



Eye of the Eagle



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IACO 2011 Marks Beginning of End for River Blindness in the Americas

The Carter Center-led Onchocerciasis Elimination Program for the Americas (OEPA) is a regional initiative that, through strong partnerships, strives to eliminate river blindness from 13 endemic areas (foci) in six countries in the Americas. The primary weapon is sustained mass drug administration of ivermectin (Mectizan®, donated by Merck), twice or four times per year. A 2008 resolution by the Pan

American Health Organization (PAHO) calls for the interruption of onchocerciasis transmission in the Americas by 2012.

The 21st annual Inter-American Conference on Onchocerciasis (IACO 2011) was held in Bogotá, Colombia, November 9–11,

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Dr. Frank Richards (left), director of the Carter Center’s River Blindness Program, receives a congratulatory certificate from Dr. Juan Gonzalo López Casas, director of the National Institute of Health of Colombia, and Dr. Beatriz Londoño, vice minister of health and well-being, for the Carter Center’s contribution to elimination of onchocerciasis in Colombia.

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Waging Peace. Fighting Disease. Building Hope.

Technology Used to Track Trachoma in Ethiopia

In June and July 2011, survey teams from the Amhara Regional Health Bureau in Ethiopia evaluated the impact of five years of the SAFE strategy (surgery, antibiotics, facial cleanliness, and environmental improvement) on blinding trachoma in South Gondar zone. This trachoma impact survey was similar to a recent survey in South Wollo zone of over 9,000 households, with one exception.

Instead of survey teams filling out observations and results of clinical examinations on questionnaires with pen and paper, data were recorded using Samsung Galaxy Tab mobile computers, called tablets, with an electronic survey application.

This methodology was made possible through the work of two students from the Georgia Institute

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River Blindness

IACO

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2011, and convened by the Colombian Ministry of Health, The Carter Center, and PAHO, with support from the Bill & Melinda Gates Foundation, the Lions Clubs International Foundation, and Merck. More than 100 people attended, the most in IACO history, including 19 from the Colombia Ministry of Health, representing national, departmental, and municipal levels.

Dr. Juan Gonzalo López Casas, director of the National Institute of Health, and Dr. Beatriz Londoño, vice-minister of Health and Well-being,

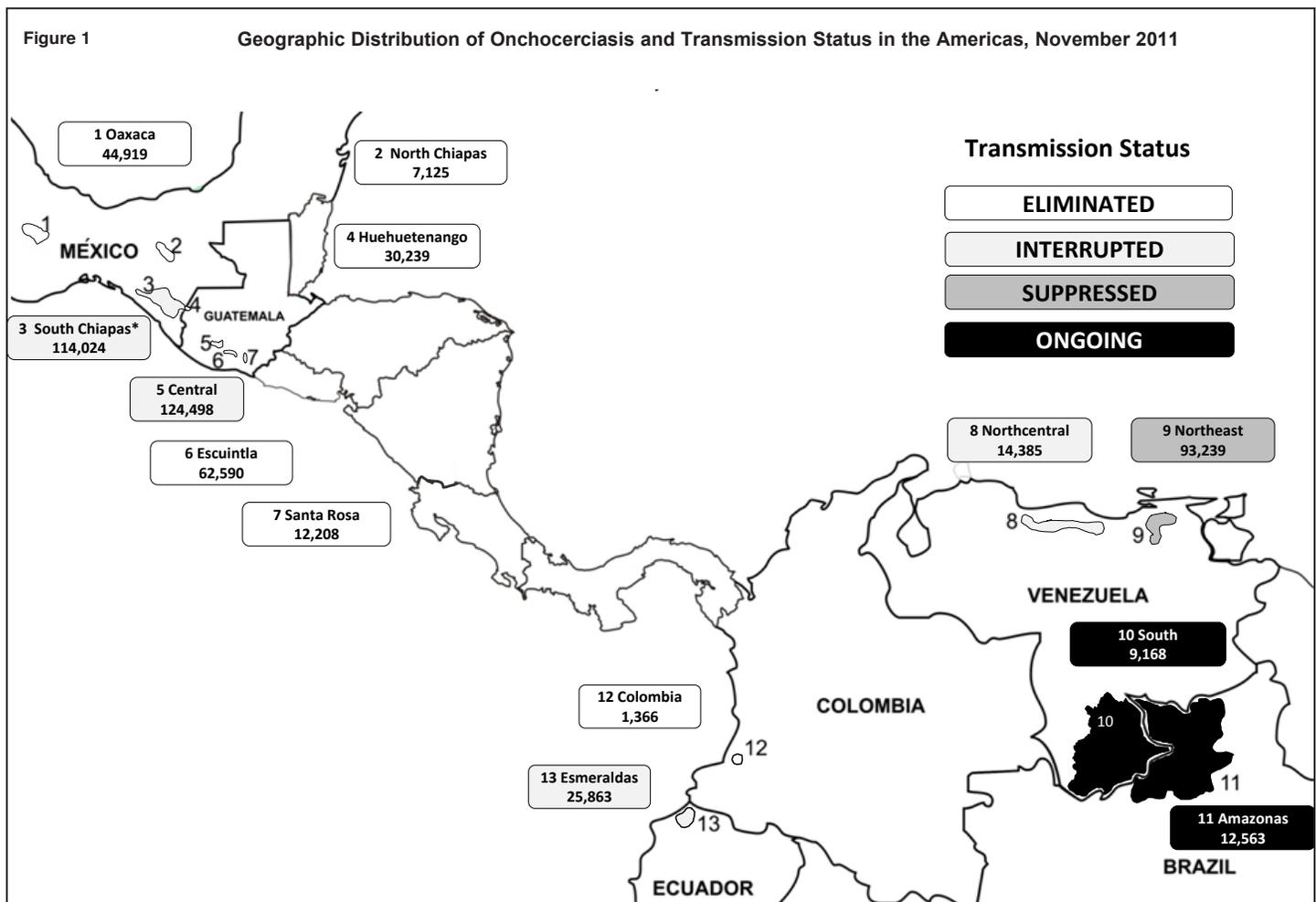
announced that the Ministry of Health of Colombia had submitted a request for certification of onchocerciasis elimination to PAHO and the World Health Organization—the first country in the Americas to do so. The next country poised to request certification is Ecuador, in 2013.

