

## CHANGES IN ELECTRONIC CIGARETTE USE PATTERNS DURING THE COVID-19 PANDEMIC

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## INTRODUCTION

The COVID-19 pandemic began at the end of 2019, impacting society across the globe in different ways. Given that important changes that affect society can impact the behavior of individuals (POPOVA et al., 2021), it is important to understand how the pandemic has impacted the use of Electronic Cigarettes. These are relatively new products, presenting risks that have not yet been fully elucidated and the potential to encourage earlier initiation of smoking (BARUFALDI et al., 2021).

## GOAL

Search the literature regarding changes in patterns of e-cigarette use by adults and young people during the COVID-19 pandemic.

## MATERIALS AND METHODS

This is a bibliographic review carried out in October 2022. This study was an initiative of members of the Education Against Tobacco Extension Project - UFRJ. Data collection took place in the Medline and Scopus databases. The following descriptors were used: "COVID-19", "Electronic cigarettes", "ENDS", "Coronavirus", "Smoking", "Vaping", "E-cigarettes", "E-cig", "Young adults" and "College".

## RESULTS AND DISCUSSION

A total of 531 articles were identified in the databases, of which 4 were selected. A study conducted with 9,748 adults living in the United Kingdom observed an absolute reduction of 30% in the risk (RR 0.7, 95% CI 0.5 to 0.9) of using these products during the pandemic (NIEDZWIEDZ et al, 2020). Another study, carried out with 2125 regular users of electronic cigarettes between 13 and 24 years old in the United States, showed that

56.4% changed their consumption pattern. Among these, 32.4% stopped using, 35.3% reduced the amount and 17.6% increased the amount (GAIHA et al, 2020). A study conducted with 1,727 young adults in the United States suggested a decrease in the number of individuals who would have used electronic cigarettes, comparing a period before (7.4%) with one during (5.0%) the pandemic (DENLINGER-APTE et al, 2022). Another study conducted with 382 North American adults using these products in the pre-pandemic period found that, throughout the pandemic, 7% stopped smoking, 37% reduced their use and 23% increased their use (KALKHORAN et al, 2022). Although there is evidence that the pandemic increased rates of emotional stress, which could be related to an increase in the use of electronic cigarettes, the studies reviewed indicated a significant reduction in this with the pandemic. However, it is observed that the studies reviewed do not standardize each other in the way they measure smoking. Furthermore, the literature reviewed focuses only on populations from the United States and the United Kingdom. Finally, more studies, especially qualitative ones, would be needed to understand the reasons associated with lower consumption.

## FINAL CONSIDERATIONS

The use of electronic cigarettes during the COVID-19 pandemic has reduced, according to the articles analyzed. However, it is noteworthy that there is a lack of literature on the subject in countries like Brazil, where the sale of electronic cigarettes remains prohibited. In addition to this finding, there is a lack of standardization in data collection and analysis and a lack of qualitative articles that allow us to understand the reasons for this reduction.

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