From Quail Island to Makogai: Leprosy sufferers and their treatment in New Zealand and the Pacific, 1906–1940

My talk this evening is about leprosy in New Zealand and the Pacific in the early twentieth century – the experiences of leprosy sufferers and their caregivers, as well as government and community responses to the disease. Geographically the talk moves from Quail Island, in Lyttelton Harbour, which became NZ's leprosy colony in 1906, to the Fijian island of Makogai, where New Zealand's leprosy sufferers were sent in 1925.

1940 is the end date for the talk partly because that's when the last of the Quail Island patients died on Makogai, and partly because it's also the time when an antibiotic treatment became available for leprosy, completely transforming the disease's medical and social significance.

The overall theme of my talk is indicated quite nicely by the contrasting titles of two books: one my own, *The Dark Island*, about the Quail Island colony, and the other about Makogai, *Image of Hope*, by Sister Mary Stella, one of the nurses there. On the whole, the treatment of leprosy sufferers in NZ wasn't one of the most impressive episodes in our public health history. But there were exceptions to this generalisation, some of which I'll mention in this talk – some quite remarkable examples of friendship, care and encouragement on the part of patients, doctors and members of the public. It's good to keep those stories in mind alongside the other ones, of personal suffering and institutional failure.

I'll start with some of the nineteenth-century medical and political developments which set the scene for the isolation of leprosy sufferers on island colonies across the British empire.

One of the few European countries in which leprosy survived in the C19 was Norway, and it was this country which became the international centre of research into the disease. The medical consensus in the early part of the nineteenth century was that leprosy was hereditary rather than contagious, and could be activated by environmental conditions – climate, food or housing. By 1847 the Norwegian doctor Daniel Cornelius Danielssen was so sure of this theory that he injected himself and his staff with leprous matter: he, and they, failed to get the disease.

And London's Royal College of Physicians came to a similar conclusion. They thought that leprosy would be best dealt with by improving the living conditions of people among whom it prevailed. As the disease wasn't, on this understanding, contagious, there was no need to confine people stricken with it.

This picture changed considerably as the result of medical and political developments in the late nineteenth century. One was the discovery of the leprosy bacillus, *M. Leprae*, in 1873. The discovery was made by Armauer Hansen, son-in-law of Danielssen, the doctor who had argued that it was hereditary. Hansen's discovery was an important contribution to the germ theory of the disease, and helped discredit the theory of heredity. There were still questions over how the disease was transmitted, but most doctors though the bacillus was transmitted through the skin after prolonged close contact with a leprosy sufferer.

Public awareness of the risk of contagion was heightened by the news in 1884 that Father Damien, the Catholic priest serving on Molokai, Hawaii's island leprosy colony, had contracted the disease. When Damien died five years later it was international news. His death personalised a growing concern among colonial doctors and administrators that leprosy might work its way back from the colonies to Europe, where it had been largely absent for centuries. *Leprosy: An Imperial Danger* is the title of a typical book on the subject, published in 1889.

China was particularly feared as a reservoir of the disease, and the Chinese diaspora was condemned for spreading it. This theory had some grounding in fact, as leprosy was widespread in China and in the second half of the nineteenth century had probably been introduced to several parts of the Pacific by Chinese emigrants. The prevalence of leprosy among the Chinese, however, was exaggerated for political purposes, part of a wider opposition to Chinese immigration.

So while a stigma against leprosy sufferers had been present for as long as there have been written records of the disease – and these date back to the law books of the Old Testament – these developments of the late nineteenth century gave new impetus to policies of segregation. In New South Wales compulsory segregation laws were passed in 1890, with Queensland and South Africa's Cape Colony following two years later. In 1897 an international leprosy conference in Berlin passed the resolution that 'every leper is a danger to his surroundings'.

Islands, with their natural barriers to contact with the outside world, were favoured places for the isolation of leprosy sufferers. The most well-known colony was Molokai. By the early twentieth century there was an archipelago of similar institutions across the British empire, from South Africa to Australia to Canada to Fiji. These grim island colonies were the physical expression of twenty-five years' rapid change in public, medical and official attitudes towards the disease.

New Zealand had little influence on these international developments, and the history of leprosy in New Zealand is really one of adopting prevalent attitudes towards the disease and fitting them to its own social patterns and expectations.

Many nineteenth and early-twentieth century writers on leprosy in New Zealand thought the disease had arrived in pre-European times, but the evidence for this isn't very strong. It seems more likely that it was introduced in the late eighteenth or early nineteenth century by infected members of whaling crews.

