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DEN1100

Section OL10

3/26/21

Writing Assignment 1

Part 1:

Dutra, L., & Glantz, S. (2014). Electronic Cigarettes and Conventional Cigarette Use Among US Adolescents: A Cross-sectional Study. *JAMA Pediatrics*, *168*(7), 610–617. https://doi.org/10.1001/jamapediatrics.2013.5488

Holliday, R., Preshaw, P., Ryan, V., Sniehotta, F., McDonald, S., Bauld, L., & McColl, E. (2019). A feasibility study with embedded pilot randomised controlled trial and process evaluation of electronic cigarettes for smoking cessation in patients with periodontitis. *Pilot and Feasibility Studies*, *5*(1), 74–74. https://doi.org/10.1186/s40814-019-0451-4

Irusa, K., Vence, B., & Donovan, T. (2020). Potential oral health effects of e‐cigarettes and vaping: A review and case reports. *Journal of Esthetic and Restorative Dentistry*, *32*(3), 260–264. https://doi.org/10.1111/jerd.12583

Part 2:

Tobacco use has been a contributing factor to many medical conditions that lead to illness and death. It is dangerous because it is a risk factor for periodontal disease, cancer, and chronic lung disease. As stated in Module 11 of the Patient Assessment Tutorials, “Smoking is a known cause of multiple cancers, accounting for at least 30% of all cases of cancer and approximately 163,700 cancer deaths every year in the United States” (Gehrig 2018). Smoking causes more deaths than suicides, fires, AIDS, and drugs combined (Gehrig 2018). Although smoking is extremely harmful to the human body, people continue to smoke because they have an addiction to the nicotine within the tobacco. When a person smokes tobacco, they are not only harming themselves. Tobacco smoke can be inhaled by secondhand smoke and can spread through thirdhand smoke through hair, clothes, vehicles, and furniture (Gehrig 2018). There are many different ways tobacco can be inhaled, and electronic cigarettes are one of the dangerous because of how prevalent it is.

An electric cigarette is a battery-powered device that uses aerosols to provide doses of nicotine and other harmful chemicals (Gehrig 2018). It is termed “vaping” and currently unregulated by the U.S. FDA (Gehrig 2018). This product consists of a mouthpiece, reservoir to hold the liquid, lithium battery, and a heating element (Irusa, K., Vence, B., & Donovan, T. 2020). Many people who smoke with an electrical cigarette are using it as a smoking cessation aid. According to the scholarly article from Pilot and Feasibility Studies, e-cigarette intervention may improve the rate for individuals to quit smoking. (Holiday 2019). Although people use it as a smoking cessation, there is an increase in the amount of middle school and high school students who are not using it as an aid. According to an article by JAMA pediatrics, “The 2011 and 2012 National Youth Tobacco Survey (NYTS) revealed that e-cigarette use among youths in grades 6 through 12 doubled between 2011 and 2012, from 3.3% to 6.8%” (Dutra, Glantz 2014).

The reason I chose electronic cigarettes is because of this increase of young students who are consuming it. Throughout high school, I would witness people using e-cigarettes in the bathroom, lunch room, or whenever a faculty member was not observing them. This would make me uncomfortable because I did not want to inhale second hand smoke nor smell like it. The number of adolescents who use this concerns me because they are developing an addiction at a young age. As a dental hygienist, I would want to educate all of my patients, especially those in high school, about the harm they are placing on their overall health.

There are many hazardous ingredients in an e-cigarette. In addition to nicotine, there are toxic chemicals which include diethylene, carcinogens, and glycol. E-cigarettes contain flavoring ingredients which come in different flavors. Some of these flavors include strawberry, chocolate, pancake, and vanilla. When glycerol is heated into an aerosol, its breakdown products include propionaldehyde, acetic acid, and lactic acid. These products can result in xerostomia because they are hygroscopic, binding water in saliva. This variety in flavoring increases the urge for adolescents to want to try it and they sometimes become addicted because of the delicious taste (Irusa, K., Vence, B., & Donovan, T. 2020).

These chemicals in electronic cigarettes are harmful to oral health because they can demineralize enamel. “The viscous aerosols produced by heated e‐liquids allow *Streptococcus mutans* to stick to enamel, resulting in demineralization and can lead to rampant caries” (Irusa, K., Vence, B., & Donovan, T. 2020). The flavoring in e-cigarettes contain sucrose which can cause caries and increase biofilm formation. Additionally, it can decrease the hardness of enamel and cause dryness within the mouth. Electronic cigarettes increase inflammatory response, which has a negative impact on a person’s periodontal and gingival health (Irusa, K., Vence, B., & Donovan, T. 2020). Individuals who smoke are more likely to have severe bone loss, making smoking the main risk of factor for developing periodontal disease.

