EXILE AND COMPASSION: THE MANAGEMENT OF LEPROSY IN THE COOK ISLANDS, 1925–95

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After its introduction to the northern Cook Islands in the nineteenth century, leprosy (Hansen's disease) gradually spread throughout the group and became a public health problem. This article traces the history of the disease and its management from the time when the colonial government ceased to rely only on the isolation of leprosy sufferers on islets within the Cook group and began to supplement its internal control measures by sending many of the patients to Makogai in Fiji. The authorities' changing approaches to the control of leprosy in the group throughout the period are examined as a way of exploring the relationship between colonial power and the indigenous population, and inquiry is made into the balance between the Cook Islands leprosy sufferers' experience of exile to Makogai and the more positive aspects of their community life there.

Introduction

LEPROSY IS ONE OF MANY infectious diseases introduced to the Cook Islands when this cluster of fifteen small islands in the South Pacific came into contact with the wider world in the nineteenth century.[1] As a disfiguring and disabling chronic condition, it had long been feared in many other places around the globe. Now also called Hansen's disease,[2] this bacterial infection affecting the skin and nerves is in fact not very contagious and is spread only by prolonged close personal contact. But for most of its history, leprosy has been noted for its insidious beginnings, slow progress, long duration, often disfiguring and disabling symptoms, and uncertain

Pacific Studies, Vol. 36, No. 3—December 2013

cure. Indeed, until the 1940s, it was essentially incurable, although certain treatments seemed to help. While an effective drug therapy now exists, the precise mode of its transmission and the extent of its communicability have not yet been definitively established.[3]

The earliest known mention of the existence of leprosy in the Cook group is 1871, and efforts to control it date from 1890, soon after a colonial regime was first established. Until 1965, when self-government was granted to the territory, the management of leprosy control was in the hands of the New Zealand colonial administration in Rarotonga, the largest of the Cook Islands. Led by the Resident Commissioner, the New Zealand officials made attempts in the first part of the century to limit the spread of the disease by isolating cases on islets in the lagoons of several of the islands. Confined on these motu, the sufferers were provided with care and treatment at a minimal level.[4] In 1925, however, the decision was made by the colonial authorities in Rarotonga and the New Zealand capital, Wellington, to send the Cook Islands cases away to Makogai in the distant British colony of Fiji. For the next thirty years, this strategy dominated leprosy control in the Cook Islands and hugely affected the lives of Cook Islanders affected by the disease.

Today, the exiling of sick people to a faraway country would be regarded by many as an insensitive or even barbaric practice, but in the middle decades of the twentieth century, its wisdom as a way of controlling leprosy was hardly questioned. The Fiji government's leprosy institution on the island of Makogai was opened in 1911 as an isolation center and hospital for Fiji cases of the disease. The island is less than ten square kilometers in area and is located about fifty kilometers northeast of the coast of Viti Levu, the large island on which Fiji's capital Suva is situated. The institution was headed by a Medical Officer appointed by the government, and from the beginning its nurses were Catholic nuns, members of the Congregation of the Missionary Sisters of the Society of Mary. The more advanced cases were accommodated in a hospital. If they were able to live independently, male patients occupied houses clustered in "villages," and females resided in a central women's area. Able-bodied patients did domestic or plantation work. By 1919, Makogai accommodated 352 leprosy sufferers from many parts of Fiji. Careful nursing and treatment was provided for the residents, some of whom were eventually discharged when there were indications that the disease had been arrested. The institution developed a reputation for being well run and medically effective, and visitors commented on the contented and cheerful atmosphere among the patients.[5] Makogai was, however, still a place of confinement and isolation, situated more than 2,000 kilometers away from the Cook Islands. One of the purposes of this article is to inquire into the balance between the

harrowing experience of being exiled and the more positive aspects of life in a community where adversity was shared, care was given, and hope was held out for cure and a return to the homeland.[6]

Makogai was only one element in the policies for dealing with leprosy in the group, however, and this study of Cook Islanders suffering from leprosy in the Makogai era examines their experience both in Fiji and in the home islands. The article places the Makogai story within the wider context of Cook Islands leprosy control. Several brief clinical and epidemiological studies of leprosy in the Cook Islands have been published by medical writers, and reference will be made to these in what follows. The broader history of the disease in the Cook Islands setting, however, especially its impact on leprosy sufferers and the community in general, has not been told before. Nor have historians of the Cook Islands given much attention to leprosy control as a focal point for studying the intersection of colonial authority with indigenous society, and this is a second focus of the article.

The Decision to Send Cook Islanders to Fiji

The idea of opening up Fiji's Makogai station to leprosy sufferers from other Pacific islands (beyond the borders of Fiji but still within the orbit of Britain and its Dominions, such as New Zealand) originated in 1920. Samoan patients arrived in 1922 and a small group from New Zealand in 1925.[7] The next admissions were a large group of Cook Islanders transferred in 1926, followed by patients from a number of other island groups in later years.

The number of known leprosy cases in the Cook Islands had fluctuated over the years but at this time was stated to be twenty-seven. Penrhyn, one of the northern atolls, was the main focus of the disease, but all the other northern islands (Manihiki, Rakahanga, and Pukapuka) had had cases from time to time, and few of the southern islands had escaped either. In 1925, all the cases were in the northern group except for two on Aitutaki and one each on Atiu and Mauke.[8] Despite efforts since 1890 to control the disease, it had slowly spread from one island to another and showed no signs of ceasing its insidious advance.[9] There were fears that measures taken against it would be unavailing, and a growing consciousness had developed that its victims were poorly cared for.

From 1922, New Zealand's Minister for the Cook Islands and his departmental officials in Wellington gave thought to transferring the Cook Islands cases to Fiji.[10] After the Secretary of the Cook Islands Department visited Rarotonga in May 1922, he acknowledged that caring for leprosy sufferers

locally was a less expensive proposition but emphasized that for him the question of cost was "not the most important consideration. Under existing conditions they receive absolutely no medical attention and no assistance except such as they can render to each other." He argued that sending the patients to Fiji would "give these unfortunates decent conditions of life and a fighting chance of recovery" and instructed officials in Rarotonga to discuss the proposal.[11] The Resident Commissioner there was concerned by the cost and also raised the issue of patient rights, warning that transfer to Makogai would probably bring "an outcry from the relatives"; he concluded, however, that protest of that kind was "not a matter of much moment, compared with the welfare of the patients."[12]

When the Minister for the Cook Islands, Sir Maui Pomare, visited the group toward the end of 1923, a decision had still not been made.[13] A few months later, however, the discovery of a new case on Rarotonga, where hitherto only a few people had been known to have leprosy, caused the Minister some concern. The Resident Commissioner was asked to give fresh thought to the idea of adopting the Makogai solution.[14] His Chief Medical Officer conceded that the leprosy patients would receive better care in Fiji but emphasized the substantially higher cost of looking after them there. He also pointed out that there would still have to be provision for the local maintenance and treatment of patients awaiting transfer to Fiji and raised a new point for consideration: whether Cook Islands patients could legally be moved to a foreign country.[15] The expectation of the Resident Commissioner was that not all patients would voluntarily consent to being transferred, and he agreed that providing legislative authority would be needed.[16] Although it was considered desirable to impose such a transfer on the people suffering from leprosy, "in their own interests," questions were raised about those who did not consent. The Cook Islands officials had predicted some resistance, and the Cook Islands Department was advised by the Crown Solicitor that it would be necessary to prepare a means of dealing with this eventuality.[17] It was not until the middle of 1925 that Parliament enacted the legislation, giving the Cook Islands Administration the authority to transfer leprosy cases to Makogai and bring them home again if and when they were deemed to be cured.[18]

The decision was made to take the thirty-two known leprosy cases to Makogai the following May (1926).[19] The agreement with Fiji was for New Zealand to pay £40 for the maintenance of each Cook Islands patient and to meet the cost of building new accommodation.[20] Preparations were made for collecting the cases from around the group and conveying them to Makogai, the constantly articulated objective being "proper care and modern treatment." The estimated cost of the voyage in the government

steamer *Hinemoa* was £3,000, and the Cabinet approved the allocation of this amount.[21]

Throughout these discussions and the making of decisions, it was of course the interests and wishes of the colonial rulers that dominated the process. In enunciating its policy, the New Zealand government laid emphasis on its benevolent intentions. When introducing the enabling legislation to Parliament in 1925, Pomare highlighted the availability of "proper treatment" in Fiji.[22] This concern for patient care was congruent with the humanitarian strand that had always been prominent in New Zealand's imperialist rhetoric.[23] There was, however, some commercial sensitivity about the presence of leprosy in the Cook Islands. Nervousness about the possible harmful effects of publicity about the disease on the island economy led the Resident Commissioner to write to Wellington about an item in the New Zealand press. It had been reported that one of the leprosy sufferers on Quail Island in Canterbury was a Rarotongan, and the Commissioner asked for it to be checked whether the man was in fact from Rarotonga and for it to be publicly corrected if he was not: "To draw the attention of the public to the fact that we have lepers here would possibly injure our fruit trade."[24]

There is no evidence that any input into the Makogai decision was sought from the Cook Islanders themselves. It had been decided paternalistically that transfer to Fiji would be in the best interests of Cook Islands leprosy cases. It was hoped that they would welcome the chance to have their situation improved by excellent care and treatment facilities. As noted above, however, it had been anticipated that some might object to being taken away, and provision had been made for such objections to be overridden.