The disease never became especially widespread in New Zealand, although a small number of leprosy cases among Māori and Chinese were reported in the second half of the nineteenth century. There were concerns among some health officials that the ad hoc arrangements for the isolation of these sufferers were not entirely satisfactory. In 1903 Maui Pomare, the Māori health officer, said that he thought they should all be moved to an island.

Also in 1903, there was a rumour that the Health Department was planning to build a leprosy hospital on Motuihe, one of the islands in the Hauraki Gulf. The Minster of Public Health denied that there was such a plan, and said that if New Zealand was going to have a leprosy colony he would prefer it to be much further away – the Cook Islands would be good, he thought. The local newspaper wasn't convinced by his assurances, though, and warned him that such a plan wouldn't be tolerated. 'The manhood of Auckland', it said, 'will rise to the occasion, and resist to the utmost such an infamous attempt to establish a plague spot in their midst'. This resistance, the paper specified, would involve a journey out to Motuihe to dismantle the building and throw it into the sea. In the face of such determined opposition, finding a site for a national leprosy colony was going to be no easy task.

Quail Island became the site of this national leprosy colony largely by accident. In 1906 a man suffering from what turned out to be leprosy was admitted to Christchurch Hospital. After a day in the Bottle Lake Hospital for infectious diseases, a ramshackle facility in the sandhills of eastern Christchurch, he was sent to an empty quarantine building on Quail Island. The island had been used as a quarantine station for stock and humans since 1874, but by this time it wasn't being used for human isolation because of the cost and difficulty of getting there.

The name of the man who was sent to the island was Will Vallance. He had come to New Zealand from Queensland, and was working as a tailor in Christchurch when he was found to have leprosy. He would spend the next 19 years on Quail Island, and was among the patients who were sent to the Fijian island of Makogai in 1925.

Vallance's physical condition deteriorated quickly – a year after he was put on the island he lost the ability to manipulate objects with his fingers, so his meals had to be cut up for him in advance by the island's caretaker, and he couldn't hold an axe to split his firewood. He did get some help in the early days of his isolation, being visited at least once a month by Charles Upham, the Lyttelton port health officer and GP, who would change his dressings and make him as comfortable as possible.

Upham (who was the uncle of the war hero with the same name) is probably the key figure in the history of leprosy in NZ, not because of any influence he had on policy, or on developments in medical treatment, but for the example he set in caring for the Quail Island patients at a time when the public fear of leprosy was quite extreme. He was a particularly devout Christian, and would have been familiar with the examples in the New Testament of those, beginning with Jesus, who had set themselves to care for the sick and the outcast. There is a parallel of sorts with Father Damien on Molokai, although in Upham's case he didn't contract the disease.

To come back to the main story, there were several additions to the Quail Island colony over the years, as leprosy sufferers were found in different parts of New Zealand and shipped out to the island. There were periodic attempts to have them

moved to another part of the country – the MP for Lyttelton, for instance, made repeated suggestions that it should be shifted to Wellington or Auckland – but when he brought up the Hauraki Gulf suggestion again he got a similar response: Auckland's mayor (who later became Minster of Public Health) said that 'the authorities had better find an island somewhere else, for we don't want a leper station here'. Another Canterbury MP responded that 'Auckland was getting so particular about itself that it ought to be put in a glass case and left there' – so there was an element of provincial rivalry in the question of the colony's location, and it wasn't something Canterbury was particularly happy to accommodate.

In terms of medical treatment for the patients, there was very little available. A much-trumpeted treatment called Nastin, claimed to be derived from a microbe isolated from a sample of leprous tissue, turned out to be largely ineffective, and actually may have made Vallance's disease worse – after the treatment he developed leprosy around his eyes, and eventually went blind. Another remedy was something called Chaulmoogra oil, derived from the fruits of a tree native to India and taken orally or by injection. It had some success in treating the symptoms of leprosy, but didn't strike at the bacterial roots of the disease. It was the best treatment available, though, until the arrival of the antibiotic dapsone in the 1940s.

The colony reached its greatest size after 1920, but even then there were never more than nine or ten patients there at any one time. Its facilities, though, were severely inadequate, and the Health Department's failure to provide adequate accommodation, sanitation and treatment were noted in the reports of official inspectors. Upham remained the colony's doctor, but it seems that he and the matron found it hard to manage the increased workload represented by the greater number of patients, some of whom needed intensive care. Maintenance projects were delayed by the reluctance of tradesmen to visit the colony, and the Health Department was under financial pressure that made it hard to keep up with the colony's expansion, with budget cuts happening at the same time as cost increases.