In 2012 six of the 13 foci will have stopped treatment, successfully passed through three years of post-treatment surveillance, and be recognized as having eliminated the disease.

In addition, Guatemala and Mexico announced that they had interrupted transmission of river blindness within their borders in 2011 and will stop all ivermectin treatments this year.

Thus, in 2012 six of the 13 foci in the Americas (see Figure 1) will have stopped treatment, successfully passed through three years of post-treatment surveillance, and be recognized as having eliminated the disease: Lopez de Micay (Colombia); Escuintla, Huehuetenango, and Santa Rosa (Guatemala); and North Chiapas and Oaxaca (Mexico). Four foci will have interrupted transmission but are still conducting post-treatment surveillance:

continues next page



River Blindness

Donation from Alwaleed Bin Talal Foundation to Benefit OEPA

The Carter Center received a generous donation of \$500,000 from the Alwaleed Bin Talal Foundation for the Onchocerciasis Elimination Program for the Americas (OEPA). The foundation has supported the Carter Center's health and peace programs since 2003. In addition to OEPA, funds from the foundation have been used for improved mental health services in Liberia, trachoma control in Mali and Niger, river blindness control and

elimination in Uganda, democracy and human rights in Africa, rule of law in Liberia, and elections in the Occupied Palestinian Territory and Indonesia.

The Alwaleed Bin Talal Foundation is chaired by Prince Alwaleed Bin Talal Bin

Abdulaziz Al Saud of Saudi Arabia and vice chaired by Princess Ameerah Al-Taweel. The foundation has donated a total of \$2.4 billion to initiatives in more than 60 countries.



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Esmeraldas (Ecuador), Central (Guatemala), South Chiapas (Mexico), and North-Central (Venezuela). For the Northeast (Venezuela) focus, transmission status was changed during IACO to “suppressed,” leaving only two foci with ongoing transmission: Amazonas (Brazil) and South (Venezuela). These two adjacent foci together are known as the “Yanomami area,” named for the area’s indigenous group.

Approximately 158,000 people are no longer at risk for river blindness in the Americas.

Approximately 158,000 people are no longer at risk for river blindness in the Americas, while 393,000 are considered still to be at risk; this includes individuals under active treatment as well as those in post-treatment surveillance areas. To accelerate elimination, especially in hyperendemic areas, the program is now providing treatment four times per year. In 2011, four-times-per-year treatment was the goal in 443 of the 1,546 communities still under treatment. Provisional reports through November 2011 showed 172,386 treatments were provided in those communities, and 137,638 treatments were provided in twice-per-year communities, for a total of 310,024 treatments for the year. For 2012, treatment totals for the region are expected to drop 68 percent due to the plans to halt

treatments in Mexico and Guatemala, even though many other areas will see treatments four times per year.

With onchocerciasis transmission occurring in only two of the six original countries in the Americas, representing only 4 percent of the original at-risk population, the IACO 2011 theme, “The Beginning of the End,” was both apt and motivating. Still, the program faces a major challenge in the Yanomami area, where there exists an extremely difficult jungle terrain with hard-to-track nomadic populations. Brazil and Venezuela continue to battle major hurdles in this area, and these issues were discussed at length during the conference.

