

A conversation with Roy Head and Will Snell,

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Participants

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Note: These notes were compiled by GiveWell and give an overview of the major points made by Mr. Head and Mr. Snell.

Summary

GiveWell spoke with Roy Head and Will Snell of Development Media International (DMI) to gather an update on DMI's campaigns and current funding situation. Conversation topics included an update on DMI's country programs, plans to fund and scale up programs, including room for more funding, and campaign priorities.

Burkina Faso program

Randomized Controlled Trial (RCT) evaluation of child survival campaign

Expectations for endline results

The child survival RCT in Burkina Faso was designed to have 80% statistical power¹ to detect a 19.9% reduction in mortality, and 50% statistical power to detect a 15% reduction in mortality. This initial modeling was based on a mortality rate of 168 deaths per 1,000 with a sample of 100,000 in 14 clusters. The small number of clusters limited the power of the study design.

The mortality rate in Burkina Faso has fallen to around 96/1,000 in the five years that have passed since the original modeling. The declining mortality rate has led to fewer deaths being included in the data, which has reduced the study's power.

Due to this reduction, DMI does not expect that endline RCT results will demonstrate a statistically significant impact on child mortality. It is not sure what the precise magnitude of the reduction will be, but estimates that statistical power might have been reduced to approximately 20%.

According to data collected by DMI's qualitative research team, health clinics in one control area reported a decrease in the number of recorded malaria deaths from 132 in 2011 to 38 in 2013. Though these surveys have a small sample size, the

¹ The ability to detect an effect if one is present.

qualitative results will be used for comparison with the more comprehensive mortality survey data.

Adjustments

In 2014, DMI shared some high-level midline results with partners. These numbers were subsequently changed following adjustments made by researchers at the London School of Hygiene and Tropical Medicine (LSHTM). Adjustments were made to control for disparities between treatment and control clusters. LSHTM will make similar adjustments to the endline results.

By adding adjustments to the data, DMI seeks to understand the potential causes of unexpected results. DMI is aware of the fine line between making adjustments that increase understanding and adjusting solely to obtain more desirable results. Adjustment for the imbalances between control and intervention arms was recommended by the RCT's Independent Scientific Advisory Committee (ISAC). Professor Simon Cousens at LSHTM is the RCT's lead investigator. Prof. Cousens takes an independent and conservative approach to this work and ensures that adjustments are done properly and ethically, with input from the ISAC.

Three adjustments have already been made to the midline results:

1. An adjustment for distance from health center
2. An adjustment for proportion of individuals who give birth in the health center (research indicates that individuals internalize the information better when giving birth in health centers)
3. An adjustment for distance from Ouagadougou (a proxy for access to high-quality medications and treatments)

These adjustments were assumed to be constant for the duration of the campaign (e.g. it was assumed that target populations remained the same distance from Ouagadougou throughout the campaign). This means that individuals who lived far from Ouagadougou, or had limited information on child survival in 2011, were assumed to be in the same situation in subsequent years.

Further adjustments might be made to the endline results.

Some of the adjustments have produced unexpected results. For example, initial results indicated that a much higher proportion of parents in the treatment group than parents in the control group had treated their children for diarrhea (a difference-in-difference of 28%). After adjusting for the above factors, the difference-in-difference falls to 9%. It is difficult to understand why this drop occurs – the result suggests that individuals living further away from health centers and/or Ouagadougou, with less access to information, are potentially more likely to treat their children for diarrhea. One possible explanation is that their remote and underserved location makes them more responsive to DMI's messages.

Some of the adjustments produced favorable results in terms of DMI's impact (e.g. findings on pneumonia).

Qualitative research to verify a surprising survey result about breastfeeding

During data collection for the RCT, surveyors used the Demographic and Health Survey (DHS) methodology to determine exclusive breastfeeding rates. Midline results (which used data collected using the DHS methodology) showed that in some control zones, exclusive breastfeeding rates had increased by around 20-30 percentage points over a 12-month period. For example, in one control group, 49% were exclusively breastfeeding their child. In contrast, historical data shows an approximate increase from 4% to 20% over a 25-year period.

DMI wanted to gather more information on this surprising finding. DMI's qualitative researchers traveled to the control zones and asked questions similar to those in the DHS, but posed in several ways. They found that the participants gave different responses when they asked the questions in a different way. Being able to ask multiple, in-depth questions solely on breastfeeding habits may yield more reliable estimates of exclusive breastfeeding rates than asking about this as part of a lengthy questionnaire on many child health behaviours. For example, some participants who had indicated that they breastfed exclusively subsequently answered that they had given their child things other than breast milk (e.g. herbal tea).

Timeline for endline results

DMI expects to receive and share high-level figures with partners in September or October 2015. Any proposals for adjustments will be discussed at the November 2015 meeting of the study's independent scientific committee, which might further alter the high-level figures. The final analysis will not be completed until sometime in 2016.

