The Role of Electronic Cigarettes in Tobacco Cessation

Student's Name or Students' Names

Department Affiliation, University Affiliation

Course Number: Course Name

Instructor's Name

Assignment Due Date

The Role of Electronic Cigarettes in Tobacco Cessation

Using electronic cigarettes (e-cigs) as a potential aid in reducing or discontinuing combustible cigarette smoking is controversial. According to the Centers for Disease Control and Prevention (CDC, 2020), evidence is suggestive but insufficient to infer that e-cigs are associated with increased smoking cessation. Since the release of the first smoking and health report by the Surgeon General of the U.S. Public Health Service in 1964, smoking in America among adults declined from close to 43% then to 14% in 2018. The report highlighted the dangers of cigarette smoking. E-cigs entered the American market in 2007, and by 2014, 4% of American adults were using them. The number declined by 2018, where only 3.2% of the individuals smoked e-cigs (CDC, 2020). Nearly half of those who use e-cigs also smoke combustible cigarettes; a behavior referred to as dual-use. Whether e-cigs are helpful in reducing the risk of using tobacco products remains controversial. Research is necessary to determine the right way of dealing with their usage across various markets.

Most e-cigs have a battery, a place to hold a liquid, and a heating element. Heating the liquid produces aerosols that contain flavorings, nicotine, and other chemicals. The user will inhale the aerosol into the lungs during use. CDC (2020) posits that e-cig aerosol generally contains fewer harmful chemicals than smoke from burned tobacco products. However, they may contain cancer-causing chemicals that could affect the lungs. The notable presence of nicotine in many e-cigs is challenging since it is a highly addictive drug found in tobacco. The CDC warns that the use of nicotine in youth and young adults could harm their brain development process, which is an ongoing process up to the age of 25. It is also a dangerous drug for pregnant women. Leduc and Quoix (2016) found that “e-cigarettes could increase the risk of nonsmokers developing nicotine dependence and of current smokers maintaining their dependence” (p. 130).

Such information creates a concern when examining the value of e-cigs in smoking cessation, leaving the debate open and creating room for more research to establish the long-term safety and efficacy of e-cigs among different users.

Bhatnagar et al. (2019) explore the marketing process of e-cigs. In many cases, e-cig producers promote them as less harmful, arguing that it could be a great way of lessening the burden of disease and disability associated with other cigarette types. Whether a marketing gimmick or not, the easy accessibility of the e-cigs created a new group of nicotine-addicted youth, who were otherwise at low risk of using tobacco. However, Bhatnagar et al. (2019) argue that this could transit to combustible cigarettes. Simulation models dispelled the notion that e-cigs are less harmful by showing net population-level harm, with up to 1.5 million lives lost. Furthermore, research reported changes in vascular, immune, and respiratory functions among e-cig users. For dual users, the risks of cardiovascular disease increased dramatically, making it challenging to ignore the impact of such products in the community.

In a longitudinal study aimed at establishing the role of electronic cigarettes in quitting or reducing the use of combustible cigarettes for adults in their 30s, Kosterman et al. (2021) argue that e-cigs are non-efficient. The study hoped to predict if users would quit smoking or nicotine dependence by the age of 39. From a subsample of 221 smokers, the researchers noted that e-cigs were associated with a lower risk of quitting. It had no association with a decrease in the use of combustible cigarettes or nicotine dependence symptoms.

In conclusion, studies show a need to explore the effects of e-cigs on users. The suggestive nature of present evidence is not enough to market e-cigs as a replacement for combustible cigarettes. The challenges noted in attempting to cease nicotine dependence are clear in longitudinal studies. The results highlight a need to explore its role on the users in

general. Seeking alternative ways of quitting tobacco products is advisable to avoid creating a new addiction.

References

Bhatnagar, A., Payne, T. J., & Robertson, R. M. (2019). Is there a role for electronic cigarettes in tobacco cessation? *Journal of the American Heart Association, 8*(12), 1-4. https://doi:10.1161/jaha.119.012742

Centers for Disease Control and Prevention. (2020, January 23). *Adult smoking cessation—The use of e-cigarettes*. https://www.cdc.gov/tobacco/data_statistics/sgr/2020-smoking-cessation/fact-sheets/adult-smoking-cessation-e-cigarettes-use/index.html#:~:text=Some%20research%20suggests%20that%20using,cessation%20than%20less%20frequent%20use

Kosterman, R., Epstein, M., Bailey, J. A., Furlong, M. & Hawkins, J. D. (2021). The role of electronic cigarette use for quitting or reducing combustible cigarette use in the 30s: Longitudinal changes and moderated relationships. *Drug and Alcohol Dependence 227*, 108940-6. https://doi.org/10.1016/j.drugalcdep.2021.108940

Leduc, C., & Quoix, E. (2016). Is there a role for e-cigarettes in smoking cessation? *Therapeutic Advances in Respiratory Disease*, *10*(2), 130–135. https://doi.org/10.1177/1753465815621233