In the logo for IACO 2011, the human eye represents the part of the body most commonly associated with river blindness. Three bands of color—yellow, blue, and red—represent the Colombian flag, and their design represents the marimba, a musical instrument used by the African-Colombian communities where onchocerciasis was once a threat. The green curve represents the tropical green climate of the previously endemic area, and the waves of blue represent the river found there.



River Blindness

Committee: Two More Ugandan Foci Able to Stop Treatments

The Uganda Onchocerciasis Elimination Expert Advisory Committee (UOEEAC) met in Kampala from Aug. 15–17, 2011. The committee is an advisory body commissioned by the Uganda Ministry of Health and supported financially by The Carter Center. Its major tasks include (a) using current World Health Organization guidelines for elimination of river blindness to evaluate the status of foci in Uganda and (b) providing recommendations to the Ministry of Health regarding the time when interventions in those areas could be stopped.

Dr. Tom Unnasch of the University of South Florida chaired the meeting, replacing Dr. Frank Walsh, the outgoing chair who remains on the committee. The meeting was attended by officials from the Ministry of Health, District Health Services, The Carter Center, and Sightsavers, as well as independent members. Meeting observers represented the World Health Organization/African Program for Onchocerciasis Control, Lions Clubs of Uganda, Mectizan Donation Program, the U.S. Centers for Disease Control and Prevention, MSD Uganda, Schistosomiasis Control Initiative, and the USAID Neglected Tropical Diseases program.

At its 2010 meeting a year earlier, the UOEEAC concluded that the Wadelai focus (15,000 people at risk) in Nebbi district had interrupted onchocerciasis transmission. At this 2011 meeting, the group concluded that two additional foci have stopped transmission: Itwara (79,155 people at risk) and Mt. Elgon (282,010 people



Carter Center staff and some of the SightFirst Committee Lions Clubs members meet at Kampala Club, Uganda, August 2011. From left: Lion Dr. Patrick Luwaga, Lion Peace Habomugisha, Lion Dr. Tumwesigye Cillasy Ruy, Dr. Frank Richards, Lion Polly Karimari Ndyarugahi, Sarah Bartlett, and Dr. Moses Katarwa.

at risk). The UOEEAC recommended that for 2012 the Ministry of Health halt its community-wide interventions, including mass drug administration, after appropriate health education had been provided to the formerly endemic communities. This would mark the first time mass treatments for onchocerciasis were halted in Uganda, because in Wadelai treatments continued for lymphatic filariasis. Should the Ministry of Health accept the UOEEAC recommendation, 650,000 Mectizan® treatments will be halted in Itwara and Mt. Elgon this year.

The committee felt that the Imaramagambo focus (109,000 people at risk) possibly could be declared as having interrupted transmission after a review of new entomological data at the 2012 UOEEAC meeting. If all goes as hoped at this year's review, then

four of the 19 Uganda foci would have achieved their goal. Uganda aims to interrupt national river blindness transmission by 2020.

The UOEEAC also recommended that new elimination efforts be launched in northern Uganda (Mid-north, 1 focus). Civil strife prevented regular mass ivermectin treatment there until recently; with peace restored, the area now can benefit from the elimination program. Twice-per-year treatment was recommended to speed up the interruption of transmission in order to reach the 2020 goal. A total of 930,000 biannual treatments will be needed in this new area soon. The Lions Clubs International Foundation and the African Program for Onchocerciasis Control will provide critical funding for this effort in partnership with The Carter Center.

