## PREVENTING CHRONIC DISEASE

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## SPECIAL TOPICS

ORIGINAL RESEARCH: FEATURED ABSTRACT FROM THE

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## Is Food Insecurity a Price of Smoking Among the Poor?

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PEER REVIEWED

## Track: Social Determinants of Health Inequities

The objective of this study was to estimate the share of income that families spend on cigarettes and to determine the association between food insecurity, smoking, and poverty.

Cigarette smoking prevalence is higher among adults living below the poverty level. The opportunity cost of smoking (the goods and services smokers forgo to purchase cigarettes) will be proportionately higher among poor families than nonpoor families since a larger share of their income will go toward the purchase of cigarettes. No study has documented what these opportunity costs might be. This study shows an association between food insecurity and the share of income spent on cigarettes. Evidence supporting this association suggests that state-sponsored smoking cessation programs targeting poor smokers may have an added benefit of reducing food insecurity.

Data from the 2001 Panel Study of Income Dynamics (PSID) were used to identify smokers and families that were food insecure and to determine the share of families' income spent on cigarettes. The PSID is a nationally representative longitudinal study of U.S. families that collects economic, health, and social behavior data on 7406 families.

lies. *T* tests and chi-square tests were used to assess univariate differences between continuous and categorical variables. Multivariate logistic regression models were used to assess the association between food insecurity, smoking, and poverty.

Approximately 7.6% of families lived in poverty, 6.1% were food insecure, and 26.1% had at least one family member who smoked in 2001. Poor families were more likely to have a family member who smoked cigarettes than nonpoor families (33.3%, poor families vs 22.5%, nonpoor families; P < .001). The share of income spent on cigarettes was significantly higher for poor families than nonpoor families (12.0%, poor families vs 2.0%, nonpoor families; P < .001). Results from the multivariate logistic regression analysis revealed that the odds of being food insecure increased as share of income spent on cigarettes increased (adjusted odds ratio, 1.72; 95% confidence interval, 1.66–1.79).

Having an average annual income of \$8624 and average annual cigarette expenditures of \$857, poor families with a family member who smokes spend a large share of their income on cigarettes. This study suggests that in addition to the adverse health consequences linked to smoking, poor families may also pay a price of food insecurity.

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