**RAM POWERPOINT PRESENTATION 2020 (December update)**

**SLIDE 1**

RAM Australia’s activities have for many years been focussed in PNG, the Solomon Islands and since 2005, in Timor Leste. In the 2019-20 year however, RAM also began supporting Vanuatu and West Timor (Indonesia). RAM has raised more than $2million since 2003 to help support our partner countries

**SLIDE 2**

RAM’s Mission Statement

Elimination is the search for a malaria free status in a defined geographical area. Eradication is global

Since 1997 RAM has been an activity of Rotary Australia World Community Service (RAWCS)

**SLIDE 3**

Malaria is recognised by the WHO as one of the worst scourges faced by mankind. It’s a disease of the developing world that impacts on 50% of the world’s population.

**SLIDE 4 (7 Clicks)**

Recent statistics from the 2020 WHO Report state that the number of cases worldwide in 2019 has is 229 million which is a slight increase from the previous year. The number of deaths has also increased by 4,000 to 409,000. An estimated two thirds of these deaths are children under 5. The report is based on information received from national malaria control programmes and other partners in 87 malaria-endemic countries

Sobering thought that potentially 3 billion people around the world are at risk

**SLIDE 5**

**The Life Cycle of the Malaria Parasite**

Malaria parasites develop both in humans and in the female mosquitoes.

When she bites an infected human, parasites are sucked up from the person’s bloodstream which at this stage of the parasite’s life cycle are called gametocytes. They travel to the mosquito’s gut where cysts called oocysts develop in the gut wall. Inside these oocyst thousands of active sporozoites (the spore like stage in its life cycle) develop, the oocyst bursts and the sporozoites travel to the mosquito’s salivary glands.

Malaria infection begins when an infected female Anopheles mosquito bites a person, injecting Plasmodium parasites in the form of the sporozoites into their bloodstream. The sporozoites pass into the human liver where they develop in 7-10 days then enter the bloodstream invading the red blood cells. At this point they become gametocytes – (full circle)

**SLIDE 6**

The WHO has drawn up the “Global Technical Strategy” for Malaria which aims to reduce both the disease incidence and death rate by 90% by 2030.

The improvement in stats for Australia’s countries of focus however is due to the ongoing instigated programs, the outstanding work done by numerous research teams, substantial international funding and the crucial support and backing by RAM Australia over the last 26 years

**SLIDE 7**

An Australian initiative, RAM was started in the early 1990s from a proposal by Dr Brian Handley, a Rotarian who was concerned about the surge in malaria incidence after the discontinuation of DDT based malaria control programs in the 1970s.

RAM was launched in 1995 in Tulagi, Solomon Islands by the RC of Honiara and its Rotary District 9600.

RAM works very closely with the Governments in our focus countries and their Ministries of Health.

We work alongside such organisations as the World Health Organisation, the Bill and Melinda Gates Foundation and the Australian Army Research Institute.

**SLIDE 8 - BILL GATES Quote**

Bill Gates is very involved in ridding the world of malaria and this is one of his quotes.

Note that there were 1,035 deaths due to shark attacks **in the 100 years** from 1916 to 2016, compared with 1,470 deaths in one day in 2016, due to a mosquito bite

**SLIDE 9**

In Australia we have a number of research teams that are at the forefront of research into the development of an essential vaccine that will induce immunity

The Griffith University’s Institute of Glycomics in Queensland has successfully induced malaria immunity to the malaria parasite in animals and the vaccine that has been developed there is now at the stage of being used in human trials.

**SLIDE 10**

The first registered malaria vaccine – RTS,S or Mosquirix is being piloted in 3 African countries but is not commercially available . The RTS,S vaccine has only limited success Why?

* Need 4 doses administered, at 1 month, 2 months and 20 months and there’s a follow up between 38-48 months.

Other 3 points are on slide

**SLIDE 11**

These are the hoped-for outcomes. Points 2, 3 and 4 highlight the risks for pregnant women who contract malaria and the subsequent impact on their unborn children

**SLIDE 12**

An important goal of RAM

**SLIDE 13, 14 and 15 Challenges**

**12 and 13** Home is galvanised iron walls and there’s no screen between the top of the wall and the roof. These typical dwellings highlight the crucial importance of the treated nets and why the push is for the old nets to be used to cover walls, windows and doors.