The First Transfer of Cook Islanders to Makogai

A very personal interest in the Makogai scheme was taken by the Minister for the Cook Islands, Sir Maui Pomare, who was a medical doctor (the first Maori to achieve this status) and twenty years earlier had investigated leprosy in the Cook Islands in his capacity as New Zealand's Native Health Officer.[25] Pomare announced that he would go on the transfer voyage himself. He decided to take with him the new Chief Medical Officer of the Cook Islands, E. P. Ellison (also Maori), so that he could visit Makogai and familiarize himself with leprosy in all its stages.[26]

The *Hinemoa* called at nearly all the islands of the Cook group in May 1926. Ellison reported that on each landfall, the known cases were examined, with a more thorough survey being done where time permitted.

Penrhyn, for example, was "thoroughly combed through." The number of cases grew too big for the accommodation available on the ship, and it was decided "to take the less advanced cases and improve their chances of early recovery." In all, forty people (twenty-six men and fourteen women) were taken. By the time the vessel reached Manihiki, it was full, so only two could be taken from there; Ellison reported that although this island was "badly stricken" with leprosy, twelve cases had to be left behind.[27] No one had to be taken against their will: all were willing to go after the "position had been explained." Pomare described the "pathetic" scenes of farewell but noted that the patients and relatives were cheered by the hope held out for recovery. The newspaper that interviewed him commented that the policy of transferring the cases from the Cooks, "where it is impossible to give sufferers proper medical and nursing attention, must commend itself to all humane people."[28]

Pomare told the New Zealand press that Makogai would be "a paradise" for the Cook Islands leprosy patients.[29] He spoke enthusiastically about the island as an ideal place for the leprosy station but added that he intended to recommend to the New Zealand government that it assist Fiji to provide better buildings, more hospital accommodation, and more medical and nursing assistance. He also made an appeal to the general public for donations for an entertainment hall and a nurses' rest house and asked his fellow Ministers to contribute.[30] News of the leprosy voyage had aroused much public interest in the disease and in Makogai, and many people expressed a willingness to raise funds for additional comforts and equipment for the patients and sisters.[31] The public appeal met with a good response in New Zealand and the Cook Islands.[32]

The forty Cook Islanders admitted to Makogai in 1926 formed the vanguard of a large number of their compatriots (282 in all) who made the journey to Fiji until transfers from the Cook Islands ceased in 1953.

Cook Islanders at Makogai: The First Decade

The size of the Cook Islands community at Makogai fluctuated considerably. To the forty original arrivals in May 1926 were added twenty-nine more in August 1927 and a further nineteen in May 1928.[33] A large group was built up by these three early transfer voyages—more than eighty, making the Cook Islanders the largest non-Fiji community.[34] The size of the group was gradually reduced, however, by the discharge of patients regarded as cured and, sadly, also by deaths so that by the middle of 1932 there were only thirty-six.[35] Their numbers had decreased even further by March 1935 when they were augmented by a long-delayed fourth Cook Islands transfer voyage that brought thirty-one new patients.[36]

Although they came from many different islands, the Cook Islanders were conscious of their difference from the other ethnic groups at Makogai, and as exiles in a foreign country they naturally developed a strong group identity. The institution encouraged this by its practice of providing each national group with its own residential and plantation area. The Cook Islands Department explained to the New Zealand public that Makogai was an ideal place for Pacific Islanders because the patients could live in conditions similar to those to which they were accustomed in their villages at home; a headman for each island group was appointed by the Medical Superintendent and given a small payment, taking responsibility for the cleanliness of the "village" and the good behavior of its residents.[37]

The Cook Islands patients at Makogai continued to benefit from the gifts of money and "comforts" trickling in from the home islands and also from New Zealand. In 1928, the Mayor of Wellington presided over a well-attended public lecture on Makogai. The audience was addressed by the sister in charge at Makogai, the Reverend Mother Mary Agnes, who thanked New Zealanders for the Christmas gifts and other donations made over the past few years.[38] The Minister for the Cook Islands, Pomare, praised Makogai's Medical Superintendent and the devoted Catholic sisters and spoke of the welcome he was given by the Cook Islands patients when he visited recently: "You would not know they were lepers they were so happy."[39] Although the patients periodically submitted complaints about the supply of food, it was the positive side of life at Makogai that was emphasized in public representations of the institution. It was plainly implied that the patients were far better off than they would have been if allowed to remain in their home islands, and the highlighting of the physical attractiveness of the Makogai setting was probably made in conscious comparison with the dreadfulness of the symptoms of leprosy. A publicity article written about this time typifies this approach in its praise of Makogai as "one of the most beautiful islands in the South Seas" and the leprosy station as clean and well run and doing a great work. "The different villages consist entirely of small cottages housing from one to four, but usually not more than two, patients; and set as they are amidst the beautiful foliage of the island, and fronting the open sea and beach, no more peaceful or beautiful spot could be imagined."[40]

During the 1930s, the general public in New Zealand continued to give generously for the Makogai patients, with a focus on those from New Zealand, Samoa, and the Cook Islands. In Christchurch, a "Mr Twomey" was active in fundraising. He was "very devoted to this worthy object," an official reported, "and should be encouraged in every possible way."[41] Patrick J. Twomey had begun his charitable work for the relief of leprosy

patients in the 1920s when he assisted leprosy sufferers on Quail Island. From 1927, he was assisting the Makogai patients, for whom the Makogai Lepers' (New Zealand) Trust Board was set up in Christchurch in 1939.[42] As will be seen below, during the 1930s this organization widened its focus from Makogai to Pacific leprosy sufferers in their homelands, including the Cook Islands.

It was not only the happy and secure life on Makogai that was compared to the miserable existence of leprosy sufferers if they had been left on their home islands but also the prospect of modern therapy and eventual cure rather than the slow death that could be expected on the remote isolation islets where treatment facilities were inadequate. The Wellington audience in 1928 was told that "except in the most advanced cases the patients enter the institution with a definite hope of cure" and that "wonderful results" were obtained by treatment with chaulmoogra.[43] Pomare explained in Parliament that "at one time leprosy was looked upon as a hopeless disease, but there is now some hope for an individual, especially if the disease is taken in the early stages; and with the treatment of chaulmoogra oil they benefit to the extent of a complete cure." He hastened to add that not all were cured, but mentioned that nine of New Zealand's patients at Makogai, including some from the Cook Islands, had already been cured and discharged.[44] In fact, treatment with chaulmoogra (a plant traditionally known in Indian medicine) was not always effective and never in the more advanced cases. It had its strong advocates, but its value was never fully accepted in the medical world.[45] Nevertheless, as Pomare had said, many Makogai patients were indeed discharged as cured. By 1934, about a third of the patients sent from the Cook Islands up to that time had returned home. Some of these should not be included in the total number of "cures," as they were found to have been misdiagnosed.[46] But other cases undoubtedly suffering from leprosy did respond favorably to treatment, and from June 1928 the medical staff began to discharge Cook Islands patients from time to time. By 1932, there had been twenty-five such discharges.[47] Naturally, the authorities were gratified, and the discharges also had an impact in the homeland. The Secretary of the Cook Islands Department wrote in 1935, after returning from the Pacific, "The fame of Makogai has spread throughout the Cooks, and it was most pleasing to see the manner in which all our new patients came willingly on the *Matai* when they were found to have the disease." In the Cook Islands, he was also very happy to meet people who had returned cured and were now "apostles of the Institution."[48] Although the 1931 International Leprosy Congress had recommended that the use of the word "cure" be avoided and that the term "arrested" should be used in preference, talk of cures continued.[49]

On the other hand, some patients died at Makogai. The first deaths occurred in 1926, when two advanced cases died only a few months after the Cook Islanders arrived.[50] Up to 1932, there were twenty-four deaths.[51] No evidence was found about the effect of these sad events on the other Cook Islanders at Makogai. Nor do we know much about the experiences of the thirty-seven children born at Makogai during the life of the institution.[52] One case of this kind was that of a girl born to a Cook Islands patient and removed immediately to the institution's orphanage. She never showed any sign of leprosy and, in 1934, at the age of six, was sent back to her grandfather in Manihiki.[53]

Leprosy Control in the Home Islands, 1926–35

Removing leprosy cases to Fiji did not by any means rid the Cook Islands of the disease. In 1927, less than a year after the first transfer to Makogai, the Chief Medical Officer reported on the situation he found in the northern islands of the group. As well as the cases left behind on Penrhyn and Manihiki when the first voyage took place, twenty-six new cases had been found on Penrhyn as well as three on Pukapuka and one on Rakahanga; there were also twenty-nine "suspects" on Penrhyn and three elsewhere.[54] Pomare was informed of this "truly serious state of affairs" and the need for "prompt action" in the form of another transfer as soon as possible.[55] The Minister felt a "deep concern"; he took the matter to the Cabinet, and a further transfer was approved.[56] When this second transfer voyage took place in August 1927, the number of people taken was twenty-nine, all from the northern group.[57]

In order to prevent further spread from the northern focus, vessels arriving at Rarotonga from the northern group were "strictly inspected," but a few cases continued to appear on the main island.[58] There were three in isolation there in 1928; they were being visited and treated regularly.[59] The third *Hinemoa* voyage, in May 1928, took twenty more cases (fifteen from the northern group, three from Rarotonga, and one from Aitutaki, plus a "suspect" from Rarotonga).[60] Officials reported that "for the first time during New Zealand's connection with the Cook Group the Islands were free from known cases of the disease." They added, however, that new cases were likely to be found from time to time.[61] This prediction proved to be correct, and by the time another transfer became possible (in 1935), there were about thirty prospective Makogai patients. It was noted, however, with reference to Penrhyn, that there was now a greater willingness to report suspicious symptoms. "The fact that several cases have returned cured from Fiji," observed the Chief Medical Officer, "is no doubt largely responsible for this."[62]

Confined on the designated isolation islets in Penrhyn, Manihiki, Rakahanga, and Aitutaki or in temporary facilities elsewhere, the leprosy patients were visited as regularly as possible for care and treatment. Only in Rarotonga could these services be provided by a doctor, except during the infrequent visits of the medical staff to the other islands. In the northern group, it was usually the Resident Agents who gave chaulmoogra treatment (administered orally or by injection), made sure ulcers and sores were washed and dressed, and kept the patients' family members under observation.[63] Living conditions on the islets were poor, and isolation was difficult to maintain.

