

LESSON PLAN & TEST QUESTIONS

Course: Community Oral Health

Topic: Smoking Cessation

Audience: Adult Learner

Instructional Objectives:

Upon completion of the lecture, the learner should be able to:

1. List the common forms of nicotine delivery systems
2. Evaluate the health consequences of smoking
3. Identify the implications of smoking exposure on the dentition
4. Discuss the common methods of smoking cessation
5. Recommend appropriate oral homecare practices for smokers

Materials: PowerPoint
Handout

References:

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Personnel: None

Time: 50 minutes

TIME	LESSON CONTENT	NOTES
2 minutes	<p>I.INSTRUCTIONAL SET</p> <p><u>A. Introduction</u></p> <p>“During high school, Christine wanted to fit in, so she began smoking at age 16. She became addicted and continued smoking for 28 years. In 2007, at age 44, Christine’s life would change forever. She quit smoking when a biopsy of a growth inside her cheek revealed oral cancer. After 35 radiation treatments and chemotherapy, she seemed to be cured. But the cancer returned in 2008; this time surgery was her only option. Her third bout with oral cancer in 2009 was even more serious. She learned it had spread to her jawbone, and doctors had to remove half of her jaw”</p> <p>CDC Tips From Former Smokers: Christine B’s Story</p> <p>The CDC states that tobacco use is the leading cause of preventable, death, disability, and disease in the United States. Tobacco use accounts for an estimated 480,000 deaths a year in the U.S.; 1 out of 5 Americans die from smoking.</p> <p><u>B. Establish Mood</u></p> <p>By attending today’s lecture, you are taking initiative to learn more about the impacts of smoking while learning about its effects on your oral and overall health. Today we will learn about the harmful effects that take place orally and systemically due to smoking. We will also learn about smoking cessation strategies and oral cancer surveillance.</p> <p><u>C. Gain Attention/Motivate</u></p> <p>If you knew of a friend or family member who was addicted to smoking would you know how to encourage them to stop or ways, they</p>	<p>Slide #1 Story of Christine B</p> <p>Q: How does this quote make you feel about smoking?</p> <p>A: Answers will vary</p> <p>Photo #1- Image of Christine B</p> <p>Slide #2 Smoking Statistics</p> <p>Note: Statistics, facts, and figures related to smoking are listed on handout</p> <p>Q: How many people do you think use tobacco in the U.S.?</p> <p>A: 40 million adults and 4.7 million youths</p>

could potentially prevent major oral cancer like in the case of Christine? If so, what resources or knowledge could you share with them.

TIME	LESSON CONTENT	NOTES
2 minutes	<p><u>D. Established Rational</u> By understanding what smoking cessation is and understanding the negative effects that smoking can have on an individual's oral health, will help the adult learner to detect oral prevent oral cancer and periodontal disease</p> <p><u>E. Established Knowledge Base</u> Has anyone heard of the term smoking cessation? Smoking cessation is the process in which a smoker attempts to quit smoking.</p> <p><u>F. Instructional Objectives</u> After today's lecture, you should be able to list all forms of smoking and cessation methods; evaluate relationship between smoking and periodontal disease and oral cancer; list the ways to perform to perform at home oral cancer screening; identify the implication of smoking exposure on the dentition; recommend appropriate homecare modifications for smoking cessation.</p>	<p>Slide #3 Objectives</p>

TIME	LESSON CONTENT	NOTES – MEDIA- Q/A
4 minutes	<p>I. Forms of Smoking</p> <p>A. Nicotine Delivery Systems</p> <ol style="list-style-type: none"> Smokable tobacco <ol style="list-style-type: none"> Cigarettes; most commonly used Cigars Tobacco pipes Water pipes also known as: <ol style="list-style-type: none"> Hookah Shisha Maassel Smokeless tobacco <ol style="list-style-type: none"> Snuff Chewing tobacco Snus; newer product Electronic Nicotine Delivery <ol style="list-style-type: none"> E-cigarettes E-pipes Vaporizers; also known as: <ol style="list-style-type: none"> Mods Slim Flash drive cartridges; also known as: <ol style="list-style-type: none"> Juuls Hookah pens <p>B. Dangers of Electronic Cigarettes</p> <ol style="list-style-type: none"> Incidence of E-Cigarette Explosion <ol style="list-style-type: none"> 195 e-cigarette explosions; 2009-2016 68% of incidents; acute injuries No deaths Common Locations During Explosion <ol style="list-style-type: none"> In pocket; 61 In use (mouth, face, hands); 60 Battery charging; 48 Storage, 18 Cargo transport; 1 	<p>Slide #4 Forms of Smoking</p> <p>Photos #2- Image of all the forms of smoking</p> <p>Q: Smoking comes in many forms, what are they?</p> <p>A: Smokable, smokeless, electronic</p> <p>Slide # 5 Dangers and Injuries Related to E-Cigarettes</p> <p>Note: Data and statistics collected and reported by the Federal Emergency Management Agency; numbers indicate the number of incidents</p>

TIME	LESSON CONTENT	NOTES-MEDIA-Q/A
	3. Type of Injuries <ul style="list-style-type: none"> a. Severe <ul style="list-style-type: none"> i. Hospitalizations ii. Loss of body parts iii. Facial injuries iv. 3rd degree burns b. Moderate <ul style="list-style-type: none"> i. Smoke inhalation ii. 2nd degree burns iii. Skin lacerations iv. No hospitalizations c. Minor <ul style="list-style-type: none"> i. Smoke inhalation ii. Minor laceration iii. 1st degree burns iv. No injuries; 32% 	<p>Q: Have any of you head about the danger associated with electronic cigarettes?</p> <p>A: Answers will vary</p>
3 minutes	C. How Do the Explosions Occur & Prevention <ul style="list-style-type: none"> 1. Lithium containing batteries <ul style="list-style-type: none"> a. Commonly used b. Large amounts of energy c. Thermal runaway phenomenon d. Excessive battery temperatures 2. Explosion Prevention <ul style="list-style-type: none"> a. Device safety features b. Loose batteries in case c. Never charge battery with electronics d. No overnight charging e. Protect from overheating f. Replace damaged batteries g. Read manufacture info h. Don't mix batteries 	<p>Slide # 6 What Causes E-Cigarette Explosions?</p> <p>Note: Current electronic cigarette packing does not caution; healthcare providers must explain risk</p> <p>Slide #7 How to Prevention Explosions</p> <p>Note: These recommendations are provided by the Food and Drug Administration</p>

TIME	LESSON CONTENT	NOTES – MEDIA- Q/A
4 minutes	<p>II. Cessation Methods</p> <p>A. Definition: Process in which a smoker attempts to quit.</p> <p>B. Statistics on Smoking Cessation</p> <ol style="list-style-type: none"> 2015, 68% report desire to quit 2018, 55.1% made attempt to quit in the past year 2018, 7.5% successfully quit in the past year 2018, 3 out of 5 adults who have ever smoked have quit: 61.7% <p>C. Tobacco Cessation Methods</p> <ol style="list-style-type: none"> Pharmacological cessation <ol style="list-style-type: none"> Nicotine replacement therapy <ol style="list-style-type: none"> Nicotine transdermal patches Nicotine nasal spray Nicotine oral inhaler Nicotine gum Nicotine oral lozenges Non-nicotine replacement therapy <ol style="list-style-type: none"> Bupropion Varenicline Nonpharmacological or behavioral cessation <ol style="list-style-type: none"> Individual counseling Group counseling Telephone counseling Cognitive behavioral therapy Hypnotherapy Acupuncture <p>D. Cessation Intervention</p> <ol style="list-style-type: none"> The 5 A's <ol style="list-style-type: none"> Ask Advise Assess 	<p>Slide #8 Smoking Cessation Methods & Statistics</p> <p>Note: Most adults who smoke report wanting to quit; statistics provided by CDC</p> <p>Note: These pharmacological interventions are FDA approved</p> <p>Photo #3- Image of smoking cessation products</p> <p>Q: What can people do or use to quit smoking?</p> <p>A: Answers may vary</p> <p>Slide #9 First 5 Steps: 5 A's</p> <p>Note: 5 step plan developed by U.S Department of Health and Human Services</p>

