LESSON PLAN #2 (TEMPLATE)		
Course: Clinical Dental Hygiene DNTH 101	Topic: Treating patients with respiratory disease.	Audience: Dental hygiene students.
Needed Materials: PowerPoint presentation	Needed Personnel: None	Total Time: 50 minutes.

OBJECTIVES: Upon completion of the lecture, the student should be able to:

(#1-4 cognitive; #5 affective)

- 1. Define the respiratory system.
- 2. Differentiate between different types of respiratory tract diseases.
- 3. Identify the etiology of respiratory diseases.
- 4. Develop a dental hygiene care plan for patients with respiratory conditions.
- 5. Advocate for tobacco cessation.

INSTRUCTIONAL SET:

Give a brief description of what you will do (1-3 sentences for each white sections).

TOTAL TIME FOR INSTRUCTIONAL SET: 10 minutes

Introduce Topic:

This lecture will briefly provide an understanding for dental hygiene students about different respiratory diseases that they could encounter in their daily clinical practice. Respiratory infections are common and especially nowadays. Therefore, knowing what the condition is and how to handle a patient with respiratory is a critical and crucial part of becoming a competent dental hygienist.

Establish Mood:

By the end of this lecture, you will better understand different types of lower and upper respiratory tract diseases. In addition, learn how to handle a patient presenting with a respiratory track condition in the clinic.

Gain Attention/Motivate:

To become a competent dental hygienist, you need to learn and familiarize yourself with various diseases and conditions. Respiratory tract infections are one of the most common conditions you will face during your practice.

Establish Rationale:

By understanding the basic anatomy of the respiratory tract, the different reparatory conditions, and handling them in a clinical setting, dental hygiene students will gain an extra step to becoming competent dental health professionals.

Establish Knowledge Base:

Have any of you ever had any clinical experience with a patient having any respiratory condition? What do you remember about the anatomy of the respiratory tract? Can you name different types of respiratory diseases? Have you ever had a smoker patient?

LESSON CONTENT:

Use outline to give a <u>sample</u> of main lecture points (no sentences for this). Roman numerals **I-V** will correspond to the 5 objectives and serve as major headings (DO NOT re-write objectives). **A-C** will be sub-headings that list important supporting details. Give a brief summary/closure <u>and</u> include an assignment (use sentences for this).

TOTAL TIME FOR LESSON CONTENT: 30 minutes

What I Do (Lecture):

- I. Define the respiratory system.
 - A. Respiratory system anatomy.
 - B. Respiratory assessment.
 - C. Classification of respiratory diseases.
- II. Differentiate between different types of respiratory tract diseases.
 - A. Definition.
 - B. Symptoms.
 - C. Oral manifestation.
 - D. Transmission.
 - E. risk factors.
- III. Identify the etiology of respiratory diseases.
 - A. Viral.
 - B. Bacterial.
 - C. Fungi.
 - D. Seasonal triggers/Perennial triggers.
 - E. Idiopathic.
 - F. Other causes.
- IV. Develop a dental hygiene care plan for patients with respiratory conditions.
 - A. Patient education.
 - B. Avoid aerosol-creating treatments.
 - C. Recognize signs and symptoms
- V. Advocate for tobacco cessation.
 - A. Motivational intervention (an effective method of tobacco cessation).
 - B. The "5A's" or the "5 R's" approaches.
 - C. The team approach.

SUMMARY/CLOSURE:

I hope that after this presentation, you have a better understanding and can differentiate between different respiratory diseases, their symptoms, oral manifestations, and how to handle them in the clinical setting. By understanding and following these steps, you gain a step forward to being competent dental hygiene professionals.

ASSIGNMENT:

For a better understanding of our topic today you should:

- Explore different websites related to dental hygiene, respiratory disease, and keep yourself updated with COVID-19 reports.
- Research about the more dental hygiene care plan for different respiratory diseases.
- Read articles related to respiratory diseases in dental hygiene.
- Research about different methods of tobacco cessation.

What We Will Do (Critical Thinking Activity):

Choose 1 option from the list and give a brief description of what the class will do for this high-level critical thinking activity.

TOTAL TIME FOR CRITICAL THINKING ACTIVITY: 10 minutes

CHOOSE ONE OPTION:

1. Case Study.

A 58-year-old male presented to your dental clinic for routine teeth cleaning. His medical history revealed that he is dealing with hypertension and has tuberculosis (TB) history. His taking Hygroton 50 mg and Aspirin. The patient says that his physician told him that he does not need medications for TB and his TB is in the latent stage.

What is Tuberculosis? What does the latent stage mean?

What precautions will you be taking to treat this patient?

Are you going to treat this patient?

ANSWER KEY:

What is Tuberculosis? What does the latent stage mean?

Tuberculosis (TB) is a chronic, infectious, and communicable disease with worldwide public health significance as a cause of disability and death. Caused by a rod-shaped bacterium (Mycobacterium tuberculosis).

The latent tuberculosis (LTBI) stage is when there are no signs/symptoms (not feeling sick) and is not infectious. Also, chest x-rays are normal; however, the blood test is positive.

What precautions will you be taking to treat this patient?

We must treat every patient as an infectious patient (apply all requires infection control measures/Full PPE). Before beginning treatment: Use 0.12% chlorhexidine gluconate rinse, avoid aerosol-producing procedures, recognize signs and symptoms. For active TB, we do not treat them in the dental office or an outpatient facility. Instead, active TB patients should be treated in a hospital with appropriate isolation, sterilization, and engineering controls. In the case of a patient with a history of TB, we must obtain the disease history by consulting with a physician before treatment.

Additionally, suppose a patient was recently converted to positive. In that case, the treatment is permitted after the patient is free of clinically active disease and evaluated by a physician to rule out active TB disease. Lastly, when a patient has signs and symptoms of TB, postpone non-emergency treatment, and refer to a physician.