The result of all this was that Quail Island was increasingly recognised as an anachronism in New Zealand's hospital system. In the words of the Chief Health Officer himself, 'All medical officers conversant with the state of things at Quail Island recognise the primitiveness of the arrangements there. We are open at any time to very adverse public criticism which will reflect both on the Government and on the Department'.

In 1923 the Department made a funding bid for major improvements to be carried out on the colony, which was approved by Cabinet. If it had gone ahead, it would have been by far the greatest investment in the colony since it was established in 1906. But before work could get underway, another possibility emerged. In 1924 the Governor of Fiji wrote to his New Zealand counterpart telling him that leprosy sufferers from Britain's colonies in the Western Pacific – the Solomon Islands, New Hebrides and Tonga – were going to be concentrated at Fiji's island leprosy station of Makogai. Western Samoa, which was administered by New Zealand, already sent its leprosy sufferers there. Would New Zealand be interested in having its other Pacific possessions join the scheme?

New Zealand certainly was interested – and not just on behalf of its Cook Islands colony. The Prime Minister cabled back to ask whether Fiji would agree to extend the scheme to include the Quail Island patients. Here, finally, was a way for New Zealand to fix its leprosy problem.

The decision to move to Makogai was one taken in the patients best interests. Makogai was properly staffed, with a full time medical officer and Catholic nursing sisters form the Society of Mary. Its facilities were excellent. The only comparable institution was the Hawaiian island colony of Molokai, which had developed considerably since Father Damien's time. New Zealand's Health Department was well aware of Makogai's superiority to Quail Island, and in internal correspondence (although not publicly) identified better medical care as a major reason for asking Fiji to take the Quail Island patients.

A further benefit to the department would be a great reduction in costs. Makogai was home to 300 leprosy sufferers, the size of a small town, and economies of scale made everything from drains to treatment facilities more affordable. The nursing sisters worked for free, and the patients subsidised their care by growing much of their own food.

Only one of the patients appears to have objected to being moved to Makogai – a Māori man called Te Ono Parao, who quite understandably just wanted to go back to his home in Kai Iwi. In the end though he was persuaded of the benefits of the

transfer, and there was no need for legislation compelling him, or any other reluctant patient, to undergo segregation outside New Zealand.

There were two departures from Quail Island before the voyage to Makogai. One was a Māori man called Jim Kokiri, who became eligible for discharge after providing three negative bacteriological tests and spending 18 months under observation. Kokiri's 'cure' was attributed to injections of chaulmoogra oil, leading the local newspaper to claim that leprosy had been 'conquered'. This was well off the mark, and the disease may just have burnt itself out. Nevertheless, Kokiri's story was a rare piece of good news from Quail Island, and his family would have been looking forward to seeing him after his three years' segregation.

The day after Kokiri left, another patient, George Philips, ran away from the island – the only escapee in the colony's history. He turned up at the house of a Charteris Bay landowner dressed as a clergyman, claiming to be the Reverend Swann of Invercargill. He got a taxi into Christchurch, withdrew all his savings from the bank, and disappeared. He was identified at the time of his death, six years later, by the scars of leprosy on his arms. After escaping from the colony he had been going under the surname, quite suitably, of 'Freeman'.

There were 8 leprosy patients put on the boat to Makogai in 1925. Among them was Will Vallance, the first man to be isolated on the island back in 1906. The trip took 10 days on a government steamer, and wasn't an easy one for those of the patients who were extremely unwell. They were landed at Dalice Bay, the location of the island's administrative block and hospital. The hospital was for advanced cases only: most of the patients lived in villages along the coast, on both sides of the headquarters. The villages were surrounded by agricultural plantations.

The colony was under the control of a medical superintendent, who lived with his wife on the island. There was also a lay superintendent, who managed the plantations, and the nursing sisters, who lived in quarters next to the hospital. They did the work of tending to the patients in the hospital and villages, preparing their dressings and so on.

Makogai was a very different kind of institution from Quail Island in several respects. It was representative of a kind of colony which had started to emerge at

the beginning of the twentieth century, especially in India – the 'agricultural colony'. All patients on the island, apart from hospital-bound cases, were expected to grow their own food to supplement their rations. They also did craft work, fished, and grazed cattle. The system was meant to provide them with an occupational therapy which would exercise their bodies and mind, while at the same time reducing the financial burden of the colony on the Fijian government and on the administration which had sent them there.

