



**10 YEARS OF PROGRESS TOWARDS ELIMINATION: SUCCESS IN A  
CHANGING POLICY ENVIRONMENT**

**Fifth meeting of the  
Global Alliance to Eliminate Lymphatic Filariasis**

**Ngurdoto Lodge, Arusha, Tanzania  
1<sup>st</sup>-3<sup>rd</sup> April 2008**



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## **ACKNOWLEDGMENTS**

The Fifth Meeting of the Global Alliance to Eliminate Lymphatic Filariasis (GAELF) was opened by the President of the United Republic of Tanzania, His Excellency Jakaya Mrisho Kikwete

Financial support was provided by the Tanzanian Ministry of Health and Social Welfare, GlaxoSmithKline (GSK), Merck & Co. Inc. and the Mectizan® Donation Program.

The organization and efficient management of the meeting was possible only through the assistance, dedication and hard work of:

- The Hon. Minister of Health and Social Welfare, Professor David Mwakyusa
- The Executive Group of GAELF
- The Local Organizing Committee led by Dr. Mwele Malecela, Director of the National LF Elimination Programme and Chair of the Representative Group of GAELF
- The rapporteur
- The many volunteers
- Lymphatic Filariasis Support Centre, Liverpool School of Tropical Medicine – Professor David Molyneux, Mrs Joan Fahy and Miss Sara Holmes



## BACKGROUND

**More than 1 billion people are threatened by lymphatic filariasis (LF)**, a devastating parasitic infection spread by mosquitoes. LF, caused by thread-like parasitic worms that damage the human lymphatic system, is usually contracted in childhood, often earlier than 5 years of age. One of the world's most disabling diseases, LF afflicts the poorest of the poor. LF is currently endemic in over 80 countries, in the tropics and sub-tropics and affects over 120 million people, leaving more than 40 million incapacitated or disfigured with swollen limbs and/or breasts (lymphoedema) and genitals (hydrocele), or swollen limbs with dramatically thickened, hard, rough and fissured skin (elephantiasis). Because of frequent debilitation and the stigma it causes, LF prevents afflicted individuals from experiencing a normal working and social life, furthering the cycle of poverty.

**The Global Programme to Eliminate Lymphatic Filariasis (GPELF)** was established in 1998 under the leadership of the World Health Organization (WHO), following a landmark resolution by the 50<sup>th</sup> World Health Assembly **to eliminate LF as a public health problem by 2020**. In 1998, SmithKlineBeecham (now GlaxoSmithKline – GSK) and Merck & Co. Inc. each announced their commitment to donate drugs – albendazole and Mectizan® respectively for as long as necessary to eliminate LF as a public health problem.

**The Global Alliance to Eliminate Lymphatic Filariasis (GAELF)** is a public-private partnership created to assist the GPELF in advocacy, resource mobilization and programme implementation. Created in 2000, it brings together national Ministries of Health, the World Health Organization and other UN agencies, the two pharmaceutical companies and other companies within the private sector, international development agencies and foundations, non-governmental organizations, research and academic institutions and local communities. GlaxoSmithKline and Merck & Co. Inc., have pledged albendazole and Mectizan® respectively to achieve elimination – the largest drug donations in history, valued at more than US\$1 billion.



## OPENING STATEMENT

**His Excellency Jakaya Mrisho Kikwete**  
**President of the United Republic of Tanzania**

I feel honoured and privileged for the invitation to officiate at the opening of the Fifth Meeting of the Global Alliance to Eliminate Lymphatic Filariasis (GAELF). I would like to thank you for allowing Tanzania to host this important meeting. For those many of you who have travelled great distances to attend this conference, I say welcome to Tanzania, the land of Kilimanjaro, Serengeti and Zanzibar.

As Professor Mwakyusa said, I do hope that at the end of the conference you will find some time to see a bit of our country and experience what Tanzania has to offer in terms of historic and scenic sights as well as the flora and fauna. Tanzania has many game parks, some of which are only stone's throw away from here - the Arusha National Park, the Kilimanjaro National Park with the majestic Mount Kilimanjaro within its borders, Tarangire National Park, Lake Manyara National Park and the Ngorongoro Crater. For those who would like to venture further, I strongly recommend a visit the Serengeti National Park (the 8th new wonder of the world) renowned for the wildebeest migration. Fortunately, at this time of the year the unique wildlife spectacle is in the Serengeti. You can also go to the spice Island of Zanzibar, the ultimate paradise on the Indian Ocean.

I am very happy to note that this is the first time the meeting is being held in Sub-Saharan Africa. I thank GAELF for thinking about Africa and for choosing Tanzania. Africa deserves this kind of treatment. More than one-third of the people infected with lymphatic filariasis live in Africa and the social impact of the disease in our continent is immense.

As a person who comes from a country and an area that is endemic with lymphatic filariasis (LF), I know how saddening and debilitating the disease can be. Sadly, the physical disabilities caused by the disease are accompanied by social stigma and economic hardship. The cycle of poverty that is perpetuated by this disease is continuous and keeps people trapped with no chance of escape. The disability caused by this disease renders those afflicted unproductive and unable to contribute to the national and their individual economic progress.

Here in Africa, LF exerts a heavy social burden. Often times, this gets especially severe because of the specific attributes of the disease, particularly since chronic complications are often hidden and are considered shameful. As Dr. Mohd Belhocine said, for men, genital damage is a severe handicap leading to physical limitation and social stigmatization. For women, shame and ridicule are also associated with the disease. People affected by limb swelling are considered undesirable. Marriage which could be a complimentary source of security and pride is often a difficult matter for the affected. It is therefore important that we appreciate the efforts being undertaken by the Global Programme to eliminate this disease from our countries.

The progress that the Global Programme has made over the past 10 years is phenomenal. I am told that it is the most rapidly expanding programme in the history of Public Health. I understand that the first treatment in Sub-Saharan Africa was in Mafia Island of Tanzania in



2000 and that, since then, over 1 billion treatments have been given in 44 countries all over the world. This is commendable and I would like to congratulate you all on this mammoth success.

The past ten years has seen a rapid scale up in the distribution of the requisite drugs to the needy. It has also been a period in which we witnessed the reduction of both infection and disease in several countries. I understand that, at this meeting, Korea will be giving a statement on the elimination of the disease from their country. I have also been made aware that elimination efforts have also been successful in Egypt and, that in Zanzibar, Tanzania, the infection rate has dropped to such low levels that soon Zanzibar will be declared free of LF. What this tells us is that it is possible to eliminate the disease to a point where it is no longer a public health problem. This is backed by hard science and empirical evidence through practice. All we need to do is to ensure that these successes are maintained and replicated in other countries.

Whilst there is ample evidence of tremendous success being made, Africa, however, still lags behind in the fight against lymphatic filariasis. Only 11 countries in Africa have active LF programmes. I believe we can do more than that. And, there is no better place to make a bold pronouncement of our resolve to eradicate this disease in Africa than here today. Let us all rededicate our efforts towards that goal.

You may all recall that, in the year 2000 in Abuja, Africa rededicated itself to the fight against malaria and we have all, without doubt, seen the fruits of this renewed vigour. It is now time to redirect our efforts, with the same vigour, to fight against LF and other neglected diseases.

I applaud the leadership of Dr. Margaret Chan, the Director General of the World Health Organization, in raising the profile of neglected tropical diseases and placing a higher priority on them as causes of poverty and hence underdevelopment. We cannot afford perpetuation of diseases that keep our people chained in poverty. Therefore, the fight against these diseases should be considered pivotal to our concerted efforts to fight poverty.

There are many who say that all Africa needs is economic growth and that all these diseases will disappear. I would say yes and no because they complement each but more importantly economic growth is greatly hampered by a sick population. My view therefore, is while we pursue economic growth, as governments, we have to deliberately, and in a big way, invest in the health of our people.

I am happy that the global community has come to appreciate that longevity and wellness are key indicators of development. Diseases must be prevented if people are to fully participate in the economic life of their societies. If, we in Africa, are really serious about fighting poverty then the fight against diseases is a battle we must fight and win. This is an integral part of the war against poverty.

The progress since you last met in Fiji has been marked by the recognition of LF as a key part of the neglected disease agenda - an agenda, which advocates the use of integrated approaches through preventive chemotherapy. Indeed, because of its global distribution LF is a major platform of this new public health package which is so cheap and cost effective. There are encouraging signs of support from the developed world. As you know, US President George Bush announced a new commitment of \$350 million over five years to Neglected Tropical



Diseases on his recent trip to Africa. This is welcome and we hope to see more of such commitments from the developed nations.

LF is part of this package which is based on the elevation of these diseases higher on the Global Health agenda. We welcome this increased attention to LF and other neglected tropical diseases, and how they impact on poverty. These diseases can be eliminated through concerted efforts of African governments, donor nations and agencies as well as the pharmaceutical companies.

I would like to make special recognition of the pharmaceutical companies Merck and Co., Inc. and GSK for their generous support in the form of free issue of medicines: ivermectin and albendazole. They are exceptional. They have made it possible for this fight to record the success achieved so far. I am delighted to note that they are continuing to play such a vital role. While we thank so much, these two companies, let me make a humble reminder to governments and other responsible authorities in Africa about our responsibility to build on the generosity of the donations from the pharmaceutical sector.

I am very impressed that LF patients are a part of the programme for this meeting. It is very important to remember that they are the real reason that we are here. Let us listen to their stories with empathy and humility and keep in mind that our work is not done until this and other neglected diseases are eliminated. Let us work with LF patients, as they can be our greatest advocates in promoting the work that we do in our programmes. It is us more than anybody else who can demonstrate that efforts are worthwhile.

I would like to end my remarks by renewing my personal commitment and that of my government to the fight against LF. In this regard, I am glad to announce that I have decided to establish the President's Lymphatic Filariasis Fund to buttress the efforts in the fight against this preventable disease and have committed 50 million Tanzanian shillings as start-up funding. I thank other sponsors for contributing a further 17 million shillings a total current funding of 67 million shillings. Our target is about 500,000 million in the next few months as this will enable us treat the 15,000 hydrocele patients currently registered for surgery although we believe there are many more not registered. The fund will directly benefit LF patients in this country by supporting hydrocele surgery for those in need and will support those who have lymphoedema and elephantiasis.

I am hoping that these funds will go a long way towards giving support to these and other LF patients needing support. Let me personally thank Tanzania Ports Authority, National Social Security Fund, Tanzania Communication Regulatory Authority, and the New Africa Hotel for their contribution to the fund. I hope others will also come forward and contribute to this important cause.

I know you have a busy schedule ahead of you. Again, I thank you for having invited me here today. I wish you all the best in your deliberations. I now have the honour to declare the Fifth Meeting of Global Alliance to Eliminate Lymphatic Filariasis open.

God Bless Tanzania. God Bless Africa.





The theme of the meeting allowed reflection on the successes of the Global Programme, reflected on the role of the Alliance as a health partnership, reviewed the 'lessons learned' and provided a platform for the next decade in an environment where global health will remain high on the development agenda.



## THE SUCCESS OF 10 YEARS

Chair: The Honorable Professor David Mwakyusa, Minister of Health and Social Welfare in Tanzania.

### *The Global Programme Perspective* **Lorenzo Savioli**

Agenda item 20 of the 50<sup>th</sup> World Health Assembly held in May 1997 resolved to eliminate LF as a public health problem. Following this Resolution in 1998, GSK committed to provide albendazole for LF elimination while Merck and Co. Inc. extended its ongoing donation of ivermectin against onchocerciasis for the elimination of LF in Africa.

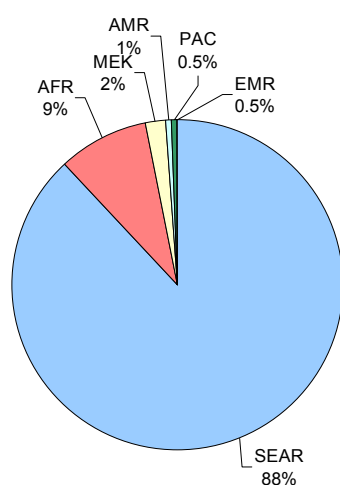
#### **The strategy**

The Global Programme strategy focuses on primary prevention carried out through mass drug administration to reduce the infection load, prevent new infections and recrudescence; and secondary prevention by preventing and managing disability due to lymphoedema and hydrocele through education of patients about the need to take responsibility for the care of their skin and maintain good hygiene.

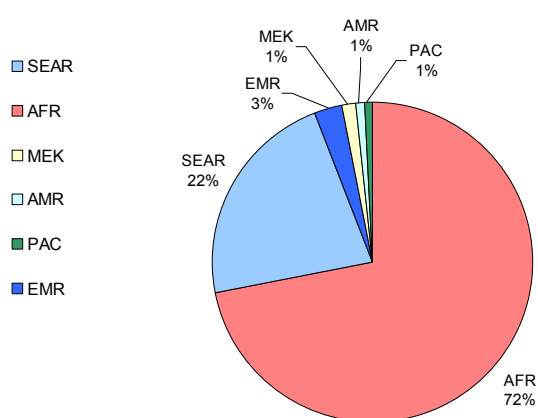
#### **Impressive successes with MDA**

Twenty-nine countries reported to be implementing at least some disability activities with 21,963 hydrocele surgeries reported to have been undertaken by 20 countries between 2004-2007 and 10,500-13,000 cases of lymphoedema management training reported from 8 countries within the same period. Mass drug administration had also upscaled. The number of people treated under MDA had been increasing gradually with a higher increase from 2005 onwards. The South East Asian region is leading by 88%, followed by the Africa region with 9%. But more concentration is required in these regions as they carry the major burden of disease, with

**People treated under MDA by 2007**



**At-risk population remaining to be covered by MDA**



highest burden (72%) in the Africa region.



The factors affecting MDA include committed ownership by Ministries of Health and programmes themselves and assured funding which helped in upscaling and sustenance. Countries that rely on year-to-year financial support had more likelihood of missing or delaying MDA, as in those with unstable political situations or in conflict. As Margaret Chan the Director General of WHO (2007) said: *"Countries must be the command centre, fully in charge of what is happening within their borders."*

MDA has had a significant impact on MF prevalence with a marked decline (as high as 60%) after three rounds of treatment. Successes have been registered in many countries have achieved elimination - China (May 2007) and the Republic of Korea (March 2008). There has also been an impact beyond LF including the contribution of LF MDA to de-worming. The trend now is to work towards integrating the control of other diseases, particularly at the community level with LF interventions.

### **Challenges**

The current priority technical challenges include how to phase out MDA for LF while ensuring continued treatment against other helminthiasis, how to carry out post MDA surveillance to prevent recrudescence, and identify alternative and affordable diagnostic tools for monitoring and evaluation.

Whilst considerable progress has been made there is no requirement for complacency. The focus in future will be to coordinate and integrate preventive chemotherapy interventions within national and district health plans.

### ***Achievements from the 1<sup>st</sup> Gates Foundation Grant*** ***Professor Bernhard Liese***

The Bill & Melinda Gates Foundation provided a US\$20m grant to strengthen the Global Alliance to Eliminate Lymphatic Filariasis (2002-2006). Partners supported included; WHO, Emory University, CDC, The Carter Center, Interchurch Medical Assistance (IMA), Liverpool School of Tropical Medicine, The World Bank. The main beneficiaries were eight country programmes.

### **Objectives of the Grant**

- To develop model programmes and
- Ensure national and global programme momentum.

Programmes considered included those that had the ability to create demonstration projects capable of effecting interruption of LF transmission; programmes with the potential for scaling up to full national programmes, implement measures to control and prevent disability, and those that were cost-effective with a high value added component. The assurance of programme momentum was done through mapping, strategy development, development of optimized mechanisms for programme coordination and partnership, and in-depth evaluation of model programmes. Examples included identification of positive trends (Dominican Republic, Ghana), scale up (Burkina Faso, Zanzibar, Tanzania Mainland) and impact assessment after 5 rounds of MDA (Egypt).



There was an impressive scale up during the project implementation period. Global LF treatments increased from 12 million to 350 million and in sub-Saharan Africa the increase was from 0-40 million. However, when funding ceased there were problems of sustainability, particularly in countries in Africa.

### **Low Unit Costs**

Unit costs of MDA programmes were extremely low and reached large populations. In Burkina Faso and Tanzania mainland, scaling up cut unit costs by 50%. Programmes reaching a relatively small population base do not benefit from economies of scale and tended to have higher unit costs. LF is a low cost intervention, with average annual treatment cost ranging from US\$0.06-22 per person covered large programmes. There is no evidence of any other public health programme having achieved comparable results within such a short timeframe and with such limited resources.

The achievements recorded through implementation of the Bill and Melinda Gates Grant have proved that annual MDA intervention is a powerful tool that has had a great impact in reducing LF prevalence in targeted areas and the potential for scaling-up/replicability has been clearly demonstrated.

### **The Challenge**

The main challenge in most countries, with the exception of Burkina Faso<sup>1</sup>, was how to secure national funding to sustain programmes. Regrettably, progress on the prevention of disabilities due to LF fell short of expectations in almost all countries. Most demonstration projects were incapable of demonstrating interruption of LF transmission, partly due to the limited resources, and the shortage of time (only 4 years initially), but also because some of the original project expectations were unrealistic. However, it has been established that an effective control programme which eliminates LF as a public health problem can be established within 2-3 years.

*DFID and the Bill and Melinda Gates Foundation were recognised for providing initial funds to launch a successful international public health endeavor and effectively operationalizing the generous donation of the pharmaceutical companies, thereby directly benefiting poor and marginalized populations.*

### ***The Gates Foundation Perspective***

***Dr. Julie Jacobson***

#### **Preventable and Treatable Causes of Diseases**

Millions of people in developing countries die from preventable and treatable causes. Most causes of death among children less than 5 years of age, particularly diarrhea, are preventable. There is need for more research to fight disease in the developing world as most new drugs treat disease rich countries and existing tools are impractical for developing countries. LF demonstrates that it is not only deaths that count in disease burden calculation. The situation with NTDs presents a unique situation that necessitates close cooperation with pharmaceutical companies.

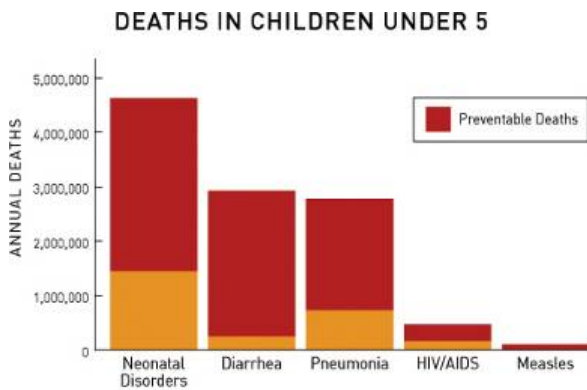
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<sup>1</sup> The government in Burkina Faso increased its funding towards LF from approximately US\$34,000 in 2004 to over US\$500,000 in 2006.



The Gates Foundation focuses on global health equity and uses an approach that facilitates the creation of a global health supply chain and increases access. There are grand challenges in global health and many obstacles to overcome. The Gates Foundation believes that science and technology can create better tools that can save lives. The Foundation rewards creativity and innovation and continues to support the creation of new solutions to continuing problems.

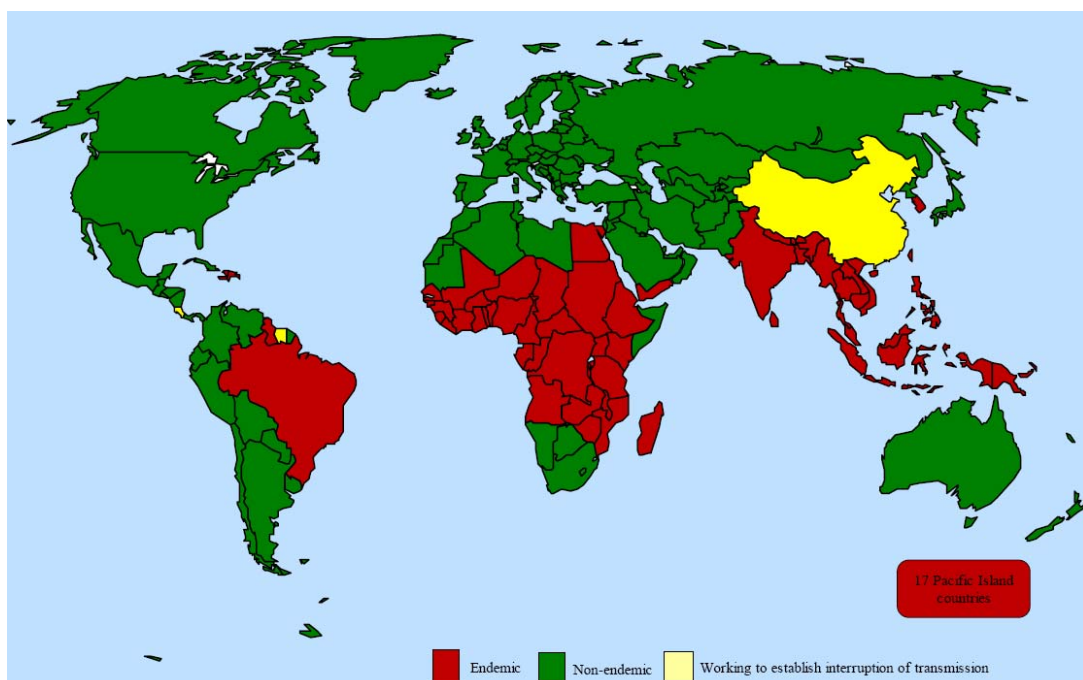
### Focus on populations most in need



The Foundation's global health mission is to help develop and deliver low-cost, lifesaving tools and strategies for people who need them most. This mission is hinged on the belief that all lives – no matter where they are lived – have equal value; and that when health improves, life improves by even measure. Driven by this premise, the Foundation focuses where little attention has been given, where it can spur new action and on the inequities between the rich and the poor. The greatest need is among populations that live on less than \$1 per day.

In implementing its perceived role, the Gates Foundation focuses on finding solutions for the biggest, most neglected health problems in developing countries, bringing together a diverse mix of public and private players and measuring and sharing results. The Foundation is still young and evolving in the work and challenges that it undertakes. Its main focus is developing the next generation of tools and driving the discovery of new solutions, including new strategies. It also focuses on finding solutions appropriate for use in the areas of greatest need. Increased investments are being made in discovery of new tools that have never been tried before, e.g. drugs and vaccines.

### Global Disease Burden: Lymphatic Filariasis





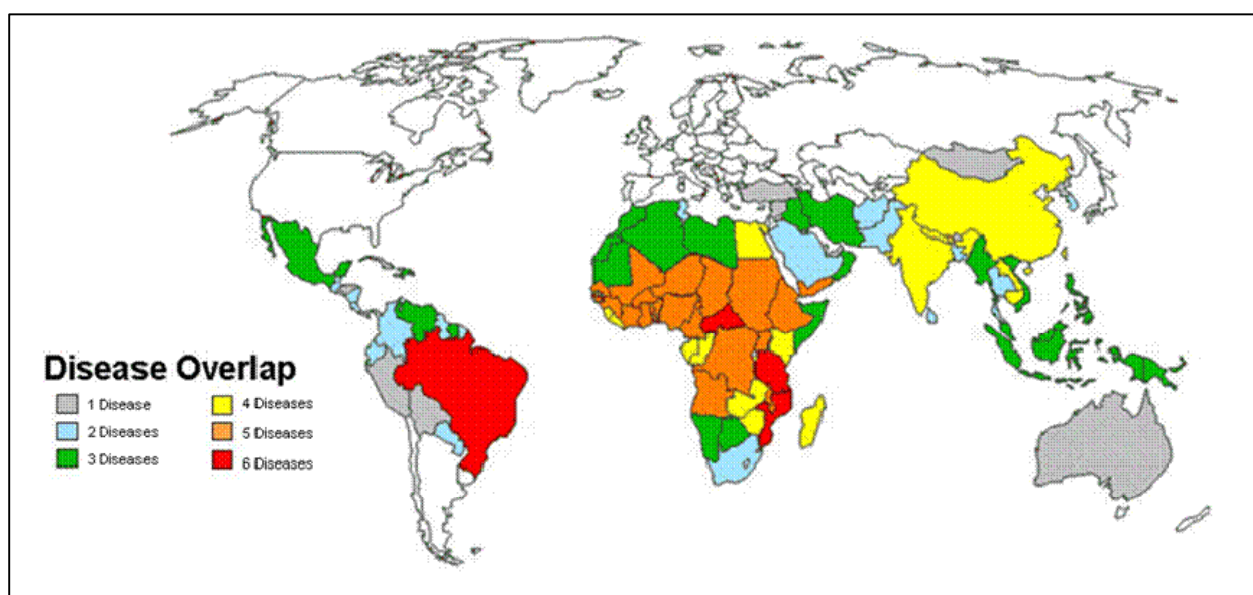
### Link between Disease and Poverty

There is a recurrent theme that links disease to poverty. The LF global disease burden confirms this link. The 80 LF endemic countries are in Asia, Africa, South America, & the Pacific, in which 38% of the at-risk population are children under 15. Almost one-third live in Africa (39 endemic countries) and more than one-third live in India - accelerating access to proven health interventions is a priority.

### Disease Overlap

Studies have shown that there is a disease co-endemicity and that a significant number of countries are affected by more than one NTD. Those ***most affected are the poorest***, often living in remote rural areas or urban slums. The ***diseases flourish best under conditions linked to poverty*** – unsafe water, poor sanitation, substandard housing, reservoirs for insects and other disease vectors; and ***100% of low income countries are affected simultaneously by more than 5 diseases***.