Planning for future RCTs

Layered RCTs

DMI has had further discussions with Dr. Rachel Glennerster and Dr. Robert Hornik about the possibility of conducting layered RCTs in Burkina Faso. It has confirmed that layered RCTs are a viable research design.

Family planning RCT

In 2016, DMI is initiating an RCT on family planning messaging. Rachel Glennerster of the Abdul Latif Jameel Poverty Action Lab (J-PAL) is the principal investigator. Dr. Glennerster is going to Burkina Faso in two weeks. One of her priorities will be assessing the quality and availability of clinical data on contraceptive usage and distribution. Even if the RCT uses clinical data, it will also conduct self-report surveys. The study will not analyze birth rates, as they are too difficult and expensive to measure.

Early childhood development campaign and RCT

DMI would like to focus its next campaign on early childhood development. The main objective would be to encourage mothers to mentally stimulate their children by speaking with them. It is beneficial to a child's development if mothers speak to their children often and from an early age. If mothers begin speaking to their children only after the child is one year old, the child's cognitive development will be hindered. Evidence from a study in Tanzania indicates that, in a counseling setting, engaging a child through speech can cause a 200% increase in his or her vocabulary. Evidence from a study in the West Indies suggests that these efforts can also translate into higher salaries, IQ levels, and increased employment rates later in life.

This campaign has a simple message and is geared toward a broad audience. There is no time commitment or cost for listeners, as mothers can engage their children during regular interactions such as meals, and they receive instant feedback from their children when they do. At baseline, almost no parents talk to their infants in the target regions. There are no supply side requirements for this intervention. Such a campaign has not yet been the subject of an RCT. However, RCTs on other types of early childhood development interventions have had positive results.

DMI wants to move forward with both the early childhood development campaign and RCT. It must reflect on whether funds would be better spent on this RCT, or on scaling up other campaigns. If results from the first Burkina Faso RCT are not favorable, DMI might want to prioritize moving this RCT forward, as its results might be more positive.

DMI believes it is important to continue studying the effectiveness of different kinds of mass media interventions. Ideally, it would like to work in two parallel directions – both conducting research and scaling up programs. Research and scale-up campaigns have different audiences among funding agencies – some funders want to invest in research programs, while others want to prioritize scale-up campaigns.

Child health campaign

The scale-up of DMI's child health campaign in Burkina Faso is proceeding as planned. Broadcasting is under way, and will continue until the end of 2017. It covers a range of issues, including the three deadliest conditions for children (malaria, diarrhea, and pneumonia), as well as nutrition and breastfeeding. The RCT runs until the end of 2018.

Funding

The campaign is supported by four funders:

1. SPRING (Strengthening Partnerships, Results and Innovations in Nutrition Globally) provided one year of funding, ending in September 2015.
2. Comic Relief provided funding for the longest period, 2015-2017.

3. Alive & Thrive provided funding through August 2016.
4. Vitol Foundation provided funding for the period January-December 2015.

Different funders prioritize different issue areas (e.g. Comic Relief's priority areas are malaria, diarrhea, and pneumonia). DMI may use unrestricted funding to fill funding gaps at the conclusion of grant periods, and hopes to maintain the full range of messaging topics throughout the campaign's duration. Funding received for a family planning RCT should cover the costs of key staff, so DMI expects it will be able to fill the remaining funding gaps.

DMI will try to extend this campaign through the end of 2018.

Mozambique

Child survival campaign

DMI used unrestricted funding from the Mulago Foundation to hire a country representative to lay the groundwork for its child survival campaign in Mozambique. Mozambique is a good setting for a child survival campaign. DMI has only had to make minor tweaks to its campaign design.

It plans to initiate the campaign as soon as it has secured funding. DMI has received official recognition as a non-governmental organization (NGO), and is in the process of signing memorandums of understanding (MOUs) with partners, including the Ministry of Health.

DMI is building relationships with partners and other funders, and is gaining an understanding of the country's political, funding, media, and health landscapes. The Mozambican government prefers to work with NGOs who are open to collaboration, rather than those that create and impose their own solutions. There is a good health funder group in Mozambique. The Ministry of Health's recent publication of its health promotion strategy has also facilitated the campaign's progress.

Funding

DMI hopes to secure funding by the end of 2015. Mozambique tends to have a higher number of bilateral agencies than other countries where DMI is considering working, like Cameroon. This will make it easier to secure both initial and follow-on funding from in-country sources. The bilateral agencies working in Mozambique who are most likely to provide initial co-funding are:

- USAID
- The British Department for International Development (DFID)
- The Department of Foreign Affairs, Trade and Development Canada (DFATD)
- Irish Aid
- The Swiss Agency for Development and Cooperation

DMI is awