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DEN 1100 - Section 1B

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### **Tobacco Cessation Term Paper**

Tobacco is a commonly known plant containing nicotine, an addictive substance that can be consumed in many different ways. Today, there are many new and still old tobacco products out there being used. Cigarettes, smokeless tobacco, and e-cigarettes are among these many options that are sold and encouraged around the world. Cigarettes are one of the most common tobacco products worldwide that it is almost, if not completely normal, in society today.

Although tobacco is one of the most common leading causes of death, it is also one of the most preventable. The effects of tobacco in the dental setting is more than just bad breath or yellow teeth. It is detrimental and raises issues in the dental field, as oral health is essential to our overall health.

Cigarettes are small papers that tobacco is rolled inside of and lit to be inhaled. The burning of a cigarette releases thousands of chemicals into the human body. These chemicals are considered carcinogens, meaning they are cancer causing. Due to the substance of nicotine being addictive, it is what causes an individual to smoke longer and more often, allowing more and more of these chemicals to be released throughout their body and become an addiction.

Chemicals such as formaldehyde, acetaldehyde, ammonia, carbon monoxide and lead are just a few carcinogenic chemicals out of hundreds present within a cigarette. These are all silent killers in a single cigarette and yet extremely common amongst smokers of all ages, starting as early as

teen or even preteen years. Although the rates of smoking have decreased over the last few decades, it's still not enough. "Worldwide, tobacco use causes nearly 6 million deaths per year and current trends show that tobacco use will cause more than 8 million deaths annually by 2030" (Gehrig, 2017). There are a number of diseases and infections throughout the body that traditional cigarettes can increase an individual's risk of. These risks are just as prominent from an oral hygiene standpoint. Periodontal disease, an infectious and inflammatory disease of the gums, is a widely common but treatable disease that tobacco contributes to.

Smoking predisposes individuals to many different kinds of oral diseases that may lead to a decline in their systemic health as well. According to a study on the impact of smoking different tobacco, the author states that "Tobacco smoking affects the microbial ecology of the oral cavity through immunosuppression, oxygen deprivation, antibiotic effects, and other possible mechanisms" (Al Kawas et al., 2021). A healthy body's microbiome can be helpful in boosting the immune system and protecting from disease, however if the healthy microbiome is lost then a patient becomes susceptible to disease and the ability for the disease to rapidly deteriorate. In this study it was found that even cigarette smokers with generally healthy gingival tissue still had bacteria beneath the gingival margin, increasing their risk of periodontitis. Tobacco is a high risk factor for not only periodontal disease but tooth decay, bone loss, oral cancer, neck cancer and even skin cancer. The risk of a baby developing cleft lip or cleft palate, if born from a mother who smoked tobacco during pregnancy, also increases.

This is where smoking counseling comes in. Tobacco cessation is the intervention by health care professionals to help patients to quit smoking and restore their oral health. Dental hygienists play a role in this intervention as they see various patients and at some point in their careers, come across those who are tobacco smokers. As a clinician working to restore, maintain,

motivate and educate individuals on their oral hygiene, it is crucial to provide this counseling to a patient during their dental hygiene visit. Where smoking cessation, patient motivation and patient education lacks, oral hygiene and thriving oral health in communities are more likely to decline.

According to an article on attitudes on smoking cessation in dental hygienists, it is stated that the “lack of time, the assumption that smoker patients have no motivation to quit, and the lack of confidence in their knowledge and skills in smoking cessation counseling have been reported as main barriers” (Alsiwat & Alayadi, 2022). Many offices and practices do not provide enough time to thoroughly treat a patient, let alone provide proper education and motivation. The proper patient care and etiquette does not often exist in these environments. “Dental hygienists report an underprovision of clinical services, including tobacco cessation counseling, nutritional counseling, and the recording of vital signs, citing barriers such as time constraints, low confidence, adverse client reactions..” (Belinski & Kanji, 2018). Many offices leave patients to make their own choices on their oral health regardless of what the outcome may be, without trying to intervene and attempt to motivate the patient to rethink their decision not to quit and potentially save a life. However, this is the role and duty of the dental hygienist, to be concerned for their patient and oral health as well as overall health. If a clinician only has just a few minutes, even that can be enough intervention to possibly make a difference in that patient's life.