Trachoma

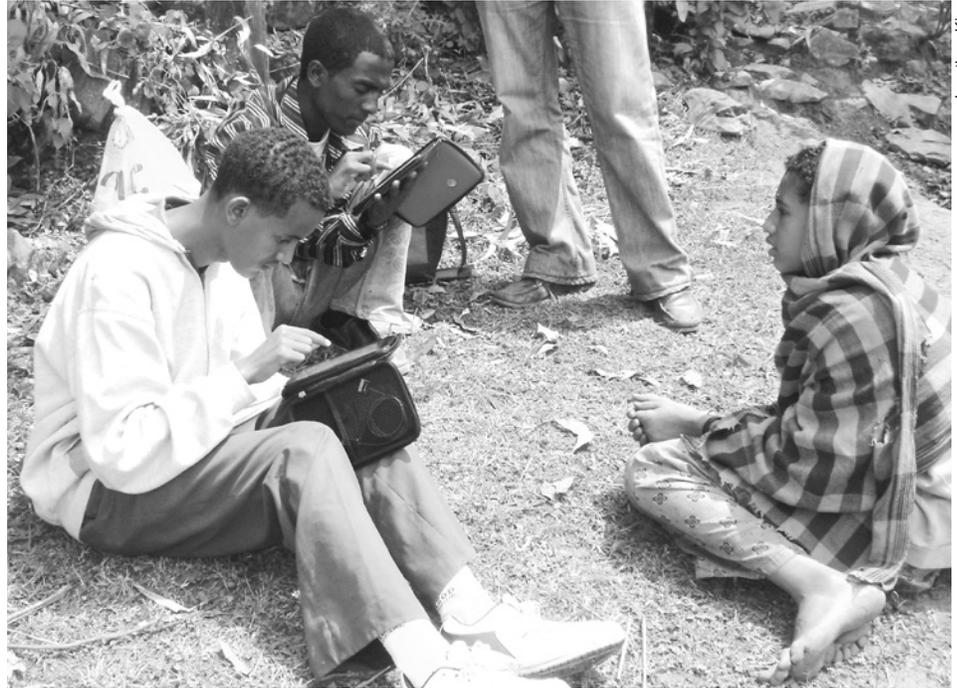
Trachoma Technology

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of Technology Department of Computer Science volunteering for The Carter Center. Joy Buolamwini, a Georgia Tech Astronaut Scholar, developed the application based on an open-source project called Open Data Kit for electronic surveys. She increased the capacity of the current Open Data Kit project and developed a software application to meet the needs of household survey data collection, determining uptake of SAFE activities and measuring prevalence of trachoma disease. Andrew Panfel developed an Amharic keyboard for data collection in the local language and a program to convert the collected information into a usable data set ready for analysis.

Eliminating written data entry saves time and money and allows for quicker reaction to the findings.

Capitalizing on the effort of the two Georgia Tech students, Carter Center staff in Atlanta and Ethiopia put the technology into action, training 24 Ethiopian information technology students enrolled at Debre Tabor University to use the tablets and record clinical data alongside eye-care workers of the Amhara Regional Health Bureau. At the end of the training, 14 teams were deployed during the rainy season months to survey 360 communities in 12 district-level implementation areas. Overall, 354 communities were accessible, and 38,652 people living in



Jonathan King

Two information technology students from Debre Tabor University practice using the Samsung Galaxy Tabs in preparation for the South Gondar trachoma impact survey.

12,064 households were examined for clinical signs of trachoma.

Unlike the South Wollo surveys that required rotating teams of data entry staff on 10 computers for 16 hours a day, seven days a week for a month, data collected from the tablets were downloaded, transmitted to Atlanta, and cleaned within two days of receipt. Eliminating the written data entry stage saves time and money and allows for quicker reaction to the findings.

Trachoma among children (TF: trachomatous inflammation follicular) ranged by community from 0–83 percent. TF was less than 10 percent among children in 55 communities, but the prevalence in only one of the 12 district-level areas, Debre Tabor town, was below the 10 percent threshold warranting district-wide mass antibiotic distribution, according

to guidelines from the World Health Organization (WHO). Since 2003, overall trachoma among children in South Gondar has been reduced from 66.6 percent to 25.6 percent. Adults with the blinding form of trachoma, trichiasis, decreased from 6.3 percent at the start of the program to 4.6 percent.

While it is encouraging to see many communities with less trachoma, SAFE interventions are still warranted in South Gondar zone, according to WHO guidelines. As for the tablets, this use of technology is feasible for large-scale, integrated or individual disease surveys. The Carter Center hopes to apply this new technology to support surveys that will enhance the capabilities of Ministry of Health programs for evaluating the impact of interventions for controlling or eliminating other neglected tropical diseases.

Trachoma

New Survey to Assess Trichiasis Surgery in Four Countries

The Carter Center Trachoma Control Program is collaborating with the Kilimanjaro Center for Community Ophthalmology, the London School of Hygiene and Tropical Medicine, and Helen Keller International to improve delivery of eye surgery as part of the SAFE strategy (surgery, antibiotics, facial cleanliness, and environmental improvement) for trachoma control in Mali, Niger, Ethiopia, and Tanzania.

Additional funding will allow resulting recommendations to be put into practice.

The first year of funding has supported surveys, interviews, and focus-group discussions with patients who have received surgery, those who have not, and trichiasis surgeons. This information gathering has focused on the availability, accessibility, and acceptability of surgical services. Patients were asked to describe their

Trichiasis surgeons described the services they provide and their job satisfaction and suggested improvements. In addition, an ophthalmologist not affiliated with the program assessed the skills of the surgeons.

Once the results of the data collection are received, design and implementation of program recommendations will begin. This study holds great promise for increasing the number of trichiasis patients who undergo surgery and improving the quality of services offered.

The Carter Center will help implement the recommendations that result from the study in collaboration with the ministries of health in Mali, Niger, and Ethiopia, three of the six countries where The Carter Center supports trichiasis surgery. Results will be shared with the World Health Organization Global Alliance for the Elimination of Blinding Trachoma, allowing all endemic countries to benefit from the findings.

