

when the nature of the disease was finally recognized, several hundreds of cases must have occurred. Confined as it was almost wholly to Natives in out-of-the-way kiangas, even after the campaign was fairly begun, many cases must have escaped notice. However, a fairly accurate estimate can be made as follows: Europeans, 111; Maoris, 1,777.

The diminution in the number of cases in November was noticeable, but it rose again in December owing to the small outbreak in the lower Waikato, and a severe one at Te Teko, in the Bay of Plenty. The issue of travelling-passes to the Natives successfully vaccinated has thrown a great amount of work on the Department. The restriction on travelling has, however, served as a very effectual lever in removing any objections which the Maoris might have to undergoing the operation. It is estimated that 12,000 passes were issued.

I attach a special report by Dr. Monk made at the end of the epidemic, and one made by myself furnishing particulars additional to those of the earlier stages.

*Report on the Earlier Stages of the Epidemic.*

On the 2nd July two events gave me serious anxiety and raised grave doubts as to the correctness of our supposition that the disease was chicken-pox. The first of these events was the news from Sydney that a pustular disease which had been in existence since the 12th April had now been pronounced smallpox on the evidence of the protection afforded by vaccination. The second was the report of the death of an elderly Maori at Mangere from this pustular epidemic. Dr. Monk and I visited the place and found that the Native had undoubtedly suffered from a severe attack of the same type of disease as the Native Rikutai. It had been more or less concurrent, but we were unable to get a definite history of the case from the other Natives. No medical man had been called in, and though the Natives said that the patient had died the day previously we found that the corpse was more or less decomposed, and was crawling with maggots at least three days old. This argued such a degree of neglect that it was not certain that the man died from the virulence of the attack. An elderly Native who had been thus left alone for days might readily have died from complications in an otherwise simple attack. We visited other houses in the neighbourhood. One adult male Native was found who had recovered from a sharp attack. He showed no pitting. Two younger Natives were suffering from a disease which was clinically no more than chicken-pox, and a European girl who had worked in a store much visited by these Natives was also suffering from a disease which had all the clinical appearances of chicken-pox of no great severity and showing successive crops of papules. Dr. Scott, of Onehunga, who was in attendance on this case, was satisfied that it was chicken-pox, more especially as she (like the Natives) had never been vaccinated. It is, however, of great interest to note that this girl was thereupon vaccinated and a partial reaction was seen about the fifth day, but on the sixth day the reaction ceased and the vaccination could be regarded as having failed.

The evidence was still most conflicting, but on the 3rd July, the day after our visit to Mangere, I wired to Head Office conveying my suspicions that the epidemic in New Zealand was of the same nature as that in Sydney, Dr. Gordon's evidence as to the effect of vaccination being one of my principal reasons for this opinion. Dr. Good, of Whangarei, visited Auckland on the 4th July and gave details of some of the cases he had seen, and expressed the opinion that the disease was of a more serious nature than chicken-pox, and thought that it was spreading fairly freely among the white population near Whangarei. He was unable to give any details as to the influence of vaccination. On Saturday, the 5th July, another Native was brought into the Auckland Hospital, this time with an attack of the more severe type, the pustules tending to be confluent and appearing on his lips, eyelids, and palate. He was not, however, dangerously ill in spite of the severity of the attack. This case made the fourth who had been brought in from the same boardinghouse, the first being a Native who had come down some three weeks before.

On the 6th July Dr. Valintine visited Auckland, and a consultation was held at the Hospital upon the four Natives and three Europeans there. There were present at our invitation Dr. Gordon (of Auckland), Dr. Robertson, Dr. Dudley, Dr. Maguire (the Medical Superintendent), Dr. Valintine, Dr. Monk, and myself. The opinions held were very diverse, Drs. Gordon and Dudley being inclined to doubt the diagnosis of smallpox, although not denying its possibility. Dr. Robertson, on the other hand, was emphatically of the opinion that the cases were modified smallpox, and to this view Dr. Maguire inclined also. Dr. Valintine decided that there was sufficient evidence to warrant the Department in dealing with the outbreak as though it was definitely smallpox, and memo. to this effect was wired to the Minister, with the suggestion that it should be given to the Press for publication. He also decided to make chicken-pox a notifiable disease to give us the legal powers we have hitherto lacked.

On the 7th and 8th July Dr. Monk and I proceeded to carry out Dr. Valintine's directions in accordance with this decision.

*Measures taken to check the Epidemic.*—Drs. Cawkwell and Eleanor Baker were engaged to travel about the northern districts vaccinating the Natives and all school-children, also any Europeans who would submit themselves. Dr. Cawkwell proceeded to Mangakahia Valley on Monday night (7th July), as it was here that the epidemic began and appeared to have gained most hold. Inspector Shenton was instructed to accompany him. Dr. Baker started work in the Northern Wairoa district, with directions to proceed northwards towards Hokianga, where several Native settlements had become infected. Dr. Good was asked to visit Poroti, a Native settlement near Whangarei, where the Native schoolmaster had reported the appearance of the disease. Dr. Macfarlane, of Rawene, was asked to visit the Native schools at Rahia for the same reason.