

Prostate Cancer and Race

Variations in Diagnosis and Treatment

Widespread variations in the diagnosis and management of clinical conditions have been noted for many years. This is particularly true when there is uncertainty regarding the benefits and risks associated with different decisions. One area in which such substantial uncertainty remains is the screening and treatment of prostate cancer. Although prostate-specific antigen (PSA) testing has been available since 1987, in the absence of randomized controlled trials demonstrating that PSA testing reduces mortality, its use is still controversial.¹ Lack of consensus also exists regarding the optimal treatment for patients with clinically localized prostate cancer. Aggressive treatment options include radiation therapy and radical prostatectomy. While survival outcomes are similar for these alternative treatments, physician recommendations vary by specialty, with radiation oncologists advocating radiation therapy and urologists favoring radical prostatectomy.²

Two articles in this issue of *Journal of General Internal Medicine* examine different aspects of prostate cancer screening and treatment. Frosch et al. conducted a randomized controlled trial to evaluate the effectiveness of two methods for delivering educational material—videotape and the internet—in improving patient knowledge of PSA tests.³ Patients randomized to the video group had greater increases in PSA knowledge and were more likely to decline PSA testing than those in the internet group. However, video patients, who were required to dedicate a specific time to viewing the video, were more likely to have reviewed all the material compared to the internet patients. When comparing PSA knowledge and PSA testing decisions of patients in the video and internet groups who reviewed the same material there were no significant differences between groups.

These results apply most directly to the kinds of patients studied, i.e., well-educated, white men with access to the internet who elect to undergo a free annual routine physical examination (assuming most of the men were enrolled in Kaiser Permanente's health plan). In contrast to a previous study, which compared videotape and discussion in educating patients about PSA in the same setting, where 22% of participants were minorities and 20% had a high school or lower level of education,⁴ the current study had 10% minority participation and only 7% had a high school or lower level of education. Thus, by requiring internet access in this study, the numbers of minorities and less educated individuals who could use this decision aid were reduced. Similarly, the fact that PSA testing was free eliminates financial barriers that can be a significant impediment to testing for fee-for-service patients.^{5,6}

In the second paper, Hoffman et al. examine whether there are racial differences in the treatment of early stage prostate cancer.⁷ For the one third of men with more

aggressive prostate cancers, African Americans were less likely to receive radical prostatectomy than whites and more likely to be treated by androgen deprivation or watchful waiting. No significant racial differences were found in treating men with less aggressive cancers and the differences noted among men with aggressive cancers are not explained by the intensiveness of evaluating the disease.

Are African Americans with aggressive cancers undergoing too few radical prostatectomies or are whites undergoing too many? The present study has no definitive criteria regarding which treatment option is more appropriate and thus the variations in rates may be clinically appropriate. For instance, in other conditions, such as renal transplantation, there is evidence of underuse of transplantation among blacks and overuse among whites,⁸ which is not explained by black patients' desire for renal transplantation compared to white patients.⁹

Hoffman et al. also report significant sociodemographic differences between their African-American and non-Hispanic white patients. African Americans were less educated (18% vs 45% were college graduates), had higher levels of comorbidity (20% vs 11%), and reported that their treatment decisions were influenced to a greater extent by insurance factors (18% vs 11%). These factors must be considered in evaluating any plan to reduce racial disparities.

What can be done to reduce these disparities? For conditions in which there is uncertainty, as in prostate cancer screening and treatment, "decision aids"—such as those used in Frosch's study—may help patients understand the probable benefits and risks of different decisions; consider how they value those benefits and risks; and participate more actively with their health care providers in making decisions.¹⁰ Cancer-related decision aids have already been shown to reduce decisional conflict; assist those who are uncertain at baseline to make a choice; and increase the probability that choices are based on better knowledge and personal values.¹⁰ While decision aids have not yet been shown to reduce "inappropriate" practice variation, they may help reduce this variation by having choices reflect patient preferences.

Decision aids, however, cannot replace the discussions that are needed between patients and their health care providers. This is particularly true for African Americans and those patients with less education, as they already are at risk of making less informed decisions. With these patients, physicians use a less-participatory decision-making style, have worse interpersonal skills, and present less information.^{9,11} Thus, as new decision aids are developed, we must evaluate their cost, ease of administration, effectiveness in transmitting information, and accessibility to a population that includes minorities and less educated patients. Similarly, as new medical students take their first steps in

becoming physicians, we must assure that the students are trained in how to listen to their patients and assist their patients in making the best treatment choices.—**Steven J. Bernstein, MD, MPH**, *Veterans Affairs Center for Practice Management & Outcomes Research, VA Ann Arbor Healthcare System, and Department of Internal Medicine, University of Michigan School of Medicine, Ann Arbor, MI.*

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