Thyroid cancer risk in New Zealand highest among Pacific women

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Just-published research shows Pacific women have the highest rates of thyroid cancer in New Zealand.

Published today in the *New Zealand Medical Journal*, the University of Otago Wellington study linked Census and cancer registration data to calculate incidence rates of the disease between 1981 and 2004, with a total of 2541 thyroid cancers included in the study period.

Rates were higher for women than men, with the highest rates observed among Pacific women – 18.5 per 100,000 compared to 8.3 per 100,000 for M?ori and 5.2 per 100,000 for European/other women. Risk was highest for Pacific women over the age of 45.

Lead author Dr Ineke Meredith says the higher incidence among women than men in New Zealand is consistent with a female preponderance observed worldwide, and suggests hormonal and reproductive factors play a role. The incidence rate for Pacific men was 2.7 per 100,000 compared to 3.2 for M?ori and 2.2 per for European/other.

Dr Meredith says the higher rate among Pacific women is in keeping with high rates across multiple Pacific Islands, although this varies between nations such as New Caledonia where Melanesian women have the highest rates in the world, and nations such as Samoa which has very low rates among women.

"Thyroid cancer is a relatively rare disease in developed countries, but continues to be of importance in the Pacific and among Pacific women in New Zealand. More work needs to be done to identify which Pacific groups are driving the incidence rates observed in New Zealand, and whether thyroid cancer risk is affected by birthplace and migrant status," she says.

One theory is that thyroid cancer rates among Pacific women will be largely among those born in the Pacific due to high consumption of iodine-rich seafood among children and young people living in the Pacific, Dr Meredith says.

"The relationship between iodine and thyroid function is complex, but both iodine deficiency and excess can cause goiter, which is a risk factor for thyroid cancer."

Study co-author Professor Tony Blakely says risk factors for thyroid cancer are unclear, but along with iodine deficiency and excess, suggested potential factors include family history of thyroid cancer or personal history of benign thyroid disease and low consumption of fresh fruit and vegetables.

The cancer most frequently presents in the fourth or fifth decade of life, and is two to four times more frequent in women than men, Professor Blakely says.

Provided by University of Otago