



Questions of life and death

Lis Ellison-Loschmann has dedicated her career – first in nursing and midwifery and now in academic research – to Māori health. Shortly after returning from two years in Spain and following the announcement of substantial Health Research Council funding for three major Māori health research projects she talks to Keri Welham.

Lis Ellison-Loschmann may work from a former industrial building with a view of commuter traffic on Wellington's busy Adelaide Road, but she can still picture Barcelona.

Ellison-Loschmann and her family have just returned from two years in the Spanish city, where the Massey University researcher studied with world class cancer and environmental epidemiology research groups.

They lived in an attic apartment in a working-class Catalan neighbourhood and Ellison-Loschmann was based in one of the largest biomedical research centres in Europe, the Barcelona Biomedical Research Park alongside the Mediterranean. When her children were homesick, she would take them to a beach café called Santa Marta, where the tables featured mosaics of unmistakably Māori design.

For the 44-year-old, Barcelona was a welcome removal from her usual focus on Māori health.

"There's just an expectation that you're Māori and you will work in Māori health," she says, sitting in her busy corner office hung with pictures of her children and a green woven mat which keeps falling off the wall.

Ellison-Loschmann describes her dedication to Māori health research as a "willing responsibility" but she relished Barcelona and the break it offered her from that focus for the first time in her career.

"I still miss the vibrancy of that city, knowing there was always something going on and feeling like you were in the middle of the world for a change."

Not that this is any sort of backwater. Her diary is packed full, and already a student waits patiently at the door. This is the first floor of what used to be a recycling operation in the Wellington suburb of Newtown; now a health research outpost of Massey. Ultimately, researchers hope the work carried out in this building, at the university's Centre for Public Health Research, will lead to improvements in the health of New Zealanders.

By the end of this year, Ellison-Loschmann will have launched three significant research projects with collective funding of \$2.5m.

The woman who left school at 16 to pick kiwifruit will lead the research teams on each project for the next three to five years. The first project will gather information about the disproportionately high rate of stomach cancer in Māori, the second will look at possible inequalities in breast cancer survival rates for Māori and Pacific women, and the third will look at the occupational health problems of Māori workers.

What is already known is that, for many cancers, Māori have much worse survival rates than non-Māori. If a Māori woman gets breast cancer or cervical cancer, she is more likely to die sooner than a non-Māori woman with the same condition. Researchers are attempting to determine what factors may contribute to those poor survival rates. They will consider access to healthcare, uptake of health screening programmes, and general health and lifestyle prior to the cancer. In the case of gastric cancer, the role of genetic factors also needs to be considered.

This is pivotal research in the fight to determine how best to improve Māori health and save lives.

Ellison-Loschmann uses general and Māori electoral rolls to find Māori for control groups. Those included in studies are those who identify themselves as Māori, and have said they have Māori ancestry. Ellison-Loschmann says the electoral rolls provide a practical base for accessing Māori subjects.

"The question of who is Māori has been raised often and redefined by many in the past. Our primary concern is to obtain the best possible data to understand Māori health. However, defining who Māori are is an area of health research in New Zealand which requires careful examination."

Her own identity is interesting. Her appearance – that distinctive head of dark curly hair, her arresting features – must make many people wonder about her lineage.

Raised in Tauranga as one of nine siblings, Ellison-Loschmann is Māori on her father's side – the line of descent including Te Atiawa, Ngāi Tahu, Ngāti Toa Rangatira and Ngāti Raukawa – and Tahitian on her mother's. The tale of how the two met is one she treasures. "Occasionally I think that their destinies were to be with each other – if you believe in that sort of thing."

Her mother, who came to New Zealand in 1949, was born on the island of Raiatea, while her father, a fitter and turner (and a dab hand at building swings, go-karts and scooters for his kids) was born in its near namesake Rangiatea in Otaki. They met at Hongoeka Marae north of Wellington.

Back in Tahiti her mother had taught primary school and worked in an accountant's office. In her new home she worked on a tobacco plantation in Nelson, and at the 'Wills'

As a population group, Māori have on average the poorest health status of any ethnic group in New Zealand.

As New Zealand entered the new millennium, Māori females had a breast cancer registration rate 1.3 times that of non-Māori females, but a breast cancer mortality rate twice that of non-Māori females.

Rates of stomach cancer registration and mortality were almost three times higher for Māori males than for non-Māori males.

For many cancers the rate ratio for Māori compared with non-Māori is higher for mortality rates than for registration rates. This suggests that Māori with cancer may be more likely to die from their cancer than non-Māori.

Source: www.maorihealth.govt.nz

cigarette factory in Lower Hutt, picking up the nickname “Frenchie”. (Although fluent in Tahitian, French, and Spanish, she spoke no English when she arrived in New Zealand.) For Ellison-Loschmann, her mother’s influence was formative.

A year picking kiwifruit paid for Ellison-Loschmann’s entrance into nursing training at Wellington Polytechnic from 1982.

After graduation, she worked in family planning, delivery of babies, cervical screening education, psychiatric care and sexual abuse counselling. A lot of her nursing and midwifery work was with Māori.

And then, when working as an assistant on one of New Zealand’s most famous health research projects, she was nudged in a slightly new direction.

“Well, you know how some people just get lucky? Well, I’m one of those people.”

Ellison-Loschmann worked with the late Dr Ir ihapeti Ramsden on her cultural safety research. Ramsden’s PhD explored the history and development of cultural safety education within nursing and midwifery education programmes in New Zealand. The work was recognised internationally as a significant development in health education, particularly in nursing education.

During the years they worked together, Ramsden began to realise Ellison-Loschmann’s interest was in health research in general, not just research about nursing. Ramsden referred her assistant to Neil Pearce, who was looking into Māori and asthma.