- d. Assist
- e. Arrange

as a guide for healthcare professional

TIME	LESSON CONTENT	NOTES – MEDIA-Q/A
4 minutes	<p>III. Periodontal Disease</p> <p>A. Definition: Chronic inflammatory disease that impacts the supporting tissues in the mouth and causes tooth loss.</p> <ol style="list-style-type: none"> 1. Affects: <ul style="list-style-type: none"> a. Gingiva or gums b. Alveolar bone c. Periodontal ligament 2. Also known as: <ul style="list-style-type: none"> a. Gum disease b. Gingivitis c. Periodontitis <p>B. The Periodontium</p> <ol style="list-style-type: none"> 1. Made up of: <ul style="list-style-type: none"> a. Gingiva b. Periodontal ligament c. Cementum d. Alveolar bone <p>C. Gingivitis vs. Periodontitis</p> <ol style="list-style-type: none"> 1. Gingivitis: <ul style="list-style-type: none"> a. Reversible b. Dental plaque c. Inflammation 2. Periodontitis: <ul style="list-style-type: none"> a. Advanced gingivitis b. Irreversible c. Bone loss d. Tooth loss 	<p>Slide #10 What is Periodontal Disease?</p> <p>Q: Have any of you heard of the term periodontal disease before, maybe from your dental professional?</p> <p>A: Answers will vary</p> <p>Slide #11 So What is the Difference</p> <p>Photo #4- Image of periodontitis and gingivitis</p> <p>Note: Explain differences in gingivitis and periodontitis in brief understandable detail</p>

TIME	LESSON CONTENT	NOTES-MEDIA-Q/A
	D. Risk Factors of Periodontal Disease <ol style="list-style-type: none"> Poor oral selfcare Lingering dental plaque Lifestyle choices <ol style="list-style-type: none"> Smoking Alcohol consumption Systemic diseases <ol style="list-style-type: none"> Diabetes Obesity Immuno- deficiencies Nonmodifiable risk factors <ol style="list-style-type: none"> Race Gender Hereditary Genetics Hormonal changes; pregnancy Modifiable risk factors <ol style="list-style-type: none"> Stress Medications 	Slide #12 What Can Cause Periodontal Disease
4 minutes	IV. Effects of smoking on periodontal health status A. Relationship between smoking and periodontal disease <ol style="list-style-type: none"> Smoking; major risk factor Tobacco- periodontitis association More sever periodontal disease <ol style="list-style-type: none"> Attachment loss Bone loss Tooth loss Gingival recession Periodontal pockets Decrease immune system <ol style="list-style-type: none"> Poor oral healing Poor infection control Periodontal disease risk; 2 times greater Poor prognosis; dental treatment 	Slide #13 Smoking and Periodontal Disease Relationship

TIME	LESSON CONTENT	NOTES-MEDIA- Q/A
4 minutes	<p>V. Smoking and Oral Cancer Relationship</p> <p>A. Definition: A disease in which cells of the body grow out of control; develops specifically in the oral cavity</p> <p>B. Oral Cancer Locations</p> <ol style="list-style-type: none"> Occurs on: <ol style="list-style-type: none"> Lips Gums Tongue Inner lining of the cheeks Roof of the mouth Floor of the mouth (under the tongue) Category; head and neck cancers <p>C. Oral Cancer Risk Factors</p> <ol style="list-style-type: none"> Tobacco use Heavy alcohol use Sun exposure to the lips Human papillomavirus (HPV) A weakened immune system <p>D. Tobacco products associated with oral cancer</p> <ol style="list-style-type: none"> Oral cavity: <ol style="list-style-type: none"> Cigarettes Cigars Pipes Lip cancer: <ol style="list-style-type: none"> Pipe smoking: Cheeks, gums, inner lips: <ol style="list-style-type: none"> Snuff Dip Chew, or Dissolvable tobacco 	<p>Slide #14 Smoking and Oral Cancer</p> <p>Photo #5- Image of oral cancer</p> <p>Slide #15 Oral Cancer Risk Factors</p> <p>Photo #6- Image of tobacco products linked to oral cancer</p>

