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D H 302: ASSESSMENT PROCEDURES IN DENTAL HYGIENE

Foothill College Course Outline of Record

Value
Summer 2021
3
3 lecture per week (36 total per quarter)
Not open to students with credit in D H 53.
Degree-Applicable Credit Course
Non-GE
CSU
Letter Grade Only
Not Repeatable

Student Learning Outcomes

- The student will create their e-portfolio and submit a project on infection control as documentation of their competency in infection control procedures.
- The student will explain the ethical obligations to maintain the standards of dental care adhering to infection control protocols that are consistent with current federal, state, and local laws and guidelines.

Description

The first in a three course series in dental hygiene theory and practice. Focus on the principles of assessment techniques as the first phase of the dental hygiene process of care. The rationale for collection of assessment data, and associated clinical procedures will be discussed. Analysis of current evidence based literature related to the dental hygiene patient assessment procedures. Intended for students in the Dental Hygiene Baccalaureate Degree Program; enrollment is limited to students accepted in the program.

Course Objectives

The student will be able to:

A. Analyze the steps and considerations when preforming a medical/ dental history interview.

B. Identify specific conditions that may indicate the need for a physician consultation.

C. Document the gross structures of the head, neck, and oral cavity and the normal range of clinical appearance for each.

D. Explain the procedure for the extra/intraoral examination including the normal range of clinical appearance for these structures and common abnormalities that may be associated with them.

E. Describe the five categories to be included in the description of an atypical extra/intraoral lesion and the appropriate term from the glossary of extra/intraoral lesions to describe an atypical finding.

F. Describe the roles of bacterial biofilm plaque, other soft deposits, and calculus in relation to dental health and disease.

G. Identify components of the hard tissue examination.

H. Explain the factors that are assessed to determine the level of caries risk.

I. Cite the signs and symptoms of periodontitis and assessment data gathered to determine periodontal status.

J. Examine potential sources of infection and the necessity for standard blood and body fluid precautions using current evidence based research. K. Evaluate and apply the principles of law and ethics related to assessment procedures in dental hygiene practice.

Course Content

A. The personal/social history, medical history, dental history, vital signs

- 1. Communication techniques for information gathering
- a. Stress reduction protocols
- b. Cultural, language and health literacy issues
- c. Open ended questions
- 2. Risk assessment
- a. Physical status: ASA categories
- b. Blood glucose levels
- c. Medications
- d. Vital signs
- 3. Dental history
- a. Chief complaint
- b. Dental concerns
- c. Existing dental conditions
- d. Radiographs
- e. Dietary habits, dental habits and daily self-care
- B. Need for physician consultation
- 1. Antibiotic premedication
- 2. Alteration of medication
- 3. Special appointment planning and modifications to care
- 4. Additional laboratory studies
- 5. Precaution to prevent disease transmission
- 6. Prevention of allergic reactions or medical emergencies
- 7. Unstable medical conditions: hypertension, diabetes, cardiovascular disease
- C. Anatomic structures of the head, neck and oral cavity
- 1. Extra-oral structures
- a. Overall appraisal of the head and neck
- b. Eyes, ears, nose
- c. Sternomastoid muscle
- d. Lymph nodes of the head and neck
- e. Salivary glands
- f. Thyroid gland
- g. Temporomandibular joint
- 2. Intra-oral structures
- a. Lips and vermillion border
- b. Inspection of labial and buccal oral mucosa
- c. Hard palate, soft palate
- d. Oropharynx, tonsils
- e. Tongue: dorsal, ventral, lateral
- f. Floor of the mouth
- g. Salivary glands
- D. Extra and intra-oral examination
- 1. Oral cancer screening
- a. Etiology and incidence
- b. Risk factors signs and symptoms
- c. Human papilloma virus and oral cancer
- 2. Cancer types
- a. Squamous cell
- b. Basal cell
- c. Melanoma

