

A Case Control Study to Identify the Risk Factors that affect Prostate Cancer in Guyana

Article by Bodhan Nipan
Demerara Paradise Limited, East Coast Demerara, Guyana

Abstract

Introduction: Prostate cancer is currently the sixth most common cancer site in the world, third of importance in men and is a major concern.

Methods: The Current Investigation has a general objective to determine the role of some genetic, hormonal, lifestyle and environmental factors in the risk of developing clinically manifested prostate cancer using information from Demerara Paradise Incorporated, a local health institution in Guyana. The study cases were determined from records of the Institution ($n = 33$) diagnosed during 2016-2017, with histological verification or cytological cancer of prostate, persons under 90 years. The controls ($n = 108$) were selected by age and records were obtained from the same hospital. The risk estimation was obtained through a conditional logistic regression.

Results: There was a statistically significant association between skin color and risk of prostate cancer ($OR = 1.30$, 95% CI: 0.92-1.84) or smoking habit ($OR = 0.82$, 95% CI: 0.58-1.16). A positive association of the risk of prostate cancer with venereal diseases was observed ($p = 0.01$), as well as with the age of onset of these diseases ($p = 0.06$). No differences were found regarding the age of onset of sexual intercourse ($p = 0.111$) or in the number of sexual partners ($p = 0.48$).

Conclusion: There was a significant association between the risk of prostate cancer and having suffered from a venereal disease, limited physical exercise between 45 and 50 years and the frequency of sexual intercourse more than 10 times a week.

Keywords: Prostate cancer, Risk factors, Relative risk, Cases and Controls, Multicentre study.