Term Paper Assignment:

Tobacco Cessation

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Clocking in as one of the most addictive substances, tobacco claims nearly 6 million lives each year worldwide (Gehrig, 2018). According to the American Dental Association, only half of smokers visit the dentist annually, therefore, it is crucial for dental hygienists to educate patients who smoke on the detrimental affects of smoking in the body as well as motivate them to quit. For some patients, a dental visit may be the only health care a person routinely seeks out, giving dental health care providers a unique opportunity to provide tobacco cessation counseling. For effective tobacco cessation counseling, the patient must know all the resources available to them including nicotine replacement options.

Tobacco products contain 70 carcinogenic, or cancer causing, substances such as formaldehyde, benzene, carbon monoxide, and ammonia. The addiction to tobacco comes from nicotine, which is a substance that is naturally found in tobacco. Smoking puts one at risk of chronic obstructive pulmonary disease, coronary artery disease, smokers cough, head and neck cancers, and many other conditions. Cigarette smoking has implications on oral and periodontal health as well. "Smoking elevates the risk of nearly every oral condition," and increases the risk of developing oral and pharyngeal cancer (Chaffee et al., 2021). Studies have linked tobacco smoking to an increased risk of dental caries and calculus accumulation. Periodontal disease is another known risk that comes from smoking. Periodontal disease is a serious condition where the supporting tissues of the teeth become infected and inflamed, and can cause tooth loss and periodontal support loss. When teeth loose the support of the periodontum, the periodontal ligaments detach from the teeth, increasing tooth mobility. Without professional intervention, the

alveolar bone will then begin to recede, leaving the teeth with no supporting structures to anchor them into the oral cavity.

Electronic cigarettes, also known as e-cigarettes and vapes, are a popular form of ingesting nicotine. The use of e-cigarettes is especially popular amongst teenagers and young adults. "Tobacco experimentation typically begins in adolescence, often due to both social influences and tobacco marketing," (Chaffee et al., 2021). E-cigarettes works by heating up a solution that gets inhaled as an aerosol. The ingredients include a carrier solution made of propylene glycol or vegetable glycerin, nicotine, and flavorings (Chaffee et al., 2021). According to the FDA, some brands of e-cigarettes were found to contain carcinogens and hazardous chemicals that are also found in antifreeze (Gehrig, 2018). While electronic cigarettes are suspected to pose a risk to lung and cardiovascular health, further research is needed in order to definitively know the health effects. The affects on periodontal health are currently inconclusive as well.

A large concern for e-cigarettes is the growing prevalence amongst teenagers and young adults "with 1 in every 6 high school students reporting current e-cigarette use," (Choi et al,. 2021). Due to the unknown long term affects, e-cigarette smoking poses a possible threat to many young peoples' systemic and oral health. Another concern is the addictive properties of e-cigarettes. The nicotine in these devices is at a much higher concentration than nicotine in a single cigarette, and users have the ability to use it instantaneously.

All patients who use tobacco products should be counseled on quitting regardless of them being ready to quit. If a patient expresses a willingness to quit tobacco, the dental health care provider should refer the patient to the appropriate resources. If the patient is unwilling to quit, the provider should motivate the patient by providing a brief intervention. Providing patients

with smoking counseling during their dental hygiene visit gives them a real opportunity to quit in an environment that may feel more comfortable in. Many people can get anxious in a medical setting, therefore, when a patient is more relaxed and expecting to simply get their teeth cleaned, they may be more relaxed and receptive to counseling.

Tobacco cessation counseling could vary slightly depending on the age group of the patient. For example, a teenager who started smoking 2 months ago should be informed of the dangers to their health that smoking poses as well as the addiction they will inevitably develop. Social factors at school or at home may be influencing a teenager to choose to smoke. Regular counseling and motivational interviewing may not be as effective for a teenager because of strong social influences in their life. A text message based motivational interviewing method was tested among college students who smoke. The results of this study concluded that the students feeling of autonomy and "self-efficacy was the strongest predictor of smoking behavior change," (Jorayeva et al,. 2017). With social media playing a large role in the lives of young people, a technology based approach may be more affective in motivating that demographic of smokers. When counseling a 30 year old who has been smoking for 12 years, the dental heath care provider should motivate the patient and share with them the improvements cessation will have on their overall health, as well as their dental and periodontal health. Old patients have more options of nicotine replacement therapies such as nicotine patches, medications, and in some circumstances e-cigarettes. E-cigarettes are known to be less destructive to the body and oral cavity than tobacco and adult patents should be presented this option, however, they should not be offered to teenagers and young adults because they are highly addictive. Patients should always be given knowledge to all their tobacco cessation options.

Tobacco addiction is extremely difficult to overcome and it is a clinicians job to motivate their patients and help them seek the help they need to quit. When doing research for this assignment, I have also learned of the importance of being kind and understanding of a patient's circumstances. At the end of the day, it is an addiction that these people struggle with and they all deserve compassion and help. From doing research on the affects of tobacco and tobacco cessation counseling, I have a much better understanding of why and how I will be helping my future patients. Arming myself with the knowledge on smoking and how to effectively and compassionately communicate with patients makes me more confident to have a conversation about it. I do not yet feel completely comfortable to counsel a patient on smoking cessation, but I believe that comfortability will come with time and experience.

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