The World Health Organization has promoted the SAFE strategy for the elimination of blinding trachoma since 1996, and The Carter Center has facilitated over 264,000 surgeries to date with support provided by the Conrad N. Hilton Foundation and the Lions Clubs International Foundation. Eyelid surgery is the only component of the SAFE strategy that treats trichiasis, the end stage of trachoma in which in-turned eyelashes scratch and rub the cornea leading to irreversible blindness. The brief operation can be completed in 10 to 15 minutes per eye, relieving pain, preventing further corneal damage, and improving visual acuity.



Aryc Moshier

Dr. Amir Bedri, the Africa regional coordinator for Light for the World, assesses the skills of a trichiasis surgeon at the Guidan-Roundji Health Center in Maradi, Niger.

The goal of the study, funded by Lions Clubs International Foundation and the Conrad N. Hilton Foundation, is to understand whether changes can be made to trichiasis surgery provision that would improve uptake and quality.

experience living with trichiasis and explain why they chose to undergo trichiasis surgery or not. Trichiasis patients who had not received surgery were asked about their knowledge of and access to the program.

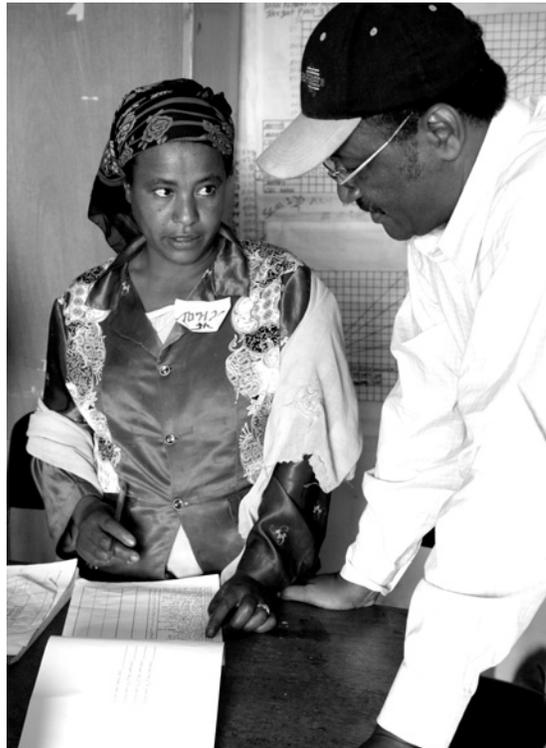
Trachoma

Series on the Human Face of Trachoma Control Volunteer Finds Her Community Receptive to MalTra Weeks

Tsadale Fasil is a community volunteer during MalTra weeks in Ethiopia. We met with Tsadale during the sixth MalTra week in April 2011 at Aley, a remote agricultural community in South Wollo zone of Amhara state. Aley is a bone-shaking four-hour drive over a mountain range from the administrative capital, Dessie. Tsadale was working as part of a team in the mass distribution of Zithromax® to control trachoma, and testing and treating fever cases for malaria. The MalTra week campaigns are conducted by many teams of four people: a government health extension worker and three volunteers. The health extension worker administers the drugs, and the volunteers complete the registration books, counsel the participants, and organize the flow of the distribution. In the sixth MalTra week, more than 5.4 million people were reached by 3,349 teams, each targeting 1,500 to 2,000 people in three or four communities for treatment.

“During the campaigns, I am engaged practically 24 hours a day. You don’t know how intensive the campaign is. We work from 6 a.m. to 6 p.m., sometimes up to 7:30 in the evening. On top of that, I have to wake up early to prepare breakfast for my family and also cook the evening dinner.” Smiling, she mentions why she is not

excused from her domestic duties: “My eldest daughters are away from home at school, and my husband isn’t much of a cooker; it’s better when I do it myself. I use some of my per diem money to buy meat or prepared food, and we all enjoy that.”



Paul Emerson

Tsadale Fasil (left) explains to Teshome Gebre, former Carter Center country representative for Ethiopia, how she completes the participant register for the MalTra week.

Tsadale has been to school and considers herself primarily a “literate farmer,” but when the health service was looking for volunteers to work in family planning and reproductive health she was first in line. “I am motivated by the ability to have a clear impact on people’s lives,” she said. “I

want to give back to my country and see it develop. As long as I have breath in my body I will work to help my community.”

Tsadale is an ideal volunteer. Active and hard working, she understands that once trachoma is controlled the distributions will stop. “Men and women trust me from my family planning days. Now these new medicines are available, and it’s my responsibility to see that people get them while they can,” she said. “At first people were a bit reluctant to participate. I tell them that all drugs can have side effects, so don’t be disappointed if your children complain of nausea—the drugs are good for them, and for you too. Everybody should participate in the distributions.” When asked whether concerns about side effects made her job more difficult, she said: “It’s easier these days after people have seen the benefits of taking the medicine. My neighbors even start demanding the drug at this time of year. They complain to me and ask what is going on if they think the distribution is starting late.”

