African American, Latino, and older patients in a Comprehensive Cancer Center

The National Cancer Institute (NCI) is considered the leader in cancer research in the United States. The NCI recognizes 68 healthcare facilities as centers of excellence in cancer research and treatment. Of these, 41 are designated Comprehensive Cancer Centers. A Comprehensive Cancer Center (CCC) provides state of the art cancer treatment and expertise in rare cancers. Patients treated at a CCC experience lower mortality following cancer surgery, and superior treatment outcomes. However, little is known about whether or not African American and Latino cancer patients have the same chance as White cancer patients to be treated at a CCC, or whether their age, gender, and health insurance policies influenced their chances of treatment at a CCC. To our knowledge the factors that affect the odds of African American and Latino cancer patients being admitted for treatment at a CCC are not studied in detail.

Fig. 1. Percentage distribution of African American and white patients at the CCC by cancer diagnosis.

What we did to get answers
To find out, we analyzed data from the State of Florida hospital discharge datasets which we obtained from the Agency for Health Care Administration (AHCA). The datasets contained medical records and information on all health insurance payers, healthcare providers, patient ages, genders, and race/ethnicity. Patient records contained medical codes indicating the primary diagnosis for each admission and the primary procedure performed during the admission. The
datasets also included an identifier of the healthcare facility region and a unique identification number for each hospital and admission. At the time of statistical analysis, outpatient data were available only up to 2010. Inpatient data were available up to 2011. Our analysis included 29,337 cancer patients treated at Florida's only CCC and at non-specialty hospitals in Florida's health regions 5 and 6. These regions contain the following counties: Pinellas, Pasco, Hardee, Highlands, Hillsborough, Manatee, and Polk. These counties surround the CCC. We analyzed data for 7,462 CCC patients (5,384 outpatients and 2,078 inpatients) and 21,875 non-specialty hospital patients (12,639 outpatients and 9,236 inpatients). We took into consideration the age and gender of each patient, their ethnicity/race, the type of health insurance they had, their cancer diagnosis, and where and when they received cancer treatment. We examined patients who were diagnosed with cancers that occur the most in the United States such as breast, prostate, and lung cancer.

![Graph showing percentage distribution of African American and white patients at local non-specialty hospitals by cancer diagnosis.](image)

*Fig. 2. Percentage distribution of African American and white patients at local non-specialty hospitals by cancer diagnosis.*

**Our findings**
African American and Latino patients were significantly less likely to receive treatment at the CCC than White patients with the same cancer diagnoses. African Americans were 48% and Latinos were 40% less likely than White patients to be admitted to the CCC as inpatients. In addition, African Americans were 37% and Latinos were 30% less likely to be admitted to the CCC as outpatients. They were also significantly underrepresented in the total patient population treated at the CCC. Men had better chances to be treated at the CCC than women. Patients treated at the CCC were much younger than those treated at local non-specialty hospitals, indicating that older cancer patients were more likely to be treated at non-specialty hospitals. Also, outpatients with Medicare, Medicare HMO or Medicare PPO health insurance were at greater risk of not being
treated at the CCC. In summary, our research findings show that the CCC consistently treated younger cancer patients, more patients with commercial/private health insurance coverage, more men, and low numbers of African American and Hispanic cancer patients. These findings were puzzling. We suspected that the CCC had difficulties reaching out to minority patients, or that the treatments it provided were too expensive, or it may have policies or procedures which prevented African American, Latino and older cancer patients from being admitted for treatment.

Sultan DH\textsuperscript{1}, Stenback J\textsuperscript{2}, Walker JR\textsuperscript{3}, Castillo-Carranza D\textsuperscript{3}, Gishe J\textsuperscript{4}, Hanciles A\textsuperscript{4}
\textsuperscript{1}Division of Behavioral and Social Sciences and Regional Transdisciplinary Collaborative Research Center-Minority Men’s Health Initiative, Hampton University, USA
\textsuperscript{2}Department of Global Health, George Washington University, USA
\textsuperscript{3}Regional Transdisciplinary Collaborative Research Center-Minority Men’s Health Initiative, Hampton University, USA
\textsuperscript{4}Department of Epidemiology and Biostatistics, College of Public Health, University of South Florida, FL, USA

Publication

Minority Use of a National Cancer Institute-Designated Comprehensive Cancer Center and Non-specialty Hospitals in Two Florida Regions.
Sultan DH, Gishe J, Hanciles A, Comins MM, Norris CM
\textit{J Racial Ethn Health Disparities}. 2015 Sep