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NEW ZEALAND.

TOKELAU (UNION) ISLANDS.

A MEDICAL SURVEY OF THE TOKELAU (UNION) ISLANDS, BY A. F. MACKAY, M.B., B.Ch. (N.Z.), OF THE SAMOAN MEDICAL SERVICE.

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Presented to both Houses of the General Assembly by Command of His Excellency.

IN June, 1926, a medical survey was made of the Tokelau (or Union) Islands to ascertain the general health of the Natives.

These islands are now administered from Western Samoa, having been taken over from the Gilberts and Ellice Islands Colony about a year previous to the survey. The group consists of three coral atolls situated about three hundred miles north of Samoa and about fifty miles apart. Each atoll consists of a coral reef enclosing a central lagoon. Every here and there the reef is raised into islets about 10 ft. to 20 ft. above sea-level, and it is possible at low tide to walk right round from one islet to the next, there being no boat-passage at any spot between the lagoon and the outside sea. Only one islet is inhabited in each of the atolls, the remainder being used for growing food and copra. At Fakaofo the village islet is very small—no more than 12 acres—yet over four hundred people are living upon it. At Nukunono and Atafu the village islets are larger and are not so crowded.

Opportunity had to be taken of the visits of a local trading-schooner to reach the group and to move from island to island, fifteen days being spent on Fakaofo (population 444), twelve days on Nukunono (population 225), and six days on Atafu (population 360). The first two days on each island were occupied in examining the Natives, and the remaining days were devoted to treatment.

In language and appearance the Natives closely resemble the Samoans, both races being Polynesians. They live in huts rectangular in shape, with roofs and walls thatched with the leaves of the pandanus. The floors are of coral, and are covered with mats. As a rule there are several doorways, and these can be closed with coconut-leaf blinds.

Sanitation is primitive but effective. Drop latrines are built out over the lagoon, and are used. Rubbish is either buried in pits to form humus in which to grow bananas, or is thrown over the reef. Pigs are kept out of the villages behind pig-walls. Rats abound, especially on Nukunono. Flies and mosquitoes are conspicuous by their absence on the village islets, but are plentiful on the others.

For water the Natives have to depend on rain, which is collected in concrete and iron tanks. A few brackish wells exist. Water is seldom used for drinking purposes, however, the usual drink being coconut-milk.

The choice of the Tokelau-Islander in the matter of his diet is extremely limited. Coconut and fish are the staple foodstuffs. Pigs and fowls are plentiful, but are only eaten on special occasions. There is an edible pandanus the fruit of which is eaten, but the taro, the breadfruit, and the banana, which are so abundant in Samoa, are luxuries in these isles. Notwithstanding the coconut and fish diet, the physique on the whole is splendid and the general health good.

Stationed on the island of Atafu is a Native medical practitioner, born on the island but trained in Fiji. He has quite a good general knowledge of medicine, and seems keen on his work. To assist him he has a Native boy, whom he has trained himself. On each of the other two islands, Fakaofo and Nukunono, there is a Native dresser-boy. These two have had a three-months course of elementary medicine in Funafuti some years back. Their knowledge is necessarily extremely limited, yet they do quite good work on their respective islands. I think it would be better if the Native medical practitioner, instead of being permanently stationed at Atafu, as he is at present, were to visit the other two islands when he has the opportunity. He should also, I think, spend one month every year in Samoa, to keep abreast of the times. In this way he would serve the whole group and not just one island.

RINGWORM.

This is very prevalent, *Tinea imbricata*, *Tinea corporis tropicalis*, and *Tinea alba* being the chief varieties. *Tinea imbricata* is commonly known as "Tokelau ringworm." Apparently in the early days it was much more prevalent in these islands than it is to-day, hence the name "Tokelau ringworm." This ringworm is such a striking disfigurement—or one might even say, ornamentation—that on landing on these islands the attention is perhaps rather unduly attracted by it, and one gathers the impression that nearly everybody seems to suffer from it. This, however, is far from correct, and the less conspicuous *Tinea corporis tropicalis* is much more prevalent. Forty-eight cases of *Tinea imbricata* were found in the group, as against 152 cases of *Tinea corporis tropicalis*.

Tinea alba is very common, as in Samoa, where it is known as *Tane*. This form of ringworm, however, causes practically no irritation, and the Natives consequently do not seek treatment, although the white, floury patches it produces are very disfiguring on a dark skin.

The treatment adopted for *Tinea imbricata* and *Tinea corporis tropicalis* was as follows: A strong tincture of iodine was first painted over the affected parts. If much of the body was affected, a portion was painted every day until all was treated. When the skin peeled Ung. Chrysarobini