Does that mean people feel positive about the drug distribution and the control program? “My people are a bit isolated out here. We don’t get much of anything from anyone,” she said. “Being a part of this program is not just about getting the tablets each year; it makes us feel connected to something bigger. We know we are not forgotten.”

This is one article in a series on how the Carter Center’s Trachoma Control Program affects individuals in the countries where it works. The comments of the people are not reproduced word for word but typify the spirit of the conversations. The author has tried to be faithful to the context, content, and tone of the person depicted.

ITFDE Urges Collaboration in LF, River Blindness Efforts

On April 6, 2011, the International Task Force for Disease Eradication (ITFDE) reviewed the status of efforts to eliminate river blindness and lymphatic filariasis (LF) in Africa.¹

In previous meetings the ITFDE concluded that lymphatic filariasis probably was eradicable and that river blindness probably could be eliminated in the Americas but not in all affected areas of Africa with currently available tools, largely because of concern about treatment complications associated with the parasite *Loa loa*.

Sudan launched an effort in 2006 using a strategy of twice-per-year mass drug administration in the isolated focus of river blindness at Abu Hamad on the Nile River. In 2007, Uganda launched a national river blindness

elimination strategy using mass drug administration with ivermectin and, in selected foci with the vector *Simulium neavei*, vector control and elimination.

Studies in Egypt show that five years of treatment with diethylcarbamazine and albendazole at high coverage interrupted transmission of LF in all endemic areas. Togo is believed to be close to eliminating transmission of LF nationwide after six or more years of annual mass drug administration (MDA) using the ivermectin-albendazole combination. However, results from annual MDA with ivermectin and albendazole for six to 10 years in 10 sentinel villages of Plateau and Nasarawa states in Nigeria show that LF transmission was interrupted in only five of the villages.

The ITFDE noted that mass drug

administration coverage for river blindness in Africa was 74 percent in 2009 and that coverage for LF in Africa in 2009 was only 18 percent. However, the ITFDE believes elimination of LF from Africa is still possible by the target year of 2020 set by the World Health Assembly in 1997. The ITFDE welcomed the African Program for Onchocerciasis Control's (APOC) recent move from a policy of control of morbidity to one of transmission elimination. ITFDE members urged linking an APOC goal of eliminating river blindness in Africa to the LF elimination date of 2020, but noted that would require surmounting several challenges, including finding effective strategies to stop transmission of river blindness in areas that are co-endemic for loiasis where ivermectin cannot be used; delineation of untreated zones where transmission of river blindness is still occurring; and extending mass drug administration to all transmission zones where this can be done safely. The ITFDE said it was imperative that the LF and river blindness initiatives work much more closely together to coordinate mapping and mass drug administration activities in Africa at all levels. LF elimination programs and malaria control programs also should join forces, the ITFDE suggested.

The ITFDE is composed of 12 distinguished public health scientists who meet at The Carter Center, with support from the Bill & Melinda Gates Foundation, to review the control, elimination, and eradication of diseases.

¹ World Health Organization, 2011. Meeting of the International Task Force for Disease Eradication — April 2011. *Weekly Epidemiol Rec* 86(32): 341–351.

In Memoriam

Lion Dr. Oluwasesan Onafowokan

We are grieved by the death of Lion Dr. Oluwasesan Onafowokan, former SightFirst chairman of the Lions Clubs International District 404 in Nigeria. He was our close partner from the beginning of the Lions Clubs International SightFirst funding of the Carter Center's river blindness program in Nigeria in 1996.

Dr. Onafowokan was a major contributor to the success of the program. He was frequently in the field to supervise ivermectin distribution activities and played an important role in advocacy visits to state and local officials to solicit government counterpart funding for river blindness control.

Dr. Onafowokan was passionate about his assignment and formed a strong relationship with many at the Carter Center office in Nigeria. His high-spirited and infectious enthusiasm will be missed. He was a fervent supporter of the program at Lions Clubs International. We sympathize with his family and colleagues at Lions Clubs International District 404 over the loss of a dear friend and river blindness warrior.

Dr. Onafowokan was buried on May 25, 2011, in his hometown of Ikorodu, Lagos state.

Editor's note: Dr. Emmanuel Emukah, director of Southeast programs in Nigeria, provided the content for this article.

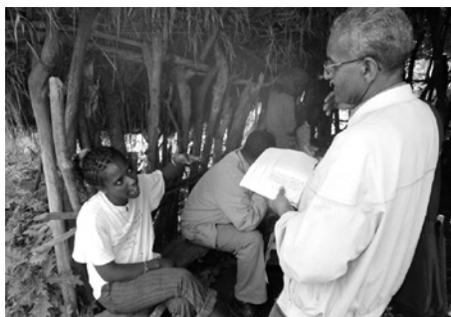
Carter Center to Assist Ethiopia in Increasing LF Treatments Ninefold to Meet 2020 Goal

The Carter Center will assist the Ethiopian Ministry of Health in scaling up ivermectin and albendazole treatments for lymphatic filariasis (LF) with the goal of helping to eliminate the disease from the country by 2020. After a two-year pilot project supported by GlaxoSmithKline in Gambella zone, where the Center helped to implement the first-ever LF treatment program in Ethiopia, the number of people to be treated will increase ninefold, from 86,548 in 2011 to nearly 750,000 by 2012. The strategy will follow the national plan for neglected tropical diseases and start the LF program in areas co-endemic for river blindness, where ivermectin already is being given.

The River Blindness Program in Ethiopia treats more than 3 million people annually and provides an excellent platform to expand LF treatment where the two diseases are co-endemic. Both river blindness and LF share a common medicine, ivermectin (Mectizan®, donated by Merck), which is used in combination with another drug, albendazole (donated by GlaxoSmithKline), to treat LF. Recent mapping for LF has shown that the disease is endemic in 17 of the 57 districts where the River Blindness Program is active. In 2012, LF treatments will be provided by adding new health education messages and an albendazole tablet to the ivermectin treatments. Tablets will be distributed in the 17 target districts by volunteer distributors who will receive additional training in providing albendazole.



Paul Emerson



Ambaye Araru (right), Bench Maji zonal coordinator, discusses the new lymphatic filariasis program with a community directed distributor.

In addition to the planned expansion, World Health Organization (WHO) guidelines require collection of baseline LF data in sentinel villages. Nighttime sample blood surveys will be conducted to determine the percent of persons who have circulating microfilariae of the parasite *Wuchereria bancrofti* that causes LF in Africa. Of note, this parasite is transmitted by *Anopheles* mosquitoes, which also transmit malaria. The Ethiopian malaria program is a success story in terms of

An Ethiopian woman finishes taking a dose of medication. In areas that are co-endemic for river blindness and lymphatic filariasis, The Carter Center is assisting the country as it implements LF treatments.

its scale-up of the distribution of long-lasting insecticidal nets, which should impact both malaria and LF. So, in a sense, Ethiopia is well on its way to eliminating LF, even though expansion of the mass drug administration program is lagging. According to WHO, a minimum of six years of continuous treatment is needed to stop the spread of LF.

WHO lists Ethiopia as the fourth most endemic country in Africa for LF. With a population of 75 million, it is estimated that as many as 30 million people may require preventive treatment to stop the spread of the disease. The Carter Center–assisted mapping results suggest, however, that LF may be less widespread than WHO estimates.

Ethiopia Begins Second Nationwide Malaria Survey

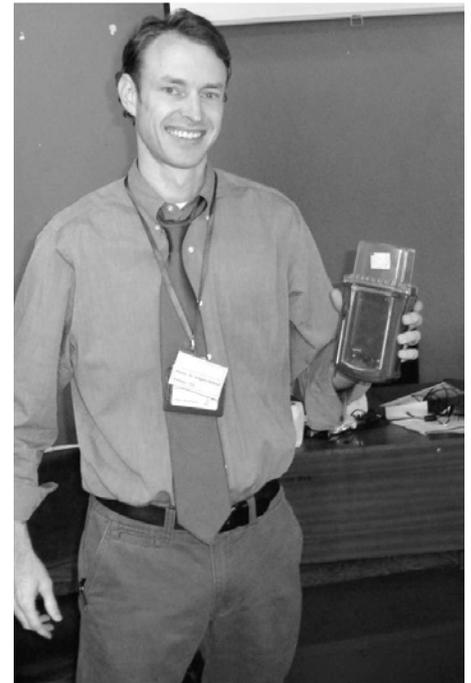
On Sept. 29, 2011, the Ethiopian Ministry of Health launched the 2011 malaria indicator survey at the Ethiopian Management Training Institute in Debre Zeit. An anticipated 11,025 households and 55,000 people across Ethiopia were expected to be surveyed, making the 2011 Ethiopia survey the

largest of its kind in any country to date.

Malaria indicator surveys (MIS) were developed by the Roll Back Malaria partnership to promote standardized monitoring within and across malaria-endemic countries. The Ministry of Health is carrying out the current Ethiopian MIS with support from many international partners, including The Carter Center, U.S. Centers for Disease Control and Prevention, U.S. Agency for International Development, the Malaria Control and Evaluation Partnership in Africa, the Malaria Consortium, Research Triangle Institute (now known as RTI), the World Health Organization, and UNICEF.

Ethiopia's first MIS was performed in 2007 with assistance from The Carter Center. Since then, the country has implemented a national strategic plan for malaria that includes the mass distribution of long-lasting insecticidal nets (LLINs) and other control interventions. Since 2007, The Carter Center has assisted with the distribution of nearly 6 million nets. The 2011 MIS provides the opportunity to assess progress toward the strategic plan goals by measuring key malaria indicators such as coverage and use of control interventions, prevalence of malaria-related fever and parasitemia, and prevention and control behavior.

