

■ DISPATCH

Pacific nations lead the way in fighting lymphatic filariasis

Region aims to eliminate the disease by 2010 through mass drug-administration programmes



Malcolm Dean reporting from Fiji

The modern, well equipped centre from which the lymphatic filariasis campaign is being run in Fiji is named Mataika House. It is a timely reminder of the long history of a disease that has been defined as the second most disabling in the world. Jonas Mataika, a former chief medical officer of Fiji, was one of the earliest doctors to work on the disease in the Pacific. Today, Josefa Koroivueta, a nephew of Mataika, is chief medical officer and is continuing the family campaigning tradition.

Fiji does not just have its own campaign but also houses the small team headquarters from which WHO's regional operation is directed. Some 22 Pacific nations—comprising 1000 islands and 7 million people spread across an area bigger than Russia and Europe combined—came together in 1999 under the umbrella of PacElf (Pacific elimination of lymphatic filariasis). Initially with Australian funding and now with Japanese money, the region aims to achieve a formal declaration of elimination in 2010—10 years ahead of the global goal.

The global campaign, launched in 1998 by WHO and what was then SmithKline Beecham, aims to eradicate a disease that infects 120 million people in 80 countries with a further 1.2 billion—one fifth of the world's population—at risk. If successful, the campaign would be the first to eliminate a disease using drugs, through the largest mass drug-administration programme ever undertaken. All 1.2 billion people at risk are being targeted.

The Pacific is in the lead. Samoa, a nation with nine islands and 175 000 people, was the first to launch its mass drug-administration programme. The island government persuaded its prime minister, three ambassadors, and its famous rugby team to take the drugs in 1999 to ensure the campaign had impact. Now it has completed its fifth annual mass drug administration; four

other Pacific states (American Samoa, Cook Islands, French Polynesia, and Niue) are just 1 year behind. Of the first 22 nations to launch a mass drug-administration programme, 11 were in the Pacific region.

It is now crunch time for the campaign. Are five annual mass drug administrations sufficient to stop transmission? Eric Ottesen, the former project leader for WHO's elimination programme, is optimistic. Now working from Atlanta, where he is director of the Lymphatic Filariasis Support Center at Emory University's Rollins School of Public Health, he will be guiding the surveys evaluating the elimination programme, which are due to begin shortly.

"The Pacific is a good testing ground because of its long history fighting the disease"

Kazuyo Ichimori, the PacElf team leader and WHO scientist based in Fiji, is equally optimistic, as she reworks the global alliance's guidelines for the Pacific nations. Ichimori believes there are two key reasons behind PacElf's success: the regional approach has given the small island states a bigger voice; and the global programme has recognised that its guidelines must have a local dimension.

The Pacific is a good testing ground because of its long history fighting the disease. Samoa has had 11 different campaigns in four decades. French Polynesia, with its 130 islands spread across an area the size of Europe, reduced the prevalence of the disease from 30% to 3% in 15 districts in the late 1950s, only to see it return.

But the new global campaign is different. The dual drug programme—diethylcarbamazine and albendazole—reduces the microfilariae that

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Lymphatic filariasis: 120 million people in 80 countries are infected

mosquitoes transmit by about 90%. Albendazole has the added advantage of also killing three common intestinal worms found in the region, thereby improving both the physical and intellectual growth of children.

Both Ottesen and Ichimori believe that "mopping up" exercises will be needed at the end of the 5-year programmes, but they will be targeted, not a mass programme. They also point to the fact that in some countries the disease is dying out spontaneously.

Like all eradication programmes, the Pacific campaign has not all been plain sailing. In addition to the seasonal hurricanes, which have been increasing and cause havoc to village records, there have been political upheavals (Fiji and Solomon Islands), international scares (severe acute respiratory syndrome), and familiar frail health budgets. All health ministries have signed up, but there is as yet little recorded active campaigning in Papua New Guinea, the largest populated nation, nor in New Caledonia.

Ottesen and Ichimori argue that the campaign has helped strengthen local health systems. Malaria is endemic in three of the 22 Pacific nations, opening up opportunities for joint campaigns to curb mosquitoes with insecticide-treated bednets. Vanuatu has already begun one. Meanwhile, all eyes are on Samoa.