

Clinical Digest

ONLINE EDITION

CANCER

## Race, Ethnicity, and Perception of Prostate Cancer Risk

Researchers from the National Cancer Institute, Bethesda, MD and Roswell Park Cancer Institute (Underwood), Buffalo, NY note that it is "imperative that men be knowledgeable enough to accurately weigh their specific risks and potential benefit" from prostate cancer screening. They also note that African American men are at higher risk for prostate cancer than non-Hispanic white men. With these factors in mind, they set out to determine whether perception of prostate cancer risk is associated with race/ethnicity or demographic characteristics in men without a history of the cancer.

The researchers surveyed 1,075 men aged 45 years or older who identified themselves as African American, Hispanic, or non-Hispanic white. These participants were asked to rate their likelihood of developing prostate cancer, as well as to compare their likelihood of developing the cancer with that of the average man their age.

The survey results indicated that 50% of African American participants, 47% of Hispanic participants, and 43% of non-Hispanic white participants described their prostate cancer risk as somewhat or very low. In addition, 17.5% of African American participants, 22% of Hispanic participants, and 13% of non-Hispanic white participants said they were more likely than the average man their age to develop the cancer.

The researchers say that these results point to two misperceptions: First, many African American participants seemed unaware of their higher-than-average risk, and second, many Hispanic participants reported a higher-than-average risk that is unsupported by the medical literature. They conclude that all men, and African American and Hispanic men in particular, "could benefit from information regarding their specific risk of developing prostate cancer before making a decision about prostate cancer screening."

Source: *Am J Prev Med*. 2009;37(1):64–67. doi:10.1016/j.ampre.2009.03.007.

## **BLOOD DISORDERS**

## The Prognostic Value of Hyponatremia

Research has shown that hyponatremia predicts adverse outcomes in patients with congestive heart failure and pneumonia. But does the condition have prognostic value for the general population?

To find out, researchers from Copenhagen University Hospital, Denmark observed 671 individuals for a median of six years. These participants were aged 55 to 75 years and had no history of heart disease, stroke, or cancer. After determining the participants' baseline levels of serum sodium, the researchers looked for associations between hyponatremia and the composite endpoint of death or myocardial infarction.

The researchers stratified participants into three groups, according to their serum sodium levels. Group A consisted of the 14 participants (2%) whose serum sodium levels were 134 mEq/L or lower—a widely accepted definition of hyponatremia. Group B consisted of those 14 participants plus 48 more (for a total of 62 patients, or 9%) whose serum sodium levels met a more conservative definition of hyponatremia of 137 mEq/L or lower. Finally, the control group consisted of the 609 hyponatremia free participants (91%) whose serum sodium levels were above 137 mEq/L.

The results showed that hyponatremia was significantly associated with the composite endpoint. Death or myocardial infarction occurred in 43% of the Group A participants and in 27% of the Group B participants. In contrast, only 14% of the control participants died or experienced myocardial infarction.

The association persisted after adjustment for a broad range of factors, including age, gender, body mass index, physical activity, diuretic use, neurotropic use, and creatinine level. Although subtle hyponatremia (defined as a serum sodium level between 135 and 137 mEq/L) did not significantly predict death or myocardial infarction when the researchers controlled for conventional risk factors, it did so when they excluded participants who used diuretics. Hyponatremia also retained its predictive value when stroke, cancer, or heart failure were added to the composite endpoint.

The researchers note that, while hyponatremia shows an independent association with adverse outcomes in middle-aged and elderly subjects, the mechanisms of this association "remain elusive." Such mechanisms might be better explained, they say, by large-scale studies and "smaller case-control studies with extensive cardiovascular, renal, and endocrine examinations."

Source: *Am J Med.* 2009;122(7):679–686. doi:10.1016/j.amjmed.2008.11.033.