Are you going to treat this patient?

You must not count on a patient's word. Instead, you must request a document from his physician explaining the state of his condition.

ASSESSMENT:

What Students Will Do (Independent Assessment):

List objectives in order with a corresponding test item for each. #1-3 should be multiple choice questions, #4-5 should be short answer questions. Include answer key.

1. **Objective #1**: Define the respiratory system.

Test Item: The respiratory system is composed of the following structures Except one. Which one is the Exception:

- a. Maxillary sinuses.
- b. Larynx
- c. Bronchi
- d. Thyroid gland
- 2. **Objective #2**: Differentiate between different types of respiratory tract diseases.

Test Item: Which of the following is a chronic upper respiratory disease:

- a. Sinusitis
- b. Asthma.
- c. Allergic rhinitis (hay fever).
- d. Chronic Bronchitis
- 3. **Objective #3**: Identify the etiology of respiratory diseases.

Test Item: Tuberculosis (TB) is a lower respiratory tract disease caused by:

- a. Mycobacterium tuberculosis
- b. Pneumocystis jirovecii
- c. Pseudomonas aeruginosa
- d. Streptococcus pneumonia
- 4. **Objective #4**: Develop a dental hygiene care plan for patients with respiratory conditions.

Test Item: A 45-year-old female presented to your clinic. Her medical history explains to you that she is have tuberculosis (TB). Write 3-5 sentences explaining how your care plan for treating this patient.

5. **Objective #5**: Advocate for tobacco cessation.

Test Item: A smoker 29-year-old male presented to your clinic for routine teeth cleaning. Your obligation as a health professional is to advise him to stop smoking. Write 3-5 sentences on how to perform tobacco cessation talk.

ANSWER KEY:

- 1. D
- 2. C
- 3. A
- 4. Treat every patient as an infectious patient (apply all requires infection control measures/Full PPE). Before beginning the treatment, we must recognize signs and symptoms. Avoid aerosol-producing procedures (ultrasonic, air polishing). Also, educate the patient about the connection between oral health and respiratory diseases. (Other answer variation: Active TB: Do not treat in the dental office or an outpatient facility. Instead, the patient should be treated in a hospital with appropriate isolation, sterilization, and engineering controls. History of TB: Use caution, obtain the history of the disease. Consult with a physician before treatment. Recent conversion to positive: Treatment is permitted after the patient is free of clinically active disease and evaluation by a physician to rule out active TB disease. Postpone non-emergency treatment and refer to physician When the patient has signs and symptoms of TB).
- 5. Apply the "5A's" approach. The first step is, ask about tobacco use. Then, advise him to quit using the Stop-look-listen approach. Next, assess his willingness to quit. Assist him with quitting. Finally, Arrange for follow-up appointments. (Other answer variation: apply the team approach. First, organize the clinic team. Then, organize a tobacco-free environment. And finally, manage a tobacco user tracking system.

REFLECTION:

Briefly answer the questions below with 3 sentences each. (Write one sentence per bullet point):

- 1. Regarding the logistics of <u>planning</u> a lecture, what did you notice about how **template lesson planning (lesson plan #2)** differs from **full-length lesson planning (lesson plan #1)**?
 - The cover page is different.
 - There is no Nots/Media/Q&A section.
 - Time is not dispersed throughout the body.
- 2. Which style of lesson planning is your preference and why?
 - Each one has its pros and cons.
 - Lesson plan #1: very detailed and specific but took a long time to execute.
 - Lesson plan #2: short and sweet, but you need the Nots/Media/Q&A section to be more organized.

REFERENCES:

In the white space below, list at least 5 references from the last 5 years from a variety of sources using APA style.

- Amato, A., Caggiano, M., Amato, M., Moccia, G., Capunzo, M., & De Caro, F. (2020). Infection control in dental practice during the COVID-19 pandemic. *International Journal of Environmental Research and Public Health*. 17(13), 4769.
- Amorim Dos Santos, J., Normando, A., Carvalho da Silva, R. L., Acevedo, A. C., De Luca Canto, G., Sugaya, N., Santos-Silva, A. R., & Guerra, E. (2021). Oral manifestations in patients with COVID-19: A living systematic review. *Journal of Dental Research*. 100(2), 141–154. https://doi.org/10.1177/0022034520957289
- Boyd, L., Mallonee, L., Wyche, C. J. (2020). Wilkins' clinical practice of the dental hygienist. (13ed) United Kingdom: Jones & Bartlett Learning, LLC.
- Coffee, L., & Sockrider, M. (2019). Dental health and lung disease. American Journal of Respiratory and Critical Care Medicine, 199(5), P9-P10.
- Gaeckle, N., Heyman, B., Criner A., & Criner G. (2018) Markers of dental health correlate with daily respiratory symptoms in COPD. *Chronic Obstr Pulm Dis.* 5(2): 97-105. doi: http://doi.org/10.15326/jcopdf.5.2.2017.0159
- Gluch, J. (2009). Explore the connection: The relationship between respiratory diseases and oral health. Retrieved from https://dimensionsofdentalhygiene.com/
- Harrington, N., Prado, N., & Barry, S. (2016). Dental treatment in children with asthma A review. *British Dental Journal*. 220(6), 299-302.
- Tysiąc-Miśta, M., & Dziedzic, A. (2020). The Attitudes and Professional Approaches of Dental Practitioners during the COVID-19 Outbreak in Poland: A Cross-Sectional Survey. *International Journal of Environmental Research and Public Health.* 17(13), 4703.

^{***}This lesson plan template is a brief overview of a full-length lesson plan. It should provide a good understanding of an entire instructional set.