Breast Cancer Disparities in New York City Boroughs and The United States

Pros cancer is the most frequently diagnosed cancer among women in the United States, and is the 2nd most common cause of cancer-related death among women in the nation. Despite new reports that indicate a decline in breast cancer-related deaths, black women have not experienced the same rate of decline as in non-Hispanic whites. Health disparities are commonplace in communities with socioeconomic stratification and multiracial diversity such as in the New York City boroughs of Bronx, Brooklyn, Manhattan, Queens and Staten Island. The study focuses on the incidence and mortality of breast cancer in all five New York City boroughs and the United States.

SEER (Surveillance, Epidemiology and End Results) Database (2010-2014) was reviewed for incidence and mortality of breast cancer for blacks and Hispanics and non-Hispanic whites in New York City boroughs and the United States (http://seer.cancer.gov/). The data for all age groups were recorded per 100,000 population. The confidence interval was 95%.

The percent distribution of the population of blacks and Hispanics and non-Hispanic whites across New York City boroughs is: Bronx, 64, 9; Brooklyn: 50, 36; Manhattan: 39, 47; Queens: 45, 25; Staten Island: 28, 62 and United States: 30, 62 respectively (US Census Bureau, 2010. The incidence of breast cancer in blacks and Hispanics is 104, 114, 136, 111, 115, 115 and 109 in New York City boroughs and the United States in the above order. The incidence of breast cancer in non-Hispanic whites is 132, 132, 155, 136, 141, 157 and 128 in New York City boroughs and the United States. The mortality of breast cancer in blacks and Hispanics is 22, 26, 24, 24, 25, 23 and 22 in New York City boroughs and the United States. The mortality of breast cancer in non-Hispanic whites is 31, 23, 20, 21, 21, 19 and 21 in New York City boroughs and the United States.

The incidence of breast cancer was lower in blacks and Hispanics in all boroughs and the United States; however mortality was higher in all boroughs (except Bronx) for blacks and Hispanics than non-Hispanic whites. This suggests that in spite of lower incidence of breast cancer in blacks and Hispanics, they will suffer from a higher mortality across the country.

Malhaar is a research assistant at SUNY Downstate Medical Center where he investigates inflammation in response to chemotherapy in African American colon cancer cell lines in a research laboratory. Malhaar has interned for two years with Brooklyn Health Disparities Center which performs community outreach in Brooklyn. Inspired by this experience, he has founded a non-profit, healthdisparity.org, which organizes workshops for students of color and teaches them about health disparities. He was recently recognized by the Brooklyn Borough President and New York Presbyterian Hospital, Columbia Medical Center for his efforts to teach minority students. He is a national finalist in Oncology Olympiad and national semi-finalist in Biology Olympiad.

African-American and Hispanic women disproportionately suffer worse outcomes from breast cancer. This study analyzed the SEER (Surveillance, Epidemiology and End Results) Database from 2010 to 2014 to quantify incidence and mortality of breast cancer in New York City boroughs (Bronx, Brooklyn, Manhattan, Queens and Staten Island) and the United States for blacks and Hispanics and non-Hispanic whites. The incidence of breast cancer was lower in blacks and Hispanics in all boroughs and the United States; however mortality was higher in all boroughs (except Bronx) for blacks and Hispanics than non-Hispanic whites. This suggests that in spite of lower incidence of breast cancer in blacks and Hispanics, they will suffer from a higher mortality across the country.

Design statistical analysis to identify incidence of breast cancer in non-Hispanic whites and blacks and Hispanics across boroughs in New York City and the United States

Identify segments of the population that are at risk for higher mortality from breast cancer which should be targeted for improved patient outcomes.

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