

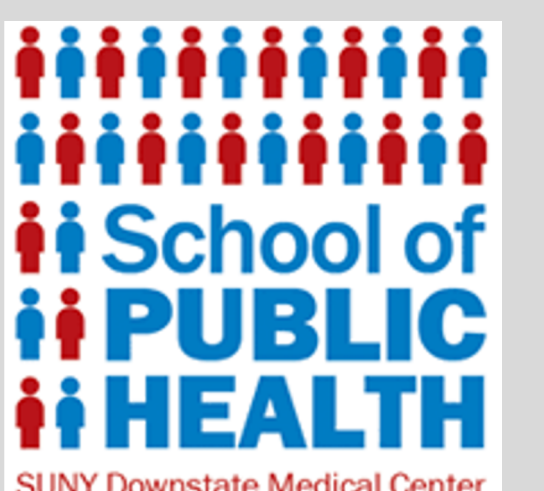
Is Race a Factor in the Mortality from Small Cell Carcinoma of the Prostate (SCCP)?

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Background

- Prostate cancer (PCa) is the leading cancer affecting men in the US; second highest cause of cancer-related deaths.
- Disparities within prostate cancer are the largest of all cancer disparities.
- AA men have a higher incidence rate than other races and are more likely to present with an aggressive type of the disease.
- SCCP is a rare, aggressive type of PCa that occurs in about 2% of men with PCa, with a mean survival of 5 months.
- Treatment is difficult due to uncommon aggressive traits, such as early metastasis to distant organs.

Objective

- To evaluate if SCCP-related mortality differs by race during the years 2000-2017, among 462 men aged 60 and older.

Methods

- Logistic regression was conducted to determine any association between race and SCCP.

Data Source:

- The Surveillance, Epidemiology, and End Results (SEER).

Predictors:

- Race; age at diagnosis; average household income.

Outcomes:

- Mortality from Prostate (SCCP) or from Other diseases.
- Alive (as of 2017).

Data

62 "Alive" participants are included in "Other" Column for analysis.
Household Income is divided into 3 levels: Low: <\$35,000 - \$49,999; Medium: \$50,000 - \$64,999; High: \$65,000 - \$75,000+

Variables	Assoc. between Mortality & Variables		P-value	
	Prostate (Y)	Other (N)		
Race (Total)	295 (63.9 %)	167 (36.1%)	0.078	
White (83.3%)	254 (66.0%)	131 (34.0%)		
Black (8.7%)	18 (45.0%)	22 (55.0%)		
American Indian/Alaska Native (1.3%)	5 (83.3%)	1 (16.7%)		
Asian or Pacific Islander (6.3%)	17 (58.6%)	12 (41.4%)		
Unknown (0.4%)	1 (50.0%)	1 (50.0%)		
Household Income (Total)	295 (63.9%)	167 (36.1%)		0.332
Low (16.7%)	52 (67.5%)	25 (32.5%)		
Medium (34.6%)	95 (59.4%)	65 (40.6%)		
High (48.7%)	148 (65.8%)	77 (34.2%)		

Logistic Regression Outcome: Mortality from SCCP

Variables	OR	95% CI	P-value (N=462)
Black	0.393	0.198, 0.780	0.008
American Indian/Alaska Native	2.292	0.263, 19.996	0.453
Asian or Pacific Islander	0.747	0.343, 1.627	0.462
Unknown	0.520	0.032, 8.475	0.646
Age	0.979	0.954, 1.005	0.120
Income Level: Low	0.694	0.387, 1.243	0.219
Income Level: Medium	0.850	0.479, 1.509	0.579

Limitations

- Absence of known disparities such as education level and marriage status.
- Limited knowledge of disease available.
- Data on possible comorbidities not available.
- Data on post survival analysis for SCCP specifically unavailable; unable to compare post-dx survival by race, or look at 6-month or 1-yr post-diagnosis survival.

Results

A logistic regression model with the predictor variables reported that Black men have a 0.393 times the odds of dying from SCCP, compared to White men when controlling for race, age at diagnosis, and income level (95% CI 0.198, 0.780).

Discussion/Conclusion

- AA men suffer disproportionately from PCa compared to other races; 2.3 times higher mortality rate than White men.
- Assumptions that this trend within PCa would be observed in SCCP; opposite was found instead despite current literature suggesting otherwise.
- A significant relationship was found between AA men and SCCP-related mortality.
- Due to short survival time, new biomarkers are needed to aid in diagnosis and treatment of disease earlier.
- Curative therapies do not exist for this disease because lacking complete understanding of molecular basis of disease and its differences from prostatic adenocarcinoma.
- More replicable research is needed before any inferences on the relationship can be made.

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