**14** -Terrain, weather and isolation present large challenges. This highlights that many isolated communities are vulnerable to malaria resurgence if elimination campaigns are left incomplete

**SLIDE 16**

Treated bed nets and spraying remain the best methods of vector control. Ongoing surveillance ensuring rapid and accurate diagnosis is **essential** for prompt and effective treatment.

Also, education sessions that cover such topics as the correct installation, maintenance and use of nets and the importance of removing stagnant water from around households are a crucial part of a malaria elimination program

**SLIDE 17**

The first RAM sponsored PhD Scholarship was awarded to Edgar Pollard PhD from the Solomons who in 2020 completed a research doctorate degree in vector control at the James Cook University in Queensland.

In the near future RAM will start to plan to sponsor a second candidate.

**SLIDE 18 Partner countries talk to slide**

**West Timor**

The Indonesian provinces that share a border with TL have significant “hot spots’ for malaria incidence and potentially could be an obstacle to TL being granted malaria free status by 2021.

A team of 4, led by National RAM Manager Dr Jenny Kerrison, went to the border provinces in W Timor in Feb 2019 to do a community assessment to find out where and how RAM can actively provide support.

**SLIDE 19 Adopt-A-RAM-Project**

Being involved in 5 partner countries, RAM really needs to increase its funding capacity. Hence in 2019 the Adopt-A-RAM-Project was introduced to the 5 Rotary Regions in Australia and SR was chosen to support Vanuatu. A fundraising RAWCS account was set up and the money accrued was part of what turned out to be a successful Application for a Global Grant led by D9910 in NZ and submitted in June 2020. Why NZ? Vanuatu is part of Rotary D9910.

**SLIDE 20**

As Vanuatu continues to face huge challenges in its malaria elimination program the RAWCS Account remains open and any contribution made will help enable RAM to continue and extend this worthwhile project

**SLIDE 21 PNG**

RAM started active programs in PNG in 1997.

In Papua New Guinea, RAM funded and distributed 250,000 nets prior to the arrival of funding from the Global Fund in 2005. (The International Global Fund is the leading contributor in the global fight against AIDS, Tuberculosis and Malaria) and since then RAM has been involved in the distribution of a further 12 million nets as the Principal Recipient (distribution agent) for the Global Fund in PNG since 2009.

In 2009 and again in 2012 following submissions by PNG, the Global Fund approved **substantial** funding grants,

**SLIDE 22**

The “Chasing Malaria” Program works with the local health system, schools, rural communities and the general public to promote malaria prevention

**SLIDE 23**

Unfortunately, there has been a resurgence in PNG and some of the reasons are………..

(After the last point) – Clinics must be able to test all suspected malaria patients with Rapid Diagnostic Tests (RDTs)

It is also crucial that malaria monitoring and evaluation programs are maintained

**SLIDE 24** The Solomon Islands

Note how the graph portrays firstly what happened to statistics when DDT spraying was implemented from 1969-1975 when it was abolished and secondly when RAM was launched in 1996. Global funding was initiated 2007 – 2009 which is not clear on the graph.

Notice the trend up since 2015.

**SLIDE 25**

A few years ago RAM Australia, implemented a Basic Tools **Healthy Village Program.** Tools such as these were distributed and used to eradicate mosquito breeding sites. This program complemented the distribution of nets funded by the GF and the accompanying education sessions. To mid-2017, 160 villages had been supported under this basic-tools program at a cost to RAM in excess of $200,000.

**SLIDE 26 Timor Leste a success story**

2019 – in just 14 years the incidence of malaria has been reduced from 220 per thousand to 1 in 100,000

Emphasise the objective of being certified malaria free by 2021. (WHO Certification 3 years on)

**SLIDE 27 Reasons for Reduction**

**SLIDES 28 RAM’s Goals (Handouts**)

Point 4 – RAM Global is a Rotary Action Group that promotes understanding & acquaintance of Rotarians and Rotaractors **worldwide** with the larger world of individuals, groups, governments and institutions who share a common interest in malaria elimination

**END OF SLIDESHOW**

How can Rotarians help?

* more volunteer teams to undertake malaria intervention programs such as community assessments prior to Rotary Global Grant submissions
* increase awareness by
1. handing out brochures and Malaria Awareness Day (MAD)leaflets
2. buying RAM pins ($5.00 to purchase)
3. showcasing RAM resources,
4. buying PNG colouring books and pencils ($3.00 to purchase)
5. Informing our local communities eg during a MAD event/activity
* clubs considering making a donation to RAM