Smoking Cessation for Women: Evidence of the Effectiveness of Nursing Interventions

Ellen Giarelli, EdD, RN, CRNP

The association between cigarette smoke and disease is direct; cigarette smoking is a major cause of disease in the United States. More than 400,000 people die each year as a result of cigarette smoke. Smoking is responsible for almost 90% of all cases of lung cancer. Smoking cessation reduces the risk of lung cancer within five years. Cessation also may reduce the risk of other cancers, such as cancer of the head and neck, pancreas, and esophagus. Smoking causes skin wrinkling and sexual dysfunction, which can be mediated by smoking cessation. Even after a diagnosis of cancer, smoking cessation improves the odds of survival and reduces the risk of developing a second cancer.

The negative effects of tobacco use cross genders, races, and social strata, but morbidity and mortality from cigarette smoking is on the rise for women, who are vulnerable to the gender-specific risks of osteoporosis, hip fractures, and giving birth to babies with low birth weights and birth defects. The evidence is simple and clear: Smoking cessation promotes health and reduces morbidity and mortality from multiple diseases. Two factors may help reduce the prevalence of cigarette smoking: 79%–90% of smokers want to quit smoking, and 70% of smokers visit a healthcare professional each year (Cherry, Burt, & Woodwell, 2003; Coultas, 1991; Emmons & Goldstein, 1992). Nurses, as the largest group of healthcare providers nationwide, are involved in the majority of the visits and can have a significant effect on the reduction of tobacco use. Indeed, nursing interventions have been tested and proven to affect smoking cessation and prolong abstinence.

The purposes of this article are to present the evidence of the effectiveness of nursing-delivered smoking cessation interventions and to synthesize the findings to propose strategies to deliver nursing interventions that target women.

Sources of Data

A literature search was conducted to find studies of smoking cessation from 1991–2005 that used interventions provided by nurses. Databases used were MEDLINE, CINAHL®, and the Cochrane Library. A priori study hypotheses were that nursing-delivered smoking cessation interventions are more effective than no interventions and are more effective if they are more intense, include follow-up, and include aids that demonstrate the pathophysiologic effects of smoking. The studies had to have at least two treatment groups, and group assignment had to be randomized.

By far, the best source of data was the Cochrane Library, which described the comprehensive process for data extraction from published sources and statistical methods for pooling expected events from each trial. The Cochrane Collaboration® yielded specific reviews of nursing interventions for smoking cessation (Rice & Stead, 2004) and related reviews of telephone counseling for smoking cessation (Stead, Lancaster, & Perera, 2005), workplace interventions for smoking cessation (Moher, Hey & Lancaster, 2005), community interventions for preventing smoking among young people (Sowden, Arblaster, & Stead, 2003), and community interventions for reducing smoking among adults (Secker-Walker, Gnich, Platt, & Lancaster, 2002).

Studies Findings

The Cochrane Collaboration® analyzed findings from 29 trials of nursing interventions that were conducted from 1991–2005 in 10 countries with adults who were 18...