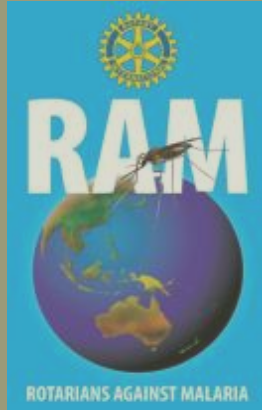


May 2010
Issue 12

RAM Newsletter



Chairman's Message

My Rotary friends and friends of Rotary,

The past few months has seen the successful completion of two very important activities, namely, Malaria Awareness Day and our Annual National Conference.

Malaria Awareness Day – 30 April: Our objective was to increase Public and Rotarian Awareness of this dreadful disease and to provide a positive influence with membership development in each of our clubs. Accordingly, we focused on two aspects that could produce the best outcome, TV and Radio.

WIN Television – the largest commercial network in Australia – extended the 30-second Community Service Announcement (CSA) to virtually all of their stations by adding South Australia both regional and Channel 9 in Adelaide, and their regional station in Western Australia to their coverage. Overall, we received the benefit of about 240 broadcasts.

Two CSA's were developed for the nearly 400 community radio stations in Australia, one for broadcast in March the other for broadcast in the week that included Malaria Awareness Day. There is no way of knowing how many stations responded to our request to broadcast. However, I am aware of positive feedback from a number of sources. It would seem that the most outstanding result was a network of nearly 80 stations covering Queensland, Northern Territory and South Australia.

We were fortunate that international company, Vestergaard Frandsen, provided sponsorship. They have since advised that they will again support us next year with an increased amount.

National Conference: One of the most important events is our annual conference held this year in mid-May, with attendees from most parts of Australia as well as Papua New Guinea and the Solomon Islands. The enthusiasm, involvement and commitment generated by each person provided us with renewed energy as we continue our fight against this dreadful disease.

Successes continue to be achieved with the mortality rate and morbidity rate in both countries indicating a significant reduction. It is interesting to note that Lihir Gold Ltd is working towards elimination of malaria on Lihir Island (PNG), while in the Solomon Islands a program is in place targeting the elimination of malaria in Temotu and Isabel Provinces.

A full Conference Proceedings Report has been posted to our web site www.ramaustralia.org. An abbreviated report is included in this newsletter.

This is my final newsletter. My 3-year term as Chairman is almost complete. It has been a wonderful experience which provided me the opportunity to become more highly involved with RAM. I believe the successes we have achieved are due in no small measure to the passionate support and commitment provided by numerous Rotarians throughout Australia and our near neighbours. This is very evident so regularly through the invaluable advice and assistance provided by each member of the executive team, some of whom have maintained their interest over a much longer period than me. My personal and sincere thanks are directed to each member of the team as well as to those people who have made themselves readily available when requested.

PDG Ian Sayers succeeds me with effect from 1 July 2010. I have had the pleasure of working closely with him over the past few years. I wish Ian every success as he leads RAM Australia to even greater achievements over the next three years.

PDG Bill Dethlefs
National Chairman

Rotarians Against Malaria (RAM) National Conference 2010

Summary

Held on May 15/16, 2010 at St Columban's Catholic Secondary College, Caboolture, Queensland.

Selected subjects discussed during the conference are summarised below. The full proceedings report is available at www.ramaustralia.org

Adopt A Village (AAV), PDG Richmond Manyweathers: This year to date AAV has raised over \$80,000. The new RAM brochure is now available and bundles have been distributed to districts represented at the conference.