It is essential for me to provide smoking counseling to my patients during their dental visits. Since smoking is a main risk factor for periodontal disease, it is very important for me to make my patients aware of the harmful effects that smoking has on their periodontium and overall health. I will educate smokers on the benefits of quitting and strongly advise them to quit. I will inform them of the overall benefits including decreased risk of cancer, coronary heart disease, stroke, and a heart attack. After, I will ask open-ended questions, without judging them, to assess their willingness to quit. Additionally, I will assist them by discussing challenges that come along with cessation and inform them that it is normal to have reluctance. I will than refer my patients by providing them with a list of quitline websites and telephone services. After assisting them, I would want to arrange follow-up appointments to focus on preventing them from having a relapse. By advising them to quit and referring them to get additional help, my goal is for my patients to know that I am concerned about their health. I am determined to save as many lives as possible.

Discussing this information with a teenager who just started to smoke 2 months ago is very important. Most individuals start smoking during adolescence due to stress, anxiety, depression, family habits, or peer pressure. I would address the situation by using open-ended questions to ask my patient about their electrical cigarette use. After attaining this information, I would strongly educate my patient of the long-term harm that they can place on their teeth and body. I would provide strong and personalized advice to urge them to quit. Since my patient is young and just started to smoke, I would advise him/her that it is a good time to quit to prevent developing an addiction that can cause early death due to smoking-related illness. By clearly emphasizing the importance of cessation, I would try my best to get my patient to quit now before additional problems occur.

It is significantly important to discuss the dangers of smoking with a 30 year old adult who has been smoking for 12 years. I would first start by showing my concern about my patient’s health by asking open-ended questions to attain information. I would than advise my patient that it is never too late to quit. After 2 weeks of cessation, lung function increases up to 30% (Gehrig 2018). It is significant to remind this patient that the final goal of electronic cigarettes is to quit smoking altogether. I would educate this patient about the health benefits of stopping and strongly urge them to stop. I would make my patient aware that I am here to help them by being personal and understanding. I would than determine their willingness to stop and discuss challenges they might have because they have been smoking for 12 years. Additionally, I would give the patient tips to help them quit and how to control their cravings. After, I would provide my patient with a quitline telephone number or website to promote cessation. I would want them to make a follow-up appointment to check up on their process and to answer any questions they might have.

Electronic cigarette use is very concerning since it is increasing worldwide. While many individuals use it to help them quit smoking, there is a large percent of the population who are using it for other reasons. It is my main objective as a dental hygienist to help decrease the amount of electrical cigarette and tobacco use for my patients. By educating, supporting, and counseling my patients about the dangers of smoking, I hope to provide an indispensable service.

Part 3:

1. This assignment has taught me how to address people of all ages about the harm tobacco products have on the oral cavity and the body. I was surprised to read about the high percentage of people who use tobacco products and the diseases it can be a risk factor of. Some patients can give a hard time to open up and admit that they use tobacco products. I have learnt the proper steps to follow in order to make a patient feel more comfortable to discuss this important information. This is very significant because I will use this information to urge all of my patients who smoke to quit.

2. I found this assignment to be very beneficial to me. I have learnt more about the toxic chemicals in smoking products in addition to the health risks it has on the body. Many individuals have a hard time admitting they smoke, and it is my goal to make my patients feel comfortable to discuss their personal information with me. This assignment has taught me the importance to urge not only my future patients, but my friends and family as well to stop smoking.

3. Throughout my life, I have known many people who use vapes. During my high school experience, many of my classmates would use an electrical cigarette. Since I did not use this tobacco product, I did not know much about it. Now that I am older, many of my friends use this tobacco product when they are at parties or small gatherings. Additionally, I had a friend that used to have an addiction to this product and would smoke every time that I was with him. This bothered me because I was consuming second hand smoke and that he had an addiction at a young age.

4. Now that I have read Module 11 and have done this assignment, I feel more comfortable to have a conversation with my future patients about smoking cessation. I want my future patients to be aware that I am concerned about their health and determined to assist them in their cessation process. It is hard for someone to quit especially if they have been smoking for many years. Therefore, it can be a difficult task at hand. By taking the time to ask, advise, assess, assist, and arrange follow-up appointments, I will show my future patients that smoke how much I am concerned about their health and will always be available if they need any help and advice.

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