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REVIEW PAPER

Anti-health behaviour of the youth: a case study of the use of e-cigarettes and electronic nicotine delivery systems

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Abstract

Use of e-cigarettes is displacing the smoking of traditional cigarettes among adolescents and young adults. The dangers resulting from this habit are becoming even graver as the awareness of the growing scale of the problem is still neither widespread nor sufficient. Due to their attractive taste and smell as well as the accompanying high nicotine concentration, the above-mentioned products constitute an easy path to the development of addiction. Purpose of the study: The purpose of this publication is to present potential negative health effects associated with the use of e-cigarettes, as well as to organize and supplement existing knowledge with the latest research findings. Research methods: Epidemiological studies showing adverse health effects have been reviewed. Bibliometrics covering the years 2020-2024 has been used. The literature review has been conducted by searching PubMed, Scopus and Google Scholar databases. The criterion of selected subject classification entries has been applied to analyze bibliographic data. Results: The use of e-cigarettes has been found to have adverse effects primarily due to the highly addictive substance, nicotine. However, there are also numerous other substances present in e-cigarettes that may not be harmful at room temperature, but when heated, can form a toxic mixture. This can lead to direct damage to the respiratory system, including structures such as the bronchi and blood vessels. Additionally, the heating process also generates oxidative stress, resulting in the formation of large amounts of free radicals that can damage tissues and potentially contribute to the development of diseases, such as neoplasms and chronic obstructive pulmonary disease. Conclusions: It is concerning to note that the use of e-cigarette among young individuals is rising. Thorough research that takes into account the wide-ranging effects of e-cigarettes on the human body with a particular focus on minors is necessary.

Keywords: e-cigarettes, nicotine, health effects

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