The arrangements for looking after leprosy sufferers on or near their home islands were regarded as stopgap measures only, since transferring patients to Makogai had been accepted by the Cook Islands and New Zealand governments as the mainstay of leprosy control policy. S. M. Lambert, the influential medical adviser of Britain's Pacific colonial administrations, was confident that the cooperative Makogai scheme would eventually result in the eradication of leprosy from the territories involved.[64] In New Zealand, the responsible Minister (Pomare) had a very high regard for Makogai and fought hard for increased government funding.[65] In 1928, however, Pomare lost his cabinet post when his party suffered electoral defeat. E. A. Neff, the Medical Superintendent at Makogai, lamented this loss of the institution's "great friend."[66] The Secretary of the Cook Islands Department assured Neff that the new Minister, Sir Apirana Ngata, would be sympathetic too.[67] Indeed, Ngata wrote almost immediately to the Prime Minister in support of his predecessor's financial proposals and secured his concurrence with them.[68] Ngata was soon to intervene again in leprosy policy matters, but Pomare's long role in Cook Islands affairs was brought to an end by his departure from office and then his serious illness. When he died in 1930, Neff paid warm tribute to him as a friend of Makogai: he was "the well-beloved of my patients and staff, and his visits have indeed meant much to us all."[69] Ngata later reminded Parliament of the part played by Pomare in organizing the leprosy transfers and advocating for New Zealand's "disinterested expenditure" on Makogai at a time when the funds were available for such a purpose.[70]

By 1932, the financial depression was threatening the Cook Islands leprosy control program. Ngata had publicized the tribute paid by Makogai's Medical Superintendent (now C. J. Austin) to the Cook Islands health services for making such thorough surveys and thus achieving the highest proportion of early cases in the total number of patients sent by any one administration. But now, Ngata regretfully pointed out, due to financial stringency, no patients had been transferred to Fiji for three years, and the

inspection program had been reduced.[71] The National Expenditure Commission recommended in 1932 that the spending of the Cook Islands and Niue administrations be cut back by about half.[72] Citing New Zealand's obligation of "trust and guardianship," Ngata argued against such a drastic reduction of the budget, especially in health and education. In regard to the leprosy program, he undertook to reduce the cost but refused to accept that it could be halved.[73] Budgetary difficulties continued, and in 1933 Ngata was still sorry that another expensive transfer voyage, though well overdue, could not be contemplated in the current depression conditions.[74] Those in charge of leprosy control continued to regard the quality of the treatment available at Makogai as the main reason for transferring patients there. Medical opinion in the Pacific continued to assert that Makogai was a place where "lepers receive treatment and care unsurpassed in the world and where there is a measure of contentment impossible to understand by one who has not seen it."[75]

By 1934, the existence of many leprosy cases in both the northern and the southern groups was known, and the desirability of another transfer was widely acknowledged.[76] The Cook Islands Department pointed out that a number of the new cases were young people, "who have a good chance of recovery under proper treatment, but who unless they are given a chance are condemned to a slow death under conditions in which they receive no medical aid." In one of his last actions as Minister, Ngata took the matter to the Cabinet.[77] Treasury wanted to have the request declined on the grounds that the Cook Islands Administration should rely on its own funds and not seek subsidies from New Zealand.[78] The Cook Islands Department argued that grants from New Zealand for the Makogai program were nothing new, "it being recognised by the Government that this work was part of New Zealand's medical responsibility in the Cook Islands and that the cost could not be found from local funds."[79]

The fourth Makogai transfer voyage took place in March 1935 on the government ship *Matai*. Ellison, the Chief Medical Officer, identified passengers for the trip and cared for them en route. The Secretary of the Cook Islands Department (S. J. Smith) and a New Zealand journalist were also on board. The number of patients turned out to be greater than expected. A total of thirty people were taken (twenty-six of them from the northern islands). The journalist noted that all the patients were anxious to get to Makogai, "of which they had heard good reports from cured lepers." When they arrived at the island, the newcomers were welcomed with "kisses and weeping" by the Cook Islanders already there. Many will no doubt return cured, wrote Smith; "the advanced cases, who should have been there long ago, will never leave."[80]

Smith regarded it as "tragic" that financial problems had made an earlier transfer impossible and wrote that it was important for the control program to be more actively pursued in the northern group if leprosy was to be stamped out. During the voyage and later in Suva with Lambert, Smith and Ellison discussed an intensified assault on the disease. The plan involved a leprosy survey to be made by Lambert, the stationing of a leprosy officer on Penrhyn to make frequent inspections and monitor the cases, and the establishment of a leprosy center there. The officials thought of giving special leprosy training to John Numa, a Cook Islander studying in Suva to be a Native Medical Practitioner (NMP), and then basing him on Penrhyn to supervise the new program. Makogai would still be the destination of the cases identified in the Cook Islands, but all cases identified in the northern group would be sent to the new Penrhyn station for proper care and surveillance while awaiting transfer to Makogai. All this would pay off in the long run, it was hoped, by improving on the present situation in which leprosy sufferers continued to have contact with other people for a long time, and many early cases were missed during hurried medical inspections.[81]

The New Zealand government was receptive to the idea, particularly the way in which case finding would be intensified, and asked Lambert to make the survey. The objective stated in the government's letter of approach was the entire eradication of leprosy in the Cook Islands within ten or fifteen years.[82] The implementation of the Penrhyn-based plan, modifying the previous reliance on Makogai, opened a new phase in the history of leprosy control in the group.

Managing Leprosy in the Islands, 1935–50

It took some time to set up the new leprosy station on Penrhyn. In securing funding, the Minister for the Cook Islands and his departmental officials acknowledged that stepping up the existing measures against the disease by establishing a center in the north would certainly incur extra costs but argued that "this is New Zealand's responsibility and in the cause of humanity and the good name of New Zealand should not longer be delayed." Told that only in this way would leprosy be eradicated in the group, the Cabinet's response was favorable, and early in 1936 the required expenditure was approved by the newly elected Labour government.[83]

Numa finished his training as an NMP at the Central Medical School in Suva at the end of 1935, and at the request of the Cook Islands authorities he spent a short time at Makogai before leaving for the Cook Islands.[84] There was some hesitation about using such a young and inexperienced man (he was then only in his early twenties) for the responsible task of

heading the intensified case finding, monitoring, and treatment program on Penrhyn. But it was recognized that it would be hard to find a fully qualified European doctor willing to be stationed in such a remote place.[85] The proposed comprehensive survey by Lambert did not eventuate, and a subsequent plan for a similar survey by Austin, the doctor in charge of Makogai, did not proceed either.[86] It was Numa who accomplished the task. The plan to deploy him on Penrhyn had gone ahead, and by mid-1937 he had made his first survey of the island's population. Lambert described it as "outstanding."[87] Many "suspects" were discovered, which to Smith, now the Resident Commissioner, indicated that the wisdom of setting up the program was already proven.[88]

Plans were quickly made to establish the "leper concentration hospital" on Matunga, the motu used since 1890 for isolating local cases.[89] A lease was obtained for Te Sauma, a very small piece of land at the northern end of Matunga and cut off from it at high tide.[90] There the center was constructed, with everything completed by July 1937. A "caretaker" was appointed to attend to the buildings, rations, and kitchen. He was a former Makogai patient from Atiu and stayed in his position for many years. "No local man could be trusted" to maintain the isolation regime, it was said.[91] Soon, seventeen patients (mostly young) were in residence. As well as cases from Penrhyn and the other northern islands, there were seven from Aitutaki and one from Rarotonga.[92] Smith admitted that setting up the project had been quite costly and that continuing high expenditure on leprosy would be necessary but reminded the Minister that thorough measures were essential if leprosy was to be stamped out in the Cook Islands.[93]

The new center was not intended as a permanent leprosy institution that would replace Makogai.[94] Soon after it was established, however, Smith reported that all the patients were responding so well to treatment that their transfer to Makogai would probably not be necessary. In fact, he wondered if Te Sauma could soon replace Makogai as far as the Cook Islands were concerned since nearly all advanced cases had already gone to Fiji and future cases would be early ones and receptive to the treatment available at Penrhyn—which would be much cheaper.[95] This suggestion was rejected by New Zealand's Health Department, which did not believe that the excellent treatment available at Makogai could be replicated by a single inadequately supervised NMP on a remote island, and pointed to the high cost of bringing Te Sauma up to Makogai standards.[96] The medical authorities in Suva and at Makogai similarly believed it would be a great mistake to attempt to set up an independent leprosy center on Penrhyn; to give leprosy sufferers every possible chance of recovery and future rehabilitation, the very best in equipment and staff must be provided.[97] The idea of ceasing to use Makogai went no further at this stage.

The practice in the Cook Islands from this time was for all diagnosed cases or "suspects" to be isolated on their home islands initially, either on the designated segregation islets or elsewhere, and then transferred as soon as possible to Penrhyn.[98] In 1938, the patients on Te Sauma were said to be "cheerful and happy."[99] Numa reported that, almost without exception, they were seeing their disease being arrested under the chaulmoogra treatment he was giving.[100] He visited the islet twice a week and tended to four outpatients in the village. Parents and close relatives were permitted to visit on the first Saturday of every month but were excluded from certain areas and had to be at least twenty years of age.[101] From the beginning, the people on the islet received gifts from the Lepers' Trust Board in New Zealand, which had decided to support patients at Te Sauma as well as at Makogai.[102] In 1942, the board made an offer of more substantial help and soon afterward donated £1500 for a recreation and worship hall that was built on the islet in 1944.[103]

Along with his general duties as Penrhyn's NMP, Numa gave much of his time to the leprosy work. He found that the "many manifestations" of the disease were well known on the island and acknowledged later that the Penrhyn people had given him "the greater part of his early training in the diagnosis of its early stages."[104] One of the observations he made when talking with older people in the northern islands was that the disease was associated so closely with particular families that it was thought to be hereditary rather than infectious. He noted that some of these families had died out, leaving practically no descendants. "There is no family to-day in Penrhyn," he wrote in 1939, that "can boast that they are leprosy-free."[105] For many years, Numa was the Cook Islands' main leprosy specialist, conducting surveys on most of the islands, but in order to improve case finding throughout the group most new NMPs were sent to Makogai on leprosy familiarization courses before returning home from Fiji.

