A conversation with Alix Zwane on June 4, 2013

Participants

- Alix Zwane, PhD Executive Director, Evidence Action, Deworm the World
- Elie Hassenfeld Co-Founder and Co-Executive Director, GiveWell
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Note: This set of notes was compiled by GiveWell and gives an overview of the major points made by Dr. Zwane.

Summary

GiveWell spoke with Alix Zwane as part of its ongoing search for charities and projects that might qualify for a recommendation. The main subjects of discussion were the nature of Deworm the World's work in India, funding and deworming opportunities, and the scientific literature supporting Evidence Action's other program, Dispensers for Safe Water.

Deworm the World in Kenya

Funding

Deworm the World (DtW) is funded through 2015-16 in Kenya, thanks to the Children's Investment Fund Foundation (CIFF), and the Ending Neglected Diseases (END) Fund. Government support and in-kind gifts of medicine are critical to the success of the 5 year National School-Based Deworming Program. The plan for 2016 and beyond, and possible funding gap, is still unclear.

Model

In Kenya, DtW is the fiscal agent for a government program; funding flows through it and onto the government. The program completes the deworming county by county and rotates through all at-risk districts in the country. The deworming program includes prevalence surveys (to see how common the parasite is), drug distribution, cascading training down to the teacher level, monitoring and evaluation of program including program coverage, and advising the government on various factors related to program implementation.

Deworm the World in India

DtW is now concentrating expanding its work in India.

Current deworming and unfunded opportunity

Last year DtW supported the deworming of some 40 million children, and DtW believes there are about 100 million kids that can similarly benefit from this program. DtW currently has the funding to treat 60 - 70 million children, leaving treatment for roughly 30-40 million children unfunded. The current funding comes from USAID (\$5 million over 5 years), the Michael & Susan Dell Foundation, and The Douglas B. Marshall Jr. Family Foundation, as well as donations made by smaller, individual donors.

DtW works through its local partner, Action Foundation for Social Services (AFSS), to assist Indian

states that are considering a deworming program. Existing resources would not be sufficient to cover all states that are currently engaged in conversations with DtW, although the decision of each state to move ahead with the program is uncertain. Current funding might cover two new states, and further funding might allow DtW to cover a third (if all three states decided to deworm, or if other states expressed interest). Each state would cost approximately \$800k - \$1 million for worm prevalence surveys to determine infection levels and three rounds of treatments.

Alternatively, DtW is considering opportunities to engage states that don't need all of the support DtW can provide, but are interested in some guidance with one or more limited aspects such as a training materials upgrade. As such, the USAID or any new sources of funding could be used in more self-sufficient states to leverage even more treatments by providing more limited assistance to those states.

Possible Funders

Conversations have been had with CIFF about helping to fund India, but no commitment has been made to do so. One possible future funding model is accepting contributions from Indian companies, which fulfills their social responsibility requirement.

In Bihar, last year DtW told GiveWell they had a \$700k funding gap. DtW was able to partially fill the gap via donations from the Young Global Leaders forum and fundraising from individuals, but doing so required a significant investment in time and energy on by who would otherwise have been focused on program-related work. The fund raising covered one year of treatment costs; they face a funding gap again this year.

DtW has no other expectation of receiving significant additional funds in the short run, though they actively seek funding from a variety of partners as part of their standard course of business.

Model

In India, DtW facilitates the expenditure of resources that the states already have available. The deworming program uses a campaign-model; each state selects a day or two when all deworming takes place. The program itself contains the same elements of the Kenya model above, but the Indian states fund much of the work themselves, such as the teacher training. As such, the states themselves have to make the decision to conduct a deworming campaign; DtW can only encourage that decision by showing that it can be done and offering assistance to help implement the program in a robust fashion that involves intensive monitoring of the program.

Integrated community programming vs. school-based deworming

The neglected tropical diseases (NTD) community is focusing on an integrated approach to tackling many diseases simultaneously at the community level. DtW takes a different approach, which it doesn't believe is necessarily better, but works when worm infection dominates other NTD problems such as in India and Vietnam. DtW integrates at the school level with other school-based programs like nutrition, such as iron supplements, when possible.

