



RAM – RAWCS Timor Leste Team

6th to 18th May 2014



Progress of the Timor Leste National Malaria Control Program.

Introduction

The following report is based on observations by the RAM team which travelled to Timor Leste to assist with the distribution of LLINs by the staff of the National Malaria Control Program (NMCP) in the Maubara sub-district in May 2014 and on discussions held with the Program Manager: Mrs Maria Do Rosario de Fatima Mota.

The NMCP sits within the Department of Communicable Diseases of the Timor Leste Ministry of Health and has considerable profile as it is achieving National Millennium Development Goal (MDG) No. 5 (vis. The removal of malaria as a cause of mortality and as a barrier to socio-economic growth in the nation.) . The NMCP works closely with the WHO, the Global Fund for the elimination of AIDS Tuberculosis and Malaria, RAM and other NGOs. The program has benefitted from the hands on assistance of, seconded Sri Lankan WHO doctor, Dr Manel, who brings 30 years' experience to the job, however unfortunately we did not get to meet her.

Program progress and achievements

Since 2006 when the incidence of malaria was 220/1000 people in a total population of 1.1 million including 58 deaths, the program has achieved a reduction to only 0.9/1000 in the latest statistics and no deaths. MDG 5 specified a target of 45/1000 by 2015 and so the NMCP is well and truly exceeding expectations. Even more encouraging is the fact that 8 of the 13 health districts are now considered to be at the 'pre-elimination' stage whilst the remaining 8 districts are still in the 'control' phase. The Global Fund has awarded the NMCP an A+ rating for their achievements which bodes well for the success of the current application for a further US\$16M in funding which will be decided later this year.

The NMCP works through the existing infrastructure of the Ministry of Health which includes a National Hospital in Dili, 7 District Hospitals, 65 Community Health Centres (Clinics) as well as District Health offices. Districts are divided into several Sub-Districts which are divided into Sucos which are groupings of village level 'posts'. The distribution of LLINs, for instance, is achieved by selecting distribution points central to several posts and progressively working through each until complete coverage of the Suco has been achieved. Currently 25 Sub-Districts are rated "high risk" for malaria.

Timor Leste's Ministry of Health is seeking to employ 80 new trained microscopists and 300 Cuban trained Doctors to assist with the elimination phase of the NMCP. It is recognised that these new arrivals will need considerable mentoring and orientation to local conditions before they are fully effective. The NMCP already places a strong emphasis on regular routine QA/QC testing of local clinic diagnosis through 'round-robin' checking of microscopist's results using standard samples. The program incorporates rigorous checking protocols on most of it's functions including regular

unannounced inspections and internal audits. As demanded by the Global Fund LLINs are all accurately tracked and accounted for.

The NMCP incorporates the following elements:-

- Distribution of LLINs and timely replacement. The polypropylene nets are rated at 5 years life with care and washing at 3 month intervals. Our team observed 4½ year old nets still in reasonable condition being replaced with new nets in Maubara. Nets are distributed on the basis of 1 net per 2 people and 1 net for each pregnant woman. Records are kept for each household with random checking to ensure that nets are being used and not being misused. Training on how to look after the nets as well as understanding malaria is delivered at each distribution point. Due to previous feedback nets are now supplied with string and nails to aid installation.
- Diagnostic services. Provision of rapid and accurate diagnostic services in Community Health Centres with regular QA/QC as described above including identification of plasmodium type. Also recruiting and training health volunteers for areas that are remote from Clinics to diagnose and treat simple cases.
- Integrated approach to Mosquito control. Including Indoor Residual insecticide Spraying (IRS), working with households to reduce mosquito breeding sites, selected application of larvicides and working with local people to cultivate plants that can be used as natural insect repellents in addition to encouraging the use of citronella and awareness of peak biting times. Where old bed nets are replaced householders are encouraged to use the old ones to screen windows and openings where possible or to use spare nets when traveling e.g. to markets.
- Entomological research. On-going field based research to determine the life cycle, harbours, breeding and biting habits of the 13 identified anopheline mosquito species in Timor. This research provides an evidence basis for planning mosquito reduction and control programs as well as informing safer living habits for village people. This work is also applicable to reducing the incidence of Dengue fever.
- Treatment Protocols. The NMCP has developed treatment protocols aimed at effectively removing the disease from patients whilst seeking to avoid development of drug and insecticide resistance. Treatments rely on accurate diagnosis. First line treatment for apparently 'simple' cases of plasmodium falciparum (pF) malaria is to administer Artemisinin Combination Therapy (ACT) for 3 days and observe patient for 7 days. If the treatment does not appear successful or plasmodium vivax (pV) is detected then second line treatment of Chloroquine and Primaquine is administered for 14days. In cases where the second line treatment follows an apparently failed first line treatment, investigation of possible resistance to ACT is conducted. The NMCP is aware of potential serious side effects of Primaquine in patients with low G6PD blood enzyme but it is unclear if routine screening is conducted.
- Training of Volunteers. The NMCP relies on the use of 'volunteers', nominated by their local communities to work with the NMCP staff as temporary employees. These people are trained to help educate their communities about malaria, recognising symptoms, how to avoid getting infected and keeping kids and pregnant women safe as well as the proper use and care of the LLINs. The volunteers also assist in compiling the detailed up-to-date census

information, compiling the distribution lists and preparing and distributing the entitlement chits. Other volunteers provide basic clinic services in remote areas and assist with the disease surveillance.

- Cooperation with Indonesia for work in West Timor. The NMCP recognises that total elimination of malaria will be difficult in Timor Leste unless it is also achieved in West Timor. The NMCP has initiated preliminary discussions with the Indonesians, on cooperative programs, however no significant progress has been made and there is no current dialog.

Conclusions

The RAM team were very impressed with the thoroughness of the NMCP approach to it's task of eliminating malaria in Timor Leste and the results that have been achieved, in controlling malaria, are very impressive. The team were also very impressed with the professionalism of the Program Manager Mrs Maria Mota. Maria is clearly a hard working dedicated Manager who enjoys a good rapport with her widely scattered staff and has a detailed knowledge of all aspects of the program. She is a respected and articulate advocate for community health in Timor Leste, has a good understanding of Rotary's contribution and is easy to work with.

As the NMCP approaches the elimination phase, hopefully with the next round of Global Fund financing, there may be a limited role for RAM. However RAM should investigate how we could assist with programs in West Timor with the goal of assisting in the permanent elimination of Malaria from the island of Timor.

David Pearson. RAM Chairman D9650, Team Leader.



Team briefing with Maria Mota in Dili.



Maria discussing net installation.



Discussing village vector control works.