



## Kaposi's Sarcoma, a Gateway to Understanding Healthcare Disparities Present in the Racial Minority Communities of America

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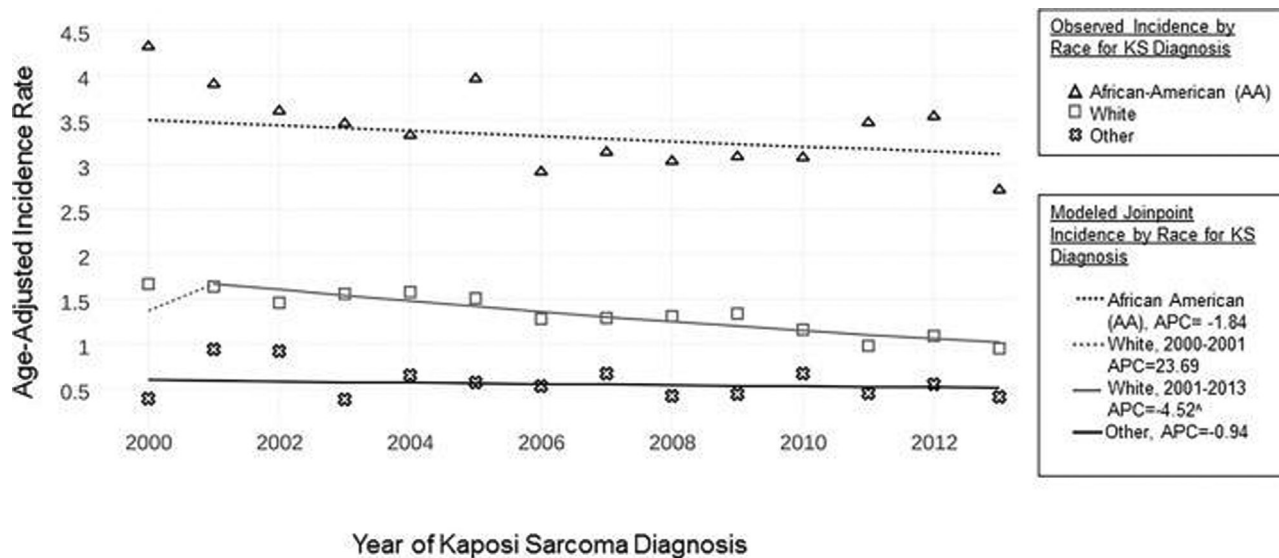
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Kaposi sarcoma (KS) is a spindle cell malignancy derived from endothelium cells and is caused by human herpesvirus-8 (HHV-8) [1]. Clinically, it often presents as a patch that progresses into purple to reddish-brown nodules. KS is commonly subdivided into four known variants, namely, AIDS-associated, classic, African, and iatrogenic [2]. KS has increased incidence in individuals with human immunodeficiency virus (HIV) due to immune dysfunction allowing for the proliferation of oncogenic HHV-8 [3]. In the United States, highly active antiretroviral treatment (HAART) for HIV has decreased the incidence of KS by improving immune function. Still, the current trends of KS in America illustrate the racial disparity prevalent in the U.S. healthcare system [4].

Hsieh et al. evaluated racial/ethnic differences in soft tissue sarcoma trends and incidence. They found that from 1995–2008 there was a higher incidence of KS in Black and Hispanic males compared to White males [5]. Similarly, Royse et al. analyzed the Surveillance, Epidemiology, and End Results (SEER) database to determine the incidence

of KS by race and geographic location from 2000 to 2013. Their finds suggest KS significantly decreased in White males but increased in Black males, especially from the US southern states (Figure 1). Compared to other races, Black males in the south developed KS six times more frequently and were more likely to pass away (Figure 1). The increased rates of KS in southern states may be due to decreased HIV testing and treatment prevalent in these states [6,7]. Furthermore, HAART compliance and use are lower in Black males, leading to an increased risk of HHV-8 activation and subsequent KS [7]. Higher rates of poverty and lower education rates adversely affect access to healthcare needed to prevent and treat HIV. In 2016, Black Americans comprised 54% of HIV diagnoses in southern individuals, of which 59% were men who had sex with men [8].

HIV is a stigmatized illness, especially in racial and minority communities, and decreased acceptance of homosexuality in the south can hinder homosexual males from obtaining needed health care. In addition, stigma adversely reduces social support, resulting in increased psychological



<sup>^</sup>The Annual Percent Change (APC) is significantly different from zero at alpha=0.05

**Figure 1.** Kaposi sarcoma incidence in the US by race, 2000–2013. Copyright © 2017 Royse et al [6].

distress and decreased efforts to prevent transmission through harm reduction [9].

The studies indicate an increasing need to tackle racial disparities in accessing diagnostic tools, physicians, and treatment for HIV to prevent unnecessary comorbidities like KS. Working with federal agencies to address socioeconomic factors like decreased education and increased incarceration rates that exacerbated HIV-related disparities is essential. To improve HIV testing in racial communities, it is crucial to implement clinical and non-clinical settings that promote feasible accessibility to HIV testing. Many Black American men distrust the medical system, which can lead to decreased access and adherence to HAART [10]. This needs to be addressed by training culturally competent physicians focused on providing a therapeutic patient-provider relationship. Further studies need to be performed to understand health-care disparities and effective methods to address the transmission of HIV and the comorbid development of KS in racial minority communities [9].

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