Madam, Since the year 2010, the use of electronic cigarettes (e-cigarettes) has increased significantly. This could be attributed to the devices being marketed among the masses as a healthier alternative and facilitator for the cessation of conventional smoking. However, there is little scientific evidence to support these claims, and therefore their efficacy as a safer choice to tobacco smoking still remains disputed.¹

In Pakistan, the use of electronic cigarettes or “vaping” is highest among adolescents, mainly for recreational purposes. A study conducted in Pakistan revealed that a significant amount of population was oblivious to the detrimental effects with the use of e-cigarettes and a major proportion considered e-cigarettes safe for use in pregnancy.²

Considering the six deaths which occurred in the United States of America (USA) due to vaping, the safety and regulation of e-cigarettes are now being reconsidered. As of September 2019, Centers for Disease Control (CDC) reports 380 cases of lung illness associated with the use of e-cigarette products.³ While the Food and Drug Administration (FDA) along with the CDC is currently investigating the cause of this vaping illness, liquids which contained cannabinoid products namely tetrahydrocannabinol (THC) and vitamin E acetate are presently being considered as the main culprit.⁶

A study conducted among adolescents in the state of Colorado found that the use of e-cigarettes is significantly associated with symptoms of wheezing, and bronchiolitis such as the daily productive cough.⁴ Advanced experimental studies suggest that vaping increases the susceptibility of the airway to infections such as pneumococcal.⁵ The results from two randomized controlled trials published in a single study showed that vaping caused injury to airway epithelium (seen by increased CC16 levels and small airway constriction).⁶

Moreover, vaping led to decreased transcutaneous oxygen tension (a measure of the level of oxygen of tissues underneath the skin) and impaired arterial oxygen tension.⁶ The toxicity of e-cigarettes should be gauged in relevant model systems such as bronchial or alveolar epithelium. Prospective cohort studies should be carried out that follow individuals using e-cigarettes for a significant duration of time. Preventive guidelines issued by CDC recommend that e-cigarettes should not be considered as an alternative for smoking cessation. Pregnant women and young people should refrain from using e-cigarettes. Additionally, vaping products should not be bought from unauthorized places. As the use of e-cigarettes is increasing in Pakistan, the need to address this issue is dire. Public awareness and educational messages should be broadcasted on television. Health-care professionals should be vigilant and, must advise their patients and community against the use of e-cigarettes.

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References

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Respiratory illness linked with the use of electronic cigarettes: An alarming situation
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STUDENTS CORNER’S LETTER TO THE EDITOR

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