Countries affected by more than one NTD disease  
(source Molyneux et al. PLoS NTD, 2005)



### Integrated Delivery

The Gates Foundation is promoting an integrated delivery platform that is flexible and functional and is accessing some of the world's hardest to reach populations with interventions that help treat the various diseases. The greatest challenge is that the lower down one gets in the hierarchy, e.g. to village level, it is the same people who bring services to the people. This requires integration to create programmes with a proportionately greater impact.

There are additional synergies that can increase the impact of the portfolio of the tools being delivered. There is a need to evaluate cost-effectiveness and advocate the viability of the interventions.



With an integrated delivery platform, the opportunity now exists to see how this approach can be used to deliver other public health interventions amenable to outreach programmes. This will increase the impact of these programmes and create sustainability and demand for the platform as some of the NTDs are eradicated or eliminated.

### **Expansion through inclusion**

The Gates Foundation is seeking to include other diseases within an integrated platform and encourage other donors to become engaged. The Foundation is optimistic about elimination of LF and believes that integrated programmes can provide an important stimulus for further upscaling. There is also potential and interest in NTDs; partners need to be ready for action.

### ***The Global Alliance Perspective***

***Professor David Molyneux***

#### **Is the glass half full or half empty?**

As he shared the report of the Global Alliance Executive Group, the Executive Secretary, Professor Molyneux wondered whether the experiences during the reporting period should be viewed as a glass half full or half empty. He informed delegates that the Alliance has moved into a new environment as part of a brand that is increasingly becoming recognized on the global health agenda, which he described using caricatures of two aliens looking at the planet and seeing only 3 diseases – HIV, malaria and TB. He related this to global policy makers whom he said believe that only 3 diseases matter, and are blind to the opportunities that exist and the achievements that have been made elsewhere. He emphasised the need to have consistent messaging for advocacy, to ensure that LF elimination remains the focus and the main entity in operations.

#### **The people behind the success of the Alliance**

The Alliance owes its successes to key people and organizations including members of the Executive Group (EG) for their support to the Global Programme, particularly their commitment and hard work which was adjudged to accord LF a particular place on the global health radar screen. GSK and Merck & Co. Inc. donate the two drugs for LF and support the Secretariat and WHO providing support to the Alliance since its establishment.

#### **Building on existing strengths**

The progress made by the outgoing EG was built on the foundations of the first EG elected in Cairo in 2004. The EG developed a plan of action with flexibility to exploit opportunities. Actions were supported by strong scientific evidence and the EG used many opportunities for advocacy and in developing a range of contacts.

#### **The Halfway House Millennium Development Goals (MDGs)**

Health policy makers are approaching the halfway house of the MDGs in the area of health but were noted to be falling behind on targets. This provided an opportunity for reassessment and opened a door that the Alliance has been able to exploit. Since Fiji, the Alliance has seen the grant from USAID turned into reality, has exploited the entry point into the Izumi Foundation to enable treatment in Zanzibar, with a larger grant for Kenya, Madagascar and Tanzania mainland.



### **Key Milestones**

The Executive Secretary believed the Alliance should focus on advocacy and resource mobilization. It has realized a number of key milestones and successes. A series of grants from the Gates Foundation implemented in many African countries by a range of partners support studies on integration and address various issues related to LF.

There have been remarkable changes since the Fiji meeting:

- GAELF through the Secretariat has become a member for the Global Network for Neglected Tropical Disease Control (GNNTDC). A recent meeting in Washington DC provided entry points to two meetings of the Clinton Initiative;
- Through GNNTDC the Schistosomiasis Control Initiative has commenced integrated NTD control in Rwanda and Burundi;
- The announcement by President George Bush during his recent visit to Africa of a grant of US\$350m for neglected tropical diseases spread over 5 years all form part of a new global commitment to NTDs;
- The WHO Director General has incorporated tropical diseases in her recent speeches elevating NTDs on the priority agenda.

### **Inclusion of LF in other disease packages**

The link between onchocerciasis control programmes and LF has already been operationalized and the NGO community is increasingly embracing LF programmes. For example, CBM and Sightsavers International whilst traditionally involved in blindness control have included LF in their programmes. However, there is not yet enough focus on morbidity and the focus on MDA should not override the Alliance's obligation to those already afflicted.

### **LF as a key part of the NTD agenda**

WHO, through its convening power has been addressing the key need for a drug fund. LF is a key part of the NTD agenda. It is a common element in NTD control so that with time more countries will be providing evidence of the elimination of LF as a public health problem. The Global Programme has treated over 1 billion patients since 2000. The LF programme is arguably the most rapidly upscaling health programme targeting the key allies of impoverishment.

The Executive Secretary reiterated the question whether the Alliance sees the glass as half full or half empty and considered that the best measure would be to encourage country commitment from the Ministries of Health to the communities themselves to commit resources for LF and other tropical diseases. He noted that without such commitment any alliance would have no basis.

### **Hopeful predictions**

It is hoped that NTDs and LF will be included as priorities by the DG of WHO in the global health agenda. There are also promising signs following the White House statement about the US\$350 million. Having achieved recognition for NTDs, the Alliance must translate that priority into practice.

The LF programme has demonstrated its potential by reaching some 1 billion people with treatments to date - this happened through country commitment. However, challenges with regard to MDA remain. There is no uniformity of results which should not be expected as the impact of the programme will show regional variation. Strategies will become more complex





and local during the post control stage and there will be huge pressure to answer questions about when to stop MDA.

### Close collaboration a must

The Global Alliance and Programme are respected for their achievements. The governance and flexibility of the Global Alliance has enabled it to be unconstrained in its ability to take advantage of opportunity and in networking. It differs from the Global Programme as it represents the glue that binds the different interested parties. The Alliance acts for the good of the whole. However, just like a social animal it is totally dependent on the colony.

### *The Africa Regional Programme Perspectives*

**Dr. Charles Ravaonjanahary**

Thirty-nine out of 46 countries in the African region are LF endemic. The estimated at risk population is 390 million which accounts for approximately one-third of the global burden.

### Progress in PELF implementation

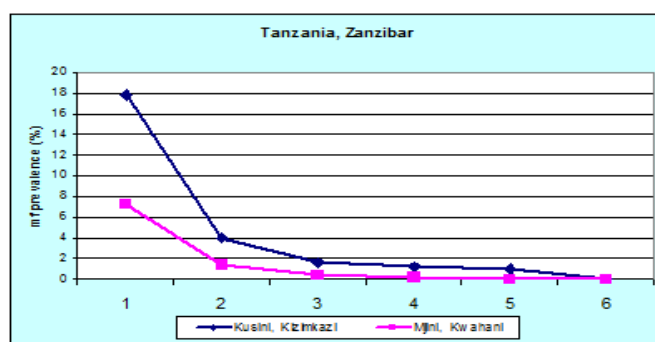
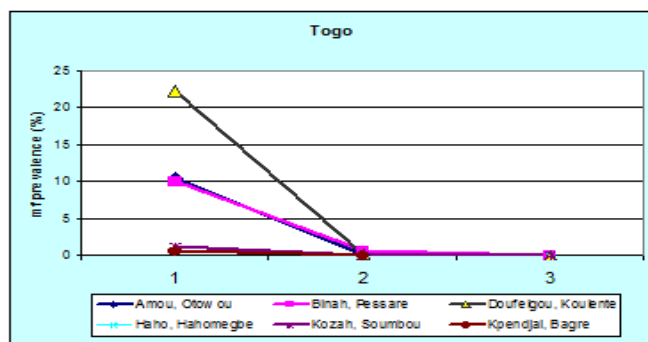
Impressive progress has been realized in PELF implementation. About 30 countries have completed or are in the process of mapping and only 4 countries remain to start. Fifteen countries are conducting MDA and the total number of treated patients in 2007 was 47.7 million. The cumulative number of treatments since 2000 is 160 million. Five countries (Comoros, Burkina Faso, Ghana, Tanzania and Togo) have MDA programmes covering the total at risk population and three of these (Comoros, Togo and Zanzibar) are reaching the endpoints.

### Steady Progression

Even though projected targets have not been achieved, there has been a steady upward increase over the 8 years since MDA was introduced, marked by a sharp increase from 2006 after more countries commenced MDA.

### Impact of MDA

This is clearly demonstrated by the case studies illustrated below which show mf prevalence reaching 0 within 2-6 rounds in some settings.





### **Implementation of PELF within integrated approach**

A total of 20 countries are at various stages of co-implementing NTD control programmes. Fifteen of these are either planning or implementing coordinated preventive chemotherapy for up to five NTDs and 6 countries are at preparatory stages including mapping.

### **Facilitating factors**

A number of factors have contributed to the success achieved. These include; government commitment for leadership and policy direction; strong health systems; strong and coordinated partnership; the use of CDTI for delivery of MDA as well as other disease control interventions that are available as opportunities for co-implementation.

### **Challenges**

Lack of an MDA strategy and resource constraints are among the major challenges facing LF programmes. Urban areas present a unique challenge due to high population movement and countries that are in conflict or post-conflict face a different set of challenges that negate the achievements that have been realized. In addition, there is a need for funds to sustain LF elimination efforts.

### **Highlights of discussion**

#### ***Integration, Yes! But how much of it?***

There was dynamic tension discussing the pros and cons of integration. Delegates suggested caution regarding diluting the focus from the LF elimination goal. The need to keep the LF elimination goal in mind was stressed given other tropical diseases are control programmes. Drug companies have tagged their donations to achieving elimination of LF by 2020 whilst the potential gains from integrating NTD control should not be missed.

#### ***Integrate operations not funding***

The NTD package as expressed in the WHO PCT strategy provides an advantage for resource mobilization but there is a need to find mechanisms to allow programmes to work together to support the NTD initiative while maintaining the focus on LF elimination. There should be integration of operations and not funding, and then advocate for more funding for wider and more holistic approaches. Each programme should maintain the specific focus of their individual programmes while finding ways to complement others particularly within health systems.

The meeting acknowledged that integration comes with challenges because of the differences across the regions and health systems. The consensus was that the Alliance should keep track by defining the type and scale of integration that would facilitate and complement LF elimination.

#### ***Integration vs. Co-Implementation***

The terms integration and co-implementation were clarified. Co-implementation is sharing such facilities/resources as operations, transport and personnel, while integration is at a higher level involving the Ministries of Health defining policies and ensuring that integration of NTDs is mainstreamed into the broader health system.



## NATIONAL STORIES WITH A FOCUS

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Chair: The Honorable Dr. Aisha Kigoda (MP), the Tanzanian Deputy Minister of Health and Social Welfare.

### ***Social mobilization to assist the MDA programme – Experience from Sri Lanka*** **Dr. Tilaka Liyanage**

Sri Lanka has a population of 19 million people out of which 10 million live in LF endemic areas. The vision of the Ministry of Health in Sri Lanka is to have a healthier nation that contributes to the economic, social, mental and spiritual development of the country; as such one of its objectives is to “empower communities to maintain and promote their health”.

#### **History of LF control and elimination activities**

Lymphatic filariasis control/elimination activities in the country can be traced back to the 4<sup>th</sup> century B.C. Between 1936 and 1939 the first all island survey was conducted which discovered an mf rate of between 20-24%. At the inauguration of an Anti Filariasis Campaign in 1947, the mf rate was brought down to between 5-6%. Since then it has remained static but at a lower rate of transmission. Since 1949 more cases of Bancroftian filariasis have been recorded.

In 1997, in line with the WHO resolution, the Ministry of Health changed its goal from LF control to LF elimination as a public health problem by 2010. In 2001 MDA was launched and piloted in one district with the DEC and albendazole combination. A year later the 1<sup>st</sup> round of MDA was administered to the entire LF endemic area and by 2005 the 5<sup>th</sup> round was administered. Actual drug coverage went up and reached targets of beyond 80%. The country has completed 5 successful rounds of MDA.

#### **Reasons for success**

The main reasons for the success of MDA included strong political support, commitment of health workers at levels (central, provincial and PHC levels), good health infrastructure, the presence of committed volunteers who worked as drug distributors and a continuous supply of good quality DEC by the Ministry of Health.

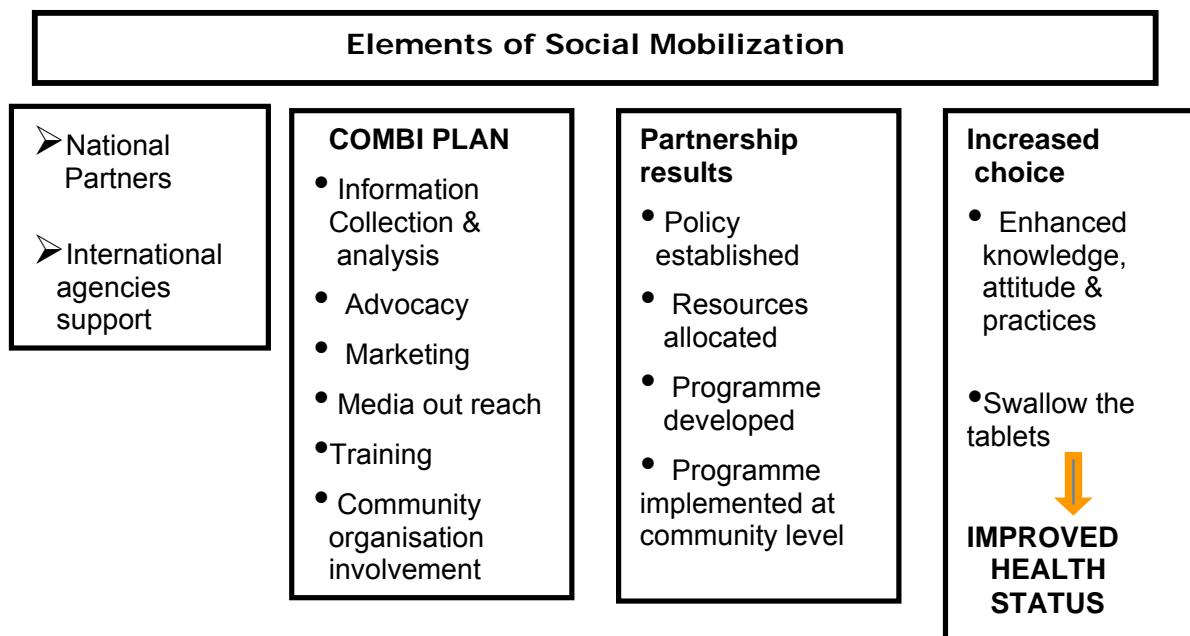
Moreover, the social mobilization campaign was well planned; the de-worming benefits of albendazole were clearly visible with minimal side effects of the two-drug regimen. The programme also received continuous support from the WHO, GSK and the Liverpool School of Tropical Medicine.

#### **Elements of social mobilization**

It was a broad-scale movement to engage people participation that involved all levels of society. The decentralization process was well planned; with embraced the critical principal of community involvement with vigorous advocacy, marketing, training and media outreach. The outcomes of the campaign included the establishment of a policy and a programme that was



implemented at community level. The impact included increased choice, enhanced knowledge, attitude and practices and a generally improved health status among the entire population.

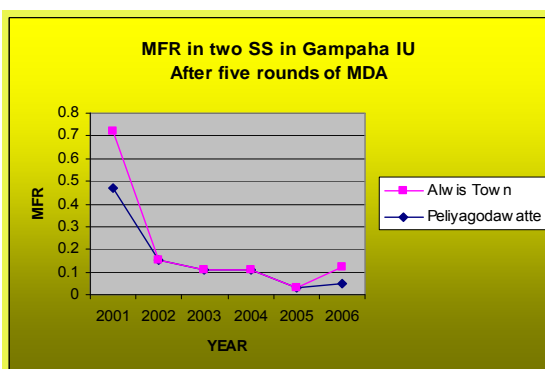
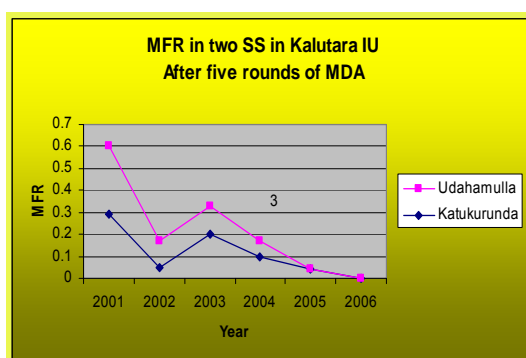


#### Focus on behaviour change

The challenge was to treat 10 million healthy people! The campaign engaged social groups (political, governmental and non-governmental including the Lion's Club) and community groups and families. The main focus was on behaviour change and because of the multi-level approach there was shared ownership for the success of the programme. The community groups and families were the backbone of the programme with between 45,000 – 50,000 unpaid volunteers distributing drugs. Continued support for social mobilization and the continuous supply of quality drugs made the key impact on the cost of the programme.

#### Main ingredients for a successful health programme

The illustrations below show an immediate decline of mf transmission within the first year of MDA and a continued steady decline thereafter.



*The success of any health programme requires genuine partnership with all stakeholders, shared ownership of the programme and the recognition of the stakes of all sectors.*



## Testing endpoints of transmission – Experience from Egypt

Dr. Reda Ramzy

### Overview

Approximately 60% of LF patients in Egypt reside in endemic areas of the Nile Delta and Giza. Egypt was among the first countries to embark on the WHO elimination strategy in 2000. The objective of the programme was to eliminate LF as a public health problem. An MDA programme with an expected coverage rate of 80% was carried out in 4 sentinel villages in endemic areas with mf or antigen prevalence rates of 1% and above. Women and children below the age of 2 years were excluded.

### LF Elimination Programme

#### How it was done

The first round of MDA was implemented in 2000 and the fifth round in 2005. MDA stopped after a minimum 5 rounds in villages that met the WHO criteria of having mf rates less than 1%, no ICT positive in LQA cluster surveys among 300 children aged 2-4 year, and no ICT positive in LQA cluster survey of 3000 children aged 6-8 year. Sentinel sites that did not meet the requirements for cessation were provided further MDA rounds with active surveillance. Research is also carried out to test provisional endpoints, which included mf of less than 0.5%, CFA and antibody of less than 2% and xenomonitoring to assess mosquito infection of less than 0.2%. The illustration below summarizes the process.



#### Reported MDA coverage rates

A total of 161 villages were covered in MDA round 1 and 1,667,000 people treated. The coverage rate was approximately 90% of eligible or total. MDA was stopped in 149 villages, 20 villages did not complete 5 rounds, and 12 villages failed the post MDA-5 evaluation. Some of the villages in the latter category received up to 8 rounds of MDA.

#### Impact of MDA

Multiple cross-section surveys were conducted in 2 sentinel sites and it was noted that MF prevalence rates fell sharply in both study areas. In Qalubya the rates declined to zero after 3 rounds and in Giza they decreased by approximately 90% after MDA-5. The CMFL declined to zero in Qalubya after MDA-3 and in Giza it decreased significantly by 72.5% and 91.4% after MDA-1 and MDA-5 respectively. The CFA prevalence rate decreased significantly by 75% in Giza and 77% in Qalubya after 5 MDA rounds. The most impressive results were observed in school children whereby antibody prevalence in grade 1 pupils fell to 0 after MDA-3 in Qalubya and in Giza they declined from 18.3% to 0.2% after 5 rounds of MDA.

**Post MDA active surveillance**

Nine village surveys were conducted in villages with the highest pre-MDA infection rates. Comprehensive monitoring was done in 44 MDA communities (22 per year, retested every 2 years). The test provisional endpoints were mf <0.5% and CFA, <2%. A total of 4,128 subjects were tested.

**Challenges**

The main challenges were the labour intensity of the process of collecting mosquitoes and the resulting low number of mosquitoes collected.

**Support to the National PELF**

The NPELF received financial support from the Arab Fund for Social and Economic Development through WHO/EMRO, benefited from the generous donation (free albendazole tablets) from GSK. The FRG at Ain Shams University received financial support through grants from NIH, GSK, and WHO/EMRO and Alexandria University group received financial support from WHO/EMRO.

**Conclusions and Recommendations**

MDA was stopped after 5 rounds in 92.5% of treated villages. However, a period of post-MDA surveillance (at least 5 years) is needed to confirm whether LF has been eliminated from these villages and to detect any early signs of resurgence of the infection. There is also a need for additional longitudinal studies to determine the fate of residual antigenemia in subjects who have cleared microfilaremia consequent to treatment.

Based on results of evaluation studies, WHO guidelines for stopping MDA, and post MDA surveillance data, the following conclusions can be made:

- 5 rounds of MDA with DEC/albendazole have a dramatic impact on various measures of filariasis endemicity and transmission.
- 5 rounds of MDA with high coverage rates can eliminate LF. However, additional data are needed to verify this hypothesis.
- MX and CFA testing are more sensitive monitoring tools than blood mf surveys. However, studies from other parts of the world are needed to confirm this finding.
- The higher the coverage obtained the greater the impact.



## **Primary Health Care integration with LF in the Dominican Republic**

**Dr. Manuel Gonzalez**

This presentation reported on the successful integration of LF activities into the primary health care system in the Dominican Republic providing an overview of its importance and how it was achieved.

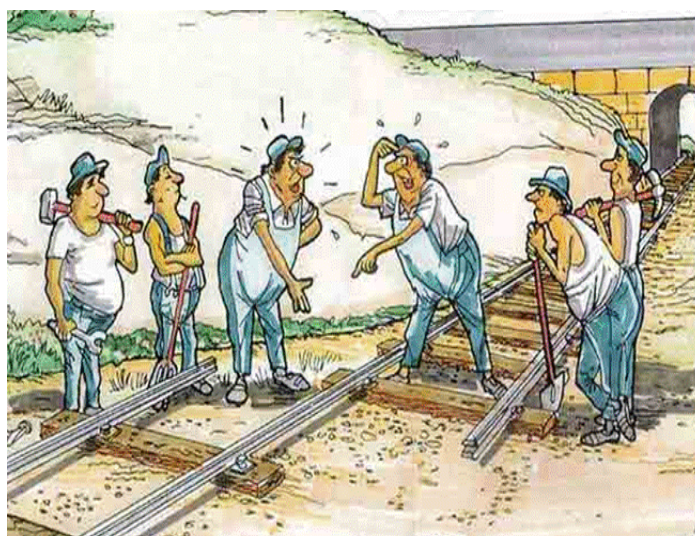
### **The context**

The Dominican Republic has a population of 9.4 million. It has 1,059 health facilities that represent the health care system comprising 141 hospitals (7 national reference hospitals, 9 regional hospitals, 25 provincial hospitals and 100 municipal); 55 urban clinics, 615 rural clinics, 89 medical dispensaries and 159 medical consulting units.

### **The main goal of integration**

The goal was to make the LF programme a recognized part of the health care system. The picture below summarizes the scenario envisaged. The process of integration was undertaken in five steps:

1. Recognition of the right to exist in order to facilitate acceptance of each other.
2. Knowing what each programme is doing so as to facilitate interest in each other.
3. Establishing mechanisms for collaboration based on the principle of reciprocity.
4. Fostering closer cooperation with regard to activities and resources in order to facilitate the formation of solidarity.
5. Establishing greater association to inspire confidence in and among each other.



*The LF programme has one foot in collaboration and the other in cooperation*

### **How it was done: Process and specific activities**

The mapping progress began in 2001 in 154 municipalities. Out of these, 84 (slightly less than 60%) were surveyed and two focus areas: South-West Region and La Ciénaga, Santo Domingo were identified from the survey results.

Interventions were initiated before mapping was completed to define the MDA implementation and management of morbidity. It commenced with a community-based model but the context changed as the country implemented a social security system in 4 regions. The model was based on a PHC system with community support. The territory was divided into 137 PHC units and handled by the UNAP team with responsibility for 500-600 families. MDA was implemented by the community. Initially provisional and regional departments were not involved.





The timeline below demonstrates the process of structural integration of the LF programme into the health care system in the SW Region.

- **2002:** (1<sup>st</sup> MDA). The primary health care system was not yet established and the LF programme worked directly with the community to deliver the drugs.
- **2003:** (2<sup>nd</sup> MDA) PHC system was established in the SW of the country. The PHC system consisted of a team of circa 1 doctor, 1 nurse, 4 community health workers and 1 community health worker supervisor, serving a population of 700 families. The PHC centres had a cure and prevention role, working in the community through house visits as much as in the clinic itself. Integration at this level required that the PHC staff formed part of the teams involved in drug distribution, together with community volunteers. PHC family health records were used to organise and record information during the MDA.
- **2004:** (3<sup>rd</sup> MDA) Start of the integration process with provincial health offices (equivalent of district). Prior to the 3rd MDA, a workshop was held with all levels of the health services in the region including: PHC, district, regional and hospital managers. At this half day workshop the LF programme was presented and a contract signed by managers agreeing to work together towards further integration of the LF programme into the general health care system.
- **2005:** (preparations for 4<sup>th</sup> MDA were made for March 2006)

#### **What has been achieved ?**

**At national level:** The Ministry of Health (SESPAS) agreed to fund future MDAs and to pay the LF team salaries. Prior to integration, the programme had been mainly funded through a grant from the Bill and Melinda Gates Foundation which had ended.

#### **At district level:**

- A two-day workshop held by the LF programme with regional health managers at which a plan of action for the transfer of functions at different levels was agreed including that the province level would train drug distributors, undertake supervision, monitoring and financial administration;
- A two-day training workshop held by the LF programme to train district managers in generic skills such as health education, planning, handling conflict and supervision;
- A one-day workshop held in each province to train district managers specifically about the LF programme and to plan the MDA together;
- A one-day workshop to train trainers selected from each province health office. These trainers will be responsible for training the drug distributors.

**At PHC level:** The decision was taken to hold the MDA over 2 weeks and not just a weekend. Each PHC was responsible for organising its own MDA, and the PHC community health workers distributed the drugs. Community volunteers were used where PHC staffing levels were low or where it was found necessary to strengthen the team. The freedom of managers to make decisions built their confidence and created a sense of ownership of the process and individual programmes.

*Workshops and training to aid the integration process were funded by the Liverpool and Atlanta LFSC.*





### **Impact of the LF integration on other MOH health programmes and activities**

The following are key areas of impact that the LF integration process has realized:

- The public's confidence in the Ministry of Health's responsiveness to public health problems has increased;
- There has been a reduction in the prevalence of intestinal parasites in the general population;
- A census database of the population has been created which has helped to facilitate better organization of other public health initiatives;
- The availability of proven expertise at the local level for combating other diseases has been enhanced;
- Integration has provided an opening for increased collaboration and cooperation between the Dominican Republic and Haiti;
- International involvement of the MOH within the Region and elsewhere has been strengthened.

*This process can be used for any initiative for the regional health system*

### **How far can integration go?**

It is not easy to know how far the country can go but from the successes realized, there is enough commitment to continue and many ideas on future possibilities. The country is ending MDA in the two main focus areas but needs to strengthen the PHC system in surveillance. There is also a need to scale up to other focus areas and replicate the model in these areas.

### **Challenges**

The main challenges were financing which also impacts on contracts of the LF team.

*Integration is an attitude and not a strategy. There is no blanket model. The modus operandi for integration needs to take into consideration individual country situations and experiences.*

### **Integrated NTD Programme upscaling in Nigeria**

**Dr. Patricia Ogbu-Pearce**

Nigeria has a population of about 140 million people and just as the country is large so are its health problems. The Ministry of Health under the leadership of the WHO is developing a framework within which a programme can put more than one disease together was developed.

### **NTDs prevalent in Nigeria**

The following NTDs are prevalent in Nigeria: onchocerciasis, lymphatic filariasis, soil transmitted helminthes, trachoma, leprosy, dracunculiasis, schistosomiasis, human African trypanosomiasis and Buruli ulcer.

To determine the magnitude of the problem a mapping exercise was carried out to ensure that diseases are tackled systematically. Mapping of the existing NTDs is at different stages. The

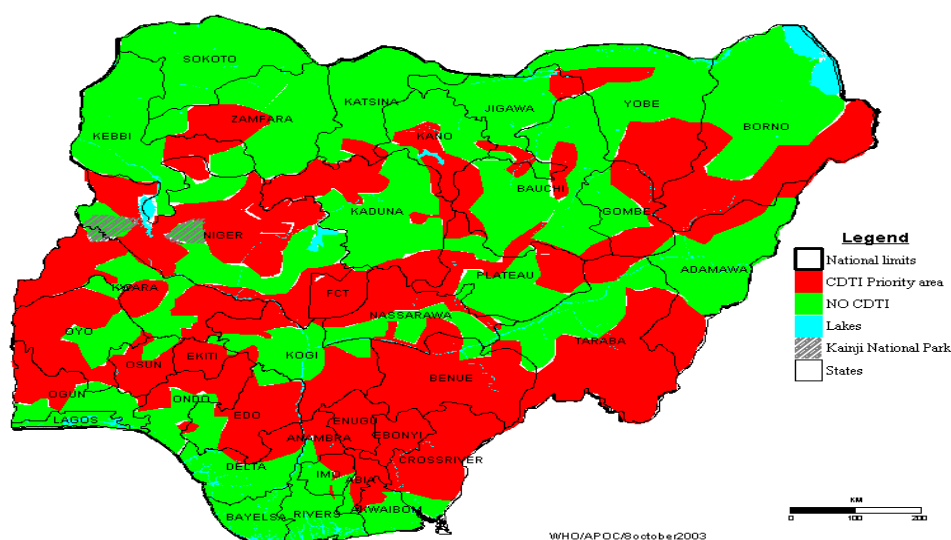


matrix below summarizes the status and coverage of the mapping exercise for each disease, subsequent initiatives already undertaken, and impact (if any).

Type of NTD	Mapping status and coverage
Onchocerciasis	32 states mapped states + FCT endemic; about 30 million persons targeted
LF	13 states mapped; 17 other states to be mapped in 2008
Soil Transmitted Helminthes	Not yet mapped, but research literature & data available suggests endemicity in 36 states using preliminary indications, 10 states interim mapping done.
Trachoma	10 states mapped for TT; none yet mapped for active Trachoma
Leprosy	Mostly mapped. Prevalence of 0.39/10,000 recorded in 2005. No. of new cases is 5,014. Four states have high prevalence rates of 1 /10,000
Dracunculiasis	Completely mapped. Disease transmission almost eliminated with the exception of 28 active cases in 3 states
Schistosomiasis	Interim mapping done for 10 States + FCT based on data from IDSR. There is a tentative agreement for an indicator for this disease to be included in the 2008 Nigerian National Demographic & Health Survey
Human African trypanosomiasis	Mapping not done yet
Buruli ulcer	Mapping not done yet

The feasibility of integrated mapping of NTDs is being explored. In 2 States integrated mapping of trachoma/schistosomiasis /LF has been done. Prioritisation of control/elimination be based on these studies, particularly opportunities for co-implementation.

**REMO Map of Nigeria**

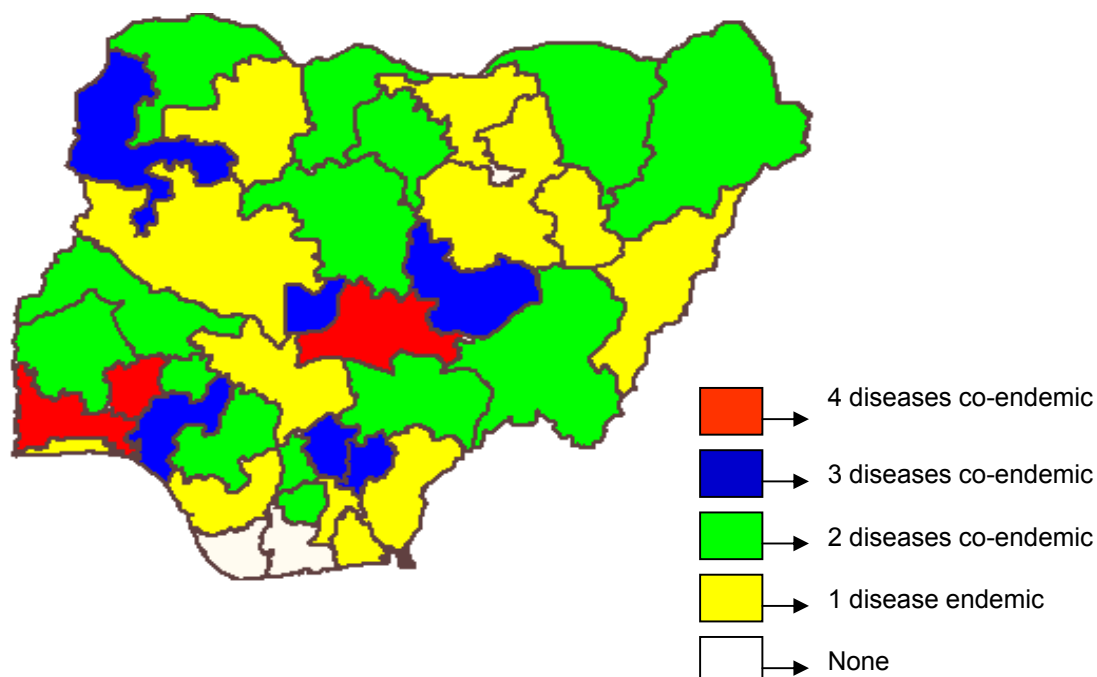




### Disease overlap

The distribution of NTDs in Nigeria shown in the following map illustrates the concentration of NTDs in the different states. The majority of states have one or two diseases that are co-endemic and are almost equally distributed across the states. A few states have a concentration of four NTDs.

**NTD endemicity in Nigeria as at June 2007**



### Intervention Measures

The bulleted list below shows the different interventions that are ongoing for the endemic NTDs:

- Onchocerciasis: Treatment by distributing Mectizan is being done in 32 states + FCT using the CDTI strategy;
- LF MDA is being conducted in 2 states, and a pilot distribution has started in 1 state. Treatment of soil transmitted helminthes in schools is currently being done sporadically and in an uncoordinated manner through the Ministry of Education. However, there is a need particularly with regard to sharing data for coordination between Ministries of Health and Education;
- For trachoma, the SAFE strategy (without the “A”) is being implemented in part or wholly in 10 states;
- Leprosy: MDT is done in all 36 states + FCT. Some 4,201 persons have been released out of 5,398 registered cases in 2007;
- Dracunculiasis: Active case search is being undertaken to ensure containment in 17 states; As at January 2008, 28 cases were reported in 3 states;



- Schistosomiasis: Mass treatment is being done in 3 states
- Human African Trypanosomiasis and Buruli Ulcer: Nothing is being done.

*The Federal Ministry of Health has set up an NTD group and formed a steering committee to guide and direct all activities.*

### **Achievements**

The main achievements realized so far include huge numbers of people treated under different NTD programmes, distribution of drugs for different diseases, and the creation of human resources for health (HRH).

- 18m people were treated with Mectizan in all target states;
- 3.4m people were covered for LF using MDA in 2 states ;
- Approximately 200k people were treated with praziquantel for schistosomiasis in 3 states;
- Huge work force of HRH has been developed and is ready to be used for integrated service delivery;
- CDDs are used for surveillance of Guinea worm cases in 32 states +FCT;
- Vitamin A capsules are being distributed in all states during National Immunization Days (NIDs) and through the CDTI structure in 10 states.

### **Upscaling**

The ground is ripe for upscaling of the available interventions. A national steering committee for NTDs has been established and has met several times already. Policy documents have been developed and are being used to develop necessary legislation. An integrated training manual is being developed and field tested. This is being done with support from the African Programme for Onchocerciasis Control (APOC). Donated drugs for trachoma, schistosomiasis and soil transmitted helminthes (STH) have been received from various organizations. MDA for LF elimination will commence and will be expanded to 3 southern states in 2008. Pilot MDA for Oncho, STH and schistosomiasis will soon commence in 2 states under a USAID initiative in 2008. Moreover, if mebendazole is procured in time, its distribution may commence in the 3 south western states in 2008 or 2009.

### **Constraints**

Public awareness of NTDs is very limited; there is inadequate political commitment at all levels and some NTDs do not have any external commitment for their management. There is a general and often unspoken fear of integration among implementers. Each disease still has a focal person even though there is a common head that coordinates activities to ensure efforts are integrated and the programme is moving together. The process of integration is moving at a slow pace due to misconceptions about it.



## ***National Financing and Upscaling in India***

***Dr. GPS Dhillon***

### **Overview of LF elimination activities**

MDA in India started as a pilot project in 1997 when it was launched as a national campaign. In 2006, a National Task Force was recommended and in 2007 MDA was expanded to 250 endemic districts. Albendazole with DEC is used in 2 districts and DEC alone in the rest of the districts.

The strategies being used are similar to those elaborated in other countries. Plans are underway to scale up in all 7 districts. Seventy million tablets from the Government of India budget have been procured and more districts will be covered if albendazole is made available. Coverage has increased over the years.

### **Achievements**

The main achievements are in the area of service delivery, drug distribution coverage and public awareness of the disease.

So far, service delivery is impressive with primary health care centres covering over 40,000 of the population. Each village has a volunteer; so far 500 villages have been covered. Capacity building of local staff has been done and the mf rate has started to decline. There has been a steady increase in drug distribution coverage. In 2004, some states were achieving lower coverage rates but now all the districts have achieved more than 60% coverage. The gap between coverage and compliance has been reduced significantly as actual drug intake has increased. Mf rates have declined as the negative influence of misconceptions has been removed and there is a general increase in public awareness of the disease. The resulting positive outcome of all this is that disability alleviation has increased as services are now being provided by health staff in the field.

Finally, the involvement of the district administration has increased and political commitment ensured at all levels. The President himself and Ministers of Health in each state are involved in the programme. The government is now providing assistance in both cash and kind. Direct programme support from the government coffers has increased multifold, while the WHO is providing capacity building support.

### **Challenges and how they have been handled**

The programme was facing a challenge with DEC procurement but now pre-dispatch and post-dispatch records are prepared, firms are being blacklisted and there is close scrutiny of changes in technical specifications on packaging. . There is a shortage of ICT cards.

### **Programme needs**

More social mobilization and awareness generation is required in the community for improved drug compliance. There is also a need to adopt home-based morbidity management and hydrocele operations that have proved to be successful elsewhere. The programme is also contemplating and has started making plans for behaviour change communication (BCC) campaigns in the form of student rallies, posters and vehicle branding.



## ***Mobilizing Political Will in the Philippines***

***Dr. Leda Hernandez***

### **Background**

Health sector reforms have helped to enhance what has been gained in the past decade. The health sector reform agenda of the Department of Health (DOH) provided the basis for the implementation of sector-wide strategies to enhance the gains by improving health care delivery, regulation, management and financing which in turn have improved the general health care status of Filipinos. The task at hand is to pioneer strategies, develop policies and carry out advocacy with a view to fulfil the goals set in the MDGs and the medium term Philippine development plan and the government's commitment to the same.

In 2005, a visionary quest, popularly known as the "Formula One for Health (F1) was developed to strengthen the health care system and use it as vehicle for social change. It was a new implementing arm to push health sector reforms and implement critical health interventions with speed, precision and effective coordination so as to achieve the 3 major goals in the health system; namely: better health outcomes, a more responsive health system; and more equitable health care financing.

A public health investment plan was also developed under F1 for the creation of 'disease-free zones' and to eliminate leprosy, schistosomiasis, LF, malaria and rabies. The government has increased its support for the elimination of LF, as evidenced in the budget lines. It started with a very low budget which made it difficult to scale up; but since 2005 the programme can now procure the DEC required to implement MDA in all the provinces.

### **Resource mobilization accomplishments**

Partnerships have been established with corporations including oil companies (Shell Petroleum Corporation; adopted 2 provinces; have a five-year commitment to the tune of US\$16k/year); mining companies (TVI Resource Development; adopted 7 contiguous municipalities; have a five-year commitment of US\$15k/year and succeeding years to be decided); insurance companies (Philam Insurance Corporation; provides general support for the promotion of LF to the tune of approximately US\$10k/year and Insural Life Assurance Company; adopted 1 province with a support of US\$5k/year and succeeding years to be negotiated); and a beauty and wellness company (Belo Medical Group) sponsored 10 hydrocelectomies costing a total of US\$2k).

Partnerships have also been established with NGOs. The Peace and Equity Foundation (PEF) known for grants/micro financing has now invested in health and included not only LF but also leprosy, schistosomiasis and other food and water borne diseases. A total of around \$150k is available under this arrangement. As a result of partnership with PEF NGO partners for social mobilization and funding availability, the programme has been able to attract 7 local partners who have adopted 9 provinces.

A resource mobilization momentum has been created and has resulted into firmer support from the DoH and WHO; evidenced by the leadership provided during different stages of partnership building and fund raising events. A special position for a full time fund raiser has been created within the DoH structure.



Also support has been mobilized from a range of other multi-stakeholders resulting in a Presidential Executive Order declaring November as LF elimination month. Through internal advocacy, LF is now recognized as one of the flagship programmes of the DoH under F1. The DoH Secretary and other officials from the Ministry now make regular appearances during LF elimination launches and key activities. WHO supports the programme by providing technical advice, resources, contacts and its presence/representation during important events and GAELF makes it easier for NGOs and corporations to begin partnerships and adopt LF elimination activities.

Fund raising activities have been conducted and the programme has been able to raise US\$20k from registrants and sponsorships during one fund raising event. The programme has also been able to tap into some of its corporate partners to help with the mobilization of more support from other stakeholders.

### **Lessons Learned**

A lot of creativity is required in building partnership. When momentum is created the next challenge is to sustain it. To this end, regular reporting to donors and accountability over funding is paramount. It is also crucial to iron-out implementation arrangements on the ground among NGOs and the DoH structure.

Partnerships take time to nurture and to bear fruit. There is a need to invest in their creation both in terms of time and human resources as some partnerships can yield continuous and lasting support. Multi-sectoral partnerships can create even more momentum and secure more intensive support from the DoH.

### **Note of appreciation**

The programme is still looking for other partners to fill in existing gaps. The presenter thanked the WHO headquarters, WPRO and pharmaceutical companies and GAELF for endorsing their proposal for partnership with other agencies. TAG members who have helped the country programmes in implementation were also recognised.

### ***Post-elimination scenarios for morbidity and NTD control in Zanzibar*** ***Mr. Khalfan Mohammed***

#### **Background**

Zanzibar is made up of two main islands: Pemba and Unguja and has a total population of 1,196,478, is part of the United Republic of Tanzania but has its own Ministry of Health.

#### **PELF main activities**

The whole population of Zanzibar is at risk. The main objective of the PELF is to interrupt transmission through MDA using an annual single dose of ivermectin and albendazole for 4-6 years directed towards the eligible population and to prevent and control disability caused by LF. Because of its size, it was regarded as one implementation unit for the LF programme. Six rounds of MDA were provided between 2001 and 2006.

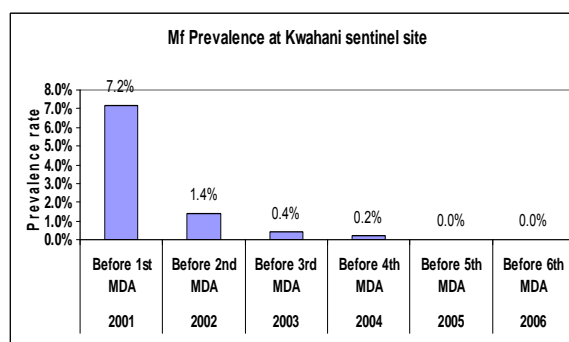
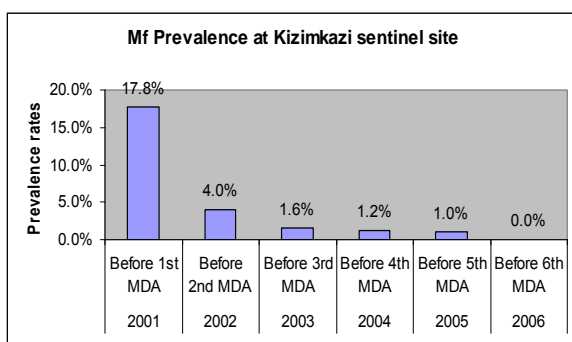


## Achievements

When the programme was launched in 2001, coverage of the eligible population was only 76%. The reasons for not reaching 100% coverage included political, religious interpretations and other general misconceptions about the disease. However, after a study to elucidate the reasons for not achieving a higher coverage the issues were tabled at a national body as part of advocacy efforts to influence decision making. This helped to gain political will, and together with reliable and generous drug donations and technical and financial support coverage increased remarkably. Other factors that contributed to the success of the MDA programme include the commitment of programme staff, a well-planned and implemented social mobilization component and community support, which was a result of successful education and behaviour change communication activities.

## Impact of MDA

To establish the impact of MDA, sentinel surveillance was conducted in 2 sites with initial high prevalence. In one rural site, prevalence before MDA was 17.8% and this declined after the 1<sup>st</sup> round to 4%. Another site, in an urban setting, had a prevalence of 7.2% before MDA which declined to 1.4% after the first round and before the 5<sup>th</sup> round prevalence was zero. Zanzibar is about to be declared free of LF transmission.



## Prevention and control of disability: How it was done

Drug distributors registered all individuals with LF and hydrocele. It was easier to identify people with lymphoedema but those with hydrocele were more difficult to identify and mostly relied on self-reporting. This has been the main challenge that has inhibited efforts in hydrocele surgery. The only workable approach was home based care in collaboration with health workers (HWs), health worker informants (HWIs), informal care givers (ICs) LF patients and members of their families.

WHO developed training modules on HBC for lymphoedema. This was followed by pilot training and assessment of health workers, ICs in the community and LF patients and their families in 10 districts. About 625 lymphoedema patients received HBC training and were followed up by ICs. There was a marked decrease in the frequency



*Home based care for lymphoedema*





of ADLs among most patients and remarkable improvement in their general condition. Entry lesions were prevented and healed, patients gained confidence, bad odour was eliminated and there was a significant reduction in limb size.

For hydrocele patients, 10 doctors (one from each district hospital) were selected to attend a 5-day workshop on hydrocelectomy. The workshop was conducted in collaboration with WHO and the main objective was to disseminate new techniques for hydrocele surgery. Immediately after the workshop each doctor operated on 1 patient. Thereafter, hydrocelectomy was conducted in 2 district hospitals before scaling up to other district hospitals.

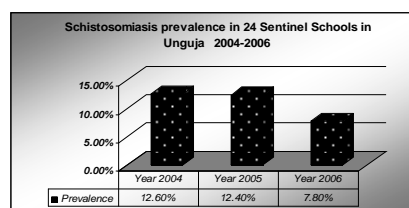
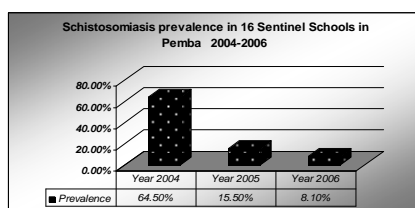
A total of 325 cases have been operated on, (135 in 2007). After the surgery, the patients' general condition improved dramatically. They became more confident and were able to go about their business or attend school. Despite stigma towards patients with hydrocele, morbidity control activities increased contact with communities.

### Integration of NTDs

Zanzibar has 3 main NTDs: lymphatic filariasis, urinary schistosomiasis and soil transmitted helminthiasis. Between 2001 and 2006, a 2-drug combination (IVR+ALB) was distributed to the Zanzibar community under the LF MDA programme. Between 2004 and 2005, under the SCI programme, a combination of PZQ+ALB was distributed to the Pemba community. The same drug combination was distributed as part of the School Programme in Unguja by SCI in collaboration with the Health Foundation.

In 2006 the Ministry of Health established an integrated programme involving the three NTDs which were integrated under the LF MDA. A triple drug therapy consisting of IVR+ALB+PZQ was distributed in areas with schistosomiasis and a double drug therapy of IVR+ALB in areas without schistosomiasis. The same personnel were used to distribute different drugs for different NTDs. When the integrated programme proved to be successful it was implemented in all districts.

The programme intervention to prevent schistosomiasis among school children involved teachers in the distribution of drugs. Drugs were taken on site to ensure compliance. A sentinel survey conducted in schools in Unguja and Pemba showed decreasing prevalence rates for schistosomiasis and STH over time. The graphs below show decreasing trends of schistosomiasis prevalence in Unguja from 12.6% to 7.8% and in Pemba from 64.5% to 8.1% over a period of 3 years from 2004-2006.





### **The way forward**

Programme integration will continue to improve after showing great benefits. Parasitological, entomological and clinical trends will continue to be monitored and evaluated for LF, Schistosomiasis and STH as well as MDA and other related activities where needed. The de-worming of school children will continue under the school health programme. Health promotion to ensure continued prevention and control of NTDs will be provided at all levels through the use of mass media (TV and radio), coupled with community education through the distribution of IEC posters and community meetings. In addition, LF morbidity control (lymphoedema management and hydrocelectomy) will continue in all district hospitals.

### **Challenges**

The main challenge facing the LF programme is the lack of financial resources for hydrocelectomy. Each case requires about 30,000 Tanzania Shillings. The Ministry of Health provides a fund but it is not sufficient. Resources are also needed to cover the cost of lymphoedema management and drugs, particularly praziquantel and albendazole/ mebendazole to sustain programme achievements.

### **Discussion**

The key points raised were:

- The evidence that elimination was achievable;
- Concern about the availability and quality of DEC;
- The importance of social mobilization;
- Reporting and recording adverse reactions;
- Sustainability of integration programmes.



## **GPELF IN THE CHANGING POLICY ENVIRONMENT**

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This session was chaired by Dr. Athula Kahandaliyanage, Director General Health Services, Ministry of Health, Sri Lanka. There were 7 panelists who shared experiences in coping with challenges as well as in identifying best practices and looking for ways and means to strengthen focus.

### ***Elimination of lymphatic filariasis in the EMRO region***

***Dr. Jaouad Mahjour***

#### **Distribution of LF infected persons and LF elimination activities**

The disease burden in the Eastern Mediterranean region is among the lowest globally. LF is mostly found in rural and semi-urban areas. National programmes have been established in Egypt, Sudan and Yemen; there are limited efforts in Oman and Saudi Arabia and the status of LF in Djibouti, Pakistan and Somalia is undetermined.

In Oman, 18 cases were reported during 1991; of which 11 were expatriates who had a history of living abroad in endemic countries. The Ministry of Health conducted an informant questionnaire in endemic areas from which there were 2 suspected endemic areas but no case was detected using the ICT card test.

#### **MDA process and current status as of 2007**

Egypt has achieved major success. A total of 29 villages received MDA, 16 had remained to be completed and others did not meet the criteria for stopping MDA. Average MDA coverage was 90%. In Sudan, 2 programmes for elimination of LF were established with the northern Sudan administrative unit. LF mapping is almost complete and data suggest that the northern state is endemic with 12 million people at risk. In the Yemen, the population at risk at sub-district level is approximately 120,000 people. The programme has completed 5 rounds of MDA, with an 85% coverage rate and is on the verge of elimination. MDA will continue in 2 IUs.

#### **Effectiveness of MDA Campaigns**

MDA rounds have had a substantial impact on mf rates. Given the high MDA coverage rates (reported/surveyed) in Egypt and Yemen, the baseline mf rate is the major factor in determining the number of required MDA rounds. Since most of the endemic areas in Egypt and Yemen have relatively low baseline mf prevalence rates (< 10%), 5 MDA rounds appear enough to eliminate LF from the majority of endemic IUs in these countries.

#### **Challenges**

- Coverage;
- Non-compliance;
- Sustaining Ministry of Health commitment;
- Post-MDA surveillance.



### **Regional challenges**

The target date to achieve LF elimination in the region is 2015. It is not clear whether the existing financial resources and political commitment are sufficient to reach that goal. In all countries issues regarding integration with other health programmes, capacity building and upgrading of infrastructure and the use of NGOs' community-based delivery mechanisms have to be addressed at the policy level.

### **Combating NTDs in EMRO countries**

The Regional Committee of EMRO in its 54th Session, October 2007, adopted a resolution calling for high priority and political commitment to the control /elimination of NTDs, as such the elimination of LF is combined with the global approach to face NTDs. In its October session, the Regional Committee acknowledged that effective and operational implementation of most NTDs can be implemented in resource poor cities. Schistosomiasis has been eliminated in several EMRO countries and reached low endemicity in others including Egypt. In March 2008 Yemen launched a national programme to eliminate schistosomiasis as a public health problem.

### ***The NTD Policy environment in the Africa Region***

***Dr. Likezo Mubila***

### **Policy direction by the WHO Director General, Dr. Margaret Chan**

Dr. Chan has identified important characteristics of NTDs that necessitate the need for action. NTDs are strongly associated with poverty and have a negative impact on economic development. They also contribute to the disease-poverty-disease vicious cycle and account for a high burden of disease as more than one billion people are affected worldwide. NTD control ensures equity in access to health care resulting in improvements in the general standards of living, which subsequently leads to development.

### **Facilitating and supporting environment for NTD control**

There is increasing commitment from political leaders and Ministries of Health in endemic countries to NTD control. However, this needs to be coupled with stronger health systems, well managed partnerships and the technical leadership of the WHO.

### **Response of the Regional Office**

The Regional Office for Africa provides the necessary policy environment and action leading to the reduction in the burden of neglected tropical diseases in member states. The region carries a high burden of NTDs. It has 390 million at risk LF cases in 39 countries (over one third of the global burden). It carries the major global burden of 197 million schistosomiasis cases in 36 countries of which about 30 million suffer permanent, life-threatening complications. Approximately 400 million people in 46 countries suffer from STH and 120 million are at risk of onchocerciasis in 30 endemic countries.

### **Action and Issues**

- WHO and Regional Resolution on NTDs;
- Competing needs for resources for other high burden diseases;
- Recognition of the need for strong health services for NTD control;
- Essential country ownership;
- Disease management a complementary activity with MDA.



Partnership and facilitation of co-implementation are other important guiding principles as they lead to cost-effectiveness and synergy in the outcomes of interventions.

### **The role of the Regional Office**

The Regional Office provides a forum that convenes all regional committees on NTDs. In its 57<sup>th</sup> session held in September 2007, this forum passed a resolution on onchocerciasis control including integration and co-implementation. The 58<sup>th</sup> session to be held in September 2008 has an agenda resolution to tackle NTDs in the region and it is hoped that this will be passed.

The Regional Office is also responsible for the provision of norms and standards, the development and dissemination of strategies, guidelines and tools; and the provision of technical support for capacity building and guiding various other aspects of implementation of programmes in the different member countries, as well as advocacy and partnership building.

Support provided to date:

- Support to develop national plans of action ;
- Capacity strengthening for integrated NTD control including the development of guidelines and tools;
- Development of training modules for national and district level capacity building to guide co-implementation;
- Capacity building support for the elaboration of implementation plans.

### **Current gaps**

- The securing of an external funding base particularly for LF elimination to complement programmes for a 5 year period;
- Securing funding for other complementary strategies to MDA e.g. environment-related issues and sanitation and water supply, so that the benefits of the drugs distributed are sustained;
- Limited capacity to support inter-country support teams of the Regional Office to the growing need and demand for technical support by member countries ;
- Requirement for drugs : schistosomiasis and STH programmes and DEC for LF in selected countries (non-onchocerciasis endemic) ;
- Coordination and partnership building with Ministries of Health.

### ***Health system approaches to NTD control***

***Dr. Ousmane Bangoura***

Approaches to NTD control have shown that health systems matter! They have also shown the merit of vertical programs and the need to strengthen the broader health system.

### **Successes in NTD control**

Impressive achievements have been realized in NTD control over the years. Filariasis has been eliminated in China and Korea; over 9 million cases of hydrocele and 5 million of lymphoedema have been prevented between 2000 and 2006; and over a billion treatments have been administered to more than 440 million people in 44 countries since 2000. Onchocerciasis has



been eliminated in 10 West African countries and treatment is now reaching over 50 million people a year. The elimination of onchocerciasis has also freed up to 25 million hectares of fertile lands for agriculture. Schistosomiasis has been controlled in China and Egypt and by the year 2009, the Guinea Worm would be the first parasitic disease ever eradicated!

### **Shortfalls, Challenges and Constraints**

Despite the impressive achievements, there are still a number of unmet needs. MDA is only reaching 17% of the population at risk. There is insufficient funding for scaling up and sustaining interventions and many projects are still heavily donor-driven.

At implementation level, communities are not empowered enough and there is a persistence of duplicated and uncoordinated management entities. There is also lack of collaboration among partners supporting individual NTD programmes.

The main challenges facing NTD control efforts include the need to expand coverage to reach all those in need and treat at-risk populations on a continuous basis and long enough to eliminate the disease as a public health problem. There is also a challenge in ensuring individual and community compliance with long-term chemotherapy. This calls for the immediate and urgent need to develop strategically designed behaviour change programmes and activities that will help to ensure the sustainability of control/elimination efforts.

There are also a number of constraints facing NTD control interventions. Between 1963 and 1990, more than 500 million people have been affected by conflict situations in their countries where more than half of the population live on less than US\$1 a day due to abject poverty. Other constraints are slow economic growth and weak health systems.

### **Special challenges in Africa**

Africa faces specific challenges with regard to governance, competing priorities and requirements and low expressed demand for preventive services. Donors heavily affect health sector investment in a situation where public health spending is less than US\$8 per capita and less than 10% of public expenditure. Institutional capacity is limited as it is represented by weak delivery infrastructure (access, availability and quality), lack of reliable and timely information that is not available, inadequately or not analyzed and not disseminated or used.

Donor aid for health has increased significantly during last year with the focus on Africa and on specific diseases. However, development aid falls short of what is needed and what has been promised. Aid is also fragmented, volatile, unpredictable and difficult to manage.

The Abuja target is that Heads of State should allocate 15% of the budget to health but most countries fall short of that target. Only 3 countries (Mozambique, DRC and Tanzania) have met the 15% recommended budget. Four countries (Burundi, Nigeria, Angola and Guinea) are allocating less than 5% of government revenues for health.

The issue of human resources in Africa is a problem in all sectors, particularly in the health sector. The African region has the least number of physicians per capita and the lowest ratio of population per physician. Tanzania for example, will meet only half of its human resources needed by 2015. In addition the shortage of human resources is not enough and there is also a high rate of migration and brain drain of key health personnel. For example, the percentage of



overseas trained nurses registered in the UK is increasing and this reduces the already scarce number of health personnel available in the continent.

### **The key to reaching the MDGs**

Improved health systems hold the key to reaching the MDGs for health. There is growing international consensus that urgent improvements of the performance of health are necessary if African countries are to meet the MDGs, particularly in the management of multiple objectives and competing demands, harnessing the energies of communities and NGOs and the private sector and increasing funding for health. At the same time, there is need to ensure that institutional assets at each level, including staff and resources, are used most effectively. The region also needs to find ways to cope with the changing environment and to ensure that the poor exercise their right for health and will benefit from the reforms that have been initiated.

There is a renewed focus on Primary Health Care through the development of frameworks for action for strengthening health systems for better outcomes by WHO, the World Bank, GAVI, the Global Fund for AIDs, TB and Malaria and new initiatives on health systems strengthening including those by the International Health Partnership and Harmonization for Health in Africa. There is also a paradigm shift in that the focus is now on rapid and sustained results and systems approach. There is also a shift from disease specific to integrated approaches and the focus is on populations and interventions rather than on specific diseases. All these aim at expanding the envelope and maximizing opportunities for harmonization and synergies.

### **Health system approaches to NTD control**

Integration has several meanings. In some instances it means co-investment in NTD interventions and in relevant components of the health system and in others it means co-implementation/co-delivery and integrated delivery of multiple health interventions. At the same time, the role of verticalization cannot be overlooked even as countries push for integration. The main goal of integration is to provide “quick” wins and enduring results that contribute to poverty alleviation and the achievement of the health-related Millennium Development Goals. The table below summarizes the five main health system approaches to NTD control and the corresponding objective of each approach.

<b>Health system approaches</b>	<b>Objectives</b>
1. Strengthening the performance of the health system	To build /enhance health system capacity to support effective NTD control - has spillover effects
2. Mainstreaming NTD control into the health system	To ensure that NTD control receives adequate support from the overall funding stream and to set in place the routines that will guarantee the continuation of the programmes when external funding dries up.
3. Co-implementation of NTDs with other health interventions	To improve availability and access to quality health services for the poorest and enhance sustainability of NTD control.
4. Securing long-term financial commitments from all partners	To ensure adequate and sustainable funding.
5. Devolution of NTD control programs	To transfer funding, operational and administrative responsibility of NTD control to participating countries when the burden of the diseases has been reduced to locally manageable levels.



### **Approaches to NTD control and related strategies**

The following approaches, either individually, or in combination, are being used by different programmes for NTD control:

- Advocacy, social mobilization and communications
- Public-Private Partnerships (division of labour based on comparative advantages of each partner)
- Donor coordination, harmonization and alignment
- Resource transfers
- Knowledge transfers and policy advice
- Analysis, monitoring and evaluation
- Research and development to support advocacy by using evidence-based information

### **Ingredients for strengthened health system performance**

The main ingredients for strengthened health system performance include improved governance, capacity building and resource mobilization, strengthening of delivery infrastructure and improved information systems. Improved governance helps to increase political awareness and country leadership and enhance public-private partnerships at all levels all the way from community level to global level. Capacity building helps to improve planning and budgeting and support of the management systems, while resource mobilization helps to ensure adequate human, financial and physical resources required for the delivery of services by trained health care workers and community volunteers, reliable and continuous drug supply and logistics management.

Strengthened delivery infrastructure is useful for the mapping of prevalent infections, development of disease control strategies, tools, MDA and the delivery of other health interventions. An improved information system on the other hand ensures the more effective monitoring and evaluation systems, surveillance and reporting, and impact evaluation.

### **Mainstreaming NTDs in the health system**

The first requirement for successful mainstreaming of NTDs in the health system is to increase awareness of the NTDs themselves at all levels. This will help to facilitate and advocate for an increase in political commitment.

NTD control should then be incorporated into the macroeconomic context, into donor country assistance strategies, and into governments' national and health sector policies (SWAp; PRSPs); and thereafter into national and district planning and budgets, drug delivery networks, supervision and monitoring systems,

Lastly, there is a need to increase the availability and incentives of health workers in health districts and front line health facilities, and for community volunteers.

### **Co-implementation of NTD with other health interventions**

Political commitment and country leadership are important in co-implementation as country ownership is the key for sustainability. Countries should then be supported to define national policies on integration and to develop packages of interventions and improve synergies among partnerships. Once that is done there is a need to provide targeted assistance for capacity





building, ensure adequate post-implementation monitoring and facilitate knowledge sharing among countries on best practices.

However, there is a need to secure adequate and long-term funding which requires donor coordination both at national and global level accompanied by comprehensive budgeting among major donors. Financing sustainability plans need to be developed and domestic public financing increased. There is also a need to dialogue with Ministries responsible for finance, planning, decentralization and civil service and to build working relationships with relevant regional organizations.

### **The way forward**

The following actions are recommended as a way of dealing with the challenges mentioned above to achieve better and more effective NTD control:

#### *Governance*

- Support national policy reviews, planning and budgeting and M&E;
- Assist in dealing with institutional and organizational issues;
- Establish an NTD Global Steering Committee.

#### *Institutional Capacity building*

- Support district-level and FLHF-level NTD planning and implementation, financial management, staffing and monitoring;
- Enhance capacity by contracting out key NTD services to private sector and NGOs.

#### *Service delivery*

- Identify opportunities for co-delivery with ongoing interventions (CDTI, vaccination campaigns, school health...);
- Deal with demand issues.

#### *Drugs, Medical Products, and Technologies*

- Strengthen the procurement and efficient management of essential medicines and medical supplies;
- Advocate for research to develop new drugs, new tools (advanced market commitment?).

#### *Workforce development*

- Produce research and analytical papers specific to HRH for effective NTD control (incentives, skill mix, distribution, etc.)
- Increase number and quality of staff with adequate competencies at national and district level
- Increase number and skills of committed managerial staff
- Higher retention of critical staff through enabling work environment (improved compensation; increased autonomy in decision-making; workplace improvements)
- Investment in training institutions (medical, nursing, lab, outreach)

#### *Financing*

- Joint financing;
- Inclusion in the Global Fund and new innovative financing mechanisms;
- Leveraging of domestic resources

#### *Monitoring and Evaluation*

- Having information systems that address all the key diseases
- Integrating surveillance systems, including laboratories
- Monitor and demonstration:
  - NTD impact and outcomes (clinical, equity, economic, financial)



- Coverage of key NTD interventions
- Effectiveness of co-delivery of NTD /Malaria/Nutrition

***Community Directed Treatment with ivermectin for co-Implementation***  
***Dr. Uche Amazigo***

**History of co-implementation**

In 1987 there was an unprecedented donation of ivermectin by Merck & Co. Inc. and between 1988 and 1995 the Ministry of Health in Nigeria distributed ivermectin using mobile and community-based treatment. This period coincided with the launching of APOC. Between 1995 and 1997 a joint research study that involved TDR/OCP/APOC/NGDOs was carried out with the objective of searching for a strategy to bring ivermectin to millions of people beyond the reach of health services. Evidence from research confirmed that communities can plan and manage ivermectin distribution with higher coverage than health systems. In 1998/99 the first concept paper for the elimination of LF was produced. APOC adopts Community Directed Treatment of Ivermectin (CDTI) as the principal control strategy. It is APOC's trademark and brand.

Under the Oncho programme, communities:

- ✓ Collect Mectizan® from the nearest health facility;
- ✓ Decide where and when to distribute Mectizan® and report back to Health Services;
- ✓ Collectively select distributors (CDDs).

**The power of CDTI**

Five years after its establishment, it was concluded that CDTI has been a timely and innovative strategy that has allowed communities to be deeply involved in their own health care on a massive scale. It was also concluded that CDTI is a strategy that could be used as a model in developing other community based programmes as well as a potential entry point in the fight against other diseases.

**Scaling up for different interventions**

APOC's community development network offers a key entry point for many health interventions including LF treatment, vitamin A distribution, schistosomiasis treatment, Guinea worm intervention, immunization (polio, measles and others), eye care (cataract identification, primary eye care), malaria bed net distribution, HIV/AIDS and reproductive health, in the most remote and rural communities. It reaches the poorest of the poor in areas where national health services are weak or non-existent. To date there are more than 200,000 community treatment registers in 16 countries in Africa for this programme, that are being used by other programmes.

**Integration, co-implementation and Community Directed Intervention (CDI)**

The terms integration, co-implementation and CDI can cause confusion and/or are used interchangeably. To distinguish these different terms and strategies by providing the following definitions can be offered: Integration is used when referring to the inclusion of CDTI activities in the broader health system with strong community involvement. Co-implementation is

It has been proved that CDTI works in the the world's most impoverished region, where there are no roads, no doctor and no drugs; where the incomes are lowest and health information is scarce. It brings services where there is greatest need and medicines to those most in need. It is therefore a good vehicle for community-based programmes.



a strategy that brings two or more community distribution initiatives together to increase efficiency and avoid fragmentation. Community-Directed Intervention is a health intervention that is undertaken at the community level under the direction of the community itself. It entails participatory approaches between health services and other partners in the introduction of possible interventions highlighting community ownership from the onset.

### **Shift from traditional health interventions**

The power of using community-based approaches can best be explained by observing outcomes of the different interventions. When combined with co-implementation, CDTI and CDI can surpass the roll back malaria target and if these approaches are combined with co-implementation higher coverage can be achieved. CDTI for co-implementation empowers communities, ensures that local cultures are respected and can reach minority groups. It also helps to strengthen health systems as both parties learn from one another and respect each others' comparative advantages.

### ***Challenges of integration***

***Dr. Adrian Hopkins***

#### ***“It’s about perspectives”***

The patient’s perspective is an appropriate starting point in determining how, and what, to integrate. *Diseases are already well integrated in the patient.* The patient is not interested in individual diseases – s/he is simply interested in getting better. To realize the impact of chronic diseases one has to get it down to the individual level. Poor people spend more on health care than their rich counterparts. Multiple infections with parasitic diseases gradually squeeze out energy, and reduce a person’s immunity. This reduces the person’s ability to work and results in loss of income. It is only when you treat people with multiple diseases that you realize the impact that it has. Similarly, to have an impact on NTDs the community should focus on “Neglected Tropical Countries” where research has been done on systems and there is limited need to do more. The priority must be to get drugs to the people.

#### **What lens are you wearing?**

Just as one’s vision depends on the lens one is using, one’s vision on integration depends on the lens one is using to integrate. Integration is not about giving out 3 tablets instead of one or setting up a rapid delivery system that can exist as a parallel structure with government health services.

Integration is ownership of, and full participation by, the existing health service structure. Primary Health Care structures implement various programmes in the most efficient way.

Co-implementation or co-administration on the other hand is delivering more than one health intervention at any one time. APOC programmes have already developed several approaches including: Comprehensive eye care, Vitamin A distribution, MDA for LF, MDA for schistosomiasis, distribution of insecticide treated nets (ITNs), and other combined approaches.

#### **Examples of poor integration**

The creation of parallel structures, particularly within a non-functioning system is an example of poor integration. Another example of poor integration is when community-owned distribution systems run with no reference to what is going on in government health structures.



### Challenges of integration

**Different partners; different needs:** Various partners work with the Ministries of Health in the different countries, BUT the one in the drivers' seat is the one who determines the direction and speed that the integration vehicle should go. Unfortunately, Ministries are NOT in the driver's seat. Most of the integrated interventions are donor-driven. Drug donors have their own priorities and own strategies; they need to see the medicines distributed, and obtain good results for the company. NGOs need to show results (deliverables) to get funding for ongoing activities in the field; GAELF and WHO want to see LF eliminated. All these different needs cannot be integrated yet they influence the process and outcome of an intervention.

**Disease specific requirements:** Different diseases have different schedules and different durations of interventions. MDA-1 is a yearly distribution of ivermectin (Mectizan) with albendazole. Mectizan for LF in Africa requires 5-7 annual rounds of MDA, each MDA administered during a short interval of time. Mectizan for onchocerciasis can be given for 20 plus years, in a sustainable way with annual mass treatment given when the population organise themselves in CDTI. Each disease has its own specificity, in terms of criteria, precautions, control requirements, community care, etc.

**Health system dynamics:** Health districts face structural and implementation challenges due to the existence of both vertical (policy and programme support) and horizontal components (decentralized fund flow and drug distribution systems) of programmes. Health systems need building up because they are the ones that undertake integration and need external help to put the programme into action. The challenge is to have functioning health districts.

**Disease mapping:** Mapping costs money; a health district integrated mapping methodology begins at the health district level. Primary health care is based on health districts. Some diseases are amenable to control via CDTI and others not.

**Choice of study sites:** Each disease has its own set of geographical indicators. Wherever possible we must look into the possibility of combining study sites.

*There are many advantages of integration but there are also many challenges. If we have fixed ideas about what integration is and everything has to be forced to fit our model. For example, having areas of CDTI without LF control is public health negligence - malaria control programmes should link to NTDs.*

Partnership is essential - Ministries of Health, drug donors, international agencies, bilateral donors, NGOs. All partners are important in contributing to a programme.

### Challenges of APOC

APOC has had its mandate expanded after obtaining additional funds. But there is a need to have a firm recommendation to combine CDTI and LF. There is an opportunity to expand LF activities and if we do not take it, it will be negligence. There is also a need to find ways of dealing with problems, such as scale up in CDTI areas; integration of teams with CDTI, particularly in relation to suitable government coordination structures. CDDs play multiple roles so they need to be trained appropriately. There are also challenges generated by opposing



approaches, e.g. school distribution v CDTI; comparisons in salary top-ups and how to motivate and retain CDDs and the provision of incentives by other programmes.

### **Conclusion**

Integration is an attitude, not a strategy. Where things fit well together do it; where things do not, don't. Explore opportunities for coordinating efforts and to deliver a more cost effective service. To have an impact on LF we have to push the communities to act now.

### ***Drug donations for NTD programmes***

***Mr. Andy Wright***

***[A presentation made on behalf of Merck & Co. Inc. and GSK]***

The pharmaceutical industry is divided into components: research and development. Research based companies include; Pfizer, GSK, Sanofi-Aventis, J&J, Merck & Co. Inc. and others. Their primary responsibility is to make a profit but this has to be done in a socially responsible manner. Their role is to discover and develop medicines and vaccines, and make them available to patients. There is a link and interdependency between research & development, manufacturing and sales.

### **Why pharmaceutical companies donate drugs for developing world diseases**

Most of the major research-based companies are engaged in drug donation campaigns. They also provide cash to support the implementation of programmes. They do this because they have a vision to improve the health of poor people (e.g. saving people from blindness). They want to make a difference in the lives of the poor. They donate drugs because it motivates their research staff as it validates research findings, and research informs profit making ventures. It is important for research staff in pharmaceutical companies to know that their discoveries will not be wasted. They also donate drugs as part of their corporate social responsibility.

### **Key issues**

Companies need to know that their donations are making a real and unique impact in form of positive health benefits for poor people. They want to see measurable results from donated drugs in terms of impact on disease transmission; sight restored; poor people spared e.g. LF. They want to see published results in terms of impact data in scientific and media articles; with some acknowledgements of their contribution.

### **Partnership lessons**

Pharmaceutical companies provide proven partnership lessons. They demonstrate that you cannot do things on your own. Partnership is required because the complexity of issues is beyond the ability of any single organization or country; and that partnership should be based on a set of principles and should not be donor driven in line with the principle that people most directly affected should determine their own needs and priorities. The lessons provided by pharmaceutical companies are also based on clear objectives, trust, transparency, complementary expertise and mutual benefit. And lastly, lessons on the need for continued coordination and communication between and among all the stakeholders.



### **Perspectives of NTD programmes**

Research-based pharmaceutical companies support NTD programmes where it makes sense for a country. They are focused on reality hence there is no 'one size fits all' and individual donations must retain the application processes. They believe that international organizations need to collaborate and recognise the importance of maintaining focus on individual disease programme goals in an integrated environment. Companies must comply with WHO treatment guidelines (particularly with regard to risks associated with different drug regimens) and train distributors for multiple interventions to alleviate confusion which can have fatal effects on the intended target group. They believe in piloting learned lessons and publishing results. The importance of monitoring and reporting adverse events is also a key lesson. Companies believe that while maintaining focus on the individual disease programme goals, LF cannot do it alone. It makes better sense to include other programmes to provide more holistic services at the same time spread the net.

### **Conclusion**

GSK and Merck & Co. Inc. are committed to the elimination of LF and will continue to donate albendazole and Mectizan as long as needed. They believe that there are potential opportunities and benefits, as well as challenges and risks of integrating LF activities with those of other diseases and they will collaborate with partners and countries to help where they can.

### ***District experiences in LF control***

***Dr. Mariam Ongara***

#### **Background**

Kibaha district is located in coast region in Tanzania Mainland. It has a total population 161,696 served by 40 health facilities. MDA began in 2001.

#### **Goals and Strategies of the LFEP**

The goal of the LFEP was to reduce the impact of the disease on the health of the population to a level that it is no longer a major public health concern in each district. Specifically, the MDA programme aimed to increase the number of hydrocelectomies by 10% in 2007; increase the number of eligible population taking mass treatment from 58.2% in 2001 to 80% by 2007; and integrate LFEP with other relevant district programmes by 2007.

Two main strategies were applied. The first strategy was to combat infection by interrupting transmission through mass treatment using 2 drugs (Mectizan & albendazole) administered as a single dose once per year; and the second is to alleviate the disease in those already infected. This was done through increased access to hydrocelectomies, increased awareness and motivation of patients of lymphoedema to practise regular skin care. Other activities to reduce the disease include increasing the use of insecticide treated nets and clearing mosquito breeding sites.

#### **How it was done**

##### ***Planning***

A bottom up process was used that takes into consideration village plans. Compilation of plans takes place at ward level and then it is integrated into the Community Council Health Plan and thereafter into the Council Health Plan. The plans take into consideration national policies,



strategies and guidelines and the allocation of resources is undertaken on the basis of the burden of disease profile and council priorities. Advocacy, capacity building and monitoring and evaluation components are also included in the plan.

#### *Implementation*

- Advocacy and sensitization was undertaken with the objective of reaching a consensus and commitment for LF control, and a plan for implementation. A cascade type of sensitization was used which entailed a 1-day sensitization meeting at district level involving between 40-50 participants and comprising key decision makers from departments, NGOs, FBOs and other influential people at the district. This process would then be replicated at ward and village level. Different kinds of IEC materials were used including posters, T-shirts and caps, radio and television. There were also mass meetings 'edutained' (educated and entertained) by local drama groups;
- Capacity building/development activities in the form of cascade training of trainers (TOT) and health workers at district level. This took one day;
- Community empowerment which entailed the identification and training of community owned resource persons (CORPS), village health workers, community based distribution agents and malaria control personnel and other potential participants. Four youth theatre and drama groups were trained in LFEP and MDA and provided 'edutainment' during the community empowerment activity;
- Other activities conducted at community level included identification and registration of patients; screening of hydrocele patients and conducting hydrocelectomies; distribution of drugs (Mectizan and albendazole); MDA and monitoring and evaluation.

#### **Integration**

LF activities were integrated with community-based malaria control, specifically ITN promotion and environmental sanitation; and home based care.

#### **Achievements**

Since MDA started there has been a steady upward increase in the number of people treated. By 2007 a total of 160,000 patients had been treated. Parasite assessment had been conducted with more than 300 people per site in collaboration with the national LF programme. A significant decrease was observed. A significant number of hydrocelectomies were performed: 102 in 2002; 125 in 2003; and 50 in 2004.

#### **Lessons learnt**

- Community involvement improves LF control and MDA achievements as CORPS are reliable resource persons for reaching eligible persons;
- Integration of LFEP with other on-going programmes in the district e.g. CBM, HBC the outcome of the programme;
- Strong public/private partnership (e.g. close collaboration and preparation of joint plans is needed for even better achievements);
- LF control and MDAs can be better implemented if there is full commitment from all stakeholders (regional leaders, district leaders and key actors at all levels)

**Challenges**

- The misconception within the community that the drugs used during MDAs (Mectizan & albendazole) cause impotence among males and infertility among women of child bearing age;
- LF is a chronic disease but it is not given its due importance by some partners;
- The increasing trend of HIV/AIDS reduces the attention given to LF disease and interferes with disease alleviation, particularly surgical intervention (hydrocelectomy);
- Poverty leads to inadequate community contribution to the LF disease alleviation (Hydrocelectomy surgery)

**Way forward**

There is a need for increased community awareness of the benefits of the drugs used for MDA. There is also a need to enhance LFEP integration with other programmes (e.g. CBMC, HBS, and DVS). More partners should be sensitized to become involved in the LFEP at the District level and hydrocelectomy camps expanded to be able to reach more cases.

**Highlights of Discussion**

- Potential for over burdening communities;
- Focus on LF elimination within any new policy framework for NTD control;
- Advocate the cost-effectiveness and reach of LF programmes.





## PRIORITIZING OPERATIONAL RESEARCH TO ADDRESS KEY CHALLENGES

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This session was chaired by Dr. Lorenzo Savioli, Director, Department of Control of Neglected Tropical Diseases, WHO Geneva.

### ***Technical Challenges facing National Programmes***

***Dr. Reda Ramzy***

#### **The programme objective**

The World Health Assembly Resolution (50.29) calls for the elimination of LF as a public health problem. Most national programmes interpret this as the reduction of infection rates to levels ( $mf < 1\%$ ). However, based on China's experience where transmission by vectors other than *Culex* mosquitoes was discovered, other countries decided to be more conservative in setting their goals.

#### **Diagnostic tools**

The ICT card test is a tool of choice and is very important for LF elimination programme mapping, monitoring, definition of programme end points and post-MDA surveillance but there are challenges with its current production, storage (it requires refrigeration) and use. A modified version by an Australian company is currently under development.

#### **Treatment**

GlaxoSmithKline has committed albendazole globally and Merck and Co. Inc. has extended its donation of ivermectin against onchocerciasis for LF elimination in Africa. There are new drug regimens that require 2 MDA/year. However, there have been reports that large scale treatment programmes and extensive MDA may lead to the development of drug resistance. There is need to monitor the situation and develop standard operating procedures. There is also a possibility of new drugs and/or drug combinations.

#### **MDA coverage**

MDA coverage rates reported vs. surveyed: due to financial and logistical constraints some Programme Managers omit mid-term sentinel sites  $mf$  monitoring.

Mass drug distribution vs. MDA coverage: Some programmes distribute drugs house-to-house but do not observe whether the drugs are actually taken. In Egypt it is difficult to go from house-to-house due to the nature of the housing.

Differences between rural and urban sites need to be analyzed. Where there is persistent non-compliance (7.4% denied having ever taken the medications) there is a need to conduct an in-depth study and refine health education messages to target the non-compliers. Successful stories have been reported in Sri Lanka, Zanzibar, Yemen and Egypt.

#### **When to stop MDA**

WHO guidelines for MDA are based on  $mf$  of  $< 1\%$  in sentinel sites and LQAS surveys (0%) using ICT in children. However, this has not been evaluated in different areas and there is a need to gather further information. Other alternative and affordable tools and endpoints can provide more information on antibody detection in children aged between 6-8 years.



In Egypt, PCR based MX has proved to be useful, user-friendly and field applicable. At the same time while using PCR the current version cannot differentiate; there is a need to develop a new system to detect mosquitoes that carry the infection rather than to collect more mosquitoes.

#### **Post MDA surveillance**

It is important to have active surveillance in areas where recrudescence is a concern. However, there are a number of questions that need to be answered first. For example, it is not certain whether the right tools are available and if so, what are these tools and after how long should surveillance be done? There is a consensus that passive surveillance can be assessed in areas where recrudescence is a concern by blood testing military recruits; university students; blood donors and hospitalized patients, but it is not clear yet what tool should be used. Guidelines for post MDA surveillance to prevent recrudescence need to be developed as more countries will require guidance in the future.

#### **Scaling up disability prevention**

Disability prevention efforts have been significantly scaled up. 29 countries have reported to be implementing disability prevention activities; 21,963 hydrocele surgeries have been reported to be undertaken from 2004-2007 from 20 countries and between 10,500 and 13,000 lymphoedema managements have been reported from 2004-2007 from eight countries. A new manual for disability prevention has been developed and the WHO is urged to make this valuable resource available to Programme Managers.

#### **Verification of having eliminated LF as a public health problem**

Guidelines need to be developed as countries complete surveillance. China was verified in May 2007 and the Republic of Korea in March 2008. The current best practice is the coordinated use of anthelmintic drugs designed to respect disease-specific goals and objectives. Another best strategy is to balance between integration and to satisfy disease-specific needs. Dr. Margaret Chan (2007) said: *"a major step was to view these diseases as a group. This makes practical sense in operational and strategic terms."*

#### **Other priority technical challenges**

Other technical challenges that need to be considered include the phasing out of MDA for LF while ensuring continued treatment against other helminthiasis; developing an MDA Strategy in *Loa loa* co-endemic areas and delimiting LF and *Loa loa* co-endemicity.

Significant progress has been made but a lot more needs to be done. There is need for a coordinated effort with other preventive chemotherapy interventions that need to be integrated within national and district health plans.

#### **Operational research issues from Eastern and Southern Africa Dr. Njeri Wamae**

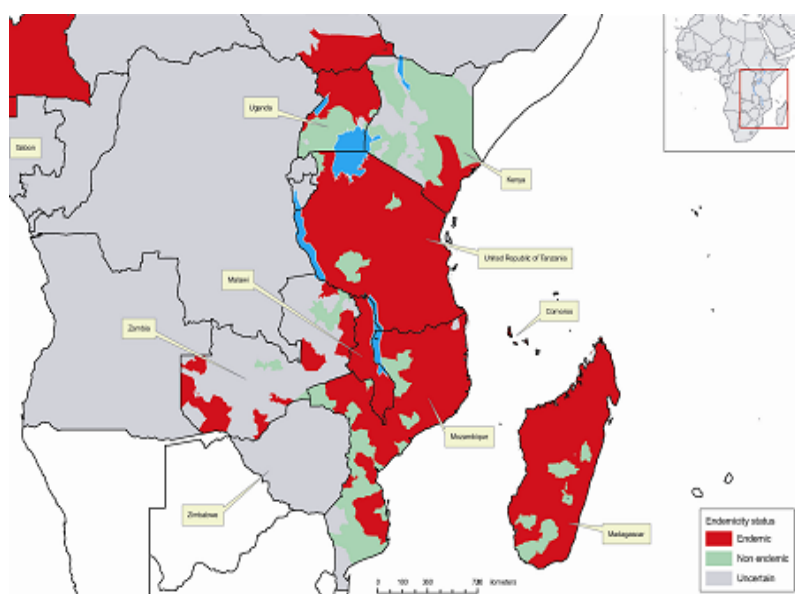
The issues facing the Eastern and Southern African region (ESAR) are not different from those faced by other regional programmes. However, the Africa region has unique problems that require specific solutions.



### The LF burden: Global and ESAR

A total of 1.2 million people are estimated to be at risk and more than 120 million are infected. It is also estimated that 40 million persons suffer from chronic clinical manifestations (lymphoedema and hydrocele).

Statistics in ESAR are alarming. 39 out of 46 LF endemic countries are in the African region with 390 million people estimated to be at risk. This represents 38% of the global burden. In 22 countries where mapping is completed, 139.6 million people are confirmed to be at risk. The map below shows the distribution of LF in fully mapped countries in ESAR (WHO, 2007) with the area marked in red as endemic.



### PELF in ESAR

PELF in the region has been underway for up to seven years since inception in 2000 and MDA as of 2007. Five out of 9 countries in the ESAR have started MDA. Tanzania started in 2000, Comoros in 2001, Kenya and Uganda in 2002 and Madagascar in 2005. Their experiences have provided an opportunity to identify coverage gaps and look into management issues.

### MDA achievements in ESAR

The total population at risk in the region is approximately 70,000,000 million people with the highest number in Tanzania (mainland) which accounts for  $\approx 50\%$  of the total, followed by Madagascar with  $\approx 22\%$ . The lowest number of population at risk is in Tanzania (isles) and Kenya. The total number of cumulative treatments delivered from 2000-2005 is 28,666,209 people with the highest number recorded in Tanzania (mainland). Comoros has managed to treat all the population at risk with MDA and Tanzania (isles) over 80% of the population at risk. The table below summarizes the achievements realized over the years.



Country (programme)	Total population at risk*	Year of first MDA	Max. no. of rounds	Max. no. of people treated in MDA	Cumulative treatment delivered
Tanzania (Mainland)	36,816,293	2000	6	5,098,797	<b>11,501,706</b>
Tanzania (Zanzibar)	1,161,629	2001	6	968,992	<b>5,126,050</b>
Comoros	572,171	2001	5	572,171	<b>1,099,650</b>
Kenya	2,987,266	2002	3	1,677,824	<b>2,847,597</b>
Uganda	12,429,409	2002	3	4,914,818	<b>5,375,651</b>
Madagascar	15,821,728	2005	2	2,130,005	<b>2,715,555</b>
<b>Total</b>	<b>69,788,496</b>	-	-	<b>15,362,607</b>	<b>28,666,209</b>

\*Numbers were calculated from district population figures provided by the respective countries.

### **The importance of research**

According to Vicente Fox, *“Research is a basic component of strengthening health and achieving the MDGs”*. In the past, improvements in health were mostly seen as an outcome of development. More recently, the WB (1993) argued that better health is a necessary element of development. The WHO Commission (2001) on the other hand argues that investments in health yield higher rates of return than any other investments.

### **“Health research” and “research for health”**

Different health research studies have been conducted over the years in the form of biomedical research, public health research, environmental health research and social sciences and behavioural research.

Research for health, also known as operational research, is planned and carried out to answer specific questions that inform on operations. In the case of LF elimination the relevant questions to guide operational include:

### **Which LF control issues need operational research?**

Control issues that need operational research are mapping, diagnostics, treatment, morbidity management, vectors, financing, health systems and integrated operational research of NTDs in a changing environment.

### **Which LF elimination issues are yet to be addressed or are being addressed?**

*LF control in urban areas:* Strategies to be developed for drug distribution, morbidity and supplementary control.

Malaria programmes have invented the idea of dispensing malaria control drugs from a kiosk. Urban areas are very heterogeneous and issues of access and method of dispensing can be considered.



*Morbidity management:* Issues to be addressed include the impact of LF treatment on morbidity/ADL, mapping LF morbidity and innovative ways of supporting lymphoedema patients (Hope clubs, Mwanga). There is a need to justify our approaches of MDA and use it for advocacy. Mapping of LF morbidity has lagged and CDDs could be used to map the prevalence. There is also a need to find innovative ways to support lymphoedema patients through the creation of Hope Clubs as was done in Mwanga in Tanzania, look at different options and compare them to see which performs best.

*Vector Control:* The main issue to be addressed is the impact of insecticide-treated bed-nets for malaria on *Anopheles*-transmitted LF.

#### **Which elimination issues have been addressed as operational research in ESAR pre-PELF?**

Several studies have been conducted that show alternative ways to reap maximum benefits from the programme. There is a need to identify those that can be replicated. For example, vectors-polystyrene expanded beads in urban filariasis in Zanzibar (Maxwell et al., 1990); hydrocelectomies as a proxy for hydrocele prevalence, Kenya (Mwobobia et al., 2000) or treatment-Com-DT in Kenya (Wamae et al., 2006). Other studies where lessons can be learned include DEC-fortified salt in Tanzania (Meyrowitsch et al., 1996); ADL in Rufiji district, Tanzania (Gasarasi et al., 2000); Rapid assessment of the geographical distribution of LF in Uganda (Onapa et al., 2005) and Mapping-RagFil in Tanzania (Malecela et al., REFERENCE).

Between 1997 and 1998 the delivery of drugs using CDDs was very successful but we need to ask ourselves whether this should be the only approach.

#### **Why do we need to prioritize operational research?**

LF elimination is time bound (2020). Scaling up has grown rapidly since the inception of GPELF, gaps have increased and key challenges emerged. This creates an opportunity to find ways to address the gaps and deal with those emerging challenges. There is huge competition for funding and resources. As such, interventions with the biggest impact and those that are the simplest to implement must be done first. LF offers a great opportunity for other NTDs to piggy back their public health initiatives. LF elimination must not only succeed but it must have reciprocal opportunities and synergies for NTDs.

#### **Changing environment since the recognition of NTDs**

There are issues of safety/tolerability of combinations of rounds of treatment in the NTD approach. There are also areas that can be targeted for joint efforts. Such areas include mapping, implementation, diagnostics, M&E, drug delivery channels, training and resources.

Joint efforts can be realized in the form of:

- Combined NTD mapping e.g. ICT and trachoma surveys, “red urine questionnaire” in school children
- Combined implementation
- Combined monitoring and evaluation
- Alternative drug delivery channels (immunization days, child health plus, school based approach, expansion of CDTI in LF areas in APOC countries)



### **Opportunities under NTDs**

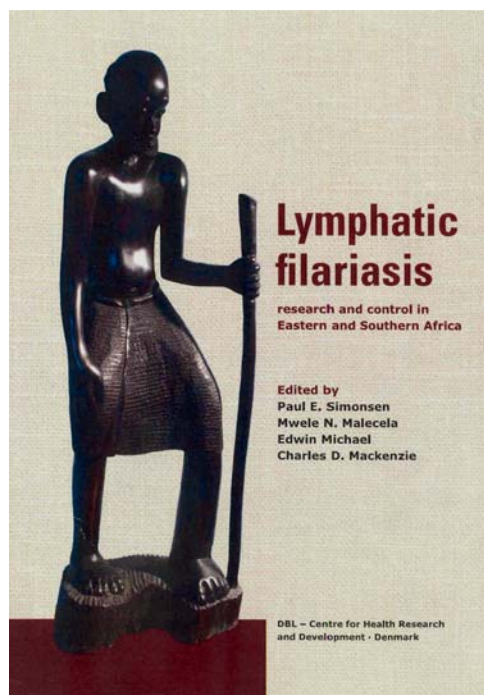
Several opportunities exist that can be exploited for more effective control, treatment and elimination of NTDs. The powerful voice of the WHO Director General, Presidents, other organizations and programmes including APOC CDTI that is willing to expand to LF IUs, and the often ignored and lonely voices of the communities.

### **LF Research in ESAR**

A lot has been done and a lot of operational issues have been dealt with as the region is very active in research. It has published numerous publications on LF research including a book titled Lymphatic filariasis research and control in Eastern and Southern Africa that has been widely distributed.

There are well-trained and experienced scientists, technical support staff and a network of field stations and laboratories. The region is home to medical/academic research institutions that are internationally recognized and with long-standing international research collaboration (NIMR, KEMRI, MUHAS, UON, etc) and regional research personnel have long-standing research collaborative relationships within and among international colleagues/institutions.

A lot of LF research information has been generated as documented by published literature which includes 118 publications from 1900-1974 and 161 from 1975-2007.



### **Additional opportunities in NTD control**

Regional training is being provided under the Eastern and Southern Africa Centre of International Parasite Control (ESACIPAC) - one of the three global Hashimoto Initiative Centres.

Some countries, e.g. Uganda, are using the school health approach as an alternative channel for drug delivery. There is a need to strengthen and expand this as the programme is not cascading as fast as it could. And ESACIPAC is conducting NTD control for the region using its model field site in Mwea, Kenya (schistosomiasis, STH)

### **How to prioritize operational research**

NTD peculiarities in ESAR will be dictated by geographical distribution, existing programmes, funding opportunities, personnel available, health system performance and political will and commitment.

The ESAR can hit the ground running but there is need to secure funding, to strengthen primary health care delivery systems and structures, and to conduct rigorous advocacy. Advocacy is a crucial ingredient for success.



### ***Current research initiatives***

***Dr. Eric A. Ottesen***

#### **An exciting time for research**

All successful public health programmes must have the involvement of an active research community that will provide solutions to programme problems that arise, solutions to anticipated problems or barriers that *might* arise, and new or refined tools and strategies to improve the programme.

In recent years, the opportunities to carry out research have changed for the better. The first paradigm was the convening of two major meetings which developed a strategic plan for LF and other NTDs.

The second paradigm shift was when a strategy to ensure LF elimination was developed. Implementation has improved, advocacy and funds have become available for integration issues (e.g. from the Gates Foundation) and as a result of the WHO TDR integration study there are many tough but interesting issues to address.

#### **Steps toward the future**

Programmes targeting NTDs are now being integrated. WHO HQ has been reorganized and now has a department of NTDs. WHO/TDR, the Gates Foundation and others are providing research and development support. A coalition of NTDs has been created and new funding from USAID for integrated NTD implementation and scale-up has been secured. There is similar interest in the UK and EU for integrated implementation support. Operational research on the integration of NTD programmes has become an important component in global health.

#### **More funding is being made available**

The Gates Foundation is supporting a number of organizations to conduct operational research on NTD integration, each organization covering one country or a set of them. The Gates Foundation has stepped in to support essential operational research for programmes in LF, trachoma and schistosomiasis. There is opportunity to address the very important research questions around integrating NTD programmes. But caution must be exercised not to neglect essential research needs of disease-specific initiatives being integrated.

The Global Alliance has received a 4 year grant for “Resolving the Critical Challenges now facing the Global Programme to Eliminate Lymphatic Filariasis.

#### **Objectives of the LF Operational Research Grant**

There are 3 main questions and 8 objectives for this grant. The first question: “When do we stop MDA and how do we make sure we are successful” has 4 objectives under it that focus on the identification of best measures of impact on LF transmission, determinants of programme success, most effective surveillance strategies and effects of MDA on morbidity.

The second question: “Are there supplemental tools that could speed up success” has 2 objectives focusing on the optimal role and strategies for vector control and the effectiveness of increasing drug dosage and frequency schedules for the current LF regimens.





Question three: “Can innovating financing strategies be devised” has 2 objectives that focus on financial situation analysis for LF/NTDs and bridging the gap between international development funds and the MOH programs for LF and NTDs.

#### **Approach in dealing with the objectives**

Each objective will be dealt with in a 10-point plan starting with the identification of the question/problem to be solved and ending with answering the question. Other steps in between include assembling experts, formulating strategies, identifying appropriate researchers and study sites and developing multi-centre protocols and review boards. Others are the standardization of reagents and procedures, implementation of studies, data collection and the reassembling of researchers and experts.

#### **Experience and successes**

##### Experience:

- It works and there is no misuse of devices;
- Training participants are very enthusiastic;
- Difficulty in accessing fast internet for transmitting data.

##### Successes:

- 7 countries have completed the surveys;
- Over 70 local staff trained;
- Over 81,000 samples available;
- 30,000 mosquito specimens collected;
- Continually improving system;
- 13 countries have already been funded to carry out Gates supported studies.

#### **Current research initiatives**

Apart from the Gates’ funded grant there are other research studies ongoing on LF and other NTDs. The Gates’ grant is covering up to 20 countries. Other operational research studies on LF include a study by TDR on problems of urban filariasis and transmission, GSK on problems of transmission and impact, NIH on problems of end-points, impact and implementation. Studies on NTDs are being conducted by the Gates Foundation, NIH, Wellcome Trust and others.

#### **What does all this mean to the Global Program?**

There is a need to add a component on operational research beyond LF so as to modify thinking. The outlook is bright because of the changing policy environment and other opportunities that are provided by the changing environment.





## MORBIDITY MANAGEMENT AND DISABILITY PREVENTION

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This session was chaired by Dr. Pierre Brantus, Consultant, Neglected Tropical Diseases, Health and Rehabilitation Unit, Handicap International, France. The first part of the session was interactive involving the testimonies by 5 Tanzanian LF patients about their life pre- and post-treatment, followed by a question and answer session facilitated by Professor Charles Mackenzie. The patients were accompanied by the LF Coordinator who also had an opportunity to give an overview of the project activities.

### ***Experiences with clinical filariasis – Voices from the Field***

#### ***Testimonies from patients from Mkuranga and Liwale districts in Tanzania***

The aim of this session was to learn about the lives and experiences of those affected with the clinical disease. Testimonies were given by Mariam Abdalla (lymphoedema), Zainab Rashid (lymphoedema), Hija Yusuph Mwago (lymphoedema and hydrocele) and Omar Abdalla Kimbikiti (lymphoedema) and the overview of the project was by the LF coordinator of the Mkuranga Project, Frederick Raymond.

#### ***Pre-MDA experiences of LF patients as captured in a film made by GSK on the Patients' Lives and Experiences***

##### ***Mariam's story***

"It started with my left leg. It used to itch and I was always scratching it. I went to the hospital and was given aspirin. After a while the other leg started to itch and swell. Then I started getting fever and got swollen lymph nodes. I couldn't wash or even go to the bathroom. I used to take different kinds of pain killers including 'panadol' and 'action' which gave me a mild relief. But since I started taking drugs in 2000 I am feeling much better. Immediately after starting treatment the intervals of my fever spells became wider. I could stay for up to 2 weeks without getting any fever. Now I go up to 6-7 months without any fever attacks. My life has changed."

##### ***Zainab's story***

"When the problem started I felt like I had stepped on thorns. I felt like I had stitches all over my legs. That went on for a while then I got swollen lymph nodes and my legs and arms started to swell. When my arms started to swell I also felt like someone was thumping my head. I got very severe fevers and sometimes even lost consciousness. Whenever I got the attacks I used to use 'panadol' tablets to kill the pain but sometimes it got so bad I had to be carried back home."

##### ***Hija's story***

"I got this problem after my O-level education, the illness started when I was playing football and my legs started itching and swelling every time I scratched. In 1998 I started going to hospital but was not successful. My condition became worse and I started getting wounds. When I got wounds I believed that somebody had bewitched me so I started going to traditional healers. The wounds subsided a bit. I had lost hope; there was no success from hospital."

I was unable to continue with higher education. It was worse during the rainy season. I sometimes got high fever and I couldn't do anything. The fever would sometimes last for a whole week. I had given up hope."

***Yusuph's story***

"It happened back in 1993. I remember one day I had gone out at night without shoes and suddenly I felt as if something had pricked me. I went back inside and when I woke up my left leg was very painful. Then my limb started to itch. It went on for about 2 weeks and then the pain shifted to the area below my groin all the way to the genital area. It got worse as I scratched and after a couple of days I noticed that I had a hydrocele and it was growing very fast. After only a month I could not put on trousers. It felt so uncomfortable and I did not feel like putting on trousers.

I went to the district hospital and was admitted there. But later on I was discharged as the hydrocele had grown very big. I went back to hospital but nothing happened they could not help me."

***Omar's story***

"I started getting problems with my legs in 1992. I felt like I had stitches and felt very hot with severe muscular pains. I went to hospital and was told it was a skin infection and was given some tablets but my leg continued to swell. If I hit myself or tripped instead of blood, water would ooze out. I used to get swollen lymph nodes and I couldn't eat anything for days. I lived on water. This continued till 2002 when the LF programme was initiated and we were told we would get drugs. Immediately after taking the drugs I started getting some relief. I now feel like a young man; I can even put on leather shoes."

***Brief overview on the LF programme shared by the LF Coordinator from the Mkuranga programme******Mr. Frederick Raymond***

The programme started in 2001 initially slowly. It was difficult to convince patients of their condition. Acceptance was one of the biggest challenges due to the prevailing misconception that the drugs caused impotence in men and infertility in women. Through advocacy people are now taking medicine.

The programme is also faced with infrastructure and logistical problems. Some places are hard to reach; one has to use a boat to get to some villages and during the rainy season those areas are unreachable. Infrastructure improvements have contributed to the programme's success

The programme is incorporated into the Council Comprehensive Health Plan and receives funds from the district budget. The district hospital supports MDA and is also performing hydrocelectomies. In 2007, eight patients were given hydrocelectomy surgery at the district hospital. As a result of vigorous sensitization nowadays people who come for hydrocelectomy attend voluntarily whereas in the past they needed a lot of counseling."

***Post-programme experiences of patients – testimonies:******Mariam***

"Since I started using drugs in 2001 I feel very well and I thank the Lord and all of you who have helped me. I ask God to continue blessing you so that you can continue helping my colleagues. I don't get very high fevers these days. I can go to the bathroom and now when I do get a fever I can bring it down even with panadol. I got my life back"

**Zainab**

I got lucky and got some drugs that I started using. I'm getting better. I don't get the feverish attacks that I used to get every now and then. I would like to ask you to continue to get medication for us and when I go back I will counsel my relatives to stop hiding diseases."

**Hija**

"Small problems caused by the disease are no longer part of me. I can continue with my daily chores. Right now I don't get frequent fevers as I used to. I get them just once in a while with long intervals between the attacks."

**Yusuph**

"I thank the Lord; after I got up from the operating table I started a new life and a new year. My health is back to normal after losing over 30kg that I was carrying around with me. Before my operation you would have to carry me up the stairs but now my health is good. I can bathe using cold water and I even feel like marrying a young woman. I am no longer ill. People used to mock me but when I got back they welcomed me. My respect is back and everyone wants to talk to me so I am thankful to all of you. I am very thankful for your partnership and support. I will be your greatest ambassador. Thank you very much!"

**Omari**

"Since I started taking drugs my health is good and I don't get frequent fevers. Before I started treatment there are times my wife had to go and look for firewood to make a fire for me. I used to feel very cold. Right now she is the one who pushes me to take my drugs. So I am asking the government and partners to continue supporting us. We are your advocates for the programme."

**Discussion on the testimonies****Facilitated by Professor Charles Mackenzie**

- Less fever attacks and a general sense of wellbeing;
- Compliance to hygiene requirements; particularly care for the skin;
- Public negligence;
- Integration of MDA and disability prevention
- The importance of advocacy;
- Do patients know what caused their condition? Yusuph said: "Hydrocele is a very bad problem and anyone who thinks otherwise should see my pictures before I was operated on. I was being stigmatized even by my own relatives and up to today I have not seen some of them. I couldn't sleep; I couldn't walk to the bathroom; I couldn't do anything. I couldn't walk before my operation. I couldn't even go to funerals of my neighbors because the moment I showed up everybody turned to me and forgot about the funeral. I was being helped like a handicapped person. It is not something I would wish for anybody. It changes your life completely! It makes people age and even if you have a wife who understands and cares, she cannot stand in front of other women because they will either laugh at her or feel sorry for her. People still do not believe that I was operated on at Muhimbili, right here in Tanzania. When I got back home some people thought I had been overseas. They couldn't believe that I was actually walking! Yes, we were informed and educated about the causes of LF. I am a good ambassador now. I will use the information and knowledge that I got as part of my treatment as well



as my condition after the operation, to educate people about the causes of LF and encourage them to seek medical treatment immediately instead of going to witchdoctors and traditional healers.”

***The West African LF (WALF) Morbidity Project***  
***Dr. Sunny Mante/Professor Serigne Gueye***

**Background**

LF is one of the major causes of disability worldwide. 25 million males are infected in 83 countries. The disease has both economic and psycho-social consequences. LF-hydrocele is the 2<sup>nd</sup> most common surgical procedure by general practitioners, urologists, general surgeons, plastic surgeons and surgical nurses.

**Obstacles to introducing modern LF morbidity prevention and treatment**

Lack of continuing medical education, insufficient number of surgeons and limiting infrastructure are among the main reasons for the inability of most countries in the developing world to introduce modern LF morbidity prevention and treatment. There is also unequal access to health care and training.

**Why the West African morbidity project?**

There is evidence that the technique described in Sri Lanka in 1948 with excision of the filaricicle sac, that was resurrected and updated by Professor Noroes and Dr. Dreyer in Recife, is preferable to the eversion method. Having a project specifically for LF management allows afflicted men to have optimal treatment, much more quickly than would be possible just via the use of new medical students and surgeons within the normal health facility setting and schedule.

**History of the WALF project**

The Project was initiated as a pilot in 2004 with funding from the Gates Foundation. It then continued as a regular project from 2005 with NORAD funding. Dr Mante trained in Brazil for several months in 2003 and Professor Gueye joined the team in 2007, to increase the speed of implementation. In addition there are 2 urologists conducting training workshops. The project does training workshops, hydrocele surgeries and lymphoedema management.

The project has developed a surgical handbook to assist district hospital surgeons in their LF-surgery work. This handbook is now available in English and French and is being used in most LF endemic areas.

**Essential requirements to ensure success and sustainability**

All respected senior surgeons in each country should be involved as co-trainers. Some LF endemic areas do not have doctors so the nurses also need to be trained. University teachers of surgery should be involved so that they can incorporate the technique into the curriculum; and district doctors and surgical nurses as well as Nurse Anaesthetists are needed to expand availability of services. There is also a need to collaborate closely with National LF Programme.



### **Training workshops**

Prior to conducting training workshops an exploratory on-site visit is made by the consultant with an introductory letter from the Ministry of Health to inform local health authorities. The project works closely with the National LF programme to identify patients in selected districts.

Preparation and control of supplies is undertaken the day before the workshop. Kits are checked before demonstration surgery and the handbook is distributed at the workshop. The surgeons go through these handbooks with the participants to make sure that they understand the procedure well. Oral presentations are given to complement the written material.

The content of the oral presentation includes a description of the surgical technique by the instructor emphasizing the following important points:

- Pre-operative measures including antibiotics ;
- Detailed procedure step by step ;
- Emphasis on pitfalls and how to avoid them ;
- Post-operative management: antibiotics, anti-inflammatory drugs, bandaging, etc.

Pre-operative examination of patients is done with participants for further clarification and demonstration. Thereafter, hands-on training is provided as the Consultant and co-trainer operate on the 1<sup>st</sup> patient, describing the procedure while participants watch and listen. During the course of the workshop, every participant assists and operates on at least one patient under direct supervision and guidance.

### **Important advantages of the technique/procedure**

**No drainage** – The technique does not necessitate putting a drain in the scrotum before wound closure. Drains do not stop bleeding and haematoma formation; in fact, they increase the risk of infection. However, there is need for careful haemostasis during the procedure.

**Shorter and easier stay in hospital** - The maximum stay in hospital using the technique is 1 week compared to 3 weeks or more after a surgical drain. Patients are fully mobile within 2 days while they have four days in bed with the draining technique.

The procedure is simple even in rural areas undertaken using local anaesthetic and antibiotics. The most important thing is proper bandaging and follow-up of the patient. Bandaging is the most important step of the procedure as otherwise oedema of the penis and scrotum may develop.

### **Post operative care**

Post-operative care is VERY important. A patient must be given routine antibiotic coverage of 2 medications for 7 days. The medicine is non-narcotic and inexpensive and needs to be taken for 5-7days. A one-week hospital stay is necessary until the wound is nicely closed and dry.

### **Achievements**

The Project has organized and conducted workshops in 14 West African countries commencing in Ghana in 2004. Countries where workshops have already been conducted include Ghana (4), Burkina Faso (3), Togo (2) and one workshop each in Niger, The Gambia, Senegal, Nigeria and Mali.



More workshops in other countries are planned with a target to cover at least 12 countries. Countries such as Burkina Faso need more training workshops as it is one of the highest endemic areas and patients are very poor and cannot afford treatment.

More than 190 people have been trained in 8 countries. At least 2,802 hydrocele patients have been operated on by people trained using the new technique. This is a remarkable achievement given the short span. Additional funds have been secured for Burkina Faso and Togo.

### **Evaluation**

Evaluation is very important to assess progress and deal with challenges in the different sites. It helps to inform what is being done, how it is being done and what outcomes have been realized.

Gates-funded evaluations have been undertaken in Ghana, Burkina Faso and Togo in 2006. In Ghana also, a large CDC/Emory socio-economic study was conducted. In Burkina Faso and Togo, an External Evaluator has been evaluating the project's activities and impact. Copies of the reports are available from the HDI website at: [www.hdi.no](http://www.hdi.no)

Some countries have conducted focus group discussions during which health personnel and patients discussed various issues including the patient's feelings about the technique.

The conclusion from the evaluation was that both patients and surgeons were satisfied. Even for routine surgery, District Surgeons and Surgical Nurses were achieving good results operating in rural African settings. Results of the socio-economic evaluation in Ghana revealed that over 90% of the patients were satisfied and more than 88% were able to return to work. Most of those unavailable for follow-up were due to absence for agricultural work.

The presenter emphasized the social implication of hydrocele and how it affects a patient's sexual life because they cannot perform intercourse. The project has seen patients as old as 80 years who came for hydrocele surgery after suffering for over 20 years! Most of these patients want to be clean before they die so that nobody knows that they had hydrocele. It is part of the preparation for death.

### **Lessons learned**

***Adherence to protocols:*** Unacceptably high levels of usually moderate but occasionally catastrophic post-operative infections have happened in "surgery campaign" settings and in the hands of a few providers who do not adhere to and respect the prescribed protocols. Given that after such as campaigns there is usually insufficient personnel to carry out post-operative follow up.

***Improving training and manuals:*** This is important to emphasize the importance of preventing and immediately detecting any post-operative infection.

***Expanded access to quality and rapid services:*** District doctors and thousands of patients now have access to improved, simplified and rapid LF surgical care across the West African region. This would have not been possible without this project. It is important to think of replicating the project to other regions in the continent as undertaken for obstetric fistula.



## ***Implementing hydrocele surgery at scale in Tanzania***

### ***Dr. C.S Yongolo***

#### **Why now?**

Professor Yongolo posed a number of questions as to the reasons for scaling up hydrocele surgery. He wondered if there was an epidemic of hydrocele in Tanzania and if that was not the case, whether surgical services were inadequate, or whether other initiatives have influenced the need to scale up.

#### **Interesting discovery at the Ministry of Health and Social Welfare**

Reports from the Ministry of Health show that hydrocele and hydrocelectomy are among the top ten surgical conditions, ranging from none in a few districts to up to 30% in coastal areas.

#### **Perceptions about hydrocele among medical personnel**

The Ministry of Health and medical personnel in general give more priority to life threatening surgical conditions. Hydrocele is not regarded as a life threatening condition and therefore not a priority. Moreover, there are limited resources to meet all the requirements for surgery, inadequate human resources and the Ministry focuses more on prevention of other priority diseases including HIV/AIDS, TB and other non-communicable diseases.

#### **Patient's perspectives**

Coastal societies usually have fairly conservative communities. There are mixed perceptions about hydrocele with some sections of the community regarding it as a prestigious condition while others fear the shame and stigma that is associated with their “coming out” and they fear the possible complications of surgery including loss of erectile function, deformity and even death following surgery. Some of those who seek medical attention feel that some medical personnel do not pay much attention to them because they are not given priority when attending clinics.

#### **Where are surgeries done and who performs them in the health system?**

Hydrocele surgeries are done at different levels of the health system. They are conducted at consultant (national), regional, district and private hospitals, health centres, dispensaries and religious health institutions. The surgeries are performed by Surgeons, Medical Officers, MD/Registrars, Resident Doctors, Assistant Medical Officers and Clinical Officers.

#### **Implementing hydrocele at scale**

Tanzania has a population of 40 million people and it is estimated that more than 6 million people (15%) have a clinical manifestation of LF. Some of these develop complications in the genitalia. The decision to implement hydrocele surgery at scale was not guided by a realization of a sudden epidemic. It was in response to a decision by the World Health Assembly in 1997 that gave birth to the goal of eliminating lymphatic filariasis as a public health problem by the year 2020. This challenged endemic countries and the world at large to act.

Like other endemic countries, Tanzania launched the National Programme to Eliminate LF (NPELF) and has had to find ways to deal with the challenges, which include among others; prevention by chemoprophylaxis (MDA), mosquito control, and the development of strategies to address the complications of LF, namely, morbidity management and disability prevention. The NPELF receives support from the Ministry of Health, the Bill and Melinda Gates Foundation,



DFID and two pharmaceutical companies GlaxoSmithKline and Merck & Co. Inc.

### **How it was done**

**Education:** This was provided to regional and district leaders about what NPELF, its objectives and how implementation will be undertaken. The focus was on prevention of transmission, treatment of complications and disabilities. Leaders at different levels of government and key influencers were engaged in the process to persuade the masses.

**Formation of a team of local PELF workers:** The programme tapped into the existing health care provision system and involved medical officers at regional and district level. Health personnel all the way to the village level were trained and taught how to administer questionnaires on LF.

**Mass Campaign:** The exercise involved Surgeons, Medical Officers, MDs/Registrars, Residents, Assistant Medical Officers, Clinical Officers, Nurses and other supporting staff and data collectors. The emphasis was for them to understand their limitations and to refer chronic lymphoedema and big hydrocele patients to consultant hospitals. Several techniques<sup>2</sup> can be used during hydrocele surgery; however, the excision technique was recommended as it has less chance of recurrence. Hydrocele operations are performed in health facilities (hospital or health centre) or camps. The necessary equipment for hydrocele surgery includes: sterile equipment for the surgery, drapes, drain, antiseptics and dressings, anesthesia (local, regional and general), antibiotics and analgesics. All patients with scrotal lymphoedema should be referred to hospital due to the sensitivity of its complications such as erectile dysfunction, difficulty in penetration due to a deformed penis and increased girth of the penis. Anticipated complications after surgery include: sepsis, urethral injury, anemia, torsion of penis, reduced length of penis and redevelopment of lymphoedema.

### **Post operation**

Initial advocacy is undertaken by the programme. Successful treatment (hydrocele) and disability management (lymphoedema) has helped in level two advocacy by the patient. Patients whose operations are successful become very good ambassadors and advocates to others in the community. Information is disseminated through relatives and neighbours of these patients. Registration of patients needing surgery from village level is being undertaken by the NPELF.

### **Challenges**

The NPELF implementation and filariasis campaign has identified many patients. Patients come out of seclusion with some hope of treatment. There are more than 14,000 patients in 5 coastal regions (Lindi, Mtwara, Dar es Salaam, Tanga and Coast) registered and awaiting hydrocele surgery. Stigma has been alleviated extent by using patient ambassadors.

These achievements come with challenges. The programme has to decide how to upscale surgeries, establish surgical camps, conduct training by Urologists and Surgeons, and conduct constant assessment of the surgeries performed by individuals trained and their health units to ensure safety of surgery. Other challenges are due to attitudinal factors e.g. conservatism and myths about the effects of surgery (impotence, infertility, etc.).

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<sup>2</sup> Techniques used during hydrocele surgery include: Window Operation, Joubleys technique (everting the sac), excision technique, Lords Placation technique, Dartos pouch technique.





### **Update**

A meeting was held in August 2007 where it was resolved to expedite surgeries by holding surgical camps. A national team was formed and 3 zones established in endemic areas. The Eastern zone will cater for patients from Dar-es-Salaam and the coast region; Southern zone will cover Lindi and Mtwara regions; and the third zone will cover Tanga region.

### ***Morbidity management in Bihar State in India***

***Mr. Jose de la Cruz***

#### **Overview**

Bihar is the 2<sup>nd</sup> poorest state in India. It the most populous area with a population of approximately 96 million people out of which 88% live in rural areas. The literacy rate is less than 50%. Available health resources include 1,648 primary health care centres, 10,337 sub-centres, 101 community health centres and 2,121 doctors.

#### **The Bihar Experience**

The Morbidity Management Project in Bihar “piggy-backed” onto another programme to achieve more value for money. It is a by-product of a community-based programme to strengthen communities to address health issues through the establishment of community health resource centres (HRCs). These are community based organisations formed by community members to address local health issues using local resources and expertise. They are a one-stop-shop for information and drugs. They are managed by volunteers who conduct health education sessions on prevention of disability care for patients. They also provide training in self-care to patients and their families in self-care groups. The services include socio-economic rehabilitation, referrals and provision of footwear. Members of HRCs are champions for stigma reduction. There are 101 HRCs already established.

Initially, the project was not dealing with lymphoedema but due to demand a small team from India and Bangladesh was sent to Ghana for training. They also attended the national LF conference in Kerala. A focal person for India was designated and programme activities commenced.

Some 918 people (27 batches) have been trained on the ground to undertake morbidity management. To date in 4 districts only 267 cases are receiving morbidity management. Patients, as young as 10 years old, have lymphoedema but the majority is above 40 years of age. More women than men are requesting treatment. Out of the 267 cases, 15 patients had had lymphoedema for 30 years! Footwear use is quite common among people with lymphoedema as only 25 do not use footwear.

#### **Patient and family involvement**

The project has embarked on a comprehensive training programme on self care that involves both the patients and their families through self care groups. Self care groups provide more motivation as they evolve into social groups. The project has started addressing issues of support and counseling to group members.

The project also supports footwear production and patients are given a choice to choose their footwear. Choice is important in restoring hope and dignity. This has been seen to have a long-



term and sustainable effect. Moreover, there is a mentoring programme for volunteers, NGO partners and government staff are involved to ensure that there is follow-up of patients. Patients are followed up for one year through peer education and other support. Patient satisfaction is used as an indicator of the success of the programme. The Programme Officer had hydrocele surgery so he understands patient needs and acts as a counsellor and mentor. The project also uses education through films and drama to disseminate IEC materials. It has an IEC van that is used to disseminate IEC materials and messages to the communities.

### **Reflections**

It is very important to have close collaboration between national and state programmes and to involve local NGOs and Community-based Organizations (CBOs). Mobilizing communities takes time but there are substantial long term gains once they are mobilized and engaged. Encouraging synergy between government, CBOs, stakeholders and communities is necessary while there is a need to consider social economic responsibility to link patients with livelihood programmes.

### **Future plans**

The project plans to reach 44,406 LF patients over 5 years, at a cost of US\$200,000. Treat a total of 145,00 patients in Bihar and develop a project for 500 LF patients in country (Nepal, Timor Leste, Indonesia, Philippines). Using the positive experience of leprosy the morbidity project will also use GIS/GPS to map cases. The unit cost per patient is US\$1.55 and they are thinking of investment in MDA support and morbidity management.

### ***The impact of MDA on clinical disease*** ***Professor Charles Mackenzie***

The presentation was linked to the testimonies given by LF patients to establish whether MDA has impacted on the life of LF patients and whether there is evidence that their comments are scientifically valid.

### **Manifestations of the disease that MDA can reduce**

The following are some manifestations that MDA can reduce that are measurable:

- **Acute episodes** – occur in an LF endemic zone;
- **Lymphoedema/elephantiasis** - usually associated with acute episodes;
- **Hydrocele** - most common in >20% of adult males in many areas;
- **Poor healing** - Skin lesions;
- **Sub-clinical disease/occult changes** - internal anatomical changes. However, more difficult to measure visually.

To understand the impact of MDA one needs to consider the effects of LF on a patient's life which include the inability to perform daily routine tasks: to walk, to work in the field, fish or ride a bicycle; psychological depression caused by a multitude of conditions including pain and illness, shame and rejection in a relationship or marriage and the inability to maintain a normal life – e.g. inability to support a family, and personal and community poverty.

The true prevalence of clinical filariasis disease is not known although some countries do have good data. However, **MDA can improve and/or eliminate the majority of outcomes of the clinical disease in a visible and measurable way.**



### **Activities that can be incorporated in LF programmes**

LF programmes can incorporate a number of activities that can make a difference in the lives of LF patients as well as add value to the programme. These include: hygiene and anti-bacterial therapy, wound care, physiotherapy, footwear provision, hydrocele surgery and psychosocial therapy. Other forms of support, e.g. work rehabilitation, can assist LF patients to come back into the community, etc.

### **The global programme and morbidity reduction**

To date the concentration of the Global Programme has been on MDA. Morbidity reduction is second in prominence and environmental aspects third.

The clinical impact of MDA has been demonstrated in Tanzania as the programme outcomes suggest a positive impact since the initiation of the LF elimination programme on Mafia Island in 2000. Comments from patients following the initiation of MDA confirm earlier comments by LF patients who gave testimonies on how effective MDA has been on their disease and their life in general. For example, before MDA the frequency of the attack was frequent dropping significantly or to no attack at all after MDA. Also, after MDA ability to perform activities increased twofold.

Below are comments from patients using 4 different approaches and with different sets of patients. The responses came from 48 lymphoedema patients who have undergone 0-6 years of MDA; 49 patients elsewhere observed weekly from 1-3 years of MDA; 406 self-referred cases in the LF support clinic in Dar-es-Salaam and responses from questionnaires administered in various constituencies:

- *"I can walk much further without having to rest" ;*
- *"I can ride my bike without pain now" ;*
- *"My foot doesn't weigh so much now" ;*
- *"I can work much longer in my farm now" ;*
- *"I don't get "fever attacks" now" ;*
- *"I don't have to give money to the witch doctor for treatments that do not work";*
- *"My "matende" village friend got better so I want now to also take the drugs" ;*
- *"It is so good that my belly worms are gone" ;*
- *"I am pregnant now at last".*

Areas assessed include individual actions (drug compliance, adherence to instructed hygiene protocols); clinical presentation (frequency and form of acute episodes, skin condition and limb circumference); disability (ability to perform everyday activities). The recorded positive impact has been reduction in leg circumference, improved ability of the skin to heal, significant reduction in pain and complete elimination of the exfoliation of the skin.

### **LF support clinic in Dar-es-Salaam**

The clinic receives cases from all over Tanzania. A number of people who attend the clinic were not currently covered by the MDA programme. Currently, the clinic is following up 406 patients, the majority with lymphoedema and a few with hydrocele. Medical staff examine patients and provide MDA drugs and refer hydrocele and other cases to hospital for surgery or more



intensive attention. Improvement has been seen in 399 (98.2%) of the patients. A questionnaire was administered to assess the impact of the MDA programme and one of the questions was about the occurrence of new cases. A definite decline in transmission is happening since MDA. As one respondent explained while responding to a question whether they know of any new cases or lymphoedema or hydrocele that have occurred since MDA began: “He had not seen any since round 2 of the MDA programme”.

#### **Importance of a morbidity programme to MDA**

Improvement in clinical status of patients is a major advocacy tool for the MDA programme. The care for patients suffering from the disease is noted by the people and provides further advocacy. The lack of new cases is also an indicator of success to programme personnel. The Dar-es-Salaam LF support clinic is important for advocacy and to provide attention to patients during upscaling of the MDA programme.

#### ***Integrating training for morbidity management***

***Professor Terence Ryan***

#### **FL and non-filarial lymphoedema**

There are multiple causes of lymphoedema. They include heart failure, venous disease, Kaposi's sarcoma, pododermatitis, and hereditary causes. Lymphoedema or swollen legs is one of the greatest neglected single morbidity. It occurs in 33% of people with LF and 40% of people having surgery for cancer. In China for example, there are up to 60,000 new cases of lymphoedema each year in Shanghai due to non-LF other causes, mostly cancer. Of the new cases of lymphoedema in northern Tanzania, very few were due to LF. In Ethiopia there are endemic and non-filarial lymphoedema cases caused by soil contaminants due to not wearing shoes, though only a small proportion of those exposed to irritant soil develop the condition. Family pedigrees collected at an Addis Ababa clinic suggested autosomal recessive inheritance. By using segregation analysis in family pedigrees the combined role of genetics and environment cause of lymphoedema can be defined.

It is important to recognize the different disease phenotypes. Chinese and Indian systems of Medicine give more emphasis to constitutional variation and were treated accordingly. This might account why the responses to Ayurveda medicine in the clinic in Kerala have a greater than expected effect on phenotypic signs such as hyperkeratosis and fibrosis.

#### **Morbidity control**

People from different genetic backgrounds respond differently to treatment. In morbidity control, fibrosis and fat tissues all need to be reversed. The process of wound healing and repair needs to be looked into. There is a need to combine LF morbidity management with wound healing paying more attention to the surface skin barrier. Lymphoedema should to be managed in the same way wound healing is managed. Modern Wound Healing emphasises the role of Cytokine and Growth Factors. Complete wound healing is Restoration of Skin Barrier Function. However, the presence of HIV may cause failure of response due to impaired immunity.

#### **Attention to barrier function**

Entry points into the skin need most attention and should be given a high priority. It must be locally available, sustainable and at low cost. There is a need to consider whether the Skin



Leprosy programme implemented in Bangladesh and Bihar, India are best suited to manage Lymphoedema. Patients do not consider skin washing as important as drugs. They need to be counseled about the importance of skin washing and followed up to monitor compliance.

### **Ethics of “hydrocoelectomy”**

Participants were reminded about the following ethical considerations when contemplating hydrocoelectomies:

- That it is unethical to propose an intervention without knowing the long term effect on the testes. There is an assumption that the enlargement of the testes due to elephantiasis is equivalent to hydrocele, but it is an inflammatory filariacele;
- That surgery on the testes without prior ultrasonography is unethical and that it is helpful to carry out differential diagnosis;
- That surgery of the testes in an inflamed environment requires long-term (at least five years) follow up for assessment of testicle size and loss of fertility. Reassurance of those communities fearing castration if there is possibility of testicular atrophy;
- That discharging a patient after a day is not advisable.

### **Is GAELF the right organisation to manage morbidity control?**

Skin care has a large and well developed alliance of Dermatologists, Nurses and Podiatrists, some of the members have been members of GAELF since 2000. GAELF needs to research into what is out there and link up with such organizations to ensure long-lasting and sustainable interventions which should take into consideration the involvement of patients in the treatment process (self help filariasis treatment). The International Lymphoedema Framework is currently exploring cheaper and more effective and longer lasting dressings and bandages. GAELF should partner with them

Morbidity control of conditions falling within the GAELF sphere of activity requires in-depth knowledge of a number of critical issues (wound healing, tissue viability and skin care) beyond oedema. GAELF should be an advocate for organisations that have this expertise and raise funds for them to carry out their mission.

***The role of GAELF:*** Delegates acknowledged that there were several causes for lymphoedema and while it is beneficial to treat the cause, GAELF’s role is to promote morbidity control through advocacy and not to carry out those activities. The role of partnership comes to the fore in such cases where organizations that can carry out programmes other than LF per se should be involved. GAELF has a strong advocacy role to play and should use the comparative advantage that the lymphoedema community has, to work towards eliminating LF. It should be a partnership approach rather than a “we against them” approach. The Global Alliance is a facilitating body and it is enlightening to see morbidity people and patients taking a larger role in the efforts towards LF elimination.

- Hydrocele surgery – monitoring, refresher course;
- Need for expertise in hydrocele and hernia surgery;
- The GAELF role in the broader area of lymphoedema management and partnership with other professional communities involved in skin disease



## **LF IN AN NTD WORLD: ADVOCACY AND FINANCING**

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This was a crucial day cementing the proceedings of the previous two days. The Chair, Dr. Peter Kilima, urged delegates to pay extra attention and contribute their ideas since finances are key to GAELF and GPELF activities.

### ***In-country financing for LF – Case of Burkina Faso***

***Mr. Emmanuel Lalsomde***

This presentation focused on financing neglected tropical diseases with national funds enabling the Government of Burkina Faso to participate in the elimination of diseases by providing subsidies to NTD programmes.

#### **Overview**

Burkina Faso is a country located in West Africa with a population of 15 million people. It is a tropical country with a very weak economic potential. The social situation is characterized by poverty by 44% of the population living below the poverty threshold as per the study carried out by the national statistics bureau in 2003. The per capita GDP is \$1/day.

The country is regularly confronted with epidemics and other serious diseases including NTDs due to its geographical location. Until recently, these diseases were managed almost exclusively with partners' funds and a contribution from the State in the form of salaries and infrastructure.

The Ministry of Health has a national health policy, the main mission being to protect, restore and promote health. The government grants special attention to health conditions of the population through epidemiological surveillance and disease prevention through vaccinations, as well as the evacuation of patients overseas to Europe and specifically France. The costs of this total around 5 billion CF francs a year over the last 3 years. However, weak performance in health programmes has been noted at national level. The analysis showed insufficient budgets and management shortcomings of mobilized resources. A national health development plan was established and a framework of expenditure developed in 2005.

In 2005, some funds were released for vaccination and HIV/AIDS control and other social diseases as part of a grant from the government, but since 2006 the Department for Epidemics and Vaccination received the major part of the budget. Through the National Health Development Plan, NTDs were managed through a programme called "Reinforcement of Communicable and Non-Communicable Diseases Control", in order to guarantee coherence between budget deficits and health priorities. The programme was succeeded in December 2006 by a programme to address neglected diseases which received in complement to the amounts quoted, a special subsidy of 1.5b CFA of which 60,631,500 CFA was for lymphatic filariasis.

#### **How are funds for the LF programme managed?**

An account was opened for the LF programme with the Central Bank. This account receives funds from technical and financial partners and a subsidy from the State. The account signatories are the Director of the Administration and Finance of the Ministry of Health and the



person in charge of the LF Programme. The LF programme was the first to have a budget line and thanks to its success a budget line for communicable and non-communicable programmes including NTDs was added in 2008.

The funds received for epidemics were used for the international vaccination days and due to this other diseases were neglected. In December 2006, 145m CFA was donated for NTDs plus a further 145m CFA for the LF programme. Parallel to PPTE (HPIC) and other contributions, the programme has managed to mobilize funds for LF.

### **Opportunity for shared learning**

The Director of Finance's attendance at the bi-annual GAELF conference has opened other horizons for Burkina Faso health programmes. He was able to meet with other heads of programmes to listen and learn from them and as a result when he returned to Burkina Faso he opened the budget line for LF and other NTDs. Therefore, having Directors of Finance from endemic countries involved in such meetings enables a better understanding of programmes when it is time for budgeting.

Note: The session Chair congratulated the government of Burkina Faso for creating a budget line including NTDs in the national budget.

### ***The Contribution of NGDOs: the Onchocerciasis NGDO Group and LF NGDO Network: Dr. Charles Franzen***

#### **A legacy fulfilled**

Recalling the late Mwalimu Nyerere's wise words when he said "Kupanga ni Kuchagua" meaning "To plan is to choose", Mwalimu's broad vision on the development to improve lives of his people while emphasizing the importance of choice was commended. The NGDOs were described with emphasis that they are not NGOs. They are non-governmental development organizations with stated objectives to improve the lives of those they serve; and can be ANY kind of organization – even political or social – provided they are not government agencies.

#### **What are NGDOs?**

NGDOs are international and local organizations mandated to do development work, very often with long experience working in developing countries, some with religious affiliations, but all with a vested interest in the well-being, social, economic and health of a country. NGDOs have extensive in-country networks of local partners and experience working with local communities.

They usually have close and invaluable relationships with local authorities including government and Ministries of Health. NGDOs are pioneers in medical service delivery. Some were among the first to provide specialized services in the hinterland of developing countries. They are staffed by hard-working and, in some cases, self-sacrificing individuals both national and international, willing to serve in the remotest areas of a country – **where the need is greatest: beyond the end of the road**; and often have strong support, not necessarily financial, in countries of origin as well as with a network of relationships including that with overseas governments.

#### **Quick fact!**



Faith-based health service delivery facilities and programmes deliver between 30%-70% of health care in Africa. The NGDO contribution is referred to in the broadest sense arguing that despite other failings the present American Presidential administration has provided more direct funding to NGDOs, FBOs and CBOs in eight years than in the previous 211 combined and that there is an unstated understanding that NGDOs provide what no other organizations can. They are essential and are recognized by many international organizations.

The main roles of the Oncho NGDO group are technical, financial and management support to CDTI projects; integration and co-implementation and operational research.

### **NGDOs and LF**

The following is a list of members of the LF NGDO network, a large group of organizations, which taken together have vast experience in CDTI activities, morbidity control, treatment & management, and integration of numerous health services, including NTDs.

- Amaury Coutinho, Brazil
- Catholic Medical Mission, USA
- Christoffel-Blindenmission (CBM)
- Handicap International (HI)
- Health & Development International (HDI)
- Helen Keller International (HKI)
- IMA World Health (IMA)
- International Foundation for Dermatology, UK
- International Skin Care Nursing Group, UK
- International Volunteers in Urology, USA
- LEPRO, UK
- Mectizan Donation Program (MDP)
- Task Force for Child Survival and Development, USA
- The Carter Center (CC)
- Sight Savers International (SSI)

### **Specific contributions of NGDOs**

Each NGDO network contributes to specific areas in line with their specialization and comparative advantage. Below are examples of the type of work NGDOs undertake:

*Health and Development International (HDI)* provides support for and coordination of the West African LF Morbidity Project that was initially funded by the Bill and Melinda Gates Foundation through that Foundation's initial LF grant and is now funded by the government of Norway through NORAD.

*Helen Keller International (HKI)* received a grant from the EU in 2008 for integration in Burkina Faso together with Handicap International, looking both at MDA and morbidity control. This is an integrated Oncho/LF/Vitamin A project. It also managed the integration of Oncho and LF in Tanga, Tanzania.

*Handicap International (HI)* is among other things, part of the Working Group on the Integration of Wound-Lymphoedema Management across Diseases in Resource-Poor Settings.





*Sight Savers International (SSI)*'s LF work is currently limited to co-funding the NTD programme in Sierra Leone.

*The Carter Center* currently supports LF mapping work in western Ethiopia and is engaged in mapping, intervention research and integration projects in the SE states and the states of Plateau and Nassarawa in Nigeria.

*IMA World Health* has projects in India (LF Morbidity Management Program); Togo as part of the PNEFL working in 7 endemic health districts; and in Haiti where IMA is the lead agency in the USAID/RTI funded LF and STH integration programme.

### **Challenges facing NGDOs**

NGDOs are facing several challenges in pursuing their work. Funding is a very serious problem due to funding limitations. As the LF NGDO network, NGDOs are facing problems in the integration of morbidity management with MDA before integrating with other NTDs; problems with the reporting framework and communication; and in the consolidation and strengthening of partnerships and involvement with the network.

A vote of thanks was recorded to the communities and suffering people, to the Ministries of Health and to all the people participating in NTD control.

The presentation ended with a Swahili slogan: “Tushinde wote katika vita dhidi ya Matende na Mabusha!” – “Let us all win in the fight against lymphoedema and hydrocele!”

### ***Health Sector Financing*** ***Professor Bernhard Liese***

This presentation looked at the trends for Official Development Assistance (ODA) to Africa and informed the meeting that the overall sector financing environment has dipped following the Cold War with a slow recovery starting only after 2000.

#### **Aid flow trends**

Aid flow to Africa reflects the same trend. ODA in the form of Foreign Direct Investments (FDI) is still the highest form of aid to Africa. The changing landscape is being observed as the share of programme and project aid is going down - this should not be ignored.

The health sector has disproportionately benefited by this. After sector wide reforms, health and education received the largest amount of resources. The HIV/AIDS epidemic and MDGs have helped to retain fund flow into the sector.

#### **Some light at the end of the tunnel**

There are new sources of health money such as the Global Fund and the President's Emergency Plan for AIDS Relief (PEPFAR) which account for an increase of about \$2b annually. Bilateral donor assistance is another large contributor. However, it is not certain that the official development assistance for the health sector will continue to increase because other sectors (e.g. agriculture) are more prominent. The exchange rate of the dollar has been dropping which is also disturbing as project and programme funding is dollar dominated.



### **However...**

There is intra-sectoral competition for resources to reach the MDGs. This will probably increase as we get closer to the MDG deadline. Modalities for assistance have changed with project funding being replaced by programmatic sectoral funding and fast disbursing instruments with a government in the driver's seat. The new lending instruments include Sector Wide Approaches (SWAPs), Poverty Reduction Support Credits (PRSCs) and Budget Support.

### **LF Focus**

In this existing environment, LF needs to focus on 2 key messages: Highly Effective and Inexpensive!

Data is available to demonstrate that MDA is having an impact with unit costs as low as between US\$0.6-22; as experienced in Ghana, Zanzibar and Togo. Programmes reaching a large population have low unit costs and scaling up MDA has cut unit costs in half in Tanzania and Burkina Faso. The Burkina Faso model is worth emulating. Expenditure categories show the majority of funding being used for training and social mobilization, MDA and M&E. Funds are largely spent at district level (almost 60%) and the government is the major source of funding providing 60% of the required funding, and showing a multifold increase between 2002 and 2006.

LF programmes are primarily inexpensive yet highly effective. The fiscal burden on MOF/MOH is minimal and well within the fiscal ceiling; they are insignificant from the perspective of sustainable debt. All LF programmes have required external funding to launch. However, an external catalytic input is always present as gradually programmes are able to mobilize national funding. It is important to note that a budgetary commitment by the government is a pre-condition for sustainable LF programmes. It is therefore desirable to anchor LF programmes in the national budgetary system as a budget line, even if it is a budget line for a group of NTDs, e.g. in Ghana.

### ***The Global Network for Neglected Tropical Diseases***

***Ms. Kari Stoevers***

### **Appreciation of GAELF's efforts**

The achievements and cohesion of the GAELF partnership and the LF elimination success stories which demonstrate 10 years of successful partnering are impressive. With 1 billion LF cases treated since 2000, onchocerciasis elimination in 10 West African countries and CDTI reaching those beyond the road, GAELF can be duly proud. Partnership is the best buy in global health because partnership = progress. Earlier presentations have provided great success stories that can solicit more funding. The Global Network for Neglected Tropical Diseases (GNNTD) was formed 2 years ago with the general aim of taking the "Neglect" out of these tropical diseases.

### **Pharmaceutical commitments: Rapid Impact Package**

GNNTD's advocacy role is complemented by support from the pharmaceutical industry. Five pharmaceutical companies have supported NTD work over the years. GSK has donated albendazole for over **600 million treatments** since 1998; Merck & Co., Inc. Mectizan over **539 million treatments** since 1988; Pfizer azithromycin **120 million doses** provided since 1999; Johnson & Johnson mebendazole **50 million tablets** in 2007; and Merck KGaA Praziquantel **200**



**million tablets** between 2008-2017. The Network uses the drug donations as leveraging to raise financial donations. Despite the drugs we are still not reaching the targets. The challenge is how to reach the most neglected areas.

#### **Alliance + Collaboration = Impact**

In 2004, a new theory that involved coming together to form an alliance for increased impact was initiated recognizing the value of an extended partnership within the NTD community. When NTDs are aggregated there are more Disability Adjusted Life Years (DALYs) from NTDs than there are from TB and malaria but funding levels are much lower. These are messages that the network uses to raise money.

#### **New Global Health Celebrities**

Global celebrities including political figures, artists, athletes and other key influential people have been used to raise large sums of money. It takes a lot of effort but the rewards are worth it. Such efforts have enabled the release of \$4.6b over 2 years from the Global Fund; up to \$135m for 2007 under the President's Malaria Initiative (PMI) and between \$30-50m under PEPFAR.

GNNTD's funding members include former US Presidents Jimmy Carter and Bill Clinton who both committed to raise funds for NTDs. New ambassadors have been coming on board over the years as a result of rigorous advocacy work.

#### **The approach**

A three-pronged approach is utilised. It works on partnership development including collaboration, integration and cost-efficiency; targeted advocacy to key decision makers, opinion leaders; and resource mobilization from governments, multi-laterals, corporations, foundations. GNNTD has worked with the US State Department by providing information on NTDs to the President leading up to his \$350m announcement.

President George Bush has pledged substantial funds for Malaria and HIV/AIDS. GNNTD, prior to the upcoming election, is briefing with Presidential candidates regarding NTDs. The Gates Foundation gave a \$3.89 grant over 3yrs for advocacy and fundraising to mobilize new resources for NTD elimination and control including LF, oncho, schisto, STH and trachoma).

There are 13 NTDs which disfigure and keep their victims trapped in a cycle of poverty. They affect the poorest of the poor and have devastating effects beyond HIV and AIDS combined. It is not easy to end poverty with crippling diseases like these affecting millions of people. A programme can cover an entire village with small amounts of money. Amazing tools are available for research that can be used to determine a new vaccine. GAELF was urged to encourage member states to be innovative in finding ways to effectively use the new money that is available for NTDs.

A campaign video that is used to raise funds for NTDs was shown which ended with a quote from Steve Case, co-founder of AOL and Chairman of The Case Foundation, that urges collaboration and partnership between the private and social sectors which says: *"There's no logical reason why the private and the social sector should operate on separate levels...If we can unleash a new entrepreneurial, collaborative kind of philanthropy, we can create new patterns*



*that will help reshape the entire system – combining the innovation of the business world to generate transformative change...More than ever, business is ready to answer the call to arms.”*

**G8, the Global Fund and other Fundraising Opportunities**  
**Professor Alan Fenwick**

**Where are we today with NTDs?**

The recognition of the importance of NTDs is overwhelming. The Schistosomiasis Control Initiative (SCI) was established in 2002 with a grant from Bill and Melinda Gates Foundation to assist countries to implement schistosomiasis control combined with de-worming in Africa. It commenced in 6 countries as part of a school health programme. Within 3 years things changed to a focus on integration of neglected tropical disease control, and included two new countries. SCI now works in Burkina Faso, Niger, Mali, Uganda, Zambia and Tanzania and more recently in Burundi and Rwanda.

Since the commencement of the Programme the cost of Praziquantel has dropped in price by 93%. Initially the cost was \$1 per tablet (\$4 for an adult course). By 2008 several pharmaceutical companies had reduced the cost to \$0.7/tablet. It is now possible to treat a child for only \$0.20. There are also new technologies such as dose poles that do not require weight measures. SCI has managed to increase and expand coverage to national level reaching over 43m cumulative treatments delivered in 2006/2007 using Praziquantel and albendazole in all countries with an SCI presence.

Equally impressive results have been achieved by NTD programmes in Uganda (hookworms), Burkina Faso (schistosomiasis) and Tanzania (through the school health programme for the treatment of worms and schistosomiasis). As a result of advocacy conducted, a private donor will be assisting to cover areas that have not been covered. Every school age child in Tanzania will be treated in 2008.

**The rapid impact package**

The focus is now on “integration” and the delivery of neglected tropical disease control. MDA for the “seven big NTDs” is done under this integrated programme. Treatment costs have gone down to only \$0.50 per person per year for an all inclusive package of drugs delivered with equipment, health education materials, training of personnel and M&E; only once a year. Countries with good governance are covered fairly well.

There is no shortage of donated drugs. The problem is how to reach the people who need them. What is needed now is political will, different advocacy tools, training, transport, community drug volunteers and a fund of approximately \$250m per year to deliver those drugs

**Paint the whole continent**

There is need to expand and cover the whole of rural Africa. Approximately 500m people need treatment for one or other of the parasitic diseases. Some promising results have started to emerge as a result of the advocacy efforts that have been made. The US government under President Bush’s administration has pledged \$350m. It is crucial to invest in regional implementation plans and gradually move towards global coverage. At the moment there are



different organizations working together in different countries. There is need to paint the whole of Africa and get all programmes working together.

### **Keep beating the advocacy drum**

As a result of the advocacy and immense support received and ongoing advocacy NTDs are an attractive programme to support. The Gates Foundation has large funds to invest and their goal is to target the poorest of the poor.

There has been talk about the possibility of NTDs being taken up by the Global Fund. There is also a possibility of NTDs getting on the agenda of the G8. All these are possibilities but we need more than drugs and money. There is a lot of talk about MDA, but that is not all. There is need to follow up on the SAFE strategy and water and sanitation interventions and target private donors.

### ***USAID NTD Control Program***

***Dr. Margaret Baker***

#### **Program overview**

This is a 5-year \$100m program funded by USAID. Its main objective is to control and reduce the burden of targeted neglected tropical diseases: schistosomiasis, lymphatic filariasis, onchocerciasis, soil-transmitted helminths and trachoma. It is envisaged that by 2011, the NTD Control Program will have treated 40 million people, have 160 million on drug treatments and be working in 15 countries.

The Program is not intended to replace the disease specific programs nor fund a fully comprehensive NTD program. Rather, it was designed to make an important contribution to NTD control by co-implementation of drugs for 5 diseases.

#### **Country programs**

There are two types of programs: Fast Track Country Programs covering 6 countries (Burkina Faso, Ghana, Mali, Niger, Uganda), and those known as new FY08 countries which include Haiti, Sierra Leone and South Sudan that had to go through a competitive process.

The programs are designed and implemented by governments and funds and technical assistance provided through 6 partners and grantees. Namely:

- Liverpool Associates in Tropical Health
- Schistosomiasis Control Initiative
- International Trachoma Initiative
- Helen Keller International
- Malaria Consortium
- IMA World Health

#### **Accomplishments to date**

It is a relatively new program so that focus was more on treatment. A total of 22.3m persons have been treated for NTDs, and 47.6m treatments delivered. These successes would not have been possible without the generosity of pharmaceutical companies (Merck & Co., GSK, Johnson & Johnson and Pfizer) that donated over \$400m worth of drugs.



## **Methodology**

Data was collected by the NTD Control Program in collaboration with the Atlanta and Liverpool Centres and LF Program Managers to see the impact of the USAID-funded program. Data was analyzed in terms of numbers of districts and persons treated by funding source and coverage rates achieved from 2004-2007. Preliminary results show a dramatic scale up of up to 96% of geographical coverage projection for 2008. It is also not easy to separate out funding sources as even though USAID was the main source of funding, there were important contributions from district and government. Funding is both external and internal country.

Before 2007, LF programs in Mali, Uganda and Niger were very small or non-existent. There has been a rapid scale up. Mali is hoping to achieve national coverage. Burkina Faso and Ghana had both achieved national scale up. In Ghana, there was high dependence on external funding and when one source dried up USAID stepped in. This highlights the importance of having mixed funding sources. The programme in Niger is fully USAID-funded and Burkina Faso is a good example of government commitment. With a line budget USAID has helped by giving top up funds reinforce the program in terms of quality, but the government is running the program.

## **MDA coverage**

Quality of MDA coverage has been maintained with steady coverage rates for Burkina Faso, Ghana and Mali just below 80%. Niger achieved almost 90% coverage within the same year the LF program was launched. Uganda has stabilized at around 70%.

## **The Grants Program**

Grantees in new countries (mostly NGOs) must compete for grants. It is a highly competitive process. Very many applications are received but there are pre-conditions that must be fulfilled for a grant proposal to be considered. The main one is the commitment by the Ministry of Health to provide government's own resources. Other requirements include the capacity to integrate the programs and additionality. USAID funds are not adequate to meet all NTD program needs; they just build on what already exists by expanding coverage (more districts), increasing the number of people treated, and additional diseases treated (mapping to target treatment of new diseases). Applicants must demonstrate that government funding is continuing and increasing and demonstrate the ability to work together to bring in new sources of funding.

## **Highlights of Discussion**

### *Oncho LF Collaboration*

Delegates felt that it was extremely important that the oncho and LF programmes work together to agree on a mechanism on how to increase access to medicine for the poorest. A solution for the way forward needs to be identified immediately.

### *Funding mechanisms*

To avoid double funding and make it easier to identify funding gaps and individual contributions, there is a need to harmonize funding sources by developing a common budget that will indicate how much each partner including the government is putting into the program, and for which activity. The LF group needs to come up with a small committee that will develop a mechanism to help USAID and others in disbursing funds where there are gaps. This committee should report back at the next GAELF meeting.



#### *Unbalanced attention between regions*

There is unanimous agreement that the achievements in the past 4 years are commendable. The African region is the centre point of all the activities and there is coordination and a complete understanding about the need to expose outstanding problems. However, concern was raised about the limited attention that is being paid to the Asia Pacific Region. The delegate who raised this concern cited countries like Papua New Guinea that have had no funding whatsoever from any source to draw the attention of the meeting to the unbalanced attention among the LF endemic regions.

Adding on to this observation, another delegate reminded participants about the need to empower and facilitate what he called “Neglected Tropical Countries” (NTCs) that do not have the capacity to compete for resources.

#### *Bravo Burkina Faso! But how did you manage?*

Everybody at the meeting agreed that having a budget line for a specific disease or group of diseases is very important because not only does it ensure continuity of the programme, it also demonstrates the commitment of the government to the objectives of the program. There was a general curiosity and need to learn how the LF programme managed to convince the Minister of Health and the government to create a budget line in the government budget. Further observations suggested that in Africa in general not only is it difficult to achieve a budget line, even the willingness to fight tropical diseases is sometimes a problem.

The response given by the delegate from Burkina Faso does not indicate any specific strategy or magic wand that the LF programme used to get a budget line. They just put a budget proposal together and approached the Ministry of Health and they got some money. They approached the Ministry again after the Fiji meeting with a proposal for all diseases in the NTD package and were successful again. This produced the confidence to approach the Ministry of Finance. Precedence had already been set and fortunately there was some unallocated funds were identified. Thereafter a budget line was requested and granted. The power of persuasion worked for the LF programme in Burkina Faso and as a result of the programme’s impressive results the LF budget line remains.

Further discussion on the issue of budget lines suggested the need for strategic lobbying and advocacy using evidence-based data to argue a case. However, each region needs its own approach and its own targeted advocacy. A blanket approach would not work.

#### *Assist countries that have not started LF programmes*

Deliberate efforts need to be made to assist countries that have not started LF programmes in Africa, and scale up activities in the rest of the continent, as well as countries in the SEAR region that have not been covered yet. Delegates were encouraged to share their ideas on how to use available funds including having a percentage of funds towards operational research.

#### *Focus on disability*

There was concern that disability has always been regarded as a side-kick and that the time has come to expand partnership to include people with disability.









### **Discussion highlights during the RCG meeting**

EG was commended on the activities carried out but members of the RCG reiterated the need to expand EG membership to include country representation and increase membership to the RCG by including new members. While recognizing the need to take up opportunities that present themselves through the NTD agenda, the RCG was conscious of the need to focus on GAELF's major goal of advocacy and fundraising for the elimination of LF.

### **Resolutions**

Three resolutions were made during the RCG meeting:

1. The GAELF Secretariat remains in Liverpool to the next GAELF meeting;
2. GSK and Merck & Co. Inc. would join WHO as observers on the EG.

The third resolution was added following the secret ballot to elect EG member when no endemic country representatives were nominated:

3. Two endemic country representatives would be co-opted to the EG by the EG;

Thanks were recorded to the 2006/2008 Executive Group who stepped down.

The membership of the Executive Group was discussed and was restructured as:

- 5 members elected by the RCG
- 1 RCG Chair
- 2 endemic country representatives co-opted by the EG
- 3 observers – representatives from GSK, Merck and WHO

Nominations and voting for Executive Group membership was by secret ballot. The Executive Group membership to the period to GAELF6 is:

#### ***Elected members***

David Molyneux (Executive Secretary)	Adrian Hopkins
Pat Lammie	Bernhard Liese
CP Ramachandran	

#### ***RCG Chair***

Mwele Malecela

#### ***Co-opted country representatives***

Dominique Kyelem	Tilaka Liyanage
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#### ***Observers***

Ken Gustavsen	Merck & Co. Inc.
Andy Wright	GlaxoSmithKline
TBA	WHO



### **Possible Venues for GAELF6**

The decision regarding the hosts for the next GAELF meeting was delayed. Possible venues for the next GAELF that included: Kuala Lumpur, Seoul, Vietnam and Manila. Consultation will be undertaken following GAELF5 and member countries will be informed on the final decision in due course.

