the non-surgical periodontal therapies, which are within the parameters of dental hygiene practice, must be approached holistically.
- Define evidence-based decision making and apply this method to the study of periodontal diseases
- Determine working definitions for the following terms: intervention, oral risk assessment, prevention, risk, and risk assessment
- Describe the benefits of oral risk assessment
- Develop a clinical goal, therapeutic intervention, and evaluation measure based on a given oral risk concern from a client in your clinical caseload
- Develop an understanding of the AAP classifications of periodontal disease
- Differentiate between health, gingivitis, and periodontitis and be able to apply this knowledge to clinical case histories
- Apply this unit of instruction to subsequent units in this course

Topical Description

Unit 1: Making a Presumptive Diagnosis

Recall and apply knowledge of the histology of the periodontium to the concepts presented during this unit of instruction.

Recall and apply knowledge from DNH 141 related to plaque and the normal periodontium to this unit.

Differentiate between normal and disease states from a histological and clinical standpoint.

Differentiate between microflora present in health and disease.

Compare the clinical and histological changes in each stage of disease progression from the initial lesion (gingivitis) to the advanced lesion (periodontitis).

Use knowledge from this unit to assist in identifying normal and disease states in your clinical client caseload.

Recognize the various periodontal disease entities and the characteristics of those entities, i.e. clinical and radiographic appearance, histologic changes and presence of defense cells, oral microflora, systemic and local factors.

Identify the predominant oral microflora associated with periodontal disease entities.

Differentiate between microbes directly implicated in periodontal disease, and those microbes which may play a role in disease progression.

Recognize the impact of environment, genetics, immune status/reaction, and type of microflora on the etiology and progression of periodontal diseases.

Discuss the impact of intra-oral host factors, and systemic factors on the etiology and progression of periodontal diseases.

Begin to utilize knowledge of the role of systemic and host factors to information on the medical and dental history as a mechanism for periodontal risk assessment.

Begin to apply knowledge of etiologic, intra-oral, and systemic factors to your clinical caseload to facilitate the dental hygiene diagnosis, recognize risk factors, and plan and implement dental hygiene actions.

Identify aspects of periodontal conditions which do and do not manifest radiographically.

Identify radiographic changes indicative of periodontal disease.

Identify radiographic exposures (Full mouth, Bitewings, Panelipse) which provide optimal assessment of periodontal changes.

Utilize human skulls and radiographs to identify changes in alveolar bone related to periodontal disease entities.

Begin to identify the need for appropriate radiographs, and to use client radiographs as an adjunct to client education.

Describe the role of occlusal trauma in the progression of periodontal disease.

Identify clinical and radiographic changes in the periodontium associated with occlusal trauma.

Discuss the impact of furcation invasions, mobility, fremitus, recession, on periodontal disease severity, progression, treatment, and homecare.

II: Non-Neoplastic Diseases of Bone

- Benign Fibro-Osseous Lesions
- Paget Disease of Bone
- Central Giant Cell Granuloma
- Osteomalacia

III: Inflammation and Repair

- Injury
- Natural Defenses against Injury
- Inflammation
- Regeneration and Repair
- Injuries to Teeth
- Injuries to Oral Soft Tissues
- Reactive Connective Tissue Hyperplasia
- Inflammatory Periapical Lesions

IV: Immunity

- The Acquired Immune Response
- Antigens
- Cellular Involvement in the Immune Response
- Major Divisions of the Immune Response
- Memory and Immunity

- Types of Immunity
- Immunopathology
- Oral Diseases with Immunologic Pathogenesis
- Autoimmune Diseases that Affect the Oral Cavity

V: Infectious Diseases

- Bacterial Infections
- Fungal Infections
- Viral Infections

VI: Neoplasia

- Description of Neoplasia
- Causes of Neoplasia
- Classification of Tumors
- Names of Tumors
- Treatment of Tumors
- Epithelial Tumors
- Tumors of Squamous Epithelium
- Salivary Gland Tumors
- Odontogenic Tumors
- Tumors of Soft Tissue
- Tumors of Melanin-Producing Cells
- Tumors of Blood-Forming Tissue
- Metastatic Tumors of the Jaws

VII: Developmental Disorders

- Embryonic Development of the Face, Oral Cavity, and Teeth
- Developmental Soft Tissue Abnormalities
- Developmental Cysts
- Developmental Abnormalities of the Teeth

VIII: Genetics and Wrap Up

- Chromosomes
- Normal Cell Division
- Molecular Composition of Chromosomes
- Inheritance Patterns
- Lyon Hypothesis
- Syndromes
- Inherited Dermatologic and Mucosal Disorders
- Inherited Disorders of the Gingiva and Periodontium
- Inherited Disorders Affecting the Dentition

Note to Instructors