Disparities in the Incidence and Mortality of Cancers in Brooklyn, New York and The United States

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Health disparities in cancer are caused by multiple factors including race, ethnicity and socioeconomic status. Socioeconomic risk factors include tobacco use, poor nutrition, physical inactivity and obesity. Income, education and health insurance coverage influence access to early detection, treatment and palliative care. Such disparities are commonplace in communities with socioeconomic stratification and multiracial diversity such as Brooklyn, New York. Brooklyn's population comprises of 54% blacks and Hispanics as compared to 32% in the rest of America (United States Census Bureau, 2010). The study focuses on cancers of breast, colon and prostate which impacts a significant population in the United States. The findings from this analysis of selected cancers among different racial groups are expected to identify segments of the population which should be targeted for efficient health care delivery and improved outcomes.

SEER (Surveillance, Epidemiology and End Results) Database (2009-2014) was reviewed for incidence and mortality of cancers of breast, colon and prostate for non-Hispanic whites, and blacks and Hispanics in Brooklyn and the United States (http://seer.cancer.gov/). The data for all age groups were recorded (per 100,000). Colon cancer data for males and females were combined. Percentage difference was calculated from absolute number of cases diagnosed or those who died (per 100,000).

The incidence of breast cancer is approximately 15% lower in blacks and Hispanics in both Brooklyn and the U.S, however the mortality from breast cancer in this group is higher both locally (12.6%) and nationwide (5.6%). Although the incidence of colon cancer was lower in blacks and Hispanics in Brooklyn (5% lower), their mortality was higher (14%), which is reflected nationally with higher mortality (11.5%) than incidence (6%) in blacks and Hispanics. Incidence of prostate cancer was substantially higher amongst blacks and Hispanics than in non-Hispanic whites; it is 72% higher in blacks in Brooklyn and 24% higher nationwide. Mortality follows the same trend of higher rates for prostate cancer in blacks both locally (108%) and nationwide (44%).

The challenge of addressing cancer disparities in minority populations is demanding and it requires collective efforts undertaken by governmental, private and nonprofit organizations, as well as researchers. This report highlights health disparities in the black and Hispanic population and identifies opportunities for interventions to address disparate disease outcomes.