

Dental Hygienists and Tobacco Cessation

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The use of tobacco is detrimental to both oral health and general health. It is a major contributor to sickness and contains a number of hazardous substances that can have long-term effects on our lives. Using tobacco of any kind can significantly damage the lungs. However, many individuals do not understand the consequences of smoking or using tobacco. In this modern time, it is seen as a trend to smoke or use one of the many types of tobacco. Thus we, as dental hygienists can educate our patients through motivational interviewing to encourage them to stop. Tobacco cessation is another term for quitting or stopping the use of tobacco, and individuals can achieve that by participating in counseling or interventions or a simple motivational interview hosted by a dental professional. Regardless of age, if our patients are “too young” or “too old” we still must attempt to discuss cessation techniques with them. The types of tobacco that will be discussed in this essay are the uses of vape and smokeless tobacco.

Now, because they are so prevalent in contemporary society, I decided to write about vaping or electronic cigarettes. More young people are succumbing to this "lifestyle," which involves smoking all day, thanks to factors including music, media, and the growth of gangs. Most of them are between the ages of mid-teens and early twenties. In high school, I frequently witnessed my classmates bringing vape products onto campus, where they would covertly smoke them in classrooms or on the stairwells when no one was looking. They would smoke in such a prideful way, as if they are accomplishing something. But the only thing they are accomplishing is risk to disease and addiction. This is terrible because despite learning at school and in other settings that smoking is bad for them, they continue to smoke. Primarily because of peer pressure and, in certain situations, to appear "cool." E cigarettes were not popular in use until two or three years ago when marijuana laws became legal in New York State because of former governor Cuomo. In a way, it gave teenagers the privilege to start vaping, not knowing that this is a

possible beginning for smoking marijuana. In the meanwhile, parents are grieving for the future lives that their smoking children will behold, since it is not starting out so good. This tobacco product is used similar to smoking a cigarette, but with different flavors. According to the journal “The Vaping Epidemic in Adolescents” by Kristen Jones and Gary A. Salzman, “Electronic cigarettes are battery-operated devices that use an electric pulse to heat and aerosolize a flavored liquid that typically contains nicotine.” (Jones, Salzman 2020). This quotation indicates that the only distinction between the two tobacco products is their flavors. The primary component pulling teenagers into the nicotine trap is flavor. In addition to peer pressure or referral, advertising is undoubtedly one of the main factors that lead young individuals to start vaping. Let's start, for example, with packaging. The majority of the vape you see has a variety of bright, candy-like colors that instantly attract the eye. The company's delicious-looking fruits or tastes are the next. Last but not least, there are sales or extremely low prices for a single vape, which is a good price for the majority of teens who do not work or who have limited allowances. As we all know the brand JUUL is a widely popular brand amongst the adolescent population, as I have even seen numerous teenagers smoking them. Regarding ingredients, “JUUL pods contain 5%, or 59mg/ml, of nicotine. This is approximately equal to the nicotine contained in 20 combustible cigarettes.” (Jones, Salzman 2020). This relates to oral health due to the presence of nicotine which can lead to problems such as dry mouth or xerostomia, and also bad breath due to the drying chemicals within the vape. It may also endanger more bacteria in the oral cavity. As far as I can tell, these vape devices do not have a cap. As a result, smokers simply throw it into their backpacks, purses, or pockets, unconcerned about how much bacteria are already in those spaces from dirty things like money. It can also cause a slowing of brain development because the teen years are during the period of

development or puberty. Finally, it has an impact on systemic health because it increases the likelihood of vape or nicotine addiction, and as we all know, nicotine is the root cause of many diseases in the body such as cancer.

Next, we will discuss smokeless tobacco. Smokeless tobacco is basically tobacco with nicotine that is not ignited or in the typical cigarette form. This substance can be inhaled through the nose known as “snuff” and chewed or left underneath the tongue and other parts of the oral cavity for a “drugging” effect from the nicotine. In David Savitz’s journal article ““Public Health Implications of Smokeless Tobacco Use as a Harm Reduction Strategy” smokeless tobacco “contain air- or fire-cured tobacco that is powdered or ground for use as nasal or oral snuff, cut and grated for use as chewing or oral snuff, or stripped and compacted for use as chewing tobacco. Such products may include sugars (sucrose, fructose, sorbitol, molasses, dried fruit), water, sodium chloride, ammonium chloride, licorice, menthol, paraffin oil, and glycerol.” (Savitz, 2011). This quote briefly explains the uses and the certain kinds of chemical mixtures are used alongside nicotine to enhance taste, like sugars for instance. Personally, having been born and raised here, I haven't seen American natives using smokeless tobacco. Instead, I've noticed a pattern showing that natives from other countries than the United States have a common habit of chewing tobacco. I've noticed that ethnic groups like Latinos and Mediterranean/Middle Eastern people tend to use smokeless tobacco more frequently. I chose this topic mostly because my father for instance, has been chewing tobacco since he was 14. As a student in dental hygiene, I can now clearly understand the detrimental consequences of tobacco in the oral cavity much more than I used to, thus I talk to him almost every day about cessation, until he agrees. Hence, I am including this in my paper to further understand the harms it poses so I can store that information and utilize it while explaining to him, and my future patients who

