**Tobacco Cessation Term Paper**

**DEN 1101**

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 Tobacco use is a controversial topic in modern society. Smoking is a high-risk factor for oral cancer. Wilkins mentioned that oral cancer is estimated that more than 48,000 new cases will be diagnosed in the United States in 2016. One person dies of oral cancer every hour in the United States (Boyd et al., 2021). It's a terrible statistic. People use tobacco products or they are exposed to a smoking environment. They increase the risk of periodontal disease and premature death because tobacco and secondhand smoke contain many toxic chemicals and nicotine that harm human health or cause addiction. Tobacco use could create oral conditions, such as gum disease, bone loss, and oral cancer. Generally speaking, tobacco has many side effects. Healthcare personnel should provide knowledge of tobacco cessation technology and information, and assist them to quit smoking.

 According to my research, Tobacco products have nicotine and chemicals. They contain over 7000 chemical carcinogenic substances. Nicotine is toxic that can cause death as well as cause addiction. “Once tobacco is inhaled directly into the lungs, nicotine and chemicals quickly assess into arterial circulation via blood vessels lining the bronchi, spreading to all body tissues: skin, and oral, nasal mucosa. Nicotine is metabolized by the liver and excreted in the urine. Approximately one in four adult Americans report using dissolvable tobacco products, such as: cigars, cigarillos, regular pipe, waterpipe (hookah), electronic cigarettes, and smokeless tobacco.” (Boyd et al., 2021). Electronic cigarettes are more and more popular among middle and high school students because it is very common.

 One of my friends told me electric cigarettes are easy to use and carry. Unlike traditional cigarettes, which require an extra cigarette lighter. The cost of electrical cigarettes is cheaper than traditional cigarettes. They believed that electronic cigarettes are safer and have fewer harmful effects than other tobacco products. However, the research indicated the structure and components of electronic cigarettes. “It consists of a battery, a heating element, and a liquid-containing cartridge. The liquids are vaporized by the heating element” (Gaur & Agnihotri, 2018). Like traditional cigarettes, electronic cigarettes also contain nicotine which causes addiction. Due to the Nicotine and metals in the tobacco, smokers often have a dark and grayish stain on their teeth. In addition, it releases various trace metals, including aluminum (Al), arsenic (As), cadmium (Cd), chromium (Cr), copper (Cu), iron (Fe), manganese (Mn), nickel (Ni), lead (Pb), and zinc (Zn) (Gaur & Agnihotri, 2018). If you use electronic cigarettes for a long time, it can cause chronic diseases such as lung cancer, bronchial asthma, diabetes, cardiovascular, oral cancer, and liver cancer. According to the systematic reviews focusing on e-cigarette effects on oral health, the most common effects are periodontal destruction, severe bone loss, tooth loss, gingival inflammation, and gingival bleeding when probing, oral cancer, mucosal lesions. Therefore, the Food & Drug Administration has not approved its safety as adverse effects are unknown.

 Even if everyone knows that tobacco is harmful to health, not everyone can successfully quit smoking. The study “*Tobacco Cessation: Are Oral Cancer Patients Ready for It*” assesses some smokers of highly addictive nicotine to decide how willing to quit tobacco by the contemplation ladder and risk perception. The result is “45.5% were planning to quit in the next 30 days, and another 22.5% within the next 6 months; 17.1% had made quit attempts in the past, but not successful” (Sujatha, S et al, 2020). During tobacco treatment, many factors may impact patient relapse smoking. The article “*Cognitive, behavioral, and situational influences on relapse to smoking after group treatment for tobacco dependence*” explains tobacco users tend to relapse from socioeconomic differences and their cognitive-behavioral models. First, “lower socioeconomic status (SES) groups in smoking are 2–3 times greater than higher SES groups” (Lunden et al., 2019) because lower socioeconomic status (SES) groups have more burden and produce more stress, which leads to failure to quit smoking more than higher SES groups. Second, this article uses a cognitive-behavioral model to determine treatment failure. “Participants tended to relapse in their usual environments, during the morning or afternoon, and while engaged in routine activities” (Lunden et al., 2019). The primary cause of relapse to smoking is stress, habits, and unexpected events. When tobacco users stop using nicotine products, they experience psychological withdrawal symptoms. Tobacco users may have negative emotions, such as anxiety, anger, confusion, and depression. They may have difficulty concentrating, and decrease heart rate. Quitting tobacco also increases their appetite or weight, as well as their cravings for tobacco. (Boyd et al., 2021). I think this is the reason why tobacco is hard to quit because the nicotine will affect the brain when they smoke. Tobacco users want to produce a sense of being well, boost their mood, and improve short-term concentration and memory.

 Many smokers start smoking as a teenager for a variety of reasons. Someone may see his family members who use tobacco. Someone thinks using tobacco products is so cool. Someone would like to release the stress from school and parents. If a teenager just started to smoke 2 months ago, now is the time to help the child quit. As a parent, they should not only manage the child’s feelings, thoughts, stress, and social influences but also encourage and provide more support for quitting smoke. Dental hygienists as the first line of defense, they could communicate with patients to realize their tobacco use status and level. Then we can assess the oral conditions through the extra/ intra oral examination and review the patient’s medical and dental history during each visit. It is more effective for dental health professionals to identify and intervene actively. Furthermore, we can advise patients to quit smoking, and tell them about the negative effects of electronic cigarettes, such as nicotine addiction, lung cancer, and oral tissue. We can explain the benefit of quitting smoking. “Quitting smoke can not only improves the taste and smell but also improve the health of family members, as it will produce second-hand smoke” (GEHRIG, 2020). We can conduct the questionnaire interview to test patients how willingness to quit tobacco through risk perception. Once the patient wants to stop, we can provide effective information about tobacco prevention and cessation programs or websites. Health personnel should pay attention to follow-up to prevent relapse, especially in a patient who has been smoking for 12 years. It can motivate smokers to change their behaviors and increase the rate of tobacco cessation. The article mentioned that tobacco cessation interventions have produced varying rates of success. “Without intervention, patients who do quit tobacco may be at high risk for relapse due to withdrawal symptoms. Whereas with effective interventions, cessation rates can increase by 50-100% (Sujatha, S et al, 2020)”.

 In conclusion, I learned a lot of information about tobacco, and one tobacco product I chose is electrical cigarettes because the research shows that many middle and high students use electrical cigarettes, including my friends around me. After doing the research, I learned about the structures of electronic cigarettes and the harmful properties of tobacco. I realized tobacco use leads to health effects and psychological withdrawal symptoms once they stop. As dental hygienist students, we have to learn tobacco intervention techniques to educate patients in changing their behavior because tobacco use is a public health concern and harmful to health. If I reach out to friends or family members who smoke, I understand how to offer advice to quit smoking. After completing this assignment, I feel more comfortable having a conversation with future patients about smoking cessation. It is important to improve my communication skills and learn an effective strategy for providing tobacco cessation counseling. I am looking forward to helping them to quit tobacco.

**Reference:**

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