With the reaffirmation of the policy of sending all Cook Islands cases on to Fiji, plans for another Makogai voyage were commenced in 1938.[106] This fifth transfer was made by the *Tui Cakau*, a small vessel chartered in Fiji. Although in previous years the passengers always "went quietly," warrants were prepared in case anyone resisted.[107] No one did, and there were even some nonpatients asking the Chief Medical Officer to be allowed to go with their family members on the ship or join relatives already at Makogai.[108] The number of people taken on this voyage was forty-three, of whom thirty-four were picked up from Te Sauma (some of them having come there earlier from Aitutaki and Rarotonga and more than half of them aged fifteen or younger). Ellison addressed the parents of those being taken on the ship "to soothe their minds" and assure them that going to Makogai for

proper food and good treatment was "the best that could possibly happen."[109] He was confident that Te Sauma had "proved its usefulness. We have never before transported so many with such reasonable prospects of recovery in every case where early treated." In his view, most of those taken on this voyage would be cured.[110]

Such transfers reduced the prevalence of leprosy in the Cook Islands for a time, but new cases were frequently found in both the northern and the southern groups. In 1940, ten patients were taken to Te Sauma from Aitutaki.[111] By September of that year, there were twenty-four people on the islet awaiting transfer to Makogai, and the necessary finance for another voyage was approved.[112] In October, the *Tagua* took twenty from Te Sauma as well as seven others.[113] The Penrhyn station quickly filled up again but with early cases. The comparatively large number of Cook Islanders discharged from Makogai in 1942 was again attributed in Fiji to the success of the Cook Islands medical service in finding cases early.[114] There were thirty-two people on the *Tagua* when it next sailed to Makogai in November 1943. Twenty of them had been found in a new survey of Penrhyn, ten were already at Te Sauma, and two were taken from Rarotonga.[115] The Resident Agent at Penrhyn noted that the relatives of the young patients seemed "very hopeful that their poor sick people will be coming home again after some time and cured."[116] Numa recorded that successful treatment had led the people to give up their belief that leprosy would always end in death; he wrote that he had been "embarrassed on occasions by people pretending to have leprosy, hoping for the excitement and adventure of a trip to Fiji."[117] Three more voyages from the Cook Islands to Makogai took place before 1950—in 1946 (sixteen patients), 1947 (ten), and 1948 (ten). All those on the 1948 voyage, on the *New Golden Hind*, were from Aitutaki, and all except three were thirteen years and under.[118]

By this time, about 250 people had been taken to Fiji, and a careful study in 1949 by Makogai's Medical Superintendent, Austin, pointed to a distinctive feature of the Cook Islands admissions since 1934: in the terminology still current at that time, there was a marked increase in the percentage (80.2 percent) that were "neural" rather than "lepromatous" in type, the latter being much more severe. Among the groups admitted from the various participating territories, this was by far the highest proportion of neural cases. To Austin, it indicated the importance of early diagnosis, and he again explained that in the Cook Islands this was accomplished by means of contact follow-up, the regular examination of school children, and the training of local medical personnel in leprosy control; it was reflected in a high Cook Islands discharge rate (53.4 percent for the period 1934–48).[119] But an ominous note was beginning to sound. Until 1951, the great

majority of the patients admitted from the Cook Islands (171 out of 238, or about 72 percent) came from Penrhyn, Manihiki, Rakahanga, and Palmerston, the populations of which were closely connected. It was starting to become evident, however, that while there was a decline in the prevalence of leprosy in the north, the number of cases on Aitutaki was increasing.[120]

It was still difficult to enforce complete isolation at Te Sauma. Numa noted that isolation was going to be even harder to impose on the growing number of Aitutaki cases since the people there did not yet understand that leprosy was contagious rather than hereditary; he recorded that it was common for young men to go to the isolation motu during the night to fraternize with the patients and even sleep there.[121] In the opinion of the Resident Agent on Aitutaki, "concealment of the disease is ingrained in the people," who feared "the lonely isolation of our small islet" or, even worse, "complete separation and exile in Makogai."[122]

Although two more transfer voyages were made before the policy of sending patients to Fiji was abandoned, doubts about the usefulness of Makogai for the Cook Islands were again beginning to emerge. It was difficult and expensive to arrange regular transfers, and collecting the cases at Te Sauma to await transfer to Fiji was not easy either. In addition, the discovery in the late 1940s of a vastly more effective therapy, using sulfone drugs, began to have an impact on leprosy control and treatment measures in the group. In the meantime, however, Makogai was in its heyday. The number of patients in residence there in 1947 was 703, of whom 274 were from beyond Fiji.[123]

Cook Islanders at Makogai after 1935

After the journalist R. K. Palmer visited "Beautiful Makogai" in 1935, he wrote articles describing its fertile plantations and tidy villages. Referring to "the horror that the average New Zealander seems to feel" at the mention of leprosy, he declared that "the mere sight of Makogai was the best antidote to that sort of morbidness. There was no sign here of a curse."[124] This positive view of the leprosy island, often tinged with surprise that a place of illness and exile could be so pleasant, was the perception most often found in the documentation of Cook Islands and New Zealand attitudes to Makogai. Ellison's impression when he reached Makogai on the transfer voyage of 1938 was that all the Cook Islanders there were "very happy and very contented."[125] This report was repeated many times in the succeeding decades. A missionary from Rarotonga visited in 1951 and was "tremendously impressed." He wrote that the reward of the Makogai staff

was "found in the smiles, affection and confidence of the patients—men, women and children."[126] The peace and order prevailing in the institution was commonly linked with the benevolent leadership of successive Medical Superintendents and the dedicated service of the universally praised Catholic sisters—Palmer called them "The Bravest Women in the World"—who cared for the leprosy patients with great compassion.

Yet the island was a place of exile, especially for people such as the Cook Islanders, who were not only confined in a place cut off from the world but also separated by hundreds of miles from their homeland and its culture. It is not surprising that dissatisfactions and tensions sometimes arose. As before, mundane matters, such as disputes over food supplies, were an indicator that discontent often lay beneath the surface. There were several instances of this, and the patients sometimes also complained that they were neglected by their own people. The Resident Commissioner agreed that the needs of the Cook Islands patients at Makogai were often overlooked by their relatives at home, probably unintentionally and as a result of a lack of information.[127] The patients were of course separated from their families, and some died on the island before they could return home. There had been twenty-nine deaths by 1935 and sixty-eight by 1948.[128] Of the two patients who died in 1942, one had been there only a couple of years, but the other was one of the original 1926 admissions.[129] Another example of a death after many years in Makogai was the passing in 1948 of a man who had been admitted in 1927 as a ten-year-old.[130] The total number of Cook Islands patients who died on the island is recorded as seventy-four.[131]

The other side of the coin was the number of people reunited with their relatives at home on being discharged as cured. Following the first discharges in the 1920s, there had been 125 by 1948.[132] A total of 206 Cook Islanders were returned to their homes from Makogai.[133] As mentioned above, the hope of being cured had encouraged leprosy sufferers to go willingly to Fiji for treatment.

The advent of sulfone therapy after the war revolutionized leprosy treatment all over the world. Chaulmoogra had undoubtedly produced an improvement in some cases, but it had to be injected, in ever-increasing doses, and was dreaded for the pain it caused. Sulfetrone arrived at Makogai in 1948 and immediately brought outstanding results in advanced (lepromatous) cases. Later another sulfone, DDS (Dapsone), administered in tablet form, was used.[134] Speaking in New Zealand in 1950, Dr. Austin of Makogai described the new drug as an unprecedented advance in treatment. He pointed out that although chaulmoogra therapy had been of limited effectiveness, its use had still enabled the Makogai staff to discharge thirty to forty patients a year. Despite his enthusiasm for the sulfone drugs,

he warned that only time would tell if they would cure completely. He also took the opportunity to explain that drugs were not the only factor in successful treatment: the psychological element was also very important, and the much-appreciated gifts from the Lepers' Trust Board and other New Zealanders had played a major role.[135]

Reduced periodically by discharges and deaths, the Cook Islands community on Makogai was reinforced every now and again by new patients: 163 were brought on the eight transfer voyages made in the years after 1935. The number of Cook Islands patients admitted during the life of the institution made them the largest national group apart from the Fiji majority.[136] In 1935, there were sixty-one Cook Islanders on Makogai.[137] By 1943, despite two more intakes, the number had dropped to forty-three.[138] Patients returned or died, but continuing admissions brought the number to fifty-seven at the end of 1948. Makogai was a very large institution by this time, with 684 residents in 1948 and 744 in 1951.[139] The Cook Islanders were a comparatively tiny group among all these people from other islands. Nevertheless, after the arrival of the last Cook Islands admissions in 1953, there were still forty-one Cook Islanders resident there.[140]

