

EDITORIAL



Clinical Research

Racial disparities in treatment patterns for localized prostate cancer in an equal access system: What are we missing?

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In the current issue, Posielski et al. assessed the impact of race on treatment decisions and Health Related Quality of Life (HRQoL) in men with localized, low- or intermediate-risk Prostate Cancer (PCa). The Authors assessed the differences in proportions of men choosing active surveillance (AS), radical prostatectomy (RP) or radiotherapy (XRT) and in Expanded Prostate Cancer Index Composite (EPIC) and RAND 36 Item Short Form Health Survey V2 (SF-36) scores between Afro-American (AA) and non-Afro-American (non-AA) patients from a Veterans Affairs (VA) health care system database including 5 different institutions for a total of 1006 patients.

The authors found a significantly smaller proportion of AA men with low-risk PCa choosing AS compared to non-AA men. For the same risk category, a significantly higher rate of XRT was found for AA patients. AA men with intermediate-risk PCa had higher rate of XRT and lower rate of RP when compared to non-AA patients. AA men exhibited worse EPIC sexual bother scores after RP for AA compared to non-AA men. Interestingly, no differences in EPIC sexual function scores were found between race groups.

Racial disparities in PCa are well documented. AA men exhibit the highest incidence of PCa compared to other races in US [1]. They are more likely to be diagnosed with PCa at younger age, with higher PSA and more aggressive disease compared to non-AA patients [2]. These differences are reflected in a 2-fold higher PCa-specific mortality (PCSM) compared to White men [3].

A minor component of this mortality gap may be explained by biological differences. Several germline variants were found to be strongly associated with earlier development and aggressiveness of PCa in AA men. However, most of them are rare and occur at similar rate across ethnicities [4].

In this perspective, current guidelines recommend early PSA screening and germline testing for all men with high-risk PCa, including AA men [5]. PSA screening intensification (at 45yy) demonstrated highly beneficial in AA men, decreasing the likelihood of dying by about 30% [6]. However, studies have consistently reported that AA men are less likely to receive PSA screening or prostate magnetic resonance compared to non-AA men. AA men are also unlikely to receive treatment regardless of disease stage. When performed, the treatment is usually delayed and less aggressive in comparison to treatment received by white men [4].

Differences in socioeconomic status and access to care are essential components in explaining ethnic disparities in PCa diagnosis and treatment [7]. The US Department of Veterans Affairs health care system is one of the larger health care systems in US, serving ~20 million veterans. As an equal-access system, it

provides an accessible, familiar, trusted source of care to veterans regardless to race and economic circumstances. The VA not only covers the out-of-pocket expenses of care, but also offers long-term care services, including 24/7 in-home medical and nursing care, physical therapy, assisted living centers, or caregiver support. The use of VA data provided Posielski et al. a unique environment to exclude access-related barriers, and thus investigate residual differences in PCa treatment choices and HRQoL outcomes. However, even after controlling for health care access, the Authors found significantly lower utilization of AS and RP compared with XRT by AA men.

Concern about oncological outcomes may be one of the reasons behind this phenomenon. In a recent VA-based study including over 50,000 veterans, Yamoah et al. found a nearly two-fold residual disparity in metastatic and PCSM rates across all NCCN risk groups between AA men and White patients [7]. In contrast, other studies reported better outcomes for AA veterans in terms of rates in castration-resistant prostate cancer, metastasis, and PCSM [8]. Published studies concordantly suggested more favorable outcomes in AA men when treated with XRT, reporting a decreased risk of distant metastasis, PCSM and overall mortality when compared to non-AA men [7, 9]. Awareness of higher mortality even after an equitable and timely intervention and the likely higher radiosensitivity might have influenced AA patients and their physicians to forgo AS and prefer XRT as an active treatment. Worse outcomes in terms of post-RP sexual bother highlighted by Polienski et al. may also contribute to these choices.

In our view, these residual racial disparities cannot be passively accepted as an effect of immutable biological differences. As Polienski et al. have shown, even when access and socioeconomic background biases are minimized, dissimilarities in treatment choice and HRQoL persist. Social, cultural and economic factors underlying so-called institutional racism may still wield their influence in an equal access health care system such as the VA.

AA men often reported poor knowledge of PCa. Compared to non-AA men, AA men are less educated on signs, screening, diagnostic protocols, and treatment opportunities. AA men are vastly underrepresented in RCTs [4]. AA patients are more likely than white patients to misperceive the aggressiveness of their cancer, even when they are diagnosed with high-risk disease [10]. Poor physician-patient communication and lack of AA physicians to turn to contribute to AA patients' general distrust of the health care system. Consequently, AA men are more frequently unwilling to seek diagnosis and care for their disease [4].

When seeking care, the treatment decision-making process of AA patients is influenced by a number of factors in addition to disease treatment. These include bowel symptoms, QoL and sexual dysfunction. Notably, in patients who perceived their tumor as not aggressive most non-AAs prefer AS, while most AAs prefer

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XRT [10]. AA patients are significantly more concerned about the financial burden associated with cancer treatment, which includes not only out-of-pocket expenses but also the loss of their own income or that of other family members. AA men tend to consider treatment duration, recovery time, and impact on daily activities as important factors in treatment selection and prefer XRT to RP as definitive treatment [4, 7, 10].

Until these socioeconomic differences, which affect knowledge, diagnostic choices, willingness and type of treatment of PCa are eradicated, AA men will not be free to treat their cancer in the same way as the white population.

Promoting policies that foster social and economic equity among racial groups is the most effective form of intervention to address racial discrepancies in PCa.

Unaccounted biological differences in incidence and aggressiveness of PCa cannot excuse any discrepancy in outcomes in terms of HRQoL and survival but should only give incentive for enhanced surveillance and earlier treatment of a well-recognized high-risk population.

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AUTHOR CONTRIBUTIONS

FC and MCM contributed equally to this work.

COMPETING INTERESTS

The authors declare no competing interests.

ADDITIONAL INFORMATION

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