

**Vaping culture: An emerging epidemic and its impact**Ayesha Javaid Baig<sup>1</sup>, Maryam Shaukat<sup>2</sup>

Madam, Over the past decade, vaping—defined as the inhalation of aerosolized nicotine produced by electronic cigarettes (“e-cigarettes”) has become prevalent among teenagers and adolescents. The modern designs, social acceptance, and wide variety of flavours have made vaping increasingly convenient, accessible, and appealing to young people. Combined with a lack of awareness about their long-term side effects, this has contributed to their growing allure compared to traditional cigarettes.<sup>1</sup> In Pakistan, 6.2% of individuals use e-cigarettes. Originally marketed as a less harmful alternative to smoking and a cessation aid, Electronic Nicotine Delivery Systems (ENDS) also gained popularity because some smoking cessation pills are carcinogenic.<sup>2</sup>

Although e-liquids pose a lower threat than conventional cigarettes, they still carry significant health risks that require attention. Particularly concerning is their impact on the respiratory system with association with conditions such as aggravated asthma, bronchitis, altering pulmonary function, and cognitive impairment. Users are likely to be exposed to heavy metals from the device, which may be carcinogenic or toxic to the heart and lungs. Additionally, ingredients present in the e-liquids, such as propylene glycol, can irritate the respiratory tract. Beyond physical health, vaping has also been linked to mental health problems in adolescents, including anxiety, depression, and ADHD.<sup>3</sup> Nicotine exposure can disrupt brain development, increasing the potential of developing nicotine addiction, along with the gateway hypothesis, which suggests that e-liquids might lead to the use of more harmful substances like cigarettes

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and cannabis, thus undermining the very practice it was intended to avoid. This highlights the misleading nature of the product’s advertising.<sup>4</sup>

To protect future generations from the dangers of this growing trend, preventive measures are essential. Despite limited research on prevention, key public health policies should be introduced. These include allocating resources for additional research, prohibiting marketing aimed at younger demographics, and establishing an ID system to restrict purchases to individuals 18 and older. Products should be sold only through licensed retailers, and an additional tax on e-cigarettes should be implemented, along with required warning labels on each device, to discourage sales. Public awareness campaigns should educate the public, and educational programmes should aim to alter the perception of vaping among students, emphasizing its negative consequences. These efforts should collectively work toward shifting the social perception of vaping from normalized to disapproved, akin to smoking.<sup>2</sup>

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