There had been no such interest in productive labour on Quail Island, where the patients were free to spend their days however they wished. Some did keep a garden and exercise, but it wasn't part of their treatment regime. I've passed over this part of the story in my talk, but there were also frequent squabbles on the island among the patients and between some of the patients and their caretakers, some of which might have been caused or exacerbated by having nothing to do.

In its lack of structured occupation Quail Island also differed from comparable New Zealand institutions such as Truby King's Seacliff lunatic asylum in Otago, which set its patients to work on its grounds and farm as part of their therapy. Fresh air, exercise and labour were also part of the prescription in New Zealand's tuberculosis sanatoria, the first of which opened in the Waikato in 1903.

The functioning of a productive colony was only as effective as its discipline. Makogai was governed by a full code of behaviour, which was periodically read aloud to the patients. The main form of enforcement was what Sister Mary refers to as a 'kindly but firm personal control', although if this failed the colony also had its own small police force and a lock-up for the recalcitrant.

Here again Makogai was quite different from Quail Island, where the only formal rules weren't made until 1921, and then were only applied to the new staff, not the patients. An attempt to introduce rules for the patients in 1923 failed when they simply refused to follow them. The doctor who accompanied the Quail Island patients to Makogai wondered whether this firmer discipline might sit 'rather awkwardly' on them. There were not any complaints made about it, however.

There were complaints, though, by the Māori and Chinese patients, who were not impressed by the racial hierarchy in place on the island. The colony's villages were

divided by ethnicity: there were separate settlements for the indigenous Fijians, the Fijian Indians, the Samoans, the Chinese, the Europeans, and so on. The settlement pattern was designed to keep the peace between the different communities by keeping them apart, and in this it seemed to be successful – race relations on the island were said to be much better than on the Fijian mainland. Separate villages also made it easier for the patients to maintain their culture and traditions, lessening the disorienting effects of being so far from home.

But not all villages were equal. Makogai had an explicit racial hierarchy in which rations were allocated by ethnicity, with Pacific Islanders getting one unit of rations, Māori and Chinese one and a half units, and Europeans two units. Both the Māori and Chinese patients from New Zealand complained about this to the Health Department. In the Māori case, the NZ government agreed to meet the additional costs of providing Māori patients with two units. The Chinese patients, though, had no luck, partly because the NZ government was also responsible for paying for Chinese leprosy sufferers from its other Pacific territories, and didn't want to have to pay extra for them too. Of course this was the era of the poll tax on Chinese migrants to New Zealand and of widespread anti-Chinese sentiment, so the chances of the Chinese patients' petition being granted were not good.

Quail Island had no rationing system of this sort, and in most cases the patients all appear to have been treated in more or less the same way. One reason for this relative equality might have been the prominence of Maui Pomare and Peter Buck within the Health Department – and both of these men did take an interest in what was happening at the colony and in the treatment of the Māori patients there.

Maui Pomare was at this time Minister for the Cook Islands as well as Minister of Health, and he was responsible for moving leprosy sufferers from the Cooks to Makogai as well. He visited the colony in 1926 and made several suggestions for its improvement, some of them, like an ice-making plant, fairly unrealistic. He presented it as a matter of British prestige, with Makogai having to be up to the standards of its American equivalent Molokai. His comments, however, didn't go down well in Fiji, with the chief medical officer noting that conditions in Makogai were, quote, 'infinitely better than those in which the rich Dominion of New Zealand had previously kept their lepers'.

And on balance he was probably right. The Quail Island leprosy colony, as a medical institution, was not one of the success stories of NZ public health. Even after the patients went to Fiji, the NZ government tried several times to reduce its funding contributions to the scheme. The public was more generous in its contributions to Makogai than the government, although there is some irony in the fact that concern for the patients seems to have increased after they left New Zealand. Fundraising was organised by Patrick Twomey, who came to be known as 'the Leper Man'. In 1939 Twomey set up the Lepers Trust Board to oversee the fundraising: the Board raised huge amounts of money for the support of leprosy sufferers across the Pacific, and as the Pacific Leprosy Foundation still exists today.

There isn't much left of the Makogai colony today, just a few old buildings being swallowed up by the bush. And while leprosy still exists, and there are occasional cases reported even in New Zealand, its position as an intensely stigmatised disease is a thing of the past – as are the island leprosy colonies of the early twentieth century.