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Term Paper

Tobacco Cessation

Did you know that the use of tobacco is responsible for close to six million deaths per year? This is an extremely high number considering that tobacco is one of the most preventable causes of death and illnesses among the public. A type of tobacco product that was introduced to the United States in the year of 2007 was electronic cigarettes. Electronic cigarettes are battery-powered devices that release quantities of nicotine and other additives to the smoker in the form of an aerosol. When inhaled, the aerosol can be absorbed into the bloodstream while lingering in the oral cavity before it is exhaled and released into the atmosphere. Although healthcare providers do not know much information regarding the harmful effects of electronic cigarettes dental hygienists have to provide tobacco cessation counseling to the individuals using these products.

Electronic cigarettes, which are also known as e-cigarettes contain a variety of dangerous chemicals and heavy metals. The Food and Drug Administration (FDA) has yet to regulate e-cigarettes which means that the composition of the product may vary. According to the American Lung Association, e-cigarettes contain; nicotine, propylene glycol, carcinogens, acrolein, diacetyl, nickel, tin, lead, cadmium, benzene, and ultrafine particles. As stated in the clinical article, "Potential oral health effects of e-cigarettes and vaping: A review and case reports," Propylene glycol, when exposed to heat is broken down into lactic acid, acetic acid, and propionaldehyde. These acids can stick to the gingiva and enamel on the teeth causing the demineralization of enamel. When demineralization occurs caries will begin to appear leading to discomfort and pain. When propylene glycol comes in contact with saliva that contains water it

can result in xerostomia (dry mouth). Wadia R, Booth states “A short-term study that investigated the gingival response that occurred when smokers switched from smoking to vaping found a significant increase in gingival inflammation at 2 weeks”. The study proves that e-cigarettes can attack the gingiva at an early stage. This is a sign that vaping can later contribute to the formation of periodontal disease among its users. Overall, e-cigarettes are highly addictive products that not only negatively your oral health, but also increase the risk of cancer and respiratory problems.

The effects that electronic cigarettes have on an individual's health are extremely detrimental because these products are geared toward teenagers and young adults. E-cigarettes are known to have harmful effects on brain development in young adults. Studies have found that “52% - 75% of youth in the 8th, 10th, and 12th grades believed that ENDS mist only contains flavoring and was unaware of the nicotine content”(Johnston et al.). This evidence shows that it is significant that the youth experience tobacco awareness and cessation counseling from a licensed dental hygienist. Awareness will inform the youth about the components and consequences of vaping/smoking. This information will allow young adults to think twice before vaping/smoking an e-cigarette.

As registered dental hygienists, it is our responsibility to educate the patient. In the case of a teenager who began smoking two months ago, it would be ideal to discuss the background of electronic cigarettes starting with the use of open-ended questions. In return, this will allow the hygienist to understand the patient and their knowledge about e-cigarettes. While getting to know the patient, it is important to understand why the patient smokes this device. Many teenagers use e-cigarettes because their friends are using them plus they enjoy trying the different flavors. The majority of young adults may not know how ingredients in the device affect their health. As a

hygienist, I would discuss how smoking can cause rampant caries, periodontal disease, cardiovascular disease, lung cancer, and respiratory problems. Lastly, the teenager would be given several options such as access to quitlines and follow-up appointments to help aid in their progress.

In the case of a 30-year-old who has been smoking for 12 years, it may be difficult to speak to the patient about this practiced behavior. After conducting a thorough Intra and Extraoral Examination, and observing their medical history, I would proceed to record all of my findings. These findings are most likely related to the patient use of tobacco over the years. Patients must be able to see the physical changes that smoking has done to their oral health whether it's inflammation of the gingiva or progressive caries. As a hygienist, you must put yourself in the patient's shoes. A patient that has been smoking for such a long time most likely feels that it is too late to quit, but that is incorrect. Therefore, you must remind them that it is never too late, quitting is a gradual process, and they're not alone. I would discuss with the patient ways in which tobacco cessation will benefit their health and even the people around them. Then provide them with the proper resources that they will need to quit. Hopefully, the patient contacts these resources or quitlines and attends a follow-up visit with me for another screening.

In conclusion, tobacco use has negatively affected the oral health of individuals of all ages. This is why dental hygienists must be up to date with any current trends such as the use of e-cigarettes, to prevent addiction or assist in tobacco cessation. Starting from the ingredients that are presented in e-cigarettes to the likely future effects. The public must be aware and willing to seek help when needed. All patients may have different perspectives when it comes to smoking, but one thing that remains the same is the consequences of smoking. Therefore, is vital that

dental hygienists and other healthcare professionals work together to advise and educate the public.

Reflection

The research paper that I have conducted on tobacco cessation has educated me about the complex role of a dental hygienist in various occasions. This assignment was highly beneficial because it forces you to further your knowledge in tobacco cessation and patient communication. Patient communication is a vital skill you must master to be a great dental hygienist. After completing this assignment, I feel more comfortable communicating with the patient regarding tobacco cessation. In addition to having key points and the proper delivery style needed to help advise the patient in making the best discussion for their health.