

# New Zealand testicular cancer trends surprise

**New Zealand patterns of testicular cancer are running against international trends, particularly in terms of ethnicity and socio-economic status, according to research carried out as part of the HRC-funded CancerTrends study.**

Lead researcher Dr Diana Sarfati the University of Otago, Wellington, says Māori men have considerably higher rates of testicular cancer than New Zealand Europeans or Pacific or Asian men.

“In every other country in the world that we’ve been able to find information on, it tends to be white wealthy men who have higher rates of testicular cancer. So that’s a really unusual finding and unique in the world. The other interesting finding is that men who had lower incomes tended to have higher rates of testicular cancer, so again it was the opposite to what’s been found in many other countries where richer men tend to have higher rates.”

Dr Sarfati says that in the United States, for example, African Americans have about one-fifth the rate of testicular cancer compared to white American men.

“So they have very much lower rates and we see something similar among Pacific men and Asian men in New Zealand – they also have much lower rates than European men. So we don’t know what’s going on with Māori men here.”

The New Zealand study, which was published in the *International Journal of Cancer* (2010) used figures from the Cancer Registry for all 2,000 cases of testicular cancer in men aged 15-44 since 1981 and linked them to census data.

There has been a clear increase in testicular cancer, particularly since the early ‘90s and Dr Sarfati says that is consistent with most developed countries.

There are about 150 cases of testicular cancer diagnosed per year, compared to about 2,500 cases of prostate cancer. Dr Sarfati says survival rates are high with generally fewer than 10 deaths per year from testicular cancer in New Zealand.

“The main treatment is surgery which is then followed with chemotherapy. Testicular cancer is very sensitive to chemotherapy so survival rates are over 95 per cent.”



Dr Diana Sarfati

#### Key words:

- Testicular cancer, Māori, Europeans, Pacific, Asian, African Americans, prostate cancer, chemotherapy, cryptorchidism, pre-natal

#### Aims of this research:

- To establish the patterns of testicular cancer in New Zealand, with a focus on ethnicity and socio-economic status, and in comparison to international trends

Dr Sarfati says little is known about the aetiology of testicular cancer and there are only two well-established risk factors. “One is age - so it tends to be a cancer of young men particularly men aged about 15-44. The other is cryptorchidism which is undescended testes. But neither of those two factors explains the findings we’re seeing here”.

“A lot of the research around the world has been focused on pre-natal and very early life, because it is a cancer of young men. Studies have investigated things like the hormone environment in utero, before boys are even born. The findings around that have been mixed but there does seem to be something about the in utero environment that may impact people’s risk of testicular cancer later.”

CancerTrends has since been included in the HRC programme *Burden of Disease Epidemiology, Equity and Cost-Effectiveness Programme*, providing input parameters for intervention modelling and cost-effectiveness.

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