

**Phone conversation between Eric Ottesen (Director of the Lymphatic Filariasis Support Center at the Task Force for Global Health) and GiveWell (Elie Hassenfeld and Natalie Crispin) on April 24, 2012**

**GiveWell:** We are interested in learning about the opportunities for donors to support lymphatic filariasis (LF) elimination or control. LF is something we know a little bit about but not a whole lot. One of the first questions we have is what are the entities we should consider funding if we are interested in supporting mass drug distribution (MDA)? We've talked to CNTD, which is one possibility. Are you seeking funding?

**Dr. Ottesen:** The LF Support Center *could* be a funding recipient, but that wouldn't be my focus in answering your question. It depends on what your interests are. There isn't a whole lot of money in LF, though there's been much more success in raising implementation funds recently, now that LF had been grouped with other NTDs.

There are two classes of things you could fund: straightforward drug delivery, which targets disease prevention, and the ancillary work that focuses on helping severely affected individuals through surgeries and disease management.

There are definite needs for funding of mass drug distributions, but I feel that these can and should principally be the focus of bilateral aid agencies. The things that aren't being supported sufficiently are areas such as elephantiasis management, surgeries for hydrocoele, and behavioral change. Those are areas that are terribly under-subscribed. For some humanitarian and faith-based organizations, these types of projects are particularly appealing; the funding for such activities (which also greatly enhance the effectiveness of MDAs) would most likely flow through NGOs.

With respect to support for MDAs, the UK and US governments provide more money than anyone else for NTD programs. There are certain countries, however, that are not high on any bilateral aid agendas; for example, Myanmar. Papua New Guinea, too, has a terrible LF disease burden, and while bilateral aid agencies should support them more significantly, so far they haven't. There are also a number of small countries in Africa and elsewhere that don't have any support; MDAs could be run in a small country with 1-2 million dollars per year.

I work part time at the Task Force with the LF Support Center, an initiative funded primarily by the Gates Foundation, and the rest of the time I serve as the Director of the RTI NTD program, which takes USAID funding and interfaces with NGOs who support national NTD programs. Budgets for these MDA programs can be as low as a few million dollars a year. The smaller the country, the more likely a single donor or organization could adequately meet the need there. Examples would include Chad and the Central African Republic which don't have large external supporters of NTD programs yet.

**GiveWell:** Where do you think the donors would accomplish the most? For an amount given, do you think it would be better spent on MDA or other related programs?

**Dr. Ottesen:** Long-term, the most cost-effective intervention is prevention – interrupting transmission of LF. We know there's a terrible problem with clinical disease, but with limited money available we have opted primarily to invest in protecting the next generation. But it's very hard to not pay attention to those suffering from LF disease. Indeed, the populations being treated in MDAs are motivated more by our helping those around them who are suffering than by thoughts of protecting the next generation. For this reason, hydrocele and lymphedema treatment enhance compliance with MDA. The two programs complement one another extremely effectively.

**GiveWell:** Do you have a sense of the difference in cost per impact?

**Dr. Ottesen:** The surgery for hydrocele in an upper developing country, such as Ghana, is maybe \$100, elsewhere it could be as low as \$50. For the lymphedema management, I don't really have an answer. It's mostly about training the patients and volunteers. It doesn't cost very much, perhaps a few dollars for soap, bandages and the like. The lymphedema does not always resolve completely, but a great deal can be done with simple hygiene techniques. It is truly extraordinary the way people's lives can be transformed by appropriate (self)care, but the impact numbers really do not exist on this question.

**GiveWell:** Are there places where if someone gave \$10k, that would lead to 100 surgeries? My instinct is that it would be more complicated than that.