use smokeless tobacco. In smokeless tobacco, is very similar to smoking tobacco in chemical composition, having nicotine of course. According to the article “Public Health Implications of Smokeless Tobacco Use as a Harm Reduction Strategy” by David A Savitz, he writes, “The primary agents of concern in smokeless tobacco are the strongly carcinogenic tobacco-specific nitrosamines, especially N'-nitrosonornicotine (NNN), 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone (NNK), and nicotine itself.” (Savitz, 2011). Here we have carcinogenic or cancer-causing chemicals which are included in smokeless tobacco, and chemicals that are used in the curing and processing of tobacco. This quote demonstrates that smokeless tobacco should not be deemed safer than smoking cigarettes, because it still has nicotine and other toxic chemicals in it that cause the same harm. Smokeless tobacco can affect oral health because it can cause horrible things like gingivitis, oral cancer and the very high possibility of tooth extractions of many teeth. Tobacco can affect the gingival and alveolar attachment to the tooth surface and root. Smokeless tobacco affects systemic health due to the well-known diseases it can cause such as cancer, lung disease etc. “Tobacco use is a contributing factor in many medical conditions and, in addition, increases the risk of periodontal disease. All oral health care professionals should be concerned with their patients use of tobacco products” as quoted by Jill S. Gehrig, from the textbook “Patient Assessment Tutorials: A Step-By-Step Guide for the Dental Hygienist”

When conversing with a teenager, I would inquire about their smoking history and motivations. Then I would inquire about the family and see if anyone knew the patient smoked or if anyone in the family did. I would proceed to inform them about how the accumulation of all the nicotine smoked will result in dreadful things that can have an impact on their lives. If they exhibit any signs of concern, I will then continue by inquiring about their life objectives. If they respond in the affirmative, I will go on to educate them and explain that smoking will actually

hinder from the patient's aim rather than bring them closer to it. My goal in this motivational interview is to first establish a rapport with the patient so that they feel comfortable sharing personal information with me, and then to educate them about smoking's detrimental effects while also taking into account their unique lifestyle and aspirations. According to the article "Tobacco Interventions by Dentists and Dental Hygienists" by Takashi Hanoika, it is written, "Many smokers interested in quitting, particularly young women, visited dental clinics. Patients believed that dentists should routinely offer smoking cessation services, and those interested in quitting felt more comfortable receiving advice about quitting" (Hanoika, 2012). This quotation illustrates that it is common for patients to seek dental care with the intention of discussing smoking cessation with the dentist or hygienist. Next, when I am speaking to a 30-year-old that has been smoking for 12 years, I would ask them if they tried quitting or not. If they reply by stating they have tried numerous times, I will proceed by asking them if they have used nicotine patches or lozenges before. If they have, then I would revisit important points and re-educate them about the risks of smoking and the effects it might or have taken upon the patient because of nicotine. I would then recommend them to see a doctor so they can prescribe medication for it (bupropion). If they have not tried patches or lozenge, I would advise them and educate them about the use and how it helps with cessation. If they show no signs of interest, I will still educate them about cessation in case they consider during the interval before their next visit.

Thus, the importance of providing smoking counseling to patients during their dental hygiene visit is because it is a danger to health and we as professionals have the right to educate our patients. We don't know this, but tobacco cessation counseling is more effective than we think it is. Smoking cessation interventions are a major helping factor for smokers who are trying to quit. According to "Tobacco Interventions by Dentists and Dental Hygienists" by Takashi

Hanoika, "The demand for tobacco interventions is great in dental settings; therefore, the effectiveness of such interventions in dental settings should be clarified." (Hanoika, 2012)

According to this quotation, dental patients prefer more interventions and cessation programs in a dental facility because they are related to oral health. In dental offices, smokers are subjected to intraoral and extraoral exams, which involve palpating various parts of the head, neck, and mouth to detect any structural abnormalities. Another exam is the Gingival description and describing lesions, which are essentially objective findings and looking for abnormalities in the gums and mouth that are caused by nicotine use. Patients can also review information like radiographs. These all serve to demonstrate to them the harm they are doing to themselves. Both the oral cavity and overall health are impacted by nicotine. It has been demonstrated that cessation interventions boost both the rate of cessation and the degree of willpower to give up smoking. Dental care workers employ the Motivational Interviewing technique in the dental setting. This includes questions and suggestions for encouraging patients to improve their oral health. According to Linda D. Boyd's textbook "Wilkins Clinical Practice of the Dental Hygienist," there is a chapter dedicated to motivational interviewing, which states, "MI and brief motivational interviewing are person-centered, goal-directed methods of communication for eliciting and strengthening intrinsic motivation for positive change." (Boyd 2021) This quote demonstrates how this differs from asking questions about a patient's medical history. It's a more in-depth discussion that may become private and personal. This is important for making the patient feel comfortable enough and build trust with the clinician. Clinicians cannot talk down to their patients because there shouldn't be inferiority or authority in the patient or clinician. The clinician should build rapport with the patient and try to encourage them stop smoking.

According to the textbook the clinician should remember the following, "Resist Righting Reflex,

Understand the Patients Motivation, Listen to the Patient, and Empower the Patient” (Boyd 2021) These are the procedures or principles that the clinician should adhere to when conducting a motivational interview with the patient. The first step, of course, is to obtain permission from the patient before proceeding with any further discussion. If the clinician follows these rules and protocols correctly, there will be progress with the patient in terms of tobacco cessation.

Finally, this assignment has helped me understand the terrible effects of tobacco and why dental professionals such as ourselves should become involved in cessation counseling and interventions. It aided me in comprehending the chemical ingredients and their impact on oral and systemic health. It gave me a small taste of how to approach patients of various ages and tobacco use in real life. This assignment is advantageous because it brings me one step closer to conducting a proper motivational interview, which we do not currently do in clinic since no one smokes in our group. This assignment made me feel both more at ease and more nervous. The reason for this is that I realized I needed to learn more about the interview process because I will be doing it multiple times per day. As a result, I must learn the most appropriate and effective methods of questioning and encouraging patients to quit smoking.

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