

Cigarette Use Among US Adults Diagnosed with Smoking-Related Cancers: Analysis of NHIS Data from 2020 to 2022

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Abstract

Background: Smoking cessation is crucial for cancer survivors, yet many continue to smoke post-diagnosis. Previous research has identified various factors associated with continued smoking among specific cancer populations. However, scientific evidence on the factors associated with smoking in cancer patients is scant. This study aimed to study what factors are associated with cigarette smoking among a diverse group of cancer survivors in the US during 2020-2022.

Methods: The analytical, cross-sectional study analyzed data from 5,997 adult cancer survivors in the 2020-2022 National Health Interview Survey. People with missing data on the key variables were excluded. The main outcome variable was smoking (never/former vs current). The predictors were age, sex, education, marital status, insurance status, race, and cancer location. The confounding variables included comorbidities (COPD, stroke, depression, anxiety, asthma, cardiovascular disease), BMI, and sexual orientation. Unadjusted and adjusted logistic regression models were used to calculate odds ratios (AOR) and 95% confidence intervals (CI).

Results: Younger age (35-44: OR 2.83, 95% CI: 1.73-4.64), lower education levels (high school or less: OR 2.75, 95% CI: 2.01-3.77), being divorced or separated (OR: 1.70, 95% CI: 1.29-2.25), lack of health insurance (OR: 2.38, 95% CI: 1.32-4.29), bisexual sexual orientation (OR: 3.70, 95% CI: 1.62-8.44), being underweight (OR: 1.91, 95% CI: 1.01-3.62), and having COPD (OR: 3.57, 95% CI: 2.70-4.73) were associated with current smoking.

Conclusion: Cigarette smoking remains common among certain subgroups of cancer survivors, particularly those with tobacco-related cancers. Targeted smoking cessation interventions are needed for high-risk groups to enhance cancer survivorship outcomes.

Keywords: Smoking Cessation, Cancer Survivors, Cigarette Use