TIME	LESSON CONTENT	NOTES – MEDIA- Q/A
2 minutes	<p>E. Relationship between smoking and oral cancer</p> <ol style="list-style-type: none"> 1. Smoking; oral cancer development 2. Decrease immune system, fighting cancer 3. Continuous cancer growth 4. Cell damage <p>F. Statistics</p> <ol style="list-style-type: none"> 1. Cancer rates; 7-10 time more 2. Secondary cancer; 3 time more 	
	<p>VI. Oral Cancer Self-Exam</p> <p>A. Performing self-examination</p> <ol style="list-style-type: none"> 1. Look in mirror and palpate: <ol style="list-style-type: none"> a. Head and neck b. Face c. Neck d. Lip e. Cheek f. Roof of the mouth g. Floor of the mouth h. Tongue 2. Remove dentures, oral appliances 3. Look, feel inside lips and gums 4. Tilt head back; inspect and feel the roof of mouth. 5. Pull cheek out and inspect it and the gums in the back. 6. Pull out tongue; look at top and bottom. 7. Feel for lumps, enlarged lymph nodes (glands) on both sides of the neck and lower jaw. <p>B. Signs and symptoms of oral cancer can include:</p> <ol style="list-style-type: none"> 1. Sores that do not heal. 2. Lumps on the lip or in the mouth or throat. 3. White or red patches on the gums, tongue, or lining of the mouth. 4. Unusual bleeding, pain or numbness in the mouth. 5. Changes in texture 	<p>Slide # 16 Oral cancer self-exam</p> <p>Q: Has anyone done an oral self-examination, or been told the importance of why an oral exam is needed?</p> <p>A: Answers will vary</p> <p>Note: Refers to handout for self-oral cancer screening steps and what to look for.</p> <p>Photo #7- Image of head, neck, and mouth for cancer screening.</p>
		<p>Slide # 17 Signs and symptoms of oral cancer</p> <p>Note: Explain the signs and symptoms.</p>

TIME	LESSON CONTENT	NOTES-MEDIA-Q/A
4 minutes	<p data-bbox="431 268 971 300">VII. Oral Manifestations of Smoking</p> <p data-bbox="383 342 971 373">A.What Your Dental Hygienist May Notice</p> <p data-bbox="383 415 643 447">1.Changes with use:</p> <ul style="list-style-type: none"> <li data-bbox="431 489 683 520">a. Pale oral tissues <li data-bbox="431 525 745 556">b. Oral mucosal lesions <li data-bbox="431 560 721 592">c. White oral mucosa <li data-bbox="431 596 735 627">d. Hyperkeratinization <li data-bbox="431 632 763 663">e. Wrinkled oral mucosa <li data-bbox="431 667 721 699">f. Nicotine stomatitis <li data-bbox="431 703 716 735">g. Gingival recession <li data-bbox="431 739 729 770">h. Decreased bleeding <li data-bbox="431 774 799 806">i. Increased probing depths <li data-bbox="431 810 602 842">j. Bone loss <li data-bbox="431 846 683 877">k. Attachment loss <li data-bbox="431 882 769 913">l. Furcation involvement <li data-bbox="431 917 802 949">m. Thick and fibrotic tissues <li data-bbox="431 953 662 984">n. Teeth staining <li data-bbox="431 989 735 1020">o. Damaged taste buds <li data-bbox="431 1024 756 1056">p. Increased sinus issues <p data-bbox="383 1108 781 1140">2. Biological changes with use:</p> <ul style="list-style-type: none"> <li data-bbox="431 1144 818 1176">a. Increased vasoconstriction <li data-bbox="431 1180 708 1211">b. Oxygen depletion <li data-bbox="431 1215 821 1247">c. Decreased immune system <li data-bbox="431 1251 862 1283">d. Increased collagen production <li data-bbox="431 1287 833 1318">e. Reduction of bone minerals <li data-bbox="431 1323 789 1354">f. Impaired wound healing <p data-bbox="383 1407 833 1438">3.Changes with smoking cessation:</p> <ul style="list-style-type: none"> <li data-bbox="431 1442 748 1474">a. Increased blood flow <li data-bbox="431 1478 834 1509">b. Healthier tissue consistency <li data-bbox="431 1514 841 1545">c. Attachment levels stabilized 	<p data-bbox="1052 268 1336 373">Slide #18 What Your Dental Hygienist May Notice</p> <p data-bbox="1052 415 1393 483">Photo #7- Image oral several oral manifestations</p>

TIME	LESSON CONTENT	NOTES-MEDIA-Q/A
4 minutes	B.Benefits of Smoking Cessation <ol style="list-style-type: none"> 1. Reduction of heart problems 2. Reduction of gum disease 3. Reduction of high blood pressure 4. Reduction of oral cancer incidence 5. 30% increase in lung function 6. Increased circulation 7. Decreased risk of coronary heart disease 8. Improved mouth odor 9. Decreased teeth staining 10. Improved periodontal condition 11. Improved taste and smell sense 	Slide # 19 Benefits of Smoking
	C.Signs of Nicotine Addiction <ol style="list-style-type: none"> 1. Compulsive use 2. Use despite harmful effects 3. Euphoric effects 4. Difficulty quitting 5. Difficulty controlling consumption 6. Recurrent cravings 7. Physical dependence 8. Tolerance 9. Relapse after abstinence 	Slide # 20 Hallmark Signs of Nicotine Addiction
	VIII. Key Elements of Tobacco Cessation Program	Slide # 21 How To Start: Before You Quit
	A.How Your Hygienists Can Help You Start <ol style="list-style-type: none"> a. Assessment b. Motivation to quit <ol style="list-style-type: none"> i. Reasons for quitting ii. Previous quit attempts iii. Nicotine dependence c. Patterns of tobacco use <ol style="list-style-type: none"> iv. History or mood disorders v. Contraindications for pharmacotherapy a. Set a quit date b. Establish a plan for quitting c. Offering coping skills training d. Gaining support from others 	

TIME**LESSON CONTENT****NOTES-MEDIA-Q/A**

- e. Recommend pharmacologic agents
- f. Relapse prevention
- g. Following up

B.Assisting Patients Who Are Not Ready to Quit

1. Brief Intervention
 - a. 3 min conversation
 - b. Respond with understanding
 - c. Reassure the patient
 - d. Ask permission to revisit conversation
 - e. Document conversation

2. Motivational Interview- Change talk

Definition: Asking the client to voice their arguments for change

- a. Start of change process
- b. Patient centered communication
- c. 4 strategies of change talk
 - i. Open ended questions
 - ii. Affirming change talk
 - iii. Reflective responding
 - iv. Summarizing results of dialog

3. 4 Principles of the Motivational Interview

- a. Express empathy
 - i. Listen, understand, no judgement
- b. Develop discrepancy
 - i. Point out discrepancies in behavior
- c. Roll with resistance
 - ii. Ask permission to provide information
 - iii. Avoid arguing with client
- d. Support self sufficiency
 - iv. Help client realize potential
 - v. Provide resources for self-discovery

Slide # 22 Not Ready to Quit?

Note: Not all patients will be ready to take the leap; planting a seed for change is necessary

Note: Explain what change talk is

Slide #23 How to Begin Change Talk

Slide #24 Effective Motivational Interviewing

TIME	LESSON CONTENT	NOTES-MEDIA-Q/A
3 minutes	<p>IX. Oral Hygiene Care for Smokers</p> <ol style="list-style-type: none"> Brushing <ol style="list-style-type: none"> Twice or more daily Morning and nightly Soft bristle toothbrush Manual or electric toothbrush Tongue cleaning Fluoridate toothpaste Plaque removal <ol style="list-style-type: none"> Flossing Waterpik Floss picks Interproximal brush Prescription or over the counter mouthrinse <ol style="list-style-type: none"> Antimicrobial rinse Fluoridated rinse Non-alcoholic rinse Home oral cancer screenings 	<p>Slide # 25 Home Care for Smokers</p> <p>Photo #8-Image of mouth at home oral hygiene products</p>
2 minutes	<p>X. In Office Dental Care for Smokers</p> <ol style="list-style-type: none"> Regular dental visits and cleanings <ol style="list-style-type: none"> 3-6-month intervals Routine dental hygiene treatment <ol style="list-style-type: none"> 3-6 month recalls Intra and extra oral examinations Oral cancer screenings Prescribed radiographic examination Routine periodontal measurements “Deep cleanings” or scaling and root debridement Necessary referrals <ol style="list-style-type: none"> Periodontitis Oral pathologist Endodontists 	<p>Slide #26 Role of Your Dental Provider</p> <p>Photo #9- Image of dental team</p>

