Introduction

Background:
- Compared to non-Hispanic Whites, non-Hispanic Black and Hispanic individuals are less likely to become exclusive e-cigarette users.
- Socioeconomic differences such as education and income also play a role in differences in e-cigarette use, e.g., adults with lower educational attainment using more tobacco products and low-income smokers being less likely to use e-cigarettes.
- Blacks and Asians are more likely to trust e-cigarette companies with information about the health effects of e-cigarettes than whites.
- Black and Hispanic smokers are more likely to have positive tobacco-related social norms, and non-Hispanic Blacks have been found to have the highest prevalence of cigarette use and cigar use.

Gaps:
- Even though there is significant literature exploring racial differences in e-cigarette use, there is a lack of systematic research examining risk factors that may contribute to these racial differences.

Objective:
- Our study sought to identify racial disparities in e-cigarette use and to determine risk factors that help to explain these differences.

Methods

The Wave 5 Adult Population Assessment of Tobacco and Health (PATH) Study.

US adults (≥18) who self-identify and do not self-identify as current, established e-cigarette smokers.
- Race-ethnicity was categorized into non-Hispanic White, non-Hispanic Black, non-Hispanic Other, and Hispanic.
- Total household income, education level, self-perception of mental health, perception of e-cigarette harm, social influences, former smoking, and receipt of e-cigarette discounts or coupons.

All analysis was conducted through R.
- Descriptive statistics of e-cig use across our risk factor variables and chi-square tests to determine the significance of these factors in explaining e-cigarette use.
- Multiple logistic regression to check the risk effects adjusting all covariates.
- Mediation analysis to determine whether identified risk factors showed evidence of influencing the association between race and e-cigarette use.

Conclusion

- E-cigarette use is most prevalent in the non-Hispanic White population compared to non-Hispanic Black and Hispanic populations, which may be explained by former cigarette smoking, receiving e-cigarette advertising, and e-cigarette harm perception.
- These findings suggest that racial differences in e-cigarette use may be reduced by increasing knowledge of dangers associated with e-cigarette use and reducing exposure to e-cigarette advertisement.
- This study’s results may be useful in helping policy-makers determine, by examining racial demographics in their communities, where to focus their smoking cessation efforts.

References


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