In the years following, the size of the Cook Islands community on the island gradually decreased. It was decided in 1953 that in view of the improvement in follow-up procedures in the Cook Islands and some other places, their patients could be provisionally released only one year after becoming bacteriologically negative instead of two years as had been the practice up to that time.[141] Many of the patients were brought home in 1954.[142] The departures continued, and by 1956 there were only twenty-five Cook Islanders left. This number fell to twenty in 1958 and twelve in 1960.[143] When the agreement with Fiji came up for renewal in 1960, it was noted that several Cook Islands patients had elected to remain at Makogai, and the New Zealand government agreed to continue paying its annual contribution as long as they stayed there (the individual fees were paid by the Cook Islands Administration).[144] Some of the other Cook Islands patients asked if they could be sent home. In the words of the official who passed on this request, they "do feel quite strongly their inability to see their own people and suffer keenly the fact that they are so far from home."[145] By 1962, there were only five Cook Islanders on the island and by 1963 only one. She was still there in 1965 but was not listed by 1968.[146] The departure of the last Cook Islands patient marked the end of an era for the Cook group, but Makogai itself continued. There were still 166 patients there in 1965, mostly from Fiji, but in view of falling numbers, the decline of leprosy as a health problem, and the move to outpatient and domiciliary treatment, the Fiji government decided in that year to close the

institution and replace it with a smaller hospital in a more accessible location.[147] In 1969, all the remaining patients were transferred to the new P. J. Twomey Memorial Hospital at Tamavua near Suva.[148]

The End of the Makogai Era in Cook Islands Leprosy Policy

After 1950, leprosy continued to engage the attention of the Cook Islands Administration and (until the group achieved self-government in 1965) New Zealand's Island Territories Department. Under the oversight of the Chief Medical Officer, it was John Numa who was most active in implementing the control program. In 1952, he completed six months of post-graduate studies in leprosy and medicine in Suva and Makogai. The senior doctor with whom he worked wrote that Numa "revealed a splendid practical knowledge of leprosy. This was expected of him, for the Cook Islands patients sent by him to Makogai are always early cases, in better condition than those from any other of the Pacific Territories." He was an "outstanding" practitioner, "possessed of initiative, clinical judgement and reliability far beyond most of his fellows."[149] During his studies Numa wrote an article on leprosy in the Cook Islands, acknowledging the assistance of Dr. Austin of Makogai. It was published in the *International Journal of Leprosy*.[150] Later, he collaborated with D. D. McCarthy in the writing of another article, published in the *New Zealand Medical Journal* in 1962.[151]

The leprosy center at Te Sauma was not often used after the late 1940s.[152] Since 1937, it had been an intermediate station for Cook Islands leprosy patients designated for Makogai, but the authorities were more and more dissatisfied with it. For one thing, its location on the distant northern atoll of Penrhyn made access difficult, and this became more important as the prevalence of leprosy declined in the north and increased in the south. Also, the advent of sulfone therapy meant that the treatment of patients in sites far away from their home islands was increasingly recognized as unnecessary. Not only was the focus moving away from the Penrhyn station, but the use of Makogai itself was more and more questioned.

Such a significant modification of policy as abandoning Makogai took some time to crystallize. In 1951, there was no talk of taking such a step, and in that year eighteen patients were transferred to Fiji on the *Alexander*. Eight were from the northern group and ten from Aitutaki and Rarotonga.[153] In 1951 also, however, the suggestion was made by the Chief Medical Officer that the central leprosy station for the Cook Islands should be on a less isolated island than Penrhyn.[154] The Island Territories Department in Wellington could see the wisdom of providing good treatment facilities in the south rather than in the north now that many of the cases were

occurring on Aitutaki.[155] The Lepers' Trust Board, too, stated its opinion that the rudimentary facilities at Te Sauma were now of limited usefulness and pointed out that the new sulfone therapy required better laboratory services than could be available in the outer islands. The board's suggestion was a small leprosy center attached to the Rarotonga hospital.[156] The move to focus on the southern islands was given further impetus by Numa's survey of Aitutaki in September 1951, followed soon afterward by surveys of the northern islands. Only a few cases and suspects were found in the latter, but sixteen positive cases and nine suspects were found on Aitutaki. In Numa's words, leprosy "will be a problem at Aitutaki for the next five years at least."[157]

A modern leprosy station in the southern Cook Islands continued to be mooted in 1952. The respective advantages of Aitutaki, where there was the highest number of cases and a need for a continuing intensive program of case finding and treatment, and Rarotonga, where hospital and laboratory facilities existed, were debated.[158] By the middle of that year, there were twenty positive cases awaiting transfer to Makogai, but when Numa completed another intensive survey a further forty-four positive cases, including thirty of school age, were discovered on Aitutaki.[159] This news alarmed the Makogai management.[160] It also contributed to the tendency in the Cook Islands Administration to contemplate replacing Makogai with a local leprosarium—an idea not welcomed by the Departments of Island Territories and Health in Wellington. One factor in this opposition, of course, was the need to respect the partnership that had been maintained with the Fiji government since the 1920s. At the same time, health officials were not convinced that an institutional approach to leprosy control and treatment was better than a modern home-based program of surveillance and therapy.[161] These doubts reflected the fact that for some years it had been increasingly recognized that there was no need to isolate all leprosy cases, only the infective ones classified as lepromatous.[162]

Discussion and disagreement continued into 1953, with arguments being advanced for and against a Cook Islands institution and for and against Rarotonga and Aitutaki.[163] A report for the South Pacific Commission by the American leprologist N. R. Sloan recommended the establishment of a leprosarium on Rarotonga, in "nearly normal surroundings"; only bacteriologically positive cases would be sent to Makogai, and most of the patients already there could be returned.[164] Setting up a local establishment was opposed by H. B. Turbott of New Zealand's Department of Health, who argued that the Cook Islands were too small an entity to maintain a good institution and that anyway the days of leprosaria had passed. Such places were now needed only for the treatment of infectious cases, and Makogai,

an institution with an international reputation, already existed for this purpose and for the training of local practitioners.[165]

No decision had been made by the end of 1953, but in a reversal of the previous practice, which had seen patients taken north to Te Sauma, two cases from Penrhyn were brought to Aitutaki for supervised treatment.[166] At this time, there were 179 known cases of leprosy in the group as a whole, of which about half (eighty-five) were on Aitutaki. A high proportion (49 percent) of these and an even higher proportion (76 percent) of the new cases were children fifteen years and under. The only other island with a large number of cases (sixty-eight) was Penrhyn, but the status of fifty-five of these was "discharged."[167]

It was decided that since most of the new cases discovered through intensified surveys on Aitutaki were not contagious, not all of them needed to be moved to Fiji. When the next transfer to Makogai took place in 1953, it involved only seven patients.[168] This was the last such relocation, although it was not known at the time that there would be no more. There had been twelve transfers since 1926, and a total of 282 patients had made the long journey from their homeland to Fiji.[169] It might be noted that some of these were relapsed cases, discharged and then readmitted. Between 1935 and 1952, there were twenty-eight such readmissions from Penrhyn as well as two from Aitutaki and one from Manihiki.[170]

In the Cook Islands and in Wellington, the debate about future policy continued. As a strategy for leprosy and treatment, sending patients to Makogai faded from the picture, although no formal pronouncement on this matter was documented. It was recognized more and more that if a local center were set up, it would not need to be an elaborate "leprosarium" with an emphasis on isolation.[171] In the end, the decision was made to include a leprosy treatment center in the small general hospital to be built on Aitutaki; the new facility opened in 1955.[172]

Surveys continued to uncover new cases here and there, though not in large numbers. In October–November 1955, however, Numa's new survey of the Aitutaki population brought to light a fresh "outburst" of leprosy there.[173] More new cases were found in 1956, 1957, and 1958. Figures compiled in September 1957 showed that since 1950, there had been 166 notifications on Aitutaki, with young children making up nearly 80 percent of this figure.[174] Of the 296 cases discovered in the Cook Islands in the period 1952–58, 273 originated in Aitutaki.[175] To cope with this big surge in the incidence of leprosy in the group, plans were made for establishing a purpose-built treatment and isolation center on Aitutaki, and it was opened in October 1958.[176] By the end of that year, there were forty patients in the center, along with 151 under domiciliary treatment in the villages of

the island.[177] As with the earlier Te Sauma center, the Lepers' Trust Board in New Zealand donated funds for "the little extras that help to make life worth living."[178] But Aitutaki's "colony," as officials called it, had only a short life. Discharges gradually reduced the number of residents, who were transferred to home treatment and then to follow-up or observation status, and by December 1960 the center was empty.[179]

Between 1926 and 1958, there had been 517 known cases of leprosy in the Cook Islands, with a considerable surge in annual notifications in the 1950s (fifty-eight in 1953, seventy-one in 1957, and seventy in 1958). Of these, 204 were aged sixteen and over and 313 aged fifteen and under. The age distribution changed over time, with the older age-groups dominating only until the late 1940s. The number of cases known to the authorities fluctuated from year to year, with highs of eighty-three in 1940, ninety-six in 1954, 144 in 1957, and 220 in 1958. Nearly a sixth of the people known to be suffering from leprosy in this period had died of the disease, mostly before 1946 and most of them at Makogai.[180]

The spectacular increase in incidence in the 1950s turned out to be the last gasp of leprosy in the Cook Islands. By 1962, McCarthy and Numa were able to state that the disease was "no longer a major problem." "It may well be," they wrote, that "leprosy in the group will soon be a matter of history."[181] Its disappearance from the scene took some time, however. New cases continued to be notified in the 1960s, and the control program was maintained at a high level. The number of cases under home treatment dropped from fifty-five in 1964 to twenty-seven in 1966.[182] Surveys and other control measures continued in the 1970s, and new cases still appeared sporadically. An incidence rate of fifty-three per 100,000 persons was reported for the year 1975–76.[183] In 1979, the cases under treatment numbered thirty-eight (twenty-three of them on Aitutaki).[184] Soon afterward, in the 1980s, the development of multidrug therapy took the assault on leprosy further forward. The last new case in the Cook Islands was reported in 1995.[185] By 2005, the nation was listed by the World Health Organization as one of many countries that had achieved and sustained the "elimination of leprosy as a public health problem" (defined as the achievement of a prevalence rate of less than one case per 10,000 persons).[186] In 2010, while some Pacific island groups still recorded cases, the Cook Islands were among those registering zero prevalence of the disease.[187]

Conclusion

Leprosy is a disease that alarmed and puzzled the medical world for many years. Uncertainty about how it spread, the long interval between infection

and the appearance of symptoms, the slow but sure progress toward severe disfigurement and disablement, and the absence for many years of an effective therapy meant that strategies for treating leprosy sufferers and containing the spread of the disease were difficult to devise and implement. In the small and scattered Cook Islands, where finance and personnel were always in short supply, leprosy proved an intractable problem indeed for the New Zealand colonial administrators responsible for controlling the disease. Despite efforts to isolate people suffering from leprosy, at first on islets near their home communities and then by transferring them to Makogai in distant Fiji, the infection persisted resolutely in the Cook Islands until recent years, even after much more effective treatment became available after World War II. Although Makogai was the mainstay of leprosy policy between 1926 and 1953, efforts continued throughout the period to control the spread of the disease within the Cook Islands and to provide local care and treatment. The control program necessitated many difficult decisions both during the Makogai era and for many decades afterward.

