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Race could be a factor in head and neck cancer survival rates, researchers find

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The national survival rates for African-Americans diagnosed with head and neck cancer have not improved in the last 40 years despite advances in the treatment and management of the disease, University of Missouri School of Medicine researchers have found in a new study.

More than 52,000 men and women in the United States currently are living with head and neck cancer. Using data from the National Cancer Institute's Surveillance, Epidemiology and Ends Results (SEER) program, MU researchers under the guidance of Mosharraf Hossain, M.D., assistant professor in the MU School of Medicine's Division of Hematology and Oncology and physician with Ellis Fischel Cancer Center in Columbia, Missouri, studied the survival trend of five ethnic groups over the last 40 years. The researchers found that despite advances in treatment options, the prognosis for African-Americans with head and neck cancer has not improved.

"This study shows that we've made good progress in treating head and neck cancer over the last 37 years, and survival has dramatically improved," said Shahzad Raza, M.D., a post-doctoral fellow in the MU School of Medicine's Division of Hematology and Oncology and lead investigator of the study. "However, we found no change in the survival or prognosis for African-Americans in the last four decades."

By analyzing data collected from 1973 to 2010 on 247,310 head and neck cancer patients nationwide, the researchers found that the incidence of head and neck cancer was higher in African-Americans than in

Caucasians, Hispanics, Asians and Pacific Islanders, or Asian-Indian and Alaskan natives. All of these ethnic groups except African-Americans showed improved five-year survival rates over a 40-year period. African-Americans had a significantly decreased five-year overall survival rate of 41.8 percent, compared with 60.8 percent survival for Caucasians, 59.3 percent survival for Hispanics, 62 percent survival for Asians and Pacific Islanders, and 50.2 percent survival for Asian-Indian and Alaskan natives.

"One commonly held theory is that socioeconomic status, access to health care and the stage in which the cancer is diagnosed all play a major role in the survival rates of African-Americans with head and neck cancer," Raza said. "However, these factors are not completely accurate predictors of a patient's prognosis."

Raza said the treatment for head and neck cancer depends on the location of the tumor, the stage of the cancer, and the patient's age and overall health. Treatments can include surgery, radiation therapy, chemotherapy, targeted therapy or a combination of treatment options.

The researchers suggest that inherent genetic factors in African-Americans may make some tumors resistant to treatments. However, more research needs to be done on the subject of survival disparity in patients with head and neck cancer.

"This research shows there is an urgent need for a national trial on head and neck cancer within the African-American community to evaluate new forms of treatment and biogenetic markers to learn why this ethnic group has decreased survival rates," Raza said.

In addition to Raza and Hossain, the research team includes Gautam Kale, M.D., and Lata Aluri, M.D., post-doctoral fellows in the MU School of Medicine's Division of Hematology and Oncology. The study,

"Survival Disparities and Trend of Head and Neck Cancer in the United States: A Surveillance, Epidemiology and End Results (SEER) Database Study 1973-2010," was presented at the 2014 American Society of Clinical Oncology annual conference.

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