Solomon Islands, PDG Wayne Morris: Funding for malaria programs comes from the Solomon Islands Government, the Global Fund and AusAID. 361,000 nets are being distributed and Rotary was requested to assist with net distribution, with responsibility of bed net supply being handled through the Global Fund. AAV is now focused on providing tools and training to allow the cleanup of villages to reduce mosquito breeding sites. ***The conclusion from the results to date is that elimination is possible, but the "when" is not known. It will require sustained government commitment and sustained support of partner groups.***

Papua New Guinea, Ron Seddon: It is important to note that although long life insecticide treated (LLIN) nets can, in theory, last 7 years, in practice assuming a 3-year life is more realistic. The widespread use of bed nets will dramatically reduce exposure to malaria. However, disease tolerance will be dramatically reduced also. Re-exposure to malaria infection after several years of protection will lead to epidemics and an abrupt increase in mortality. Therefore replacement of the Global Fund provided nets as they wear out is essential. To assist, RAM needs to raise funds now ready for bed net provision through AAV after 2014. It is therefore imperative that a significant portion of AAV funds go into savings for future net provision. AAV is a long term commitment and accumulating funds for future use is a key aspect of AAV.

Papua New Guinea, Leo Makita: Leo gave an informative PowerPoint presentation on the strategy employed in PNG to fight malaria. This includes the supply of long life insecticide treated bed nets, internal spraying of houses, spraying of village surrounds, diagnosis and education. Problems include an insufficient number of microscopes for diagnosis and technicians to man them.

Malaria elimination in Micronesia, Prof Dennis Shanks: Prof. Shanks is working on a program designed to eliminate malaria in Micronesia by dealing with it island by island. Isobel Island in the Solomon Islands has been chosen as a start point for elimination as it is perhaps one of the easier regions to test the process, hopefully quickly recognising any inherent problems in strategy and also being able to demonstrate success relatively quickly. Blood smear surveys of 9000 people (1 in 3) was completed with follow-up treatment of confirmed malaria cases. This work, in conjunction with bed net distribution, internal spraying and education, demonstrates that elimination of malaria from an island, although difficult, is an achievable objective. Long-term government and partner commitment will be fundamental for success, however, because if the guard is dropped, malaria will quickly re-establish through people migrations.

Timor Leste, PDG Phil Dempster: The Timor Leste Government was initially reluctant to allow RAM involvement in bed net distribution and other activities in their country. Recently the government has shown a change of heart and Rotary now looks forward to positive involvement in that country.

Conference Dinner: The keynote speaker was **Prof Ron Quinn**, Director of the Eskitis Institute for Cell & Molecular Therapies at Griffith University. He introduced *Nature Bank*, an initiative to collect a library of fractions derived from natural substances collected from plants and marine invertebrates in cooperation with the Australian Institute of Marine Science, many universities and the Queensland museum. He is in the process of preparing an application for a grant of A\$ 61 million to be spent over 10 years to continue the research and acquire more specimens for Nature Bank.

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RAM Chairman Elect PDG Ian Sayers: Ian has no intention of making any big changes and will continue with the initiatives in place. The Solomon Islands is having positive results with malaria reduction but PNG is less advanced and Ron Seddon could use assistance. Ian will also support a ramp up of RAM aid to Timor Leste. He will try and widen the support for RAM outside of Rotary by approaching industry. RAM could also sponsor PhD or post-doctorate research.

A growing Adopt A Village program is seen as a priority for long term malaria reduction and eradication.

Adopt A Village Program – Future Direction

The Future Direction statement released in February 2010 has been updated.

The updated statement is available from our web site www.ramaustralia.org

Malaria project wins Gates Foundation support

A unique drug-discovery project developing a cure for malaria has been awarded a prestigious grant from the Gates Foundation. The project, based on Griffith University's Eskitis Institute for cell and Molecular Therapies, has taken a leap forward by discovering a novel approach to finding compounds from nature.

Eskitis Institute Director Professor Ron Quinn said his team was delighted to receive \$100,000 in funding from the Gates Foundation's Grand Challenges Explorations Grant, which backs transformational ideas that could change the face of health in developing countries.

"The grant recognises our work in introducing an innovative way of screening compounds against the malaria parasite proteins, Professor Quinn said.

"This new screening test is a lot simpler and more effective in identifying compounds that can fight the malaria parasite and it enables screening of a wider range of proteins. There are enormous untapped resources in our environment – our aim is to use cutting-edge science and technology to uncover those and use them for the benefit of the global community."

The breakthrough project's ultimate goal is to locate the initial chemical lead that can then be developed into the next-generation drug. The malaria parasite, transmitted by mosquitoes, has the potential to develop resistance to most of the drugs in the market.

World Health Organisation figures estimate a child dies from malaria every 30 seconds, adding up to more than one million deaths each year. While most deaths occur in Africa, WHO predicts climate change may increase the geographic spread of the disease.

Although malaria predates written history, researches are still actively working to find new drugs that are affordable, effective, sustainable, safe for human consumption, and can be readily marketed to the developing countries where the disease is rampant.

Eskitis Institute has a unique biota collection of more than 45,000 samples of plants and marine invertebrates from tropical and temperate Australia, China and Papua New Guinea.

Source: The above article was written by Sabrina Rashid and included in Griffith News, October 2009. Authorisation for inclusion in this newsletter is by kind permission of Professor Ron Quinn, Director, Griffith University's Eskitis Institute for Cell and Molecular Therapies.

DID YOU KNOW

It would only take ONE DAY'S worth of Pentagon funding to provide protection against malaria for every man, woman, and child in Africa for five years.

Eradicating Malaria, One Island at a Time

By PP Lionel Edmond, Rotary Club of Old Montreal, Canada

In March, I was asked to go to the Solomon Islands and Vanuatu to monitor two 3-H projects concerned with the elimination of vector borne diseases of which malaria was paramount.

Before I discuss the projects in question, I would like to orient the readers with these two beautiful island chains, both of which were first inhabited by the Melanesian people for thousands of years, then by the Europeans in the 1800s.

The Solomon Islands lie east of Papua New Guinea and consist of nearly 1000 islands covering a land mass of 11,157sq. mi. The population is 523,000 and its per capita GDP is \$2,917. The capital is Honiara, located on Guadalcanal Island, which gained notoriety in WWII. It became a British protectorate in the 1890s. In 1978, it achieved independence, while remaining a constitutional monarchy.

The Republic of Vanuatu is of volcanic origin and lies 1,090 miles east of northern Australia and southeast of the Solomon Islands. It has a land mass of 4,706 sq. mi. and a population of 243,000. Its per capita GDP is \$2,442 and the capital is Port Vila. In 1906, it became a French-British condominium known as New Hebrides, subsequently becoming a Republic in 1980.

Both areas have experienced malaria infection as a result of vector borne conditions exacerbated by climatic conditions which are conducive to mosquitoes. The remoteness of many of the islands in the archipelagos and the mobility of the people to and from the capital cities make it difficult to control the transmission of infection. In both areas, malaria control activities are in a state of change. Various agencies have joined with the local health authorities to provide assistance in the eradication of the dreaded disease which affects a large portion of the populations.

Rotary, through its member Districts in Australia and New Zealand, in conjunction with its host Rotary Clubs in both affected countries, have in recent years contributed much time and monies in joint projects to address the health problems of these regions.

In 2002-2006, the Rotarians in District 9910, New Zealand, working with their counterpart Clubs in Port Vila and Santo, Vanuatu, embarked on an ambitious 3-H Project to address the vector borne disease problems in Vanuatu. They were joined by the Bill & Melinda Gates Foundation's Global Health Program with additional funding. During this period, significant milestones were achieved, including the introduction of lifetime (long lasting) impregnated bed nets, the creation of community health posts (50) on the islands of Santo and Malekula and the development of independency within the target communities whereby they assumed responsibility for their health and the maintenance of their environment. The project underwent a reorientation of its original scope, when it was asked by the local Ministry of Health to assume more responsibility in community health programs outside of its 50 communities. Thus it took a more proactive role in this overall health challenge. At the end of the project in 2006, substantial improvement was achieved in the reduction of infection in the targeted populations. Much remains, however, as the local government strives to expand its presence in the outlying islands.