### **Directives to the EG**

The EG was given the following directives which will guide their work in the next term. The directives drew on recommendations that came up in the different sessions during the meeting.

- Review the governance- including the need to revolve RCG members;
- Focus on assisting countries to start up programmes in Africa;
- Scale up activities in Africa;
- Advocate for funds for operational research;
- Focus on disability;
- Make better use of the constituencies.

The GAELF President/RCG Chair expressed her concern about the insufficient flow of communication within the RCG. Communication was mainly been dominated by email communication which was also minimal. There is a need to think of ways to increase communication. It was suggested that in addition to email communication, the RCG should hold one meeting in the middle of GAELF meeting to review progress mid-year and plan the way forward.

### **Reactions to the RCG report and comments on the Meeting**

#### *Expand EG and increase RCG membership*

Dr. Mwele Malecela was congratulated for being re-elected as Chair of the RCG and for her astounding performance and the EG was applauded for all the activities successfully undertaken during their term. Delegates requested that while identifying members to be co-opted into the RCG, in addition to gender balance, the EG should also try to find a balance between members from Anglophone and Francophone countries. Specific reference was made to the Pacific countries that are representing 20% of the globe but are not members of the EG. The rationale behind this argument was that partners that came together in the previous meetings are not the same partners today and that there was a need to review the partnership base and analyze the functions of different constituencies, particularly those responsible for key activities like advocacy and fundraising.

Responding to this discussion, the GAELF President urged delegates to agree and respect the outcome of the elections for now and assured delegates that their concerns would be worked on in future.

#### *Make better use of constituencies*

Delegates observed that there are very strong constituencies, including research, academia and NGDO networks that could be made better use of. They requested a clarification of roles so that each constituency is clear on how they can support the Alliance.

#### *Excellent meeting*



There was unanimous agreement among delegates that GAELF5 was well organized and well planned. The RCG, the Liverpool Secretariat and the local organizing committee were congratulated for a stellar job.

Humbly accepting the gesture of appreciation, the GAELF President admitted that it was hard work but that the spirit of cooperation and the optimism that they received helped a lot in getting the meeting off the ground on the right foot. She confessed that it was a good time to be on the EG and thanked the former EG for laying the foundation that enabled them to move forward.

*Recommendations for future GAELF meetings*

A request was made that in the next GAELF meeting presentations should be of at least 15 minutes to allow meaningful discussion and that there should also be regional presentations.

The GAELF President assured delegates that the organizing committee spent several days looking at the agenda to make it diverse and at the same time useful. She cautioned about the time constraints especially given the amount of time that opening and closing sessions usually take. Delegates however agreed that the opening ceremony was excellent and hence worthy of the time. They also commended the decision to include LF patients who were able to air their voice.



## KEY MESSAGES AND FUTURE PERSPECTIVES

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### ***The Opening Ceremony***

#### ***Dr. Mwele Malecela***

The meeting witnessed high level support at national level, Africa Union level, WHO, industry (GSK and Merck) and from Ministers from Malawi and Korea.

The announcement of the President's Fund that doubled itself in the course of the meeting was a landmark event of GAELF5. And even though it was not discussed during the respective session, the meeting proposed that GAELF advocate for a similar fund at Africa Union level.

The elimination of LF in Korea was received with acclaim and followed the recognition that China had received recognition for its achievement in stopping LF transmission.

### **Agenda item 1**

#### ***The success of 10 years***

##### ***Chair: Rt. Hon. Dr. David Mwakyusa***

Wherever there is success there are failures. Lesson learned is the key message:

- The donor community should ensure that the gains made in the 10 years are sustained;
- Additional funding earmarked for LF should continue to be sought from the broader donor community given the uncertain priority that LF is given within the NTD envelope;
- Given the overwhelming success in controlling the spread of LF, it is recommended LF control become GAELF's primary initiative and elimination continue to be the primary goal;
- Systematic updates of the problems should be provided to the World Health Assembly on a regular basis. The LF elimination strategy should be updated regularly to incorporate lessons learnt and changing opportunities;
- More attention should be paid to morbidity management by creating a provision for it in country health systems and donors should be requested to respond to the increase in demand for hydrocele surgery;
- Institutional implications of the shift towards NTDs are still uncertain for LF; GAELF and country programmes should recognize these issues and address them accordingly;
- It is encouraging to note that 38 endemic countries are now carrying out MDA; it is important to safeguard elimination while continuing to support countries with no LF programmes;
- We should continue to emphasize to all the stakeholders the need to expand the partnership; and as we continue to grow we must continue to leverage the relationships.

### **Agenda item 2**

#### ***National Stories with a Focus***

##### ***Chair: The Rt. Hon. Dr. Aisha Kigoda***

- In Egypt, the focus on endpoints of transmission helped to reduce mf levels. MDA was stopped after 5 rounds in 92.5% villages, but there is still a need to detect any early signs of resurgence of infection;



- Social mobilization and political commitment are important and have to continue to maintain the partnership;
- APOC should define mechanisms to expand MDA to reach full coverage?;
- Limited awareness among communities and weak political commitment are major constraining to LF elimination efforts;
- Integration has been an important element of success in some settings;
- Experience in Burkina Faso and Zanzibar shows that country-wide MDA can only be sustained if there is a committed budget line for LF elimination;
- The country experiences are extremely valuable as they reflect reality of experience.

### **Agenda item 3**

#### ***The Global Programme in a changing environment***

**Chair: Dr. Athula Kahandaliyanage**

- Integration of NTD programmes with other health programmes is necessary to build capacity and strengthen partnerships with NGOs. There is a need to integrate for cost-effectiveness where appropriate;
- CDTI is an effective vehicle to reach people beyond health services; other information could “piggy back” onto CDTI;
- There is a need to understand that integration is complementary and not a parallel structure to government services. It should be attempted only where it will work and programmes should find ways to coordinate efforts to deliver cost-effective services;
- NTD control programme, integration, co-implementation, partnership are all effective modalities for working together;
- Resource mobilization, health systems development and cost-effectiveness studies are important for reaching goals effectively.

**Proverb:** “If you want to go fast; go by yourself if you want to go far go with somebody else”

### **Agenda item 4**

#### ***Prioritizing Operational Research to Address Key Challenges***

**Chair: Dr. Lorenzo Savioli**

- As implementation opportunities expand in the context of NTD programmes it is important that the Alliance shows awareness of the different tools being used to combat the disease;
- There is a need to enhance the coordination of LF research efforts among the various supporting agencies due to restricted resource availability;
- There is a need to support studies to define the best ways to integrate LF with other health programmes within the context of the primary health care system;
- It is important to realize that funds alone are not sufficient; there are other important components that are important for the sustainability of LF elimination efforts

### **Agenda item 5**

#### ***Part 1: Morbidity Management and Disability Prevention – Patient’s perspectives***

**Chair: Professor Charles Mackenzie**

- There is a need to facilitate the establishment of patient support groups. The concept of patient groups should be included in the Alliance;
- Patients are advocates for LF elimination;



- The primary reason why the programme began in the first place is the patients. All efforts should keep that in mind.

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## ***Part 2: Morbidity Management and Disability Prevention***

### ***Chair: Pierre Brantus***

- The West African project allows the training of personnel within a short time and to carry out hydrocele operations. There is a series of techniques that can be used by surgeons;
- The national LF programme in Tanzania is a model of success;
- Experience gained and information shared will help to revive hydrocele treatment in programmes that were still lagging behind;
- There is a close correlation between the treatment of drugs and patient recovery (Tanzania experience);
- When much of our focus is on MDA the GAELF has a responsibility to patients and promoting morbidity control.

## **Agenda item 6**

### ***LF in an NTD World: Advocacy and Financing***

#### ***Chair: Dr. Peter Kilima***

- National Ministries of Health or any other responsible authority should introduce a budget line for NTDs and incorporate NTDs in the Ministry's strategic plans;
- Advocacy for NTDs should target decision makers. At national level it should be Ministries of Health and national and international NGOs;
- The MoH should develop a national plan for NTDs that will guide the implementation process and allocation of resources. It should be outlined and well planned;
- The Ministries of Health of Tanzania and Burkina Faso, because of their successful experience, should convene a sub-committee to deal with sub-financing issues in increasing LF as a priority in national plans;
- APOC could be used as a model to coordinate LF control and elimination activities;
- All countries should be engaged and assisted to develop a strategy for NTDs to guide resource allocation;
- The meeting should strongly recommended that governments ensure leadership in planning and coordinating financing. Countries should take the lead in flagging up the importance of NTDs;
- GAELF needs to improve data collection and clinical and social outcomes; strive to increase funding for disability alleviation; strive to improve the scientific research base and increase participation of local NGOs where they exist and have their capacities built

## **Highlights of Plenary Reactions from the summaries**

- Need to strengthen M&E systems by developing information systems that address all the key country experiences for advocacy;
- Need to demonstrate impact and effectiveness of co-implementation;
- Given the known shortage of human resources, there is a need to involve communities more in our work;
- Efforts to increase the mobilization of health personnel, training them and improving their skills and competence. We must not only use them as drug distributors but as core-managers of our activities;



- Create task forces at community level comprising those who are involved in NTDs and expand existing ones to incorporate other components and other health-related programmes particularly NTDs;
- Need to strengthen the technical and operational staff at WHO HQ and region;
- Use regional implementation of LF programme models without losing sight of the achievements realized by different countries;
- Need to maximize the existence of political will and support in the countries;
- GAELF should strive to have synergies with the big 3: malaria, vector control and home based care programmes for HIV/AIDs;
- Need to put in place advocacy initiatives using groups or networks for patients
- Programmes should have financial sustainability plans in areas where there is no budget plan;
- Synergy between prevention of disability and morbidity management – there is an intense infrastructure organized under the international federation of international leprosy organizations (ILEP) which meets on a yearly basis and a lot of members are open to be doing morbidity management – leprosy cases are declining and members are willing to take on new work. GAELF was invited to attend ILEP meetings



## LESSONS LEARNED AND RECOMMENDATIONS ON THE WAY FORWARD

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The theme of the meeting allowed for reflection on the successes of the Global Programme as well as a reflection on the role of the Alliance as a health partnership. Listed below are key lessons that will serve as useful pointers for the next decade.

### *Link between LF and poverty:*

1. LF is primarily a disease of the poor; as such, the fight against LF is a fight against poverty.

### *The power of numbers/integration:*

2. Simple measures can transform lives. However, sustainable and lasting change can only be secured through a strong combination of partnership and innovation.
3. In order to maximize the effect of resources and coordinate efforts at community level, there is need to integrate programme activities for related diseases (co-implementation).

### *Conducive environment:*

4. There is a strong political will to fight NTDs and greater hope for the elimination of LF now that the trend is to invest in health for economic development.

## RECOMMENDATIONS

### **Focus on Elimination**

1. The goal of the Global Alliance is the interruption of transmission resulting in the elimination of LF as a public health problem. The Alliance recommends continued and consistent advocacy using evidence for successful and low cost elimination that is possible within a relatively short period of time;
2. The Alliance recommends that WHO should report regularly to the WHA on the progress towards eliminating LF 'as a public health problem' in relation to WHA Resolution 50.29;
3. The Alliance recommends that the strategy of the Global Programme should be reviewed periodically by WHO to incorporate lessons of experience and changing opportunities;
4. The Alliance should encourage the initiation of studies to develop a '*transition-phase*' strategy that would provide for the effective continuation of ongoing activities of health programmes 'integrated' with the GPELF, even after LF MDA activities have ceased;
5. It was noted that 38 endemic countries were now carrying out MDA. It was recommended GAELEF advocate for programmes to safeguard existing achievements and scale up towards elimination, while also addressing the needs of those countries which to date have not yet initiated a national programme.
6. The GAELEF recommended that given the need to continue upscaling national programmes and initiate new country programmes WHO should seek to increase human resources for LF elimination in the context of the higher priority accorded to NTD preventive chemotherapy strategy and in the light of the success of LF elimination programmes to date.

### **Integration/ co-implementation**

1. The African region carries a high burden of lymphatic filariasis (390 million in 39 countries) - one third of the global burden. Therefore, the GAELEF recommends further strengthening of





efforts towards mobilization of resources and integration to continue and expand elimination efforts and requests the African Regional Office to raise the profile of the disease in countries without a programme to initiate one as soon as possible;

2. GAELF recognized that integration of NTD control or elimination activities should be a participatory process ensuring Government leadership in planning and project management. Therefore, the Alliance should support studies to identify *best practices for integration, coordination/co-implementation of LF activities* with those of other health programmes (including NTDs) *within* national health care systems;
3. GAELF recommends that countries build on the opportunity of Community Directed Treatment (ComDT) particularly with APOC to expand LF MDA to reach full implementation units. GAELF should work more closely with APOC to develop mechanisms to support the expansion of co-implementation.
4. The institutional changes at the international and country level resulting from a shift towards broader NTD control from individual disease control/elimination have implications for the Global Programme and the Global Alliance. It was recommended that this issue be recognized and addressed, acknowledging that there was a need to continue the disease specific advocacy function of GAELF.

### Research

1. As the implementation of LF programmes expands (especially in the context of the greater focus on co-implementation/integration of NTD programmes) the Alliance must ensure continued *awareness of the importance of supporting operational research* to improve the tools and strategies that underpin the LF (and other NTD) programmes;
2. The Alliance should work to *enhance the coordination of LF research efforts* among the various supporting agencies to ensure that potential gaps are filled and duplication is avoided;
3. The current operational research funding for LF from the Gates Foundation and other agencies has allowed important questions to be addressed. The GAELF recorded its appreciation for that support. However, it was recommended that GAELF should work to secure additional *support for specific critical programmatic and operational research issues* that currently are either *not addressed or are inadequately funded*. The most important of these include :
  - a. the scale-up of disability management and prevention;
  - b. the mapping of LF concurrently with mapping for other NTDs;
  - c. optimizing drug delivery mechanisms – particularly as they relate to community involvement and the primary health care system;
  - d. carrying out LF programme activities in urban settings;
  - e. development of new simplified, inexpensive diagnostics;
  - f. development of robust systems for monitoring, evaluation and data management;
4. The Alliance should promote the *harmonization of operational research with 'upstream' research* aimed at addressing basic research issues, including new drug and tool development.
5. The Alliance should strongly support WHO's efforts to find an *alternative to the technical role TAG has played* in the Global Programme over the past 10 years;



6. The GAELF recommended that data collection on clinical and socio-economic outcomes was required, especially in relation to disability prevention and alleviation.

### **Morbidity Control**

There is a need to emphasise the importance of this element of the LF elimination strategy:-

1. It was recommended this can be achieved by:
  - a. countries and donors responding to the increased demand for hydrocele surgery and morbidity management to accompany the introduction of LF mass drug administration;
  - b. improving the scientific research base on LF disabilities.
  - c. exploring ways to increase participation of local NGOs especially in South-Asia.
2. GAELF recommends extending the West Africa morbidity project, initially to other African regions and eventually globally;
3. GAELF should encourage WHO to plan a review of the recommendations established in 2002 on the management of hydrocele;
4. GAELF recommended that advocacy for the Global Programme should include the need for hydrocele surgery and morbidity management, emphasising that partners are committed to expanding these important activities;
5. Recognising the need for greater NGO involvement it is recommended that GAELF explore the potential to participate in future meetings of the network of organizations working in the field of leprosy and trachoma;
6. Studies should be initiated to confirm the indications that LF MDA reduces the clinical manifestations of the disease;
7. The absence of the incidence of new clinical cases should be included as a parameter defining the success of the programme.

### **Financing**

1. The donor community should ensure that the gains achieved through country commitment and resources, donor support, including the pharmaceutical donors and under the Gates grant are sustained to provide catalytic funding to initiate more national programmes in Africa.
2. Additional funding for LF specific programmes should continue to be sought from the broader international donor community recognizing that LF is a key intervention within the NTD envelope.
3. GAELF should continue to advocate for prioritization of NTD elimination and control as a global health priority and ensure there is a coherent platform to develop coordinated strategies;
4. GAELF should seek funding to increase resources for disability management and hydrocele surgery.



**APPENDIX A GAEFL Agenda**  
**1<sup>st</sup>-3<sup>rd</sup> April 2008**

<b>DAY 1 Tuesday, 1<sup>st</sup> April 2008</b>		
	<b>CHAIR:</b> President of GAEFL, Dr. Mwele Malecela	
<b>0830-0845</b>	<b>Delegates to meeting room</b>	
<b>0900-1030</b>	<b>OPENING CEREMONY</b> National anthem <b>Welcome addresses by:</b> Chair of the Local Organizing Committee – Dr. D. Mmbando GAEFL President – Mwele Malecela WHO GSK – Mr John Musunga, Managing Director GSK East Africa MSD – Mr Steffen Brygger, Managing Director MSD South Africa Regional Commissioner - Mr Isidori Shirima Minister for Health and Social Welfare – Hon. Professor David Mwakyusa <b>OFFICIAL OPENING</b> by His Excellency Jakaya Mrisho Kikwete, the President of the United Republic of Tanzania <b>Vote of thanks</b> (GAEFL Executive Secretary – David Molyneux)	
<b>1030-1115</b>	<b>TEA – photograph</b>	
<b>1115-1230</b>	<b>AGENDA ITEM 1</b> <b>The success of 10 years</b>	
	<b>CHAIR: Minister of Health &amp; Social Welfare, Tanzania – Professor David Mwakyusa MP</b>	
	Perspectives from: <ul style="list-style-type: none"> <li>• Global Programme</li> <li>• Achievements from the 1<sup>st</sup> Gates Foundation grant</li> <li>• Gates Foundation perspective</li> <li>• Global Alliance</li> <li>• Africa region</li> </ul>	<ul style="list-style-type: none"> <li>• Dr. Lorenzo Savioli</li> <li>• Professor Bernhard Liese</li> <li>• Dr. Julie Jacobson</li> <li>• Professor David Molyneux</li> <li>• Dr. Charles Ravaojanahary</li> </ul>
<b>1230-1430</b>	<b>LUNCH</b>	
<b>1430-1545</b>	<b>AGENDA ITEM 2</b> <b>National stories – with a focus</b>	
	<b>CHAIR: Deputy Minister of Health &amp; Social Welfare, Tanzania – Dr. Aisha Kigoda MP</b>	
	<i>Korea's commitment towards eliminating LF as a public health problem</i> <ul style="list-style-type: none"> <li>• <i>Social mobilisation</i> in Sri Lanka</li> <li>• <i>Endpoints</i> of transmission in Egypt</li> <li>• <i>Primary health care</i> integration with LF in the Dominican Republic</li> <li>• <i>Integrated NTD programme</i> upscaling in Nigeria</li> </ul> Q&A	Dr. Jong Koo Lee <ul style="list-style-type: none"> <li>• Dr. Tilaka Liyanage</li> <li>• Dr. Reda Ramzy</li> <li>• Dr. Manuel Gonzalez</li> <li>• Dr. Patricia Ogbu Pearce</li> </ul>
<b>1545-1615</b>	<b>TEA</b>	
<b>1615-1715</b>	<ul style="list-style-type: none"> <li>• <i>National financing</i> and upscaling in India</li> <li>• <i>Mobilising political will</i> in the Philippines</li> <li>• <i>Post-elimination scenarios</i> for morbidity and NTD control in Zanzibar</li> </ul> Q&A	<ul style="list-style-type: none"> <li>• Dr. GPS Dhillon</li> <li>• Dr. Leda Hernandez</li> <li>• Dr. Khalfan Mohamed</li> </ul>
<b>1715-1830</b>	<b>Representative Contact Group Business Session No.1</b>	Dr. Mwele Malecela
<b>1930</b>	<b>Sponsored dinner</b>	



DAY 2 Wednesday, 2 <sup>nd</sup> April 2008		
0900-1030	<b>AGENDA ITEM 3 GPELF IN THE CHANGING POLICY ENVIRONMENT</b>	
	<b>CHAIR: Dr. Athula Kahandaliyanage</b>	
	<ul style="list-style-type: none"> <li>Perspectives from EMRO</li> <li>The NTD policy environment – Africa region</li> <li>Health system approaches to NTD control</li> <li>CDTI for co-implementation</li> <li>Challenges of integration</li> <li>Drug donations for NTD programmes</li> <li>District experiences in LF control</li> </ul> Q&A	<ul style="list-style-type: none"> <li>Dr. Jaouad Mahjour</li> <li>Dr. Likezo Mubila</li> <li>Dr. Ousmane Bangoura</li> <li>Dr. Uche Amazigo</li> <li>Dr. Adrian Hopkins</li> <li>Mr Andy Wright</li> <li>Dr. Mariam Ongara</li> </ul>
1030-1100	TEA	
1100-1230	<b>AGENDA ITEM 4 PRIORITISING OPERATIONAL RESEARCH TO ADDRESS KEY CHALLENGES</b>	
	<b>CHAIR: Dr. Lorenzo Savioli</b>	
1100-1230	<ul style="list-style-type: none"> <li>Technical challenges facing national programmes</li> <li>Operational research issues from East and Southern Africa</li> <li>Current research initiatives</li> </ul> Q&A	<ul style="list-style-type: none"> <li>Dr. Lorenzo Savioli</li> <li>Dr. Njeri Wamae</li> <li>Dr. Eric Ottesen</li> </ul>
1230-1400	LUNCH	
1400-1630	<b>AGENDA ITEM 5 MORBIDITY MANAGEMENT AND DISABILITY PREVENTION</b>	
	<b>CHAIR: Professor Charles Mackenzie</b>	
1400-1500	Patient perspective – interviews with patients	Ms Mbutolwe Esther Mwakitalu
1500-1530	TEA	
	<b>CHAIR: Dr. Pierre Brantus</b>	
1530-1730	<ul style="list-style-type: none"> <li>West African morbidity programme</li> <li>Implementing hydrocele surgery at scale in Tanzania</li> <li>Morbidity management Bihar State, India</li> <li>Impact of MDA on clinical disease</li> <li>Integrating training for morbidity management</li> </ul>	<ul style="list-style-type: none"> <li>Dr. Sunny Mante/Professor Serigne Gueye</li> <li>Dr. Sidney Yongolo</li> <li>Mr. Jose de la Cruz</li> <li>Professor Charles Mackenzie</li> <li>Professor Terence Ryan</li> </ul>
1730-1830	<b>Representative Contact Group Business Session No.2</b>	Dr. Mwele Malecela
1930	<b>Cultural evening</b>	



DAY 3 Thursday, 3 <sup>rd</sup> April 2008		
0900-1045	<b>AGENDA ITEM 6</b> <b>LF IN AN NTD WORLD: Advocacy and financing</b>	
	<b>CHAIR: Dr. Sam Zamba</b>	
	<ul style="list-style-type: none"> <li>• In-country financing</li> <li>• NGDO contribution</li> <li>• Health Sector financing</li> <li>• Global Network for Neglected Tropical Diseases</li> <li>• G8 and Global Fund issues</li> <li>• USAID NTD programme</li> </ul> Q&A	<ul style="list-style-type: none"> <li>• Mr Emmanuel Lalsomde</li> <li>• Dr. Charles Franzen</li> <li>• Professor Bernhard Liese</li> <li>• Ms Kari Stoevers</li> <li>• Professor Alan Fenwick</li> <li>• Dr. Margaret Baker</li> </ul>
1045-1115	<b>TEA</b>	
1115-1245	Report on Representative Contact Group deliberations and decisions	Dr. Mwele Malecela
1245-1400	<b>LUNCH</b>	
1400-1500	<b>AGENDA ITEM 7</b> <b>KEY MESSAGES AND FUTURE PERSPECTIVES</b>	
	<b>CHAIR: Mr Ken Gustavsen</b>	
	Session summaries by Chairs Session summary wrap-up Vote of thanks	<ul style="list-style-type: none"> <li>• Dr. Peter Kilima</li> <li>• Professor David Molyneux</li> </ul>
1500-1530	<b>Closing ceremony in the presence of the Honorable Professor David Mwakyusa MP, Minister for Health and Social Welfare</b>	Dr. Mwele Malecela
1530-1600	<b>TEA</b>	



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## APPENDIX C

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	Togo	Dr. Komlan Nabiliou
Americas	Dominican Republic	Dr. Manuel González
	Haiti	Marie Denise Milord
Eastern Mediterranean	Egypt	Hussein Kamal
	Yemen	Abdul Samid Al Kubati
Indian Sub-continent	Bangladesh	Moazzem Hossein
	India	P.L. Joshi
Mekong Plus – only 1 rep	Philippines	Leda Hernandez
PacELF	Cook Islands	Charlie Ave
	PNG	Leo Makita
Chairs Regional PRGs	Africa	Charles Ravaonjanahary
	Americas	Jean –Francois Vely
	Eastern Mediterranean	Maged El-Setouhy
	Indian Sub-continent	Sombat Chayabegara
	Mekong Plus	CP Ramachandran
	PacCARE	Jean-Francois Yvon
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	GTZ	Sybille Rehmet
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	Merck & Co. Inc.	Ken Gustavsen
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## APPENDIX D

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***Prepared by the Executive Group of the Global Alliance to Eliminate Lymphatic Filariasis***

***The boundaries and names shown and the designations used in this report do not imply the expression of any opinion whatsoever on the part of any presenter concerning the legal status of any country, territory, city or area or of its authorities or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not be full agreement.***