**Dr. Ottesen:** The short answer is 'yes'. Some years ago with Gates Foundation support a group of NGOs focused on improving access to hydrocele surgery and developed the West African Lymphatic Filariasis Morbidity Project. A very committed surgeon trained many others in optimal surgical care for hydrocoeles, and then these surgeons went on to perform many needed surgeries. They didn't require huge amounts of money, and this is where good estimates of the cost per surgery come from. You can get predictable results (in terms of number of hydrocoeles cured) from an investment of any size.

**GiveWell:** Is it true that marginal dollars accomplish the same impact?

**Dr. Ottesen:** This isn't complex surgery. Hydrocelectomy is done by young surgeons, even medical students. It's just about giving people opportunity to have the surgery. You can directly translate money into surgeries.

**GiveWell:** Who would be the right people to talk to about turning money into surgeries?

**Dr. Ottesen:** Probably someone other than me. I would probably link you with a Norwegian (Dr. Anders Seim) who has put in small but important amounts of money toward this problem through a foundation he established called Health and Development International. He is the person who pushed hardest to support hydrocele surgery and lymphedema management. There are people in Tanzania who have worked hard on this as well, including Dr. Charles MacKenzie (a professor at Michigan State University) who works closely with Tanzania and other countries. The true pioneer in all this is a Brazilian urologist (Dr. Joaquim Noroes) who with his wife (Dr. Gerusa Dreyer) totally transformed our understanding of LF disease, both hydrocoele and lymphedema/elephantiasis. She also promoted the concept of Hope Clubs to support patients in managing their lymphedema condition.

**GiveWell:** Are these one-time surgeries that don't need follow up?

**Dr. Ottesen:** Essentially yes. You can cure people with hydrocoele through surgery. There have been videos that I can share with you to help you recognize what can be done. With research funds from GSK we supported a three year study in Ghana that followed the individuals from pre-surgery to a year or more post surgery. The study asked people to reflect back on the impact of their disease on their lives and allowed us to learn about the personal and psychosocial impact of their having hydrocoele. The study has been published recently.\*\*\*

**GiveWell:** Are most of the people who are targeted for surgeries bad cases, or do some have relatively minor problems?

**Dr. Ottesen:** Interestingly, some of what we might judge to be minor hydrocoeles are felt as very severe or even socially crippling by those having them. All would be candidates for surgery. Indeed, men very often have significant inhibitions about talking of their genital or sexual inadequacies. In the Dominican Republic, for example, essentially no one admitted to having hydrocoele, but then when there were free hydrocele surgeries offered, the prevalence turned out to be quite high.

**GiveWell:** Are there surgical complications?

**Dr. Ottesen:** Complications are dramatically reduced with good techniques, such as those imparted by the training of the West African Morbidity Project and a similar program supported by the Carter Center in Nigeria.

**GiveWell:** The study you mentioned in Ghana is great because it's addressing both the quality of life change and the complications. Is there anything else like that?

**Dr. Ottesen:** Dr. David Addiss, director of the Children Without Worms program here at the Task Force, has published with Molly Brady a major review \*\*\*\* of this topic that can be very helpful.

**GiveWell:** My impression is that the general wisdom among people who are thinking about health program prioritization is that surgery isn't high on the list. Why do you have a different perspective?

**Dr. Ottesen:** There are probably two reasons. MDA ('just' giving pills) is simpler to understand, and many individuals can be reached to have a broad preventive impact. Surgery is more complex and deals with smaller numbers, but that's why the need persists. If you can match that need with people's funding interests, that's ideal.

At the beginning of the polio eradication program, many leaders also wanted to take care of the affected people's deformities, but they couldn't get the necessary support for that part of the program. We also see that for LF there are still two roads to take, and we have at least maintained our terminology of having the dual goals ('pillars' of the program) of disease prevention and disease treatment. The trachoma program has done a better job of keeping morbidity control as a focus of their elimination efforts. The most unattended part of the LF program is clearly the existing morbidity. The drug donation programs also address morbidity to some extent – we've funded very impressive studies in India to look at the lymphatic system of children, and found that you can see essentially complete reversal of early disease in children given their MDA drugs.

