

# Cancer Health Disparities in Southeastern Wisconsin

Yi Ou\*

Wisconsin Department of Health Services, Madison, WI, USA

## Objective

To assess health disparities in all-site cancer incidence and mortality rates, and stage of specific cancer diagnosis (female breast cancer and colorectal cancer) compared between African American and white populations of southeastern Wisconsin during 2007-2011.

## Introduction

Advanced cancer treatments and research have been helping reduce cancer mortality nationally and in Wisconsin. However, chronic health disparities in cancer remain a major public health concern as not all population subgroups have equal access to these healthcare benefits [1, 3]. Previous cancer studies showed that cancer health disparities persisted among racial populations had primarily focused on the entire state of Wisconsin [2]. The southeastern region Wisconsin, the greater Milwaukee metropolitan area, is home to 83% of Wisconsin's African American population, and includes one of the most segregated metropolitan areas in the United States [1]. Because of this, better understanding of cancer trends in the southeastern Wisconsin region can assist in targeting a focal point to more effectively use resources to eliminate health disparities in Wisconsin.

## Methods

Cancer incidence data were obtained from the Wisconsin Cancer Reporting System (WCRS) for the period 2007-2011. Cancer mortality data was assessed from the National Center for Health Statistics (NCHS) for the period 2007-2011. For absolute disparities, trends in cancer incidence, mortality, and the stage of diagnoses for African Americans and whites were calculated. Ratios of African American rates and white rates were used to measure changes in relative disparities [2].

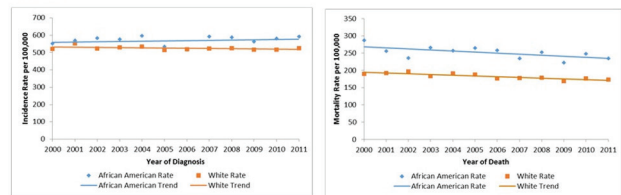
## Results

During 2000-2011, African Americans had higher cancer incidence rates and mortality rates than whites, except for breast cancer incidence rates were lower for African American women than for white women (Figures 1, 2, 3, and 4). Sex affected the trends in disparities and the magnitude of change for incidence rates (Table 1). In 2010, African American female breast cancer incidence rate was 8 cases per 100,000 population fewer than white rates. African American women tend to be diagnosed at a late stage of breast cancer with a rate ratio of 1.03 in 2000 and 1.29 in 2011. For colorectal cancer, African American men were more likely to be diagnosed with an advanced stage than white men with a slight decrease in disparity. The ratio between African American and white rates were 1.44 in 2000 and 1.40 in 2011

## Conclusions

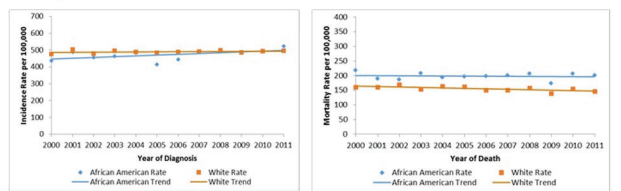
Reducing cancer burden and eliminating cancer health disparities will need further research. But this study has shown that the at-risk population in the southeastern Wisconsin is a good starting point for public health professionals and policy makers to utilize their resources and prioritize effectively to reduce racial health inequity in cancer in Wisconsin.

**Figure 1.** Trends in Age-Adjusted Cancer Incidence and Mortality Rates\*, All Sites, By Race, Southeastern Wisconsin, 2000-2011

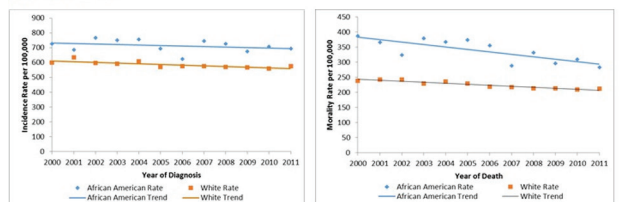


a Rates are per 100,000 persons and age-adjusted to the 2000 U.S. standard population.

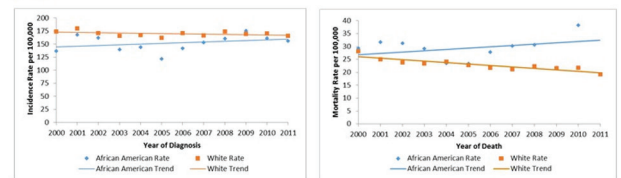
**Figure 2.** Trends in Age-Adjusted cancer Incidence and Mortality Rates, All Sites, Females, by Race, Southeastern Wisconsin, 2000-2011



**Figure 3.** Trends in Age-Adjusted cancer Incidence and Mortality Rates, All Sites, Males, by Race, Southeastern Wisconsin, 2000-2011



**Figure 4.** Trends in Age-Adjusted Female Breast Cancer Incidence and Mortality Rates, By Race, Southeastern Wisconsin, 2000-2011



**Table 1.** Age-Adjusted Cancer Incidence and Mortality Rates\*, All Sites, by Race and Sex, Southeastern Wisconsin, 2000-2011

	2000			2011		
	African American Rate	White Rate	Rate Ratio <sup>b</sup>	African American Rate	White Rate	Rate Ratio <sup>b</sup>
<b>Incidence</b>						
Both Sexes	549.41	522.13	1.07	591.42	525.65	1.11
Male	725.67	599.5	1.2	694.28	574.59	1.24
Female	436.55	475.24	0.92	523.21	496.61	1.01
<b>Mortality</b>						
Both Sexes	286.89	189.79	1.39	234.18	172.93	1.35
Male	386.58	237.72	1.58	282.64	212.07	1.14
Female	217.46	160.51	1.22	201.01	146.35	1.33

a Rates are per 100,000 persons and age-adjusted to the 2000 U.S. standard population.  
b Ratio of African American rate to white rate is calculated based on the 2000-2011 trend line.

## Keywords

cancer; Registry; Health equity

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### References

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2. Jones N, Williamson A, Foote M, et al. Cancer health disparities persist among African Americans in Wisconsin. *WMJ*. 2010; 109 (5): 267-273.
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**\*Yi Ou**

E-mail: Yi.Ou@wisconsin.gov

