

Study Finds Prostate Cancer Increasing in Most Countries

Rates Remain Highest in Highest Income Regions of the World

March 21, 2012 Atlanta—Prostate cancer is the most commonly diagnosed cancer among men in many regions of the world, with 899 000 new cases and 258 000 new deaths recorded in 2008. The burden from the disease is anticipated to increase to 1.7 million new cases and 499 000 deaths by 2030 were the respective incidence and mortality rates of prostate cancer to remain unchanged in the future.

A new study of prostate cancer rates around the world finds incidence rates remain highest in the highest income regions of the world including North America, Oceania, and western and northern Europe, while mortality rates tend to be highest in low- to middle-income settings including parts of South America, the Caribbean, and sub-Saharan Africa.

This collaborative study led by Dr Ahmedin Jemal of the American Cancer Society and Dr Freddie Bray of the International Agency for Research on Cancer reviewed variations in prostate cancer incidence and mortality across five continents by examining the most up-to-date incidence rates in 40 countries and 63 population-based cancer registries based on the GLOBOCAN 2008 and *Cancer Incidence in Five Continents* databases compiled at IARC. Mortality rates were examined in 53 countries using data obtained from the World Health Organization (WHO) mortality database. They found for the vast majority of countries examined, prostate cancer incidence rates increased over the last 10 years of observation. They found no examples of declining incidence trends.

Increasing prostate cancer incidence rates were observed in 32 of the 40 countries included in the analysis. Several countries exhibited stabilizing incidence trends, and most of them were high-resource populations for which declines in mortality trends were observed at the national level. In contrast, the greatest increases in incidence rates occurred in less resourced countries with stable or increasing mortality trends.

“International differences in prostate cancer diagnostic practices, particularly the adoption of prostate specific antigen (PSA) testing in higher-resource settings, are likely be a major contributor to the variation in the incidence rates worldwide,” said Dr. Jemal.

However incidence rates are increasing in Asia (Japan, Singapore and Thailand) where PSA testing remains less common. Some researchers have suggested a possible role of a westernization of lifestyle in explaining such trends. The only well-established risk factors for prostate cancer are older age, black race/ethnicity, and a family history of the disease.

Dr Christopher Wild, IARC Director commented: “The increasing trends in less affluent areas may be related to an increased prevalence of risk factors associated with economic development such as obesity, increased consumption of dietary fat, and decreased physical activity.” One key question is whether the increasing trends in incidence in low- and middle-income countries are indicative of a truly changing risk or represent an increased detection. “Further analyses are needed in order to answer such questions with a degree of certainty that will permit the formulation of preventive measures and refining of screening methods”, Dr Wild added.

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In contrast, prostate mortality rates decreased in 27 of the 53 countries included in the analysis, increased in 16, and remained stable in the remaining 10 countries. The decreasing trends were mainly observed in North America, Oceania, Western Europe, and parts of northern Europe. Increasing mortality was generally observed in countries located in Central and Eastern Europe, parts of Asia, and Africa.

Dr Bray, commented: “Reasons for the recent declines in prostate cancer mortality rates in higher-resource countries are likely due to advances in treatment as well as increased detection of early stage disease through PSA testing. As curative treatment and early detection by PSA became increasingly widespread in the 1990s, their individual contributions to the reduction in mortality rates are difficult to disentangle, and remain the subject of much debate. There are obvious concerns that prostate cancer mortality is increasing, as well as incidence, in lesser-resourced settings”

Article: [Center MM, et al. International Variation in Prostate Cancer Incidence and Mortality Rates](#). Eur Urol (2012), doi:10.1016/j.eururo.2012.02.054

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