Dr. Gregory Noland, Carter Center epidemiologist, spent three weeks in Ethiopia prior to the MIS launch to assist with a training workshop. Through classroom sessions and field-based practical exercises, more than 300 surveyors and 50 supervisors were



Dr. Gregory Noland of The Carter Center holds a GPS-equipped digital device used by survey teams to conduct the 2011 Ethiopia malaria indicator survey.

trained in survey design, questionnaire orientation, research ethics, and laboratory techniques. The 2011 MIS, like the 2007 survey, will use GPS-equipped handheld devices that eliminate the need for paper-based questionnaires and manual data entry.

The survey was timed to coincide with the peak malaria transmission season in Ethiopia, and preliminary results are expected early this year. Several Carter Center staff attended the launch ceremony: Dr. Frank Richards, director of the Center's malaria program; Dr. Noland; Dr. Zerihun Tadesse, Ethiopia country representative; Darin Evans, assistant director for the Center's lymphatic filariasis, river blindness, and schistosomiasis programs; and Eshetu Sata, monitoring and evaluation officer.

Dr. Teshome Gebre Receives Award



In June 2011, Dr. Teshome Gebre (left), former Carter Center country representative for Ethiopia, receives the Gold Medal and Certificate of Distinction for his "outstanding contribution to the successful implementation of the Health Sector Development Program in general and dedicated service for malaria and neglected tropical diseases in particular" from Ethiopian Minister of Health Dr. Tedros Adhanom.

Communications Program Increases Net Ownership, Proper Use in Nigeria

In July 2011, The Carter Center in Nigeria, in collaboration with the Ebonyi state Ministry of Health and Roll Back Malaria (RBM), introduced a new behavior-change communications project to encourage appropriate use and care following mass distribution of long-lasting insecticidal nets (LLINs). Volunteer community health promoters make monthly home visits, providing information about malaria and the use of the nets. The health promoters also collect data on household LLIN ownership, use, and condition. In June 2011, 18 supervisors and 87 community health promoters were trained, and the project officially launched in six villages last July.

The health promoters organize community events such as LLIN hanging demonstrations, LLIN washing and

mending days, and drama group performances. One notable innovation has been the construction of portable posts for hanging nets. The health promoters teach household members how to use locally available materials such as branches, cement, sand, and aluminum or plastic containers, to make supports from which they can hang nets over sleeping spaces that are not adjacent to walls or other permanent surfaces. Nets can remain hanging from these posts at all times and save people the time and trouble of reattaching their nets each night.

Results from the first three months of the project suggest that it already has had a positive impact on net ownership and use in these villages. “[Before], most people knew [of LLINs], but certainly not why, when, where, and how

to use the nets,” said Adamu Sallau, malaria coordinator for The Carter Center in Nigeria. “Only through our engagement with the people during behavior-change communication activities do they now know that LLINs are to be hanging at appropriate height, tucked-in completely ... every night, in all places, at all seasons, even during travels. Without the behavior-change communications program in place, mere LLIN distribution to households only would have been a waste of time, effort, and resources.”

In addition, responding to net shortages identified during initial home visits by the community health promoters, the Ebonyi state RBM team organized a mop-up distribution to deliver an additional 1,094 nets to 554 households in July. As a result, all 1,284 households in the six villages owned at least one net by the end of August.

The intervention also has had statistically significant effects on behaviors related to net hanging and net care. The percentage of nets observed to be hanging increased from 84 percent in July to 92 percent in September. In July 58 percent of hanging nets were at the appropriate height; this figure rose to 98 percent by September.

There were corresponding, statistically significant increases in indicators related to net use. There was a 30 percent increase in the proportion of people who reported using a net the previous night and a 16 percent increase in the proportion of nets used the previous night.

Ministry of Health officials, RBM staff, and other partners implementing the project with Carter Center



Adamu Sallau

Volunteer community health promoters use branches, old cans, and cement to create posts that will allow people to use a long-lasting insecticidal net anywhere in a household, while assuring the net is used at the appropriate height.

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This issue is made possible in part thanks to the
 Michael G. DeGroot Health Program Publications Fund.

Global Health News

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assistance say the project has been a success. “These communications... have actually changed the behavior of people toward the use of LLINs in Ebonyi state, a situation that was worrisome before the introduction of the program,” said Obasi Kingsley, state logistics officer in Ebonyi. “People no longer sleep without nets. I am also a living example. I never used a net, but now I don’t sleep without a net and I feel comfortable in it. This is a wonderful project offered by The Carter Center and it should be extended throughout Nigeria.”

Update on Cases of Guinea Worm Disease

