Association of Smoking in the Home With Lung Cancer Worry, Perceived Risk, and Synergistic Risk

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Purpose/Objectives: To examine the association of smoking in the home with lung cancer worry, perceived risk, and synergistic risk, controlling for sociodemographics, family history of lung cancer, and health-related self-concept. The hypothesis is that participants with smoking in the home would have higher scores for lung cancer worry, perceived risk, and synergistic risk.

Design: Cross-sectional baseline survey.

Setting: Participants recruited from an outpatient clinic and pharmacy at University of Kentucky HealthCare, an academic medical center.

Sample: 515 homeowners from a larger randomized, controlled trial aimed at reducing exposure to radon and secondhand smoke (SHS).

Methods: Homeowners were selected via quota sampling so that about half would have a smoker or smokers in the home.

Main Research Variables: Lung cancer worry and perceived risk; perception of synergistic risk of radon and SHS exposure; demographics.

Findings: Participants with smoking in the home had higher rates of lung cancer worry and perceived risk. In addition, those with less education and a family history of lung cancer and who were current smokers had higher lung cancer worry and perceived lung cancer risk scores. Predictors of perception of synergistic risk were marital status and health-related self-concept.

Conclusions: Homeowners with smoking in the home, less education, and a family history of lung cancer had greater lung cancer worry and perceived lung cancer risk. Lung cancer risk reduction interventions with vulnerable populations are needed.

Implications for Nursing: Nurses are in a unique position to target high-risk populations and identify opportunities to create teachable moments to reduce environmental risks of radon and tobacco smoke exposure.