A new study from Danish researchers has found that childless men have a lower risk of developing prostate cancer than fathers, and that, paradoxically, the more children a father has, the lower the risk of the disease. The study appears in the February 15, 2008 issue of CANCER, a peer-reviewed journal of the American Cancer Society.

Whether fatherhood can affect the risk of prostate cancer remains controversial. Evidence has suggested that childless men may be at lower risk of prostate cancer than men with children, and that men who father sons may be at lower risk than men with daughters only. To address the issue, researchers led by Kristian Jørgensen of the Statens Serum Institut, in Copenhagen, Denmark, used a national population-based register to analyze data from all men born in Denmark between 1935 and 1988, among which 3,400 developed prostate cancer. They found men without children were 16 percent less likely than those with children to be diagnosed with prostate cancer during up to 35-years of follow up. The analysis also revealed that among fathers, there was a gradually reduced prostate cancer risk with increasing number of children. The authors suggest that, theoretically, this might reflect a "healthy father" phenomenon, in which men who retain fertility are less likely to develop a malignancy. The study found no association between prostate risk and child gender.

The analysis did not reveal what factors associated with childlessness might be responsible for the risk reduction. Currently known risk factors for prostate cancer are race, family history of prostate cancer, and advanced age. "Regardless of the underlying mechanism, the results of the current study provide prospective, epidemiologic support for the view that childless men are somehow at lower risk of developing prostate cancer," the authors wrote.

The authors also note that "additional studies are required to identify the underlying biologic, environmental, social and/or behavioral factors that explain the observed differences in prostate cancer risk between fathers and childless men and between men fathering few and those fathering many children."

Article: "Fatherhood Status and Prostate Cancer Risk" Kristian T. Jørgensen, Bo V. Pedersen, Christoffer Johansen, and Morten Frisch. CANCER; Published Online: January 7, 2008 (DOI: 10.1002/cncr.23230); Print Issue Date: February 15, 2008.

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