In 2007, the District 9600 Rotarians in Australia, working with their counterpart Rotarians in the Rotary Club of Honiara, obtained approval for a 3-H Grant, entitled: "***Rotarians Against Malaria,***" which focused on malaria control in Honiara City, Solomon Islands. Under this program, the objectives were to reduce mortality and morbidity due to malaria through the strengthening of local and national capabilities in malaria control. They targeted a reduction of the incidence of malaria

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from 234 cases/1000/year experienced in 2004-05 to (at least) 80 cases by the year 2008-09. A strong component of the program was to raise national awareness of malaria control through educational and community awareness programs. In the latter stages of the project, the scope was expanded and the remaining funds were redirected towards community awareness programs. This was an important area that was not being provided by the other partners in the National Malaria Program. Rotary has experience in this vital area and was happy to provide the necessary funding and direction to successfully launch this initiative.

The writer's role as Auditor of the Solomon Island Project and the Post Project Monitor of the Vanuatu Project provided an interesting contrast of cultures and programs. Unfortunately, upon arrival in Brisbane, prior to departure for Honiara, two cyclones struck the areas surrounding the destinations. This provided undue flight delays and cancellations, which exacerbated scheduled meeting with management committee members from New Zealand and Australia in the host countries. But as any seasoned cadre person knows, you must accept the good with the bad, but ensure that you maintain your final report deadline!

Rotary is alive and active in that part of the world and continues to advance the causes of health and well being of mankind. ***Look forward to seeing you all in June in Montréal!***

MALARIA

Most countries in the world observe 25th April as WORLD MALARIA DAY.

(Editor's note: In Australia, 25 April is Anzac Day, so we observe Malaria Awareness Day on 30 April.)

WHAT IS MALARIA: It is a vector borne infectious disease caused by protozoan parasites. It is widespread in tropical and subtropical regions, including parts of America, Asia and Africa.

HOW DOES IT SPREAD: Malaria is caused by a parasite called Plasmodium, which is transmitted via the bite of an infected mosquito. In the human body, the parasites multiply in the liver, and then infect red blood cells. In not treated, malaria can quickly become deadly by disrupting the blood supply to vital organs.

INCIDENCE OF MALARIA:

- One child dies of Malaria every 30 seconds.
- More than 1 million people die of Malaria every year, mostly infants, young children and pregnant women.
- 71% of deaths are in under five year olds.
- About 40% of the world's population is at risk of malaria.
- In countries with intense transmission, malaria causes an average loss of 1.3% of annual income growth.
- More than 500 million people become severely ill with malaria every year.
- Malaria is one of the leading causes of death of children worldwide because they have not yet developed sufficient immunity.

THE SMALL MOSQUITO IS A BIG MONSTER

The mosquito can be a tiny creature, but it can spread deadly diseases like MALARIA, DENGU, CHIKUNGUNYA.

These mosquitoes breed in water collections, inside and around our homes.

WHAT ROTARIANS AND/OR ROTARY CLUBS CAN DO TO INCREASE AWARENESS:

- 1 Mosquitoes can breed in and near stagnant water in ponds or lakes, ditches, unused drums, air coolers, flower pots, water stored for animal's drinking, old bottles and buckets etc.,
- 2 Strengthen political commitment for malaria control.
- 3 Maximise access to prompt quality malaria diagnosis and appropriate treatment for malaria.
- 4 Improve vector control measures.
- 5 Improve knowledge, behaviour and participation of communities and individuals in the National Malaria Control Effort.

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PROVIDE MOSQUITO NETS:

One of the most sobering facts about malaria is that it can be prevented simply by sleeping under an insecticide treated mosquito net.

