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E-Cigarette

E-cigarettes are sometimes called “e-cigs,” “vapes,” “e-hookahs,” “vape pens,” and “electronic nicotine delivery systems (ENDS).” Some e-cigarettes look like regular cigarettes, cigars, or pipes. Some look like USB flash drives, pens, and other everyday items. I chose electronic cigarettes because they are very popular right now. Many of my friends use them and I worry because they think it is not as bad as regular cigarettes. E-cigarettes have many consequences, and I would like to inform myself in order to let my friends know all the consequences. E-cigarettes create an aerosol by using a battery to heat up liquid that usually contains nicotine, flavorings, and other additives. Users inhale this aerosol into their lungs.

Because the Food and Drug Administration (FDA) has not begun its review of any e-cigarettes or its ingredients, nor has FDA issued any standards on the products, e-cigarette composition and effects vary. What researchers do know is that these toxic chemicals and metals have all been found in e-cigarettes:

- Nicotine – a highly addictive substance that negatively affects adolescent brain development
- Propylene glycol – a common additive in food; also used to make things like antifreeze, paint solvent, and artificial smoke in fog machines
- Carcinogens- chemicals known to cause cancer, including acetaldehyde and formaldehyde

- Acrolein – a herbicide primarily used to kill weeds, can cause irreversible lung damage
- Diacetyl – a chemical linked to a lung disease called bronchiolitis obliterans aka "popcorn lung"
- Diethylene glycol – a toxic chemical used in antifreeze that is linked to lung disease
- Heavy metals such as nickel, tin, lead
- Cadmium – a toxic metal found in traditional cigarettes that causes breathing problems and disease
- Benzene – a volatile organic compound (VOC) found in car exhaust
- Ultrafine particles that can be inhaled deep into the lungs

An increasing amount of research shows the chemicals in e-cigarettes start to inflict damage right where they enter the body: the mouth. Because e-cigarettes are a recent phenomenon, said Dr. Crystal Stinson, assistant professor at Texas A&M College of Dentistry in Dallas, "Studies on their impact are really new. But now we have a solid amount of evidence that shows the link between e-cigarettes and poor oral health."

Nicotine, whether smoked or vaped, restricts blood flow to the gums, which can contribute to periodontal disease. The fluid in e-cigarettes, which can include propylene glycol, benzene, formaldehyde, and other chemicals, only increases the risks. A study published earlier this year in the journal iScience showed that 43% of people using e-cigarettes had gum disease and oral infections. That figure was higher– 73% – among smokers, but only 28% among people who don't smoke or vape.

Dental hygienists play a big role in helping people quit smoking. The mouth is often the first place to notice secondary/adverse health effects from smoking. Dental hygienists can show the effects in the mouth to the patient, and that may convince the patient to quit smoking.

Advising teenagers about quitting smoke could be a little hard, but I would start by asking teenagers why they are doing it. Most teenagers do whatever the rest do, to feel 'cool'. If teenagers are doing it because of that reason, I would explain to them that smoking has a lot of adverse effects. Knowing that words may not do a lot, I would show them pictures and videos of how they can end up if they keep smoking. I would also explain that smoking can be addictive and that they do not want to keep smoking until it gets addictive. I would tell them to try to stop before it is too late.

On the other hand, It would be more difficult for a 30-year old adult because I am pretty sure he has received a lot of advices with the same thing before, I would show him with an intraoral camera (if possible) or just with a mirror how his mouth looks like and also would compare with a healthy nonsmoker mouth, so he can tell the difference and try to convince that patient to stop smoking, never is too late to stop smoking.

With this essay, I have learnt all the components of the e-cigarette, and it surprised me that the FDA has not begun the reviews of the E-cigarette ingredients. I also learned the effects that some of the ingredients of E-cigarettes can cause. Another thing that I realized was how important the role of the hygienist is in terms of counseling the patients about smoking. This essay was beneficial because we can learn something new, and we can teach our loved ones about this topic. At the same time, I think this assignment was pretty long and it took some time to finish it, time that we can spend studying other information, for instance, the information of the exams, that for my personal opinion is more beneficial right now.

Many of my friends stopped smoking regular cigarettes, thinking that E-cigarettes were going to be more beneficial for them, but the truth is different. E-cigarettes have a lot of consequences, and because they are a relatively new product, there are some consequences that have not been discovered yet.

Now I feel more comfortable and more confident talking about this topic. It is always good to speak about a topic, after doing the proper research and having the literature review and also using some online resources was helpful to inform myself and now. I feel ready to start counseling people with smoking problems.

References

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