**GiveWell:** If someone were to give you \$1m unrestricted, would you use it for MDA or morbidity management?

**Dr. Ottesen:** MDA is my job. I can tell you how many pills have been given for LF over the last ten years, but the persistent morbidity needs do nag at me. \$1m will not buy complete success in MDA, which requires 5-6 rounds of yearly treatment, but it would go a very long way to improving disease management of LF (hydrocoele surgery and lymphedema care).

**GiveWell:** What if it were more, say \$5m?

**Dr. Ottesen:** The need is so great in the small or underserved countries, for example Papua New Guinea and some African countries that don't have funds to carry out MDA, that investment in MDA would be very meaningful and could trigger greater future support. It's wherever the heart takes you though. The impact of such support would be enormous either way. I can't say one is better than the other. There are so many worthy needs, and you just have to ask, "What do I, the donor, most care about?"

You can't go wrong funding any of the NTDs. There's so little funding, it's so inexpensive, and the return of investment is so high. There's no way to make a wrong decision. That's different from AIDS, TB, and malaria where the incremental impact in those areas is often small, but that's not true in NTDs.

**GiveWell:** I don't fully agree with that. It's true that bednets get more attention but there are still people who don't have nets because there's not enough funding. While it's true that NTDs get less attention, I'm not sure that attention on the global scale is the right measure. We think the measure is the incremental impact of additional dollars. We recommended bednets over deworming and were happy with the allocation of 75% to bednets and 25% to deworming.

**Dr. Ottesen:** Interestingly, nets are even more effective at interrupting LF than they are at preventing malaria, so we are very supportive of their distribution. In terms of your choice between nets and deworming, I don't believe you can go wrong either way!

**GiveWell:** Let's say we wanted to try to answer the question, 'what is the cost of hydrocele prevented through MDA.' Is there good data on that?

**Dr. Ottesen:** A projection has been made in recent publications\* first on the number of hydrocles prevented during the first 8 years of the (MDA-based) Global Programme to Eliminate LF and then on the economic benefit to individuals and health systems from the prevention of the hydrocoeles and lymphedema. That is not exactly the answer to your question, but it comes close.

**GiveWell:** Who would we look at for funding MDA? Is CNTD the right group to be looking at? Others? Which do you think are good?

**Dr. Ottesen:** That's a tough one. CNTD uses DFID funds, and one of the nice things about those funds is that they have the UK approach, i.e. many fewer strings attached so that funds can be given directly to governments. USAID funds have many more strings attached for enhanced accountability. They are harder to deal with, but I do think the management rigor is actually helpful.

The best way to support MDAs in countries is probably through NGOs who contribute a great deal of on-the-ground support to these activities. Ideally, though, determination of where the greatest need or opportunity to make a difference lies would come from consultation with WHO, as they have the broadest overview of the NTDs in all endemic countries. WHO could help point out where the needs are and where a given level of funding support could be channeled most effectively. There are many excellent international NGOs working efficiently (often with local NGO counterparts) to support national NTD activities. These include Christoffel Blindenmission (CBM), Helen Keller International (HKI), SightSavers, IMA World Health, World Vision and the Carter Center. The Global Network for NTDs (GNNTD) is mainly an advocacy organization, but they've also brought donor organizations and individuals together with appropriate recipients.

**GiveWell:** The deworming group we supported was SCI. Their staff isn't on the ground handing out drugs. Is that the same as the way CNTD works?

**Dr. Ottesen:** There are probably both similarities and differences. SCI is more closely linked to the country activities, while CNTD is generally broader in its mission. SCI was initially one of the largest recipients of USAID implementation money and some of the Gates NTD funding as well. They are more hands on with the implementation programs than CNTD. I'm sure the investment is handled well by them, as they have had many years in the program implementation business. CNTD has been particularly successful, among other things, at supporting and strengthening a network of national laboratories to support the NTD programs.