Disparities in the Incidence and Mortality of Prostate Cancer in New York City Boroughs and The United States

Cancer of the Prostate is the most frequently diagnosed cancer among men in the United States after skin cancers, and is the second most common cause of cancer-related death in the nation. Incidence of prostate cancer in black men is disproportionately higher compared to their counterparts of other races and ethnicities and despite new reports that indicate a declining in prostate cancer-related deaths, black men have not experienced the same rate of decline as in non-Hispanic whites.

Health disparities in prostate cancer are caused by multiple factors including race, ethnicity and socioeconomic status. Such 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 percent distribution of Hispanics, blacks and non-Hispanic whites are: Bronx, 55-9-9; Brooklyn: 20-30-36; Manhattan: 26-13-47; Queens: 28-17-25; Staten Island: 18-10-62 and United States: 18-12-62 respectively (United States Census Bureau, 2010). The study focuses on the incidence and mortality of prostate cancer in all five New York City boroughs and the United States. The findings from this analysis among different racial groups are expected to identify segments of the population which should be targeted for efficient health care delivery and improved patient outcomes.

SEER (Surveillance, Epidemiology and End Results) Database (2010-2014) was reviewed for incidence and mortality of prostate 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%. Percent difference was calculated from absolute number of incidence and mortality per 100,000.

The incidence of prostate cancer in blacks and Hispanics is 192-217-216-235-252 and 155 in New York City boroughs and the United States in the above order. The incidence of prostate cancer in non-Hispanic whites is 109-102-115-120-121 and 122 in New York City boroughs and the United States in the above order. The mortality of prostate cancer in blacks and Hispanics is 35-46-33-36-39 and 19 in New York City boroughs and the United States in the above order. The mortality of prostate cancer in non-Hispanic whites is 19-14-18-18-17 and 31 in New York City boroughs and the United States in the above order.

The incidence of prostate cancer was approximately 70% higher in blacks and Hispanics in all boroughs and the United States. Boroughs with the higher population of blacks, Brooklyn, Bronx and Queens, also had higher mortality from prostate cancer than boroughs with high non-Hispanic white populations. The mortality for these boroughs was also greater than the national values.

This suggests that communities across the country with high black populations are at increased risk for deaths from prostate cancer.

Prostate cancer is frequently diagnosed among men in the United States (US), and is the second most common cause of cancer-related death in the nation. Incidence of prostate cancer in black men is disproportionately higher compared to their non-Hispanic white counterparts and despite recent decline in prostate cancer-related deaths, black men have not experienced the same rate of decline.

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The incidence of prostate cancer was approximately 70% higher in blacks and Hispanics in all boroughs and the US. Brooklyn, Bronx and Queens, with higher populations of blacks, also had higher mortality from prostate cancer than boroughs with high non-Hispanic white populations. The mortality in these boroughs was also greater than the national values. This suggests that communities across the country with high black populations are at increased risk for deaths from prostate cancer.

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

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