There are benefits to tobacco cessation and different treatments that are available alongside it for patients from moderate to severe cases. “For patients who use tobacco, personalized periodontal therapy may include systemic and/or local antimicrobial therapy, host-modulation therapies and rigorous and customized smoking-cessation strategies” (Ryder et al., 2018). Every case is different and depending on that case, the appropriate treatments should

be offered. However, generally dental hygienists should assess, diagnose, plan, implement and evaluate treatment for those willing to quit. Those not willing to quit should be provided at least a brief counseling in an attempt to increase their motivation to quit.

In the study of the knowledge and attitude of smoking cessation among dental hygienists it is stated that “only 3.9% responded correctly to the question regarding understanding the components of the 5A approach” and “only 10% of the participants were satisfied with their knowledge regarding smoking cessation counseling” (Alsiwat & Alayadi, 2022). When it comes to smoking cessation, the five A’s model should be followed as well. This consists of asking, advising, assessing, assisting and arranging proper support and care for the patient and their journey to better their life and health. There should be no judgment or lecturing as that will not help the situation but instead, anger or discourage the patient. What the patient needs is advice, support, assistance and education on the dangers and effects of tobacco smoking.

For a patient who was a teenager and just started smoking cigarettes about 2 months ago, I would start by identifying that they are indeed a smoker, document their social habits and how often it occurs, and talk to them about the dangers of tobacco. Although they may be aware, it is still important to stress the dangers and significant impact it can have on a patient's oral and overall health. I would use the five A’s, starting with asking the patient about their smoking, advising them to quit in a concerning but supportive manner, figure out if they are ready to quit or not, and depending on their readiness to quit I will assist and arrange support for tobacco smokers seeking to quit. If the patient does not seem to want to quit, I would respectfully ask questions that require an actual response other than one word answers.

An example of this is asking “On a scale of 1-10, how confident are you in quitting smoking?” If the patient replies with a 3, I would ask why they feel as though they are at a 3. I

would also ask questions like “How can we get you to a 4 or 5? What are some things we can do to start with?” We can brainstorm on ways to quit and look into assistance for that patient as well as provide encouraging advice even if the motivation to quit is not currently there. I would follow those same guidelines for a patient who may be in their 30’s and has been smoking for 12 years. However, I would also remind them that it is never too late to quit and progress within the body is already being made in just the first 24 hours of quitting tobacco. Showing this patient their before and after of their teeth and gingival tissue alongside their x-rays displaying any bone loss, decay, etc, can also motivate a patient when they see what is actually going on within their mouth. Persistence and education can make a huge difference in just a matter of weeks.

Teaching a patient about detox so that they are prepared is also key with patient motivation in tobacco cessation. If you give your patient all of this information and resources but they are not educated on withdrawals, it might make them feel like they cannot handle it. They may go back to smoking and feel unprepared or defeated, which is why educating and weighing the risks and benefits of quitting is important as it allows the patient to still be in control of their own life. Patient motivation and tobacco cessation go hand in hand. Providing free assistance such as quitlines, which are toll free telephone centers staffed by trained smoking cessation experts (Gehrig, 2017), can potentially encourage the patient all the more because they know that the help they need is available to them at all times. Reminding your patient that it is never too late to quit and that small steps make a huge difference can also make a difference in the way they see their progress and keep going. As oral health is essential to overall health, it is important that dental hygienists take on their role in patient care because any help and encouragement that is offered can save a life.

## Reference List

### (Updated Literature Review)

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## **Reflection**

Although I had some knowledge on tobacco smoking and its effects, I soon realized after this assignment and going through readings that there is still so much more information out there. This information is extremely important to know especially as future hygienists, so that we are better equipped, educated and prepared to help our patients. Due to that, I believe this assignment was extremely helpful and not only refreshing but educating. I grew up in a family of smokers, many who suffered because of their refusal to quit. Not only do I feel more comfortable now communicating with family and friends but also with patients on the dangers of tobacco smoking and its long term effects on their oral and systemic health. This assignment, I believe, has allowed us to look deeper at this topic and understand the appropriate measures taken versus what our initial thoughts or instincts would be. Every patient will be different but what's important is educating and motivating them to at least try, because it is never too late to better your health despite the negative effects our actions may have caused.