Official policy was not unaffected by a desire to avoid damage to New Zealand's commercial interests in the Cook group and to prevent any spread of the disease to resident Europeans (or any further incidence in New Zealand itself, where it was present already in a small way). There was an important humanitarian element in the control policy, however, reinforced in the interwar period by a commitment to guardianship and trusteeship. From the beginning, the transfers to Makogai were seen as wholly beneficial to the leprosy sufferers. This approach was strongly associated with the two Maori politicians, Pomare and Ngata, who had ministerial responsibility for the Cook Islands for many years. Nongovernmental organizations and charitable donors, both in the Cook Islands and in New Zealand, were also prominently involved in the support of leprosy sufferers and later in programs to combat the disease.

The benevolence of New Zealand had a strongly paternalistic tinge since the Cook Islanders themselves were not invited to share in the making of decisions about leprosy control (although an indigenous medical practitioner, John Numa, stood out as a knowledgeable and effective leader in the leprosy control programs). Medical progress and public health improvements were seen as part of colonial development and welfare, and these policies were to be implemented for the good of the community even if they involved drastic intrusions into people's lives. The most obvious example of compulsion exercised for public health purposes was when leprosy sufferers were deprived of their freedom by being isolated on islets or transported across the ocean for confinement on Makogai. This approach was summed up in 1936 by Victor Heiser, who had been Director of Health

in the Philippines and a founder of the large Culion leprosy establishment there. Heiser explained why he favored a policy of segregation, which is "cruel to relatively few, whereas non-segregation threatens an entire people."[188] The authorities were well aware that Cook Islands leprosy sufferers were likely to fear an exile to Makogai but did their best to allay these anxieties by emphasizing the hope of cure. At the same time, they were prepared to take people to Fiji even if they were unwilling to go.

The negative aspects of enforced exile and confinement are obvious, but to reach a balanced assessment they must be viewed alongside the more positive features of the Makogai experience. Heiser commented on this point also: he "believed that isolation not only protected others from contracting leprosy but, furthermore, was the most humane solution for the leper himself. Instead of being shunned and rebuffed by the world, he could have an opportunity to associate with others of his kind in pleasant relationship."[189] In her book *Makogai—Image of Hope*, Sister Mary Stella encapsulated "the spirit of Makogai" as

> a combination of "sadness and gladness"—of mental anguish, physical and moral sufferings, loneliness, fear of what might be happening to loved ones and the uncertainty of not knowing; there was sorrow at separation from them and powerlessness to aid them; there was uncertainty about the future—how long would this isolation last? . . . And yet—there was the deep joy of so many wonderful friendships, the mutual sympathy, the courage, . . . the bond of union that drew all groups together in their common suffering and formed true community; simple but real enjoyment that came from the happy times, the pleasant social activities; and trust, loyalty and gratitude towards the staff.[190]

Naturally, the positive side of life on Makogai was always emphasized by officials in New Zealand and the Cook Islands. Other, more negative assessments were made later, with emphasis put on authoritarianism, deportation, and the breaking up of families. In 1999, however, *Compassionate Exile*, a documentary film about Makogai and some of its former patients, captured the positive in a story that could have been told in a completely negative way.[191] This more balanced approach is a reminder that the original meaning of the word "asylum" is not a place of banishment or punishment but a refuge, a place of care and protection. In the Cook Islands, at a time when local treatment was difficult and there seemed to be little chance of containing the disease if leprosy sufferers remained in the community, a control policy built around the provision of care in a large and distant institution was not altogether pitiless or unreasonable.

ACKNOWLEDGMENTS

This work was supported by the Marsden Fund, as part of a project based at the University of Canterbury, Christchurch, New Zealand: "Community and Isolation, a Social and Contemporary History of Leprosy in the South Pacific, 1890–2004." My thanks are due to the Ministry of Health and the Ministry of Foreign Affairs and Trade, New Zealand Government, for granting access to certain files held by Archives New Zealand, Wellington, and to the Cook Islands Government for permission to conduct archival research on this topic in the National Archives, Rarotonga.

NOTES

1. Raeburn Lange, Plagues and pestilence in Polynesia: The nineteenth-century Cook Islands experience, *Bulletin of the History of Medicine* 58 (3,1984): 325–46.

2. Although leprosy is now called Hansen's disease, I refer to it in the article as "leprosy," as it was identified in that way during most of the period under discussion here. Except when it is used in direct quotations from historical sources, however, I avoid the word "leper," which is now regarded as an insensitive way of referring to sufferers from leprosy.

3. Ann G. Carmichael, Leprosy, in *The Cambridge world history of human disease* (Cambridge, 1993), 834, 836–37.

4. See my forthcoming article in *Journal of Pacific History*.

5. Information about Makogai and its history is conveniently available in a book by Sister Mary Stella: *Makogai: Image of hope. A brief history of the care of leprosy patients in Fiji* (Christchurch, 1978). Annual patient statistics are found in C. J. Austin, Leprosy in Fiji and the South Seas, *International Journal of Leprosy* 17 (4, 1949), table 1.

6. For a discussion of this theme in relation to Makogai and the Pacific Islands generally, see Jane Buckingham, The inclusivity of exclusion: Isolation and community among leprosy affected people in the South Pacific, *Health and History* 13 (2, 2011): 65–83.

7. Memorandum, Acting Colonial Secretary, Fiji, *Appendices to the Journals of the House of Representatives* (*AJHR*), 1928, A-3A, 6; S. M. Lambert, *A doctor in paradise* (London, 1942), 124; Stella, 72–75.

8. *AJHR*, 1925, A-3, 5; 1926, A-3, 34.

9. See my forthcoming article in *Journal of Pacific History*.

10. Secretary, Cook Islands Department (SCI), to Resident Commissioner (RC), April 11, 1922, Island Territories (IT) 1 IT 110/4 pt. 1, Archives New Zealand (ANZ), Wellington.

11. Extract from report of visit of SCI to Rarotonga, May 1922, IT 1 IT 110/4 pt. 1 (ANZ).

12. RC to SCI, July 11, 1923, IT 1 IT 110/4 pt. 1 (ANZ).

13. SCI to RC, December 15, 1923, IT 1 IT 110/4 pt. 1 (ANZ).

14. Secretary of External Affairs to RC, February 22, 1924, IT 1 IT 110/4 pt. 1 (ANZ).

15. Chief Medical Officer (CMO) to RC, September 2, 1924, IT 1 IT 110/4 pt. 1 (ANZ).

16. RC to Secretary of External Affairs, September 6, 1924, IT 1 IT 110/4 pt. 1 (ANZ).

17. SCI to PLO, September 23, 1924; Crown Solicitor to SCI, October 9, 1924; SCI to RC, October 21, 1924; RC to SCI, November 16, 1924; Minute, Minister, November 25, 1924, IT 1 IT 110/4 pt. 1 (ANZ).

18. New Zealand Parliament, Cook Islands Amendment Act, 1925.

19. Prime Minister to Governor-General, October 3, 1925, IT 1 613 IT 110/4/2 pt. 1 (ANZ).

20. *AJHR*, 1928, A-3A, 7.

21. SCI to Minister, February 1926, IT 1 IT 110/4 pt. 1 (ANZ).

22. *New Zealand Parliamentary Debates* (NZPD), 1925, 206, 727.

23. Raeburn Lange, European medicine in the Cook Islands, in *Disease, medicine and empire: Perspectives on Western medicine and the experience of European expansion*, ed. Roy MacLeod and Milton Lewis (London, 1988), 61–79.

24. RC to SCI, November 26, 1924, IT 1 IT 110/4 pt. 1 (ANZ).

25. *AJHR*, 1906, H-31, 70–72.

26. SCI to RC, January 26, 1926, IT 1 613 IT 110/4/2 pt. 1 (ANZ).

27. CMO to Minister, June 18, 1926, H 1 131/12/16 (3806) (ANZ).

28. *Evening Post* (*EP*), June 11, 1926.

29. Unidentified undated clipping [1926], IT 1 IT 110/4 pt. 1 (ANZ).

30. *EP*, June 11, 1926; Pomare to all Ministers, June 25, 1926, IT 1 614 IT 110/4/3 (ANZ).