Ellison-Loschmann studied for her PhD, looking at asthma severity in Māori, alongside Pearce and Ramsden, who herself was a severe sufferer of asthma.

Pearce says: “Lis’s PhD showed the major problems of asthma in Māori, and particularly that these problems are not due to any innate tendency for Māori to get asthma, but rather they mainly stem from problems of access to health care for Māori who have asthma.”



Distinctive tables in a Barcelona café.

Ellison-Loschmann still works under the guidance of Professor Pearce, who heads the Centre for Public Health Research. She is now working on a Postdoctoral Fellowship with Pearce and Professor Chris Cunningham from the Research Centre for Māori Health and Development on the epidemiology of cancer in Māori.

Professor Pearce says each of Ellison-Loschmann’s current studies can only be addressed with epidemiological research: the

study of incidence and distribution of a disease in a population.

“It is therefore extremely important that researchers like Lis are leading the way. Although the basic epidemiological methods are the same for any epidemiological study, there are a number of specific characteristics of such research in Māori, including the types of questions that get asked, the process of community consultation, the urgent need and responsibility to translate study findings into policy.”

Ellison-Loschmann does not regard conducting research with Māori as more difficult than with other ethnic groups. But, as Pearce says, consultancy is a large part of preparing for research and Ellison-Loschmann believes a lack of specifically Māori representative groups makes it more difficult to access the Māori expertise that is available but scattered.

For example, although cancer is one of the biggest killers of Māori, there is no Māori equivalent of the Cancer Society that researchers can refer to when planning studies. Ellison-Loschmann believes there should be.

“It’s true that we don’t have recognised ‘Māori’ bodies for a whole lot of areas and I am not suggesting that we need to set up separate groups for everything but cancer has probably now taken over from CHD (chronic heart disease) as the number one cause of mortality in Māori and we are still way behind in addressing the health inequalities in this area right now, let alone the potential health consequences that will result from it over the next 50 years.” ■

Breast Cancer in Māori and Pacific women.

Ellison-Loschmann will lead a \$1 million study into possible inequalities in survival of breast cancer. Previous studies have shown all women in New Zealand have an equal chance of developing breast cancer, but Māori, Pacific and poorer women seem to have lower survival rates.

Based on recent research, 107 breast cancer deaths could be avoided each year if Māori and Pacific women, and women with low socio-economic status, all had the same breast cancer survival as non-Māori /non-Pacific women.

Ellison-Loschmann will lead a team of 10 researchers from New Zealand universities hoping to identify why those differences in survival rates exist.

Over three years, they will focus on the role of access to primary care and pathways from diagnosis to treatment. They will also take into account international studies which suggest some population groups may be predisposed to getting more aggressive forms of cancer with a different tumour biology.

Occupational health of Māori workers

The study is set down for three years, at a cost of \$560,000. Ellison-Loschmann will lead a team of seven researchers looking at the occupational health of Māori workers. Ellison-Loschmann's team will build on the work of telephone survey three years ago.

This survey involved 3000 employees who were asked about muscular conditions, the impacts of shift work on sleeping patterns, and other issues such as respiratory illness.

Within that group, there were 300 Māori, but that wasn't enough for a separate analysis of Māori health in this area. Researchers will find and survey another 2200 Māori workers using the electoral roll and telephone interviewing. The study will consider the overall contribution of work-related disease to Māori mortality and morbidity. The findings will then be used to monitor trends over time.

Conditions common in workers include occupational asthmas, asbestos poisoning, exposure to carcinogens such as pesticide sprays and stress.

The study is one of four funded by a \$2.5m programme grant for occupational health research at Massey. The other three projects are investigating dermatitis in cleaners (headed by Jeroen Douwes), asthma in saw mill workers (headed by Dave Maclean), and modifiable risk factors for congenital malformations (headed by Andrea t'Mannetje). The four studies are expected add to the global understanding of occupational health, which has been an under-researched field in New Zealand.

Stomach Cancer in Māori

This is a five-year study, funded through a \$950,000 grant, involving eight researchers from New Zealand and one, Mona Jeffreys, from the University of Bristol. Stomach cancer is a relatively uncommon form of cancer, but has a high fatality rate. Of the 350 or so New Zealanders diagnosed with it every year, an average 50 to 60 are Māori. Recent studies have shown Māori are three times more likely to get stomach cancer than non-Māori, and three times more likely to die from it.

Researchers are hoping 75 per cent of New Zealanders diagnosed over the next five years will participate in the study. The mortality rate is high and stomach cancer is a



fact which will make this study very difficult for the interviewers to meet the subjects and hear their views.

"I think it's a really important study but it's not going to be an easy study because most of the people die," Ellison-Loschmann says. A pilot study had shown people with stomach cancer were overwhelmingly keen to participate in research that might help others.

Risk factors for stomach cancer include a diet high in salted meats, alcohol consumption, and *Helicobacter pylori*. (*H. pylori*, which in some cases appears to lead to stomach cancer, is found in the stomach of about 30 per cent of the New Zealand population and is treatable with antibiotics.) There are also genetic factors which

will be explored.

About 90 per cent of stomach cancers can be divided into two categories: intestinal and diffuse.

Intestinal stomach cancer is usually found in older people, often males, and is more common in those with a history of ulcers or *Helicobacter pylori* infection. Diffuse stomach cancer most often affects women, hits earlier in life, is more aggressive and appears to be more common in Māori. Dr Parry Guilford of Otago University, a member of the research team, has done previous research on families who are disproportionately affected by the diffuse type of stomach cancer. These familial clusters appear spontaneously worldwide.

Ellison-Loschmann's team will conduct interviews and collect bloods from Māori with stomach cancer, together with equivalent data from a control group of Māori without stomach cancer.