India does not have schistosomiasis, so DtW focuses only on soil-transmitted helminths (STH). (In Kenya, the program treats for Schistosomiasis in areas of the country that have been found to be atrisk.)

Deworming without Deworm the World

What might India's deworming programs look like without DtW's participation?

- Reduced training for campaign execution
- Inability to assess whether programs are actually treating all at-risk children, due to lack of robust monitoring data and systems
- Less cost-effective deworming: DtW encourages states to schedule deworming based on treatment thresholds established by the WHO. In many cases, deworming can occur annually rather than semi-annually, and DtW provides support and funding to conduct prevalence surveys to better target treatment
- In many cases, deworming would not be happening without DtW's involvement. Note that
 deworming is not currently occurring in the four states in which DtW believes it might work
 next.

Current Programs

DtW is assisting the deworming programs in three areas: Bihar, Rajasthan, and Delhi. Delhi is important partly because it is the capital so it's important to lead by example and signal commitment to the program.

AFSS has an Operations Director in India, as well as a team of three staff for each state in which it operates, in addition to support staff. DtW also has several global staff members, and is hiring two or three people to be based in India to improve survey implementation and data collection as well as a Country Director to lead overall strategy, policy engagement, and fundraising efforts.

AFSS is the mechanism through which DtW implements its programs in India, but, at this point, AFSS is solely working on the DtW program. Thus, there's no substantive difference between DtW having its own country-staff who implement the program and DtW working via AFSS.

Identifying target areas

For identifying target areas for deworming, intensity of worms may be a better measure than prevalence. Prevalence and intensity mapping to target treatment is what is recommended by WHO and what is encouraged by DtW. Both prevalence and intensity data in India is not nearly as good as it is in many parts of Africa; part of the thinking has been that once the need is shown in one place (such as Kenya), there is less benefit to doing a deep intensity mapping of other places. That said, prevalence and intensity mapping in India may be a good use of funding because of the relative paucity of data from that setting and the significant socioeconomic and climatic differences between regions.

Without prevalence and intensity maps, targeting of potential new states in India is currently based on other metrics, particularly the limited existing studies and factors like the quality of sanitation. Simon Brooker is an expert on this work with whom DtW has engaged, among others.

Other countries with Deworm the World involvement

DtW has historically worked in many other countries by facilitating allocation of drugs; coordinating

with WHO and Children Without Worms to get drugs to where they need to go. Now WHO has taken over most of that work.

DtW has looked at expanding current programs into Liberia and Nigeria. In Liberia it would be in partnership with Schistosomiasis Control Initiative (SCI). The need for DtW in Nigeria wasn't as great after CIFF decided to do a huge mapping program as this sort of mapping was closely related to the technical assistance work that DtW had funds for. Going forward DtW will do less extensive work in Africa beyond Kenya due to its focus on school-based deworming programs in areas where STH is the greatest NTD threat, and it expects to focus its energy on expanding in India.

Scientific literature on water purification, relevant to Dispenser for Safe Water's intervention

Dr. Zwane is confident in the efficacy of water purification. In addition to the research GiveWell discussed (based on the Cochrane Collaboration's review of water purification programs), Dr Zwane mentioned:

- Cutler and Miller 2005, a historical ID strategy of the epidemiological effects of chlorination of areas of US.
- Tara Watson 2006, which observed the phase-in of water infrastructure of chlorination in Indian reservations in the United States. It showed drop in child mortality, not only in hospitals on the reservations, but also in nearby hospitals.
- <u>A paper Dr. Zwane co-authored called "Spring Cleaning"</u> It used a large sample size, with infrequent surveying, to avoid changing behavior of repeatedly surveying them.
- "The Risk of Asking", in which Dr. Zwane and her co-authors document the effects of repeatedly asking for self-reported data.

Currently the Gates Foundation is funding relevant trials in Bangladesh, Zimbabwe, and Kenya in its WASH Benefits study (http://www.washbenefits.net/). Kenya's will be a dispenser-based chlorination intervention, Bangladesh's will be Aquatabs (chlorine tablets). The trials will measure Water, Sanitation, and Hygiene (WASH) benefits with separate arms measuring interventions separately, plus a combined arm. The trials will include objective measures (such as nutrition) in addition to self-reported diarrhea, so it will be less affected by biases due to lack of blinding.

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