Perceived Difficulty Quitting Predicts Enrollment in a Smoking-Cessation Program for Patients With Head and Neck Cancer

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Smoking is the major causative agent of head and neck cancer (Freedman, Abnet, Leitzmann, Hollenbeck, & Schatzkin, 2007). Smoking after a diagnosis of head and neck cancer can severely decrease quality of life, increase recurrence, and decrease survival (Dikshit et al., 2005; Duffy et al., 2007). Yet 35%–46% of patients with head and neck cancer continue to smoke after diagnosis of cancer (Duffy et al., 2007), compared to approximately 21% of the general population (Centers for Disease Control and Prevention, 2007).

The Health Promotion Model (HPM) (Srof & Velsor-Friedrich, 2006) has been used as a framework for predicting health-promoting lifestyles in a variety of populations, including patients with cancer (Frank-Stromborg, Pender, Walker, & Sechrist, 1990; Lusk, Ronis, Kerr, & Atwood, 1994). The HPM identifies key cognitive and perceptual variables which influence behavior change. A central component of the HPM that predicts behavior change, including smoking cessation, is self-efficacy (Friend & Pagano, 2007; Gritz et al., 1991). If a patient perceives that smoking cessation is a difficult task, his or her self-efficacy for that task would be low. Continuous smokers and those who decline cessation programs have been found to have a decreased level of risk perception associated with smoking along with lower motivation and self-efficacy for smoking cessation (Schnoll et al., 2003, 2004).

An association exists between level of nicotine dependence and smoking cessation, with less heavily dependent smokers being more successful in quitting (Pinto, Abrams, Monti, & Jacobus, 1987) and less likely to participate in cessation programs (Audrain-McGovern, Halbert, Rodriguez, Epstein, & Tercyak, 2007). Many smokers with head and neck cancer also regularly consume alcohol. Smoking increases during alcohol consumption, and heavy drinkers are less likely to attempt to quit and less likely to be successful when they do (Marks, Hill, Pomerleau, Mudd, & Blow, 1997; Piasecki, McCarthy, Fiore, & Baker, 2008).

Purpose/Objectives: To determine the predictors of participation in a smoking-cessation program among patients with head and neck cancer.

Design: This cross-sectional study is a substudy of a larger, randomized trial of patients with head and neck cancer that determined the predictors of smokers' participation in a cessation intervention.

Setting: Otolaryngology clinics at three Veterans Affairs medical centers (Ann Arbor, MI, Gainesville, FL, and Dallas, TX), and the University of Michigan Hospital in Ann Arbor.

Sample: 286 patients who had smoked within six months of the screening survey were eligible for a smoking-cessation intervention.

Methods: Descriptive statistics and bivariate and multivariate logistic regression were used to determine the independent predictors of smokers' participation in an intervention study.

Main Research Variables: Perceived difficulty quitting (as a construct of self-efficacy), health behaviors (i.e., smoking and problem drinking), clinical characteristics (i.e., depression and cancer site and stage), and demographic variables.

Findings: Forty-eight percent of those eligible participated. High perceived difficulty quitting was the only statistically significant predictor of participation, whereas problem drinking, lower depressive symptoms, and laryngeal cancer site approached significance.

Conclusions: Special outreach may be needed to reach patients with head and neck cancer who are overly confident in quitting, problem drinkers, and patients with laryngeal cancer.

Implications for Nursing: Oncology nurses are in an opportune position to assess patients' perceived difficulty quitting smoking and motivate them to enroll in cessation programs, ultimately improving quality of life, reducing risk of recurrence, and increasing survival for this population.

People with depression are much more likely to use tobacco than nondepressed people (Epstein, Induni, & Wilson, 2009). Decreases in depression are associated with increases in smoking-cessation rates (Friend &