TIME	LESSON CONTENT	NOTES-MEDIA-Q/A
3 minutes	<p>XI. Closure</p> <p><u>A. Summary of Major Point- Relate Back to Objectives</u></p> <p>I hope you have a better understanding of what smoking cessation is. I hope that you can take what you have learned today and use this knowledge for yourselves or your friends and family who may be interesting in quitting. I hope that through today's information you have learned what the common and new forms of nicotine delivery are as well as the systemic health consequences of nicotine use. Remember that smoking exposure does not only impact the body but has serious implications on the oral cavity. Keep in mind that common methods of smoking cessation and the immediate systemic benefits of smoking cessation can have on you overall body. I hope that you are also able to recommend appropriate oral homecare practices for smoker.</p> <p><u>Provide a Sense of Accomplishment</u></p> <p>I hope you feel encouraged to start your own journey into smoking cessation or sharing this knowledge with someone in your life who may want to quit. I hope you feel more comfortable and are able to recognize the common forms of nicotine delivery, smoking cessation, overall health impacts, and homecare modifications</p> <p><u>B. Assignment</u></p> <p>For a better understating of our topic today you should:</p> <ol style="list-style-type: none"> 1. Explore websites listed on your handout 2. Search the CDC, ADA, scholarly journals for current facts and figures 3. Research tobacco cessation programs offered in dental offices in your local area 	<p>Slide #27 Objectives</p> <p>Q: Name three of nicotine delivery systems</p> <p>A: Smokeless tobacco, smokable tobacco and electronic nicotine delivery</p> <p>Q: Can any of you name a few of the oral manifestations of smoking exposure</p> <p>A: Gingival recession, teeth staining, decreased gingival bleeding</p> <p>Q: Do you feel confident enough to discuss smoking cessation with a friend who may be interested in quitting?</p> <p>A: You know the common forms of nicotine delivery, various smoking cessation methods, the overall health consequences, and homecare modifications that smokers can use.</p> <p>Slide #28 References and Websites to Explore</p> <p>Note: Websites and academic journal placed on the back of your oral cancer screening handout</p>

TIME	LESSON CONTENT	NOTES-MEDIA-Q/A
5 minutes	<p data-bbox="451 268 954 300" style="text-align: center;">CRITICAL THINKING ACTIVITY</p> <p data-bbox="381 342 1023 846">Case: Your friend has been smoking for 20 years and recently tells you she is thinking about quitting cigarettes. She also tells you she has developed one red painful sore on the bottom of her mouth that has been bothering her on and off for the past month, and thinks she has developed some sort of allergy all of a sudden. Now that you are aware of the forms of nicotine delivery, cessations methods, and overall health impacts; what would you tell your friends as far as her cessation options? How would you address the sore in her mouth and what info could you tell her about the overall impact of smoking on her health?</p> <ol data-bbox="407 888 1019 1140" style="list-style-type: none"> 1. Your friend tells you she rather seek a more holistic “approach” to quitting, but is not completely opposed to taking medications to help her quit. However, she says when she quits, she wants to quit “cold turkey” meaning no nicotine. What options does she have? <p data-bbox="454 1182 1023 1581">Answers: Holistic options would be something like non-pharmacological cessation. You should investigate things like individual counseling, group counseling or behavioral therapy. If you want to take medication but without nicotine non-nicotine replacement therapy should be something you look into with your healthcare provider. You may hear of medications called Bupropion or Varenicline.</p> <ol data-bbox="407 1623 1019 1871" style="list-style-type: none"> 2. You friend feels that by quitting she is giving up a big part of her life. She says that she feels healthy overall besides the new mouth sore and wants to know what she would gain by quitting cigarettes? With your knowledge what can you tell your friend to encourage her change? 	<p data-bbox="1052 268 1399 342">Slide #29 Critical Thinking Activity: Case for Analysis</p>

TIME**LESSON CONTENT****NOTES-MEDIA-Q/A**

Answers: You may feel healthy now but by quitting cigarettes you will feel even better and healthier. By quitting you will have improved sense of taste, smell, and your risk for high blood pressure and heart disease will decrease. By quitting you will also be able to have better breathing and lung capacity along with improved oral health. Quitting will also decrease your risk for oral cancer. By quitting you have a lot to gain in relation to your daily life and health.

