

RISK FACTORS OF PROSTATE CANCER IN UNIVERSITI KEBANGSAAN MALAYSIA MEDICAL CENTRE: A CASE-CONTROL STUDY

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Introduction:

In Malaysia, prostate cancer is ranked 6th among male cancer and expected to increase in the future.

Background: Etiology of prostate cancer remain poorly understood but recently many evidence correlate the incidence of prostate cancer with multiple factors such as genetic, occupation, diet, hormonal disturbances, sexual activity and sexual transmitted disease. This is the first time for this kind of study done in Malaysia to recognize the risk factors for prostate cancer.

Purpose: This study was conducted to determine the relationship between risk factors and prostate cancer patients who came for treatment at Universiti Kebangsaan Malaysia Medical Centre (UKMMC).

Methods: Prostate cancer cases which were diagnosed between 2003 and 2008 which met with the inclusion criteria were included in the study. A total of 112 pairs of cases and controls which were matched by age and ethnicity were analyzed. McNemar Odds Ratio (ORM) calculated using software McNemar Calculator for univariate analysis while Conditional Logistic Regression was used for multivariate analysis. Analyses were carried out by using SPSS version 12.0.

Results: Most of the prostate cancer patients (68.8%) that came for treatment in UKMMC were above 70 years old. Majority is Chinese (50.0%) followed by Malay (46.4%) and Indian (3.6%). Multivariate analysis showed cases were more likely to have a first-degree relative with history of cancer (OR= 3.77, 95% CI= 1.19-11.85), exposed to pesticide (OR= 5.57, 95% CI= 1.75-17.78) and consumed more meat (OR= 12.23, 95% CI= 3.89-39.01). Significantly reduced risks of prostate cancer were observed among those consumed more vegetables (OR= 0.12, 95% CI= 0.02-0.84), more tomatoes (OR= 0.35, 95% CI= 0.13-0.93) and those who had frequent sexual intercourse (OR= 0.44, 95% CI= 0.19-0.96).

Conclusion: Some life style and occupation factors are strong predictors of the occurrences of prostate cancer among patient in UKMMC. More importantly, with the identification of the potentially modifiable risk factors, proper public health intervention can be improved.