Rotarians Against Malaria Annual Report 2014-15

The last twelve months have seen some remarkable improvements in malaria control among our near neighbours. The RAM Conference in August saw the creation of some new initiatives including the creation of a RAM funded Post Graduate PhD Scholarship and commencement of the development of a Standard Kit for District Chairs.

Our near neighbours have diligently achieved the following results. Timor Leste has reduced its infection rate to 0.9 cases per 1,000 and is moving towards elimination. PNG has reduced its incidence to 38 cases per 1,000, a reduction of 75% since 2009 and the Solomon Islands can now boast a figure of 46 cases per 1,000 and as low as 0.4 in some locations. This significant reduction started by the initial provision of bed nets by Australian Rotarians during the 1990s.

This reduction has gathered significant momentum since the start of Global Fund in 2002. RAM PNG has been the Country Coordinating Mechanism since 2006 and in that time has delivered over 7,000,000 Long Life Insecticide Nets to the people of PNG. Protection provided by the use of LLINs has been the main reason for the drop in reported malaria cases in our near neighbours.

In PNG, Global Fund approved allocation for the next two years has created a shortfall, to the extent that only certain areas will get household net distribution, other areas will only get nets supplied to children under five. To ensure that malaria is kept in check RAM PNG has implemented a "Chasing Malaria" Program.

The "Chasing Malaria" Program is based presently in NCD and Central Provinces. It's primary aim is to map malaria within Central and NCD Provinces while at the same time supplying Long Lasting Insecticidal Nets (LLINs) to fill gaps where malaria is a problem: This is done by giving every RDT (Rapid Diagnostic Test) positive case of malaria an LLIN. This assumes that people have no nets where they have caught malaria but also reinforces the malaria message of using a LLIN every night. From the data collected, it is hoped that RAM will be able to start clean-up projects within the worst affected villages so get rid of malaria altogether.

The Results to end March 2015

- 1) The project is now delivering nets through 19 Health Centres in NCD and 21 Health Centres in Central Province (1 Goilala, 11 Kairuku, 6 Rigo and 3 Abau).
- 2) The project has recorded 1,210 cases of malaria with LLINs distributed to them. This is about 250 malaria cases a month between the two provinces. This would give approximate incidence rates of 2.5 per 1000 in NCD and about 6 per thousand in Central Province.
- 3) When the project started, many cases of malaria were being diagnosed clinically without using RDTs. Now all clinics are regularly using RDTs NCD now tests 99% of all cases of malaria and Central 95% the reasons for the lower cases in Central is that some of the Aid Posts of the programme are still not utilising RDTs properly.
- 4) Between December to March NCD Clinics tested 10,592 cases of malaria of which 357 were positive (3.7% positive). Of note, it is seen that many of the cases tested are adults. From October 2014 to January 2015, only 32 out of 93 cases of positive malaria were from children under the age of 12 years old. Combined with the fact that these cases are scattered around NCD, this suggests that perhaps most of the malaria in NCD is imported. The highest number of child cases came from ATS which indicates that this area might still be a problem for malaria.

5) In Central Province, from 6,337 patients tested with RDTs, 562 (8.7%) were positive. Unlike NCD, malaria cases in Central are not scattered but appear focused in certain locations. The two worst villages identified are Kuriva Blocks near Kuriva Health Centre and Adio near Kabuna Health Centre. This identification means that the project can now start to look at other interventions that can be applied to these villages to reduce malaria.

To kick start the "Chasing Malaria" program RAM supplied \$600,000.00. The program is planned to run for three years with a budgeted cost of \$2,200.000.00 per year. RAM will only be able to provide some of the required funds and is actively seeking corporate partners to assist.

In the Solomon Islands, with the net distribution well in the hands of the Ministry of Health, RAM's role has primarily been supplementing the MOH with our Healthy Villages program. Under this initiative villages apply to join the program and in the process can, to a certain extent, take ownership of their own destiny. On joining the program, villages receive a set of tools and an educational package on the breeding cycle of mosquitos. The tools enable the village to put the lesson into practice by eliminating stagnant water around the village and thus destroying the mosquito's breeding grounds.

This year saw the supply of tools to another 32 villages and RAM"s investment in this program is now in excess of \$120.000.00.

In Timor Leste, August saw the a arrival of 22,700 LLINs completing RAM's agreement to supply 42,700 LLINs from October 2013 to July 2015 to ensure every expectant mother in Timor Leste has a net to protect herself and child from the malaria mosquito. This brings to a total of over \$400,000.00 RAM has provided to cover shortfalls in Global Fund allocations since 2012.

March - April this year saw PP Steve Carroll and friends from the Williamstown Club commence Rotary's Ride Around Australia Against Malaria. RRAAAM for short. Steve, a Vietnam Vet, and friend's motor cycle ride commenced in March and finished in Newcastle on Anzac Day. The ride was in Memory of Steve's daughter who died from malaria. The group spoke at Rotary Clubs and other interested groups around Australia raising \$28,000 for RAM,s work in PNG.

The 2014 RAM Conference at RiverGlenn, Brisbane provided the opportunity for District RAM Chairs to update themselves through presentations from RAM PNG, the Timorese National Malaria Control program, malaria vaccine trials from Griffith University and the Australian Army Malaria Research Institute. Workshops run during the Conference resulted in all District Chairs receiving a new RAM Banner and the development of a new Malaria Awareness Day flyer.as part of the District Chairs information kit.

After discussions with the Australian Institute of Tropical Health and Medicine at James Cook University a PhD Scholarship in Vector Control has been conceived. The Scholarship, in partnership with AITHM, is for up to 3.5 years and is only available to a graduate from either PNG, Timor Leste, The Solomon Islands or Vanuatu.

It is pleasing to announce the first recipient of the RAM PhD Scholarship in Vector Control is Mr Edgar Pollard from the Solomon Islands. Edgar holds an MSc from the University of South Pacific and has published Malaria Research articles to his credit. He commences his study towards the end of 2015

PDG Phil Dempster National RAM Chair