Race and Lung Cancer Surgery—A Qualitative Analysis of Relevant Beliefs and Management Preferences

Maureen George, PhD, RN, AE-C, and Mitchell L. Margolis, MD

The five-year survival rate for African Americans with stage I or II non-small cell lung cancer is 36% compared with 42% for Caucasians (Farjah et al., 2009). Much of the discrepancy is because fewer African Americans undergo surgical resection than Caucasians (Farjah et al., 2009). Racial differences in resection rates persist independent of age, gender, cancer stage, income, and comorbidities (Farjah et al., 2009). Among patients who do have surgical resection, five-year survival rates are similar for African Americans and Caucasians.

Whether the lower resection rate for African Americans is because surgery is offered less often, because patients are less willing to undergo resection, or both is unclear. At least one study suggested that minority patients receive too few referrals for resection surgery (Lathan, Neville, & Earle, 2006). However, an earlier multicenter survey reported that 14% of African Americans but only 5% of Caucasians said they would reject a physician’s recommendation for lung cancer surgery (Margolis et al., 2003). The authors identified that participants’ belief that air exposure during surgery caused tumor spread was an important impediment to the adoption of aggressive lung cancer treatment for early-stage disease, especially among African American patients (19%) compared with Caucasians (5%). The racial differences were independent of income, education, gender, and other covariables. That one belief may explain, in part, why African Americans accept lung cancer surgery at lower rates than Caucasians. However, the lower rate of lung cancer resection surgery among African Americans remains poorly understood.

The authors believed that the issue might benefit from further in-depth exploration with qualitative methods. Therefore, the current authors followed the initial survey with focus groups to achieve a more comprehensive understanding of how beliefs and preferences inform health-management behaviors. The authors believed that a focus group methodology offered several advantages. First, in the previous work, qualitative approaches provided invaluable information regarding how patients reached decisions about asthma (George, Birck, Hufford, Jemmott, & Weaver, 2003). The authors believed that a focus group methodology would be better accepted if current patients met past surgical patients, obtained second opinions, and had trusting patient-provider relationships.

Purpose/Objectives: To gain a better understanding of beliefs about the utility of lung cancer resection surgery and preferences for lung cancer management among African American and Caucasian adults.

Research Approach: Qualitative.

Setting: The Philadelphia Veterans Affairs Medical Center.

Participants: 21 participants (9 African Americans and 12 Caucasians; 11 with chronic obstructive pulmonary disease and 10 with lung cancer).

Methodologic Approach: Three focus groups were conducted. Transcripts and field notes were coded, grouped into thematic categories, and explored in later focus groups.

Main Research Variables: Beliefs about lung cancer resection surgery and management preferences.

Findings: African Americans doubted that surgery was needed, questioned its efficacy, and preferred complementary and alternative medicine (CAM). African Americans and Caucasians believed that exposure to air during surgery could cause tumor spread and were skeptical that smoking caused lung cancer. Therefore, they had a sense of treatment futility. Conversely, Caucasians were impatient with forced waiting for surgery. Both groups believed that surgery would be better accepted if current patients met past surgical patients, obtained second opinions, and had trusting patient-provider relationships.

Interpretation: If providers understand more clearly the beliefs and preferences that impede acceptance of surgical resection, then they can formulate educational interventions directed at overcoming patient resistance. The clinical utility of such individualized interventions could be evaluated in future studies.