- 3. Extra/intraoral examination process
- a. Sequence
- b. Visual inspection
- c. Palpation techniques
- E. Terminology for describing and documenting atypical finds
- 1. Types of soft tissue lesions
- a. Macule
- b. Papule
- c. Patch
- d. Plaque
- e. Nodule
- f. Wheal
- g. Vesicle
- h. Bulla
- i. Pustule
- j. Ulcer
- k. Fissure
- I. Petechiae
- 2. Descriptive terms the characteristics of soft tissue lesions
- a. Discrete
- b. Grouped
- c. Confluent
- d. Linear
- e. Luekoplakia
- f. Erythroplakia
- g. Erythroluekoplakia
- 3. ABCD-T approach to formulating lesion descriptions
- a. A = anatomic location
- b. B = border. regular, irregular, margins: smooth, raised
- c. C = color. white, red, yellow, brown, blue, black
- d. D = dimension: measured with periodontal probe in millimeters
- e. T = type of lesion
- F. Bacterial biofilm and dental deposits
- 1. Acquired pellicle
- 2. Oral biofilms
- a. Stages of formation
- b. Types of bacteria in oral biofilms
- c. Cellular communication of oral biofilms
- 3. Soft deposits: materia alba, food debris
- 4. Hard deposits: calculus
- a. Calculus formation
- b. Types of calculus
- 5. Systemic and local body responses to biofilm and calculus
- a. World Health Organization and global issues of dental disease
- b. Systemic diseases and the inflammatory response to oral biofilms
- G. Hard tissue exam
- 1. Dental charts
- 2. Tooth numbering systems
- 3. Classification of occlusion and dental caries
- a. Class I occlusion
- b. Class II, division I occlusion
- c. Class II, division II occlusion
- d. Class III occlusion
- e. G.V. Black Classification of dental caries
- f. Class I dental caries
- g. Class II dental caries
- h. Class III dental caries
- i. Class IV dental caries
- j. Class V dental caries
- k. Class VI dental caries
- I. Noncarious lesions
- m. Abfraction

- n. Abrasion
- o. Attrition
- p. Decalcification
- q. Erosion
- H. Dental caries risk assessment
- 1. Susceptible tooth surface
- a. Pit and fissure
- b. Smooth surfaces
- c. Interproximal surfaces
- d. Defects in enamel
- e. Recession
- 2. Diet considerations
- a. Fermentable carbohydrates and dietary sugars
- b. Frequency of eating and snacking
- 3. Cariogenic bacteria
- a. Mutans streptococcus
- b. Lactobacillus
- 4. Oral hygiene practices
- 5. Saliva
- a. Xerostomia
- b. pH levels
- I. Periodontal examination
- 1. Gingival evaluation and description
- a. Descriptive terminology for gingival description
- b. Color of gingiva
- c. Surface texture of gingiva
- d. Contour of gingiva
- e. Consistency of gingiva
- f. Bleeding or exudate
- 2. Periodontal evaluation
- a. Terminology for periodontal examination
- b. Periodontal probing depths
- c. Bleeding, exudate or suppuration

1. Evidence based dental hygiene care

b. Clinician's skills, judgement, experience

c. Consideration of patient's needs, preferences, values

3. Sources of evidence based literature in dentistry and dental hygiene

5. Presenting a summary of evidence based research on infection and

K. Legal and ethical considerations in dental hygiene assessment

2. Patient confidentiality and Health Insurance Portability and

a. Best available scientific literature

- d. Recession
- e. Furcation
- f. Mobility, fremitus

2. Levels of evidence

b. Systematic review

e. Case control study

g. Literature review

c. Randomized controlled trial

h. In vitro and animal studies

4. Parts of a scientific paper

1. Compliance with infection control

4. Referrals to other health professionals

a. Meta-analysis

d. Cohort study

f. Case reports

hazard controls

Accountability Act

3. Informed consent

procedures

g. Clinical attachment level J. Evidence based literature on infection and hazard control

- 5. Ethical principles considerations
- a. Beneficence
- b. Nonmaleficence
- c. Veracity
- d. Justice
- e. Autonomy

Lab Content

Not applicable.

Special Facilities and/or Equipment

A. Multimedia classroom.

B. When taught via Foothill Global Access, on-going access to computer with email software and hardware; email address.

Method(s) of Evaluation

Methods of Evaluation may include but are not limited to the following:

Quizzes Written midterm Written final Oral and written presentation of research E-portfolio submission

Method(s) of Instruction

Methods of Instruction may include but are not limited to the following:

Lecture Discussion Cooperative learning exercises - patient case studies Oral presentations

Representative Text(s) and Other Materials

Bowen, D., and J. Pieren. <u>Darby and Walsh Dental Hygiene Theory and</u> <u>Practice, 5th ed.</u> 2019.

Wynn, R., T. Meiler, and H. Crossley. <u>Drug Information Handbook for</u> <u>Dentistry, 25th ed.</u> 2019.

Nield-Gehrig, J.. Patient Assessment Tutorials, 4th ed. 2016.

Types and/or Examples of Required Reading, Writing, and Outside of Class Assignments

- A. Weekly reading assignments (50-100 pages).
- B. Research on a dental hygiene related topic.
- C. Group project on research topic.
- D. E-portfolio submission on infection control.

Discipline(s)

Dental Technology