31. SCI to Colonial Secretary, Fiji, August 26, 1926, IT 1 IT 110/4 pt. 1 (ANZ).

32. SCI to RC, June 17, 1926, IT 1 614 IT 110/4/3 (ANZ); RC to Resident Agent (RA), Pukapuka, December 1, 1926, Medical 6/6 1/2, National Archives of the Cook Islands (NACI), Rarotonga; SCI to Minister, January 12, 1927, IT 1 613 IT 110/4/2 pt. 1 (ANZ).

33. CMO to SCI, August 17, 1927, IT 1 613 IT 110/4/2 pt. 1 (ANZ); CMO to SCI, June 8, 1928, IT 1 613 IT 110/4/2 pt. 2 (ANZ).

34. In January 1928, there were more than 300 from Fiji, 27 from Western Samoa, 13 from Tonga, and 8 from New Zealand; Minister to Prime Minister, January 31, 1928, IT 1 614 IT 110/4/3 (ANZ).

35. Cook Islands leprosy statistical note, 1932, IT 1 IT 110/4/1 pt. 2 (ANZ).

36. SCI to RC, March 29, 1935, IT 1 IT 110/4/1 pt. 2 (ANZ).

37. Notes on Makogai [February 1928], IT 1 IT 110/4 pt. 1 (ANZ).

38. SCI to Mayor, February 20, 1928, IT 1 IT 110/4 pt. 1 (ANZ); *EP*, February 23, 1928.

39. Transcript of speeches made at lantern lecture [1928], IT 1 IT 110/4 pt. 1 (ANZ).

40. Typescript, Makogai Leper Asylum, Fiji, n.d. [*ca.* 1929], IT 1 613 IT 110/4/2 pt. 2 (ANZ).

41. Director-General of Health to SCI, December 10, 1934, IT 1 W2439 87 90/10/15 (ANZ).

42. Derek Douglas, *A brief outline of the development and operations of the Leprosy Trust Board (the Leper Man Appeal)* (Christchurch, n.d. [1985]); Jane Buckingham, The Pacific Leprosy Foundation Archive and Oral Histories of Leprosy in the South Pacific, *Journal of Pacific History* 41 (2006): 81–84. The Makogai Lepers' (New Zealand) Trust Board became the Lepers' Trust Board in 1942 (renamed the Leprosy Trust Board in 1978). In 1991, the organization, still based in Christchurch, became the Pacific Leprosy Foundation.

43. Notes on Makogai [February 1928], IT 1 IT 110/4 pt. 1 (ANZ).

44. *NZPD*, 217, 1928, 950.

45. Leonard Rogers, Progress in the control of leprosy in the British Empire, *British Medical Journal*, no. 4456, June 1, 1946, 826; Jane Buckingham, *Leprosy in colonial South India: Medicine and confinement* (Houndsmills, 2002), 91–96; John Parascandola, Chaulmoogra oil and the treatment of leprosy, *Pharmacy in History* 45 (2003):, 47–57; F. S. D. dos Santos, A. P. A. de Souza, and A. C. Siani, Chaulmoogra oil as scientific knowledge: The construction of a treatment for leprosy, *História, Ciências, Saúde-Manguinhos* 15 (2008): 29–46.

46. Governor, Fiji, to Governor-General, New Zealand, July 12, 1926, IT 1 IT 110/4 pt. 1 (ANZ); Acting Medical Superintendent, Makogai, to CMO, Fiji, August 18, 1926, IT 1 613 IT 110/4/2 pt. 1 (ANZ); IT 1 W2439 130 110/4/3 (ANZ).

47. Cook Islands leprosy statistical note, 1932, IT 1 IT 110/4/1 pt. 2 (ANZ).

48. SCI to Twomey, April 5, 1935, IT 1 W2439 87 90/10/15 (ANZ).

49. Dos Santos, de Souza and Siani, 37.

50. Governor's Deputy, Fiji, to Governor-General, New Zealand, August 27, 1926; SCI to RC, October 11, 1926, IT 1 613 IT 110/4/2 pt. 1 (ANZ).

51. Cook Islands leprosy statistical note, 1932, IT 1 IT 110/4/1 pt. 2 (ANZ).

52. Stella, 56.

53. Medical Superintendent, Makogai, to CMO, Fiji, June 15, 1934, IT 1 614 IT 110/4/2 pt. 3 (ANZ).

54. CMO to RC, March 3, 1927, IT 1 IT 110/4 pt. 1 (ANZ).

55. SCI to Minister, March 16, 1927, IT 1 IT 110/4 pt. 1 (ANZ).

56. SCI to RC, March 29, 1927, IT 1 613 IT 110/4/2 pt. 1 (ANZ).

57. CMO to SCI, August 17, 1927, IT 1 613 IT 110/4/2 pt. 1 (ANZ); CMO to RC, November 1, 1927, Medical 6/6 1/2 (NACI).

58. *AJHR*, 1927, A-3, 6, 7.

59. B. G. Thompson, quarterly report, January 3, 1928, G (Governor) 48 3 C/7 (ANZ).

60. CMO to SCI, June 8, 1928, IT 1 613 IT 110/4/2 pt. 2 (ANZ).

61. *AJHR*, 1929, A-3, 9.

62. Ibid, 10.

63. CMO to RC, May 26, 1927, IT 1 609 IT 110/2/1 (ANZ).

64. S. M. Lambert, Medical conditions in the South Pacific, *Medical Journal of Australia*, September 22, 1928, 369.

65. Minister to Prime Minister, October 10, 1928, IT 1 614 IT 110/4/3 (ANZ).

66. Medical Superintendent, Makogai, to SCI, December 19, 1928, IT 1 IT 110/4 pt. 1 (ANZ).

67. SCI to Medical Superintendent, Makogai, December 19, 1928, IT 1 IT 110/4 pt. 1 (ANZ).

68. Minister to Prime Minister, December 18, 1928, IT 1 614 IT 110/4/3 (ANZ); Prime Minister to Minister, January 30, 1929, AALR 873 W3266 39 52/496 (ANZ); Prime Minister to Governor-General, February 6, 1929, IT 1 W2439 130 110/4/5 (ANZ).

69. *EP*, June 30, 1930.

70. *AJHR*, 1932, A-3, 3.

71. *EP*, December 1, 1931.

72. *AJHR*, 1932, B-4A, 41.

73. *AJHR*, 1932, A-3, 1-3.

74. Ngata to Governor-General, June 6, 1933, G 48 3 C/7 (ANZ).

75. Western Pacific Health Service, annual report, 1934, IT 1 IT 110/5 pt. 1 (ANZ).

76. W. MacKnight, September 12, 1934; RC to SCI, 3 Oct 1934, IT 1 IT 110/4/1 pt. 2 (ANZ).

77. SCI to Minister, October 19, 1934, IT 1 614 IT 110/4/2 pt. 3 (ANZ).

78. SCI to RC, November 27, 1934, IT 1 614 IT 110/4/2 pt. 3 (ANZ).

79. SCI to Minister, November 30, 1934, IT 1 614 IT 110/4/2 pt. 3 (ANZ).

80. SCI to Minister, March 28, 1935, IT 1 614 IT 110/4/2 pt. 3 (ANZ); unidentified clipping, *ca.* March 29, 1935, filed in IT 1 IT 110/4/1 pt. 2 (ANZ).

81. SCI to RC, March 29, 1935; SCI to Lambert, April 15, 1935; CMO to RC, June 5, 1935, IT 1 IT 110/4/1 pt. 2 (ANZ); *Dominion* clipping, April 30, 1935, filed in H 1 131/12/16 (3804) (ANZ).

82. Prime Minister to Lambert, May 22, 1935, IT 1 IT 110/4/1 pt. 2 (ANZ).

83. SCI to Minister, September 5, 1935; Minister for the Cook Islands to Minister of Finance, September 5, 1935; SCI to Minister, February 19, 1936, IT 1 IT 110/4/1 pt. 2 (ANZ).

84. IT 1 110/6 (ANZ).

85. SCI to RC, August 26, 1935, IT 1 W2439 130 110/8 (ANZ); SCI to CMO, Fiji, September 6, 1935; RC to SCI, October 3, 1935; SCI to Director of Medical Services, Fiji, May 15, 1936, IT 1 IT 110/4/1 pt. 2 (ANZ).

86. SCI to Minister, May 4, 1936, IT 1 IT 110/4/1 pt. 2 (ANZ).

87. Lambert, *A doctor in paradise*, 392.

88. RC to Minister, August 5, 1937, IT 1 IT 110/4/1 pt. 2 (ANZ).

89. RC to SCI, April 16, 1936, IT 1 W2439 130 110/8 (ANZ).

90. RC to SCI, November 7, 1936, IT 1 IT 110/4/1 pt. 2 (ANZ).

91. CMO to RC, November 29, 1945, Medical 6/6 6 (NACI).

92. RC to SCI, July 21, 1937; RA, Penrhyn, to RC, September 24, 1937; photographs sent by RC, November 11, 1937, IT 1 IT 110/4/1 pt. 2 (ANZ); extract from letter from RC, November 10, 1937, H 1 131/12 (26331) (ANZ).

93. RC to Minister, August 5, 1937, IT 1 IT 110/4/1 pt. 2 (ANZ).

94. SCI to RC, August 26, 1935, IT 1 W2439 130 110/8 (ANZ).

95. Extract from letter from RC, November 10, 1937, H 1 131/12 (26331) (ANZ); RC to SCI, February 28, 1938, IT 1 IT 110/4/1 pt. 2 (ANZ).

96. Director-General of Health to Secretary for External Affairs, December 20, 1937, H 1 131/12 (26331) (ANZ).

97. Medical Superintendent, Makogai, to Director of Medical Services, Suva, March 16, 1938, IT 1 IT 110/4/1 pt. 2 (ANZ); Lambert to Secretary for External Affairs, April 28, 1938, IT 110/6 (ANZ).

