Vonetta L Williams et al., J Cancer Sci Ther 2015, 7:5
http://dx.doi.org/10.4172/1948-5956.S1.044

OMICS International
conferenceseries.com

International Conference on
Prostate Cancer
June 22-24, 2015 Florida, USA

Treatment patterns in the management of prostate cancer: Lessons learned from the Florida cancer data system

Vonetta L Williams[1], Hamisu M Salihu[2] and Jennifer Permuth-Wey[1,3], Philippe E Spiess[3], and **Thomas Mason[1]**
[1]University of South Florida, USA
[2]Baylor College of Medicine, USA
[3]Moffitt Cancer Center, USA

Introduction: African American (AA) men represent a high risk population affected by prostate cancer (PrCa) and there are gaps in the current literature about PrCa and first course of treatment patterns among AA men compared to Non-Hispanic White (NHW) men in the State of Florida, USA. Therefore, this study focused on examining possible race/ethnic differences and first course of treatment patterns among newly diagnosed PrCa cases in Florida using a publicly available data set.

Materials & Methods: Publicly available data from the Florida Cancer Data System (FCDS) was queried to identify patients diagnosed with primary adenocarcinoma prostate cancer in the state of Florida between 1982 and 2012. Race/ethnic groups were defined as African American (AA) and Non-Hispanic White (NHW). Race/ethnic differences in treatment patterns and various demographic/clinical variables were assessed using chi-square and Fisher's exact tests. Adjusted odds ratios (AOR) for treatment patterns were calculated using logistic regression. Models were adjusted for year of diagnosis, marital status, health insurance payer and vital status. Models were additionally stratified by stage at diagnosis, tumor grade and age at diagnosis.

Results: A total of 244,438 patients (87.5% NHW and 12.5% AA) were diagnosed with prostate cancer during the study period. The average age at diagnosis and age range was 65 (29-105) years for AA men and 69 (32-104) years of age for NHW men. Statistically significant race/ethnic differences existed by stage at diagnosis ($p<0.0001$), age at diagnosis ($p<0.0001$), health insurance payer ($p<0.0001$), tumor grade ($p<0.0001$), marital status ($p<0.0001$), no first course treatment ($p<0.0001$), surgery only or surgery in combination with other treatment modalities ($p<0.0001$), radiation and hormone therapy ($p<0.0001$), hormone therapy only ($p<0.0001$) and radiation therapy only ($p<0.0001$). AA men were more likely to receive no first course treatment for localized disease (AOR=1.10, 95% CI=1.06-1.14, $p<0.0001$) and less likely to receive no first course of treatment for regional disease (AOR=0.89, 95% CI=0.80 -0.98, $p=0.02$), compared to NWH men. Significant differences in no first course of treatment existed among men diagnosed with grades 1 and 3 but there were no significant differences in no first course of treatment by race/ethnicity for tumor grades 2 and 4. In addition, there were no significant differences in no first course of treatment by race/ethnicity for men <50 and 65-74 years of age. However, there were significant differences in treatment by race/ethnicity where AA men, 50-64 and 75+ years of age were more likely to receive no first course of treatment (50-64, AOR=1.09, 95% CI=1.04-1.15, $p=0.0012$) (75+, AOR=1.19, 95% CI =1.11-1.27, $p<0.0001$) compared to NHW men. In addition, AA men were significantly less likely to receive surgery for localized, regional, and distant disease.

Conclusion: Significant differences in first course of treatment patterns exist by stage at diagnosis, tumor grade, and age at diagnosis for primary prostate cancer patients in Florida. More specifically, AA men were less likely to receive surgery or surgery in combination with other treatment modalities across all stages of disease after adjusting for various potential demographic and clinical confounders.

Biography

Vonetta L Williams, is a native Floridian and received her Ph.D. in Public Health from the University of South Florida in Tampa, Florida. She received her Master of Public Health degree with a concentration in Epidemiology and Biostatistics from Florida A&M University in Tallahassee, FL. Her research interest is Cancer Health Disparities and her dissertation evaluated race/ethnic disparities in treatment patterns among pathologically confirmed primary prostate cancer cases. She is the Manager of Information Shared Services at Moffitt Cancer Center and Research Institute in Tampa, Florida where she has been employed for over 8 years.

Vonetta.Williams@moffitt.org