3. Your friend says that she is worried about the sore in her mouth. She was reading information from Google that says that a sore like hers could be related to a rare oral disease, allergy, or oral cancer. She says, "I know that smokers have a higher chance in developing oral cancer". You may not be able to diagnose your friend, but what can you tell her to ease her fears and seek appropriate help.

Answers: You should tell your friend not to be afraid about the information she found on Google. The only real way she can find out exactly what she has is by going to the doctor or her dentist. You can let your friend know that her dentist can refer her to an oral pathologist.

4. Your friend says that the last time she went to the dentist they recommended that smoking cessation would improve her oral health, but she did not really understand how smoking would impact her mouth. What can you tell your friend about the impact of smoking exposure on her mouth?

Answer: You can tell your friend that you learned that smoking can affect the body's ability to fight off bacteria and harmful pathogens in the mouth which can lead to gum disease. Smokers are more susceptible

Slide #30 Critical Thinking Activity: Case for Analysis

Q: What other information could you give your friend now that she is worried about the sore in her mouth possibly becoming oral cancer; now that you have more knowledge on oral cancer.

A: It would be good to tell your friend that the prognosis for oral increase if detected early and she should discuss this matter further with her healthcare professional.

to developing periodontal disease which is the loss of bone in the mouth that is not reversible. You should let your friend know that smoking impairs wound healing in the mouth and decreases positive outcome to dental treatment.

Test Questions

1.**Objective #1:** List the common forms of nicotine delivery systems

Test Item: Smoking forms may involve all of the following **EXCEPT** one. Which of the following is the **EXCEPTION**?

- A. Electronic nicotine delivery
- B. Inhalation nicotine delivery
- C. Smokeless tobacco
- D. Smokable tobacco

2.**Objective #2:** Evaluate the health consequences of smoking

Test Item: Smoking has a direct relationship on oral and systemic health and its effects include all of the following **EXCEPT** one. Which of the following is the **EXCEPTION**?

- A. Periodontal disease
- B. Decreased immune system
- C. Increased lung functioning
- D. Oral cancer

3.**Objective #3:** Identify the implications of smoking exposure on the dentition

Test Item: All of the following are typical oral manifestations of smoking on the dentition **EXCEPT** one. Which one is the **EXCEPTION**?

- A. Increased bleeding
- B. Gingival recession
- C. Teeth staining
- D. Bone loss

4.**Objective #4:** Discuss the common methods of smoking cessation.

Test Item: Your childhood friend you grew up with has been smoking for 20 years and heard you took a community oral health course on smoking cessation. Your friend tells you, “I recently went to my dental hygienist for my routine cleaning and she mentioned something about a smoking cessation program. I told my hygienist that I would try quitting once the new year comes. Can you tell me about some of the smoking cessation methods you learned in your community health class? I might sign up for it next time.”

In one paragraph (3-4 sentences) discuss the common smoking cessations methods you would tell your friend about.

5.**Objective #5:** Recommend appropriate oral homecare practices for smokers.

Test Item: In one paragraph (3-4 sentences), suggest appropriate oral homecare practices for smokers.

Correct Answers:

1.B

2.C

3.A

4. I would tell my friend that there are many FDA approved products that his/her dental professional may recommend that can help with smoking cessation. I would tell my friend about the two main cessation methods which are pharmacological or nonpharmacological. I would tell my friend that he/or she can use nicotine replacement products like patches, nasal spray, gum, or lozenges. on-nicotine replacement therapy which may include medication like Varenicline or Bupropion. Non-pharmacological intervention includes things like counseling or cognitive behavioral therapy. I would encourage my friend to do additional research and consult his dental provider about the best option for him.

5. Smokers will need to brush their teeth two or more times a day with fluoridated toothpaste prevent dental cavities. Smokers must also clean their tongues daily decrease to bacterial buildup and breath malodor. It is also important for smokers to remove plaque in between their teeth with items such as floss, Waterpik, interproximal brush, or floss picks to prevent gum disease. It is important for smokers to use antimicrobial mouthrinses to prevent gum disease, fluoride mouthrinse for caries prevention, or non-alcoholic mouthrinses if dry mouth is an issue. Smokers should be performing routine home oral cancer screenings.