Most malaria cases in neo natal children occur because they are not provided with mosquito nets. Make mosquito nets available to children, particularly new born ones.

Plan a project to distribute mosquito nets in rural areas and urban slums, for use by the pregnant mothers and new born babies.

MALARIA IS PREVENTABLE & CURABLE:

However, it can be fatal if not treated promptly. It is commonly associated with poverty, but is also a cause of poverty and a major hindrance to economic development.

ACT NOW:

Start action on World Malaria Day, the 25th April.

The current Rotary year is coming to a close. But Rotary services do not stop. Action taken this year will be a guideline for the incoming leadership.

PDG SURESH KASLIWAL

RI Zone 4A & 4B (India) Coordinator, Health & Hunger Resource Group.

Source: The author has granted permission for the use of this article in this newsletter.

New Treatment to Reduce Deaths in Children with Malaria

Malaria is an insidious disease that infects humans. Caused by the bite of an unassuming carrier – the mosquito, the death toll is alarming. Malaria literally infects more than 500 million people per year and kills more than 1 million annually, mainly children under 5 years old.

Western Australian company **Eastland Medical Systems Ltd** announced today the positive results of the clinical trial of its product ArTiMist™. The sublingual spray (applied under the tongue) is a revolutionary patented technology that will make a significant difference in reducing deaths in young children.

Whilst traditional treatments can be effective against malaria in adults, young children are particularly susceptible to severe or complicated malaria and speed of delivery is critical to saving lives. It is a sad fact that many children die because of delays in getting to a hospital or medical clinic where help can be given. This is a daunting prospect for families with children given that complicated malaria can kill a child a child within 24 hours.

Eastland's recently completed clinical trials in Rwanda comparing ArTiMist™ with the current treatment, intravenous quinine, was targeted at children with severe malaria. The results showed that ArTiMist™ rapidly kills the malaria parasites and is safe and well tolerated in patients. The rapid absorption of ArTiMist™ corresponded well to parasitic reduction and the clinical response of patients.

Not only has the study achieved a similar success to intravenous infusion, which is expensive to administer, the spray application of ArTiMist™ under the tongue can be delivered by untrained personnel. As such, ArTiMist™ can provide a rapid and effective first line treatment against severe or complicated malaria in children where time is of the essence.

Further, ArTiMist™ is particularly valuable and effective in patients with advanced malaria where oral drugs are impractical due to vomiting and diarrhea or where the patient has become comatose.

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Scientist Calvin Ross, inventor of ArTiMist™ and director of Eastland Medical Systems stated “Accessibility to and early administration of this new treatment ArTiMist™ will be seen as a major advantage in reducing the majority of deaths from severe malaria in children.”

Mr. Dermot Patterson, Eastland's CEO, confirmed that as a consequence of the successful ArTiMist™ clinical trials UK consultants ProtoPharma Ltd will now be engaged to conduct an extended study to confirm the results in a larger group of patients. The extended clinical trials are expected to commence later this year.

Further information:

Dermot Patterson

CEO and Company Secretary

Eastland Medical Systems Ltd

www.eastlandmedical.com.au

OUR OBJECTIVE

“The prevention of mortality, and a reduction in morbidity and social and economic loss caused by malaria through a progressive improvement and strengthening of local and national capabilities in malaria control.”

Sponsorship

We acknowledge and sincerely thank **Vestergaard Frandsen** for their most generous financial support of Malaria Awareness Day 2010.

Vestergaard Frandsen philosophy includes the development of innovative products that prevent the transmission of waterborne and vector-borne diseases in developing countries. They are especially interested in addressing a class of diseases called the Neglected Tropical Diseases (NTD), which kill many of the most vulnerable people on earth.

Turning commitment into action, amongst the products they have developed is PermaNet – a Long Lasting Insecticide Treated Mosquito Net.

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Contributions and comments are welcome.