

# Knowledge of Oral Cancer Risk Factors Among African Americans: Do Nurses Have a Role?

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**Purpose/Objectives:** To assess the knowledge of oral cancer risk factors among African Americans.

**Design:** Descriptive; guided by the Patient/Provider/System Theoretical Model for cancer screening.

**Setting:** Community-based primary care center in a southern state.

**Sample:** 141 African Americans. The majority was female, had a 12th grade education, and had an income less than \$10,000; 25% were smokers.

**Methods:** Participants were asked to identify whether each of 15 factors (i.e., seven risk factors and eight nonrisk factors) increased risk for oral cancer. One point was added for each correct response; therefore, scores could range from 0–15 points. Demographic data were collected.

**Main Research Variables:** Knowledge of and misconceptions about oral cancer.

**Findings:** Only six participants correctly identified all of the risk factors. The majority recognized tobacco but was not as aware of the effects of the sun, alcohol, and diet. Many erroneously identified factors such as hot beverages, poor oral hygiene, spicy foods, dentures, and mouthwash as risk factors. Those with higher incomes and those who visited their dentists in the prior year had more knowledge of risk factors. No differences were found in knowledge based on age, gender, education, or smoking status.

**Conclusions:** Some patients are less likely to routinely visit a dentist and are less knowledgeable about the risk factors for oral cancer. Many of these risk factors are modifiable; therefore, patients need to be aware of the risks and have access to effective strategies to reduce risk.

**Implications for Nursing:** Assess risk factors, teach risk reduction, and correct misinformation. Refer patients to dental professionals. Develop community outreach to African American men at barbershops and fraternal organizations.

## Key Points . . .

- Nurses can play a role in the prevention and early detection of oral cancer.
- Nursing strategies should include efforts to educate patients about the risk factors of oral cancer and increase screening.
- Research should identify potential patient, provider, and system barriers that may influence oral cancer screening.

and mortality. Modifiable and nonmodifiable risk factors, as well as screening recommendations, have been identified for this disease (see Figure 1). However, little progress, if any, has been made in improving the prevention, early detection, and survival rates for patients with oral cancer (Mignogna, Fedele, Russo, Ruoppo, & Muzio, 2001; Silverman, 2001). Inadequate knowledge about oral cancer and its risk factors may play a contributing role in its incidence and late diagnosis.

Previous studies have suggested that Caucasians, women, people who have been educated beyond high school, and non-smokers were more knowledgeable about oral cancer risk factors, signs, and symptoms compared to others (Horowitz, Moon, Goodman, & Yellowitz, 1998), yet inconsistencies exist regarding the degree of knowledge about each of the risk factors. For instance, people were most knowledgeable about the role of tobacco (i.e., cigarettes or cigars, chewing tobacco) in oral cancer but were less knowledgeable about the effects of ultraviolet light and alcohol. Moreover, many erroneously identified factors such as spicy foods or hot beverages as risk factors for developing oral cancer (Horowitz & Nourjah, 1996; Horowitz, Nourjah, & Gift, 1995). People who are less knowledgeable about the risk factors, signs, and symptoms of oral cancer may be less likely to participate in oral cancer screening (Horowitz et al., 1998).

Oral cancer screening involves examination of the oral cavity and throat. Screening is recommended as a routine part of dental and primary care patient encounters, and patients can

Oral cancer encompasses cancers of the oral cavity, including the lips and pharynx. The tongue is the most common site for oral cancer, and squamous cell carcinoma is the most common oral malignancy (National Cancer Institute [NCI], 2003; Sciubba, 2001; Silverman, 2001). An estimated 28,260 new cases of oral cancer will be diagnosed in 2004, with approximately 7,300 deaths from this disease (American Cancer Society [ACS], 2004a). The incidence increases with age, with 90% of oral cancer occurring in patients aged 45 and older (ACS, 2004b; Silverman). The incidence and mortality rates associated with oral cancer are higher among men. Furthermore, as with many cancer types, African Americans are more likely to present with regional or distant disease and have lower five-year relative survival rates associated with oral cancer (ACS, 2004a; Silverman). Treatment for oral cancers may involve surgery, chemotherapy, or radiation (ACS, 2004b).

Prevention of oral cancer through risk factor reduction and early detection of the disease is key in reducing incidence

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