98. RC to SCI, January 15, 1937, IT 1 IT 110/4/1 pt. 2 (ANZ); *AJHR*, 1937, A-3, 14; 1938, A-3, 12, 14.

99. *AJHR*, 1938, A-3, 13.

100. Numa to CMO, January 20, 1938; RC to SCI, April 28, 1938, IT 1 IT 110/4/1 pt. 2 (ANZ).

101. RA, Penrhyn, to RC, September 30, 1939, Medical 6/6 5 (NACI).

102. RC to T. F. Telford, February 11, 1938; W. G. MacNaughton and Sister M. Agnes to Telford and Twomey, February 15, 1938, H 1 131/12/16 (3804) (ANZ).

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105. John Numa, Penrhyn Island, *Native Medical Practitioner* 3 (1, 1939): 416; Numa, Prevalence, 154.

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107. RC to SCI, August 15, 1938, IT 1 IT 110/4/1 pt. 2 (ANZ).

108. CMO to RC, December 1, 1938, IT 1 IT 110/4/1 pt. 2 (ANZ).

109. RC to SCI, October 18, 1938; RA, Penrhyn, to RC, October 18, 1938; RA, Manihiki, to RC, October 18, 1938, IT 1 IT 110/4/1 pt. 2 (ANZ).

110. *EP*, November 1938; CMO to RC, December 1, 1938, IT 1 IT 110/4/1 pt. 2 (ANZ).

111. RA, Aitutaki, to RC, July 9, 1940, Medical 6/6 5 (NACI).

112. Acting Assistant SCI to Minister, September 10, 1940, IT 1 W2439 86 90/10/14 pt. 1 (ANZ).

113. Assistant Medical Officer to CMO, January 7, 1941, IT 1 W2439 86 90/10/14 pt. 1 (ANZ).

114. Medical Department, Fiji, annual report, 1942, 15, IT 1 154 EX 8/34 pt. 2 (ANZ).

115. *AJHR*, 1945, A-3, 11.

116. RA, Penrhyn, to RC, November 11, 1943, IT 1 W2439 86 90/10/14 pt. 1 (ANZ).

117. Numa, Prevalence, 155.

118. List, October 1946, Medical 6/6 6 (NACI); Report by Ualesi F. Toelupe, n.d. [1948], IT 1 W2439 86 90/10/14 pt. 1 (ANZ); RA, Aitutaki, to RC, October 25, 1948, Medical 6/6 7 (NACI); *AJHR*, 1949, A-3, 12.

119. Austin, 404–6.

120. Numa, Prevalence, 157–59.

121. Numa to CMO, October 26, 1951, H 1 336/4 (32644) (ANZ); Norman Mitchell to Minister, March 15, 1958, IT 1 W2439 87 90/10/14 pt. 2 (ANZ).

122. RA, Aitutaki, to Official Secretary, Rarotonga (OS), July 22, 1952, IT 1 W2439 86 90/10/14 pt. 1 (ANZ).

123. Austin, 401.

124. *The Press*, April 29, 1935, IT 1 614 IT 110/4/2 pt. 3 (ANZ).

125. CMO to RC, December 1, 1938, IT 1 IT 110/4/1 pt. 2 (ANZ).

126. W. Murphy to OS, n.d. [1951], Medical 6/6 7 (NACI).

127. RC to Secretary for Island Territories, August 25, 1950, IT 1 W2439 86 90/10/14 pt. 1 (ANZ).

128. Table, 1935, IT 1 614 IT 110/4/2 pt. 3 (ANZ); Austin, 408.

129. Medical Superintendent, Makogai, to Cook Islands Department, January 10, 1942, IT 1 W2439 86 90/10/14 pt. 1 (ANZ).

130. Director of Medical Services, Suva, to Secretary for Island Territories, July 21, 1948, IT 1 W2439 86 90/10/14 pt. 1 (ANZ).

131. Stella, 171.

132. Austin, 408.

133. Stella, 171.

134. C. J. Austin, Leprosy in Fiji and the South Seas, in *Proceedings of the Seventh Pacific Science Congress of the Pacific Science Association, 1949*, vol. 7 (Christchurch, 1953), 287–90; Stella, 96–98, 149–50.

135. C. J. Austin, Fiji Leprosy Hospital, Makogai (radio script, November 26, 1950), Medical 6/6 7 (NACI).

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139. South Pacific Health Service, report 1947-48, IT 1 154 EX 8/34 pt. 2 (ANZ); Inspector-General's report, South Pacific Health Service, 1960–61, 17, H 1 333/1/1 (32066) (ANZ).

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141. Minutes of meeting, South Pacific Board of Health, Suva, August 19–22, 1953, H 1 1750 333/1/1 (27287) (ANZ).

142. CMO to RC, July 30, 1954, H 1 333/12 (25441) (ANZ).

143. Maintenance papers, 1950–65, IT 1 W2439 87 90/10/16 pt. 2 (ANZ); CMO, monthly report, March 1958, H 1 333/12/2 (27868) (ANZ).

144. Secretary for External Affairs to Secretary for Island Territories and Director-General of Health, June 29, 1960; Director-General of Health to Secretary for Island Territories, August 24, 1960; Secretary for Island Territories to Secretary for External Affairs, October 18, 1960, AAFB (Health) 632 W3463 122 131/12/16 (48399) (ANZ).

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147. Inspector-General's report, South Pacific Health Service, 1964–65, 17, H 1 333/1/1 (32066) (ANZ); Acting Colonial Secretary, Fiji, to Secretary for External Affairs, January 13, 1964; Secretary for External Affairs to Director-General of Health, August 12, 1965, AAFB 632 W3463 122 131/12/16 (48399) (ANZ).

148. Stella, 162–63.

149. Memorandum, P. T. Griffiths, August 4, 1952, IT 11 8 pt. 1 (ANZ).

150. Numa, Prevalence, 151–60.

151. D. D. McCarthy and John Numa, Leprosy in the Cook Islands, *New Zealand Medical Journal* 61 (354, February 1962).

152. CMO to OS, February 6, 1959, IT 1 W2439 87 90/10/14 pt. 3 (ANZ). The facilities at Te Sauma were dismantled in 1955.

153. OS to Director of Medical Services, Fiji, June 8, 1951, IT 1 W2439 86 90/10/14 pt. 1 (ANZ).

154. CMO to Acting Secretary, Lepers Trust Board, April 9, 1951, IT 1 W2439 86 90/10/14 pt. 1 (ANZ); CMO to OS, October 12, 1951, Medical 6/6 7 (NACI).

155. Secretary for Island Territories to Secretary for External Affairs, March 8, 1951, IT 1 W2439 4 1/66/7/7 (ANZ).

156. Acting Secretary, Lepers Trust Board, to CMO, May 22,1951, Medical 6/6 7 (NACI).

157. Numa to CMO, October 26, 1951, H 1 336/4 (32644) (ANZ).

158. CMO to OS, February 18, 1952, H 1 336/4 (32644) (ANZ); OS to Acting CMO, July 7, 1952; RA, Aitutaki, to OS, July 22, 1952; Acting CMO to OS, March 20, 1953, IT 1 W2439 86 90/10/14 pt. 1 (ANZ).

159. OS to Secretary for Island Territories, July 7, 1952; CMO to OS, October 1, 1952; Numa to CMO, December 15, 1952, IT 1 W2439 86 90/10/14 pt. 1 (ANZ); Numa, Prevalence, 154.

160. Medical Superintendent, Makogai, to Numa, September 11, 1952, IT 1 W2439 86 90/10/14 pt. 1 (ANZ).

161. Secretary for Island Territories to OS, January 16, 1953; Secretary for Island Territories to Director-General of Health, January 29, 1953; Secretary for Island Territories to OS, February 18, 1953, IT 1 W2439 86 90/10/14 pt. 1 (ANZ).

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Norman R. Sloan, *Leprosy in Western Samoa and the Cook Islands: A survey*, Noumea, 1954, 14, 20–21.

165. Deputy Director-General of Health to Secretary for Island Territories, November 23, 1953, March 17, 1954, IT 1 W2439 87 90/10/14 pt. 2 (ANZ).

166. CMO, monthly report, November 30, 1953, H 1 333.12/2 (27868) (ANZ).

167. Sloan, 15–16, 18, 19.

168. Secretary for Island Territories to Minister, June 12, 1953, IT 1 W2439 87 90/10/14 pt. 2 (ANZ); South Pacific Health Service, Inspector-General's Report, 1951–53, 8, H 1 1750 333/1/1 (27287) (ANZ).

169. The figure is the total of admissions as reported at the time of each transfer. Compare the figure of 280 given by Stella (171) and also McCarthy and Numa (77).

170. McCarthy and Numa, 81.

171. J. M. Wogan, Report on the Medical Services of the Cook Group of Islands, August 20, 1954, H 1 333/12 (25441) (ANZ); Wogan to Turbott, January 18, 1955, H 1 131/12 (26331) (ANZ).

172. Deputy Director-General of Health to Secretary for Island Territories, March 22, 1955, IT 1 W2439 87 90/10/14 pt. 2 (ANZ).

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174. D. D. McCarthy (Acting CMO), Leprosy in Aitutaki: An appreciation of the present position, September 2, 1957; Numa to Acting CMO, December 9, 1957, IT 1 W2439 87 90/10/14 pt. 2 (ANZ).

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176. A. S. Wallace (Acting CMO), Report on public health in the CI, January 6, 1958; D. D. McCarthy, Notes on activities in Aitutaki during the past year, n.d. [July 1958], IT 1 W2439 90/10/1 pt. 2 (ANZ); CMO, monthly report, October 1958, H 1 333/12/2 (27868) (ANZ); McCarthy and Numa, 77, 80.

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189. Ibid.

190. Stella, 90.

191. Bob Madey and Larry Thomas, *Compassionate exile*, video recording, Suva, 1999.