

International Conference on

# Oral, Mouth and Throat Cancer

August 15-17, 2016 Portland, USA

## Socioeconomic and Other Demographic Disparities Predicting Survival Among Head and Neck Cancer Patients

**Seung Hee Choi**

Michigan State University College of Nursing, USA

The Institute Of Medicine (IOM) report, “Unequal Treatment,” which defines disparities as racially based, indicates that disparities in cancer diagnosis and treatment are less clear. While a number of studies have acknowledged cancer disparities, they have limitations of retrospective nature, small sample sizes, inability to control for covariates, and measurement errors. To examine disparities as predictors of survival among newly diagnosed head and neck cancer patients recruited from 3 hospitals in Michigan, USA, while controlling for a number of covariates (health behaviors, medical comorbidities, and treatment modality). Longitudinal data were collected from newly diagnosed head and neck cancer patients (N=634). The independent variables were median household income, education, race, age, sex, and marital status. The outcome variables were overall, cancer-specific, and disease-free survival censored at 5 years. Kaplan-Meier curves and univariate and multivariate Cox proportional hazards models were performed to examine demographic disparities in relation to survival. Five-year overall, cancer-specific, and disease-free survival were 65.4% (407/622), 76.4% (487/622), and 67.0% (427/622), respectively. Lower income (HR, 1.5; 95% CI, 1.1–2.0 for overall survival; HR, 1.4; 95% CI, 1.0–1.9 for cancer-specific survival), high school education or less (HR, 1.4; 95% CI, 1.1–1.9 for overall survival; HR, 1.4; 95% CI, 1.1–1.9 for cancer-specific survival), and older age in decades (HR, 1.4; 95% CI, 1.2–1.7 for overall survival; HR, 1.2; 95% CI, 1.1–1.4 for cancer-specific survival) decreased both overall and disease-free survival rates. A high school education or less (HR, 1.4; 95% CI, 1.0–2.1) and advanced age (HR, 1.3; 95% CI, 1.1–1.6) were significant independent predictors of poor cancer-specific survival. Low income, low education, and advanced age predicted poor survival while controlling for a number of covariates (health behaviors, medical comorbidities, and treatment modality). Recommendations from the Institute of Medicine’s Report to reduce disparities need to be implemented in treating head and neck cancer patients.

### Biography

Seung Hee Choi has completed her PhD and postdoctoral studies from University of Michigan School of Nursing. She is an assistant professor of nursing at Michigan State University. She has published more than 10 papers in peer-reviewed journals.

[SeungHee.Choi@hc.msu.edu](mailto:SeungHee.Choi@hc.msu.edu)

### Notes: