

## The Power of Videotaped Personal Statements of Patients With Lung Cancer: A Recruitment Strategy for Smoking Prevention and Cessation Programs

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Cigarette smoking continues to be the leading cause of preventable morbidity and mortality in the United States (U.S. Department of Health and Human Services, 2004). Cigarette smoking causes an estimated 443,000 deaths each year, including approximately 49,400 deaths from exposure to secondhand smoke. In 2009, about 21% of U.S. adults were cigarette smokers; 90% of lung cancer deaths among men and approximately 80% of lung cancer deaths among women are related to smoking (National Cancer Institute, 2010). Although 70% of smokers report that smoking is hazardous to health (Viscusi, 1990), rates of smoking have not significantly declined and an estimated 21% of adults in the United States continue to smoke. Patients with cancer are willing to intervene with their families, and family members self-report a decrease in their smoking habits that may be a result of the occurrence of lung cancer in the family (Gerrard & Hingorani, 2001; Schilling et al., 1997). However, professed interest in study participation, unfortunately, does not ensure that family members will then participate in an intervention. The effectiveness of a recruitment strategy when working with patients with cancer and their families can determine the success or failure of the intervention.

Krant and Johnston (1977) reported that families of patients with cancer expressed feelings of tension and helplessness and voiced their desire of finding a way to best help the patient. McBride and Ostroff (2003) identified a cancer diagnosis as a catalyst that can personalize the dangers of smoking, therefore directing the patient and loved ones who smoke toward restoration and maintenance of good health. In addition, relatives of patients with lung cancer who smoke were found to be more inclined to quit than were the family members of patients diagnosed with cancers other

than lung cancer (McBride & Ostroff, 2003). However, a meta-analysis by McBride, Emmons, and Lipkus (2003) showed that the family members' needs and perceptions of the cancer experience often are different from those of the diagnosed patient.

### Conceptual Frameworks for Smoking Cessation Programs

Smoking cessation programs have addressed multiple variables that have been shown to be associated with persistence and frequency of use, including smoking among peers, drug use, and poor self-esteem (Flay, Hu, & Richardson, 1998), self-efficacy (Baer, Kamarck, Lichtenstein, & Ransom, 1989), health locus of control (Leventhal & Cleary, 1980), temptation and coping (Shiffman, 1993), parental disapproval (Hansen, Malotte, & Fielding, 1988), beliefs about body weight and smoking and health beliefs about smoking (Cleary, Hitchcock, Semmer, Flinchbaugh, & Pinney, 1988), and the cost of smoking (Silvis & Perry, 1987). The question of what is necessary to motivate individuals to spontaneously stop engaging in a risky health behavior has been a driving force in research. The Health Belief Model (Hochbaum, 1958) was the first model that emphasized the importance of cues to action, or negative health consequences, as a precursor to behavior change. Other models have expanded on behavior change as a cognitive experience in which the individual's interpretation and judgment are determinants of change. A naturally occurring health event (i.e., the development of lung cancer) that motivates individuals to stop engaging in a behavior that compromises health (i.e., smoking) has been identified as a teachable moment. The concept of a teachable moment draws on the Health Belief Model and explains that a cue to action occurs when three constructs are identified as being present:

heightened emotionality, an increased perception of risk, and a change in social norms.

The purpose of this article is to report on a novel recruitment effort used to engage family members of a patient with lung cancer in a smoking cessation and prevention program. Supported by a grant from the Kentucky Lung Cancer Research Foundation, the project was initiated in 2007 with a goal of trying to find a methodology that would break the cycle of nicotine addiction in families by assessing the diagnosis of lung cancer as a teachable moment. The authors identified patients with a diagnosis of lung cancer who were attending the clinic either for a second opinion, tissue typing through biopsy, or an evaluation for surgery through onsite recruitment at a university-based multidisciplinary lung cancer clinic. The patients were approached to see whether they would be interested in participating in a family-based smoking cessation and prevention program. All of the patients approached were eligible for the study unless clinic staff determined that a patient was emotionally fragile; the patient had uncertainty regarding diagnosis; that the lung cancer was not a primary lung lesion, but rather a secondary metastasis; or the patient was too ill to be approached. Potential participants also were required to have a history of tobacco use to be included in the research study.

The smoking cessation and prevention intervention involved several components: a baseline and follow-up assessment of smoking behaviors and attitudes; an education session about the risks of smoking; a personalized message from the patient to his or her family that focused on why he or she did not want family members to smoke; viewing a video entitled "Coach's Final Lesson," a documentary of a high school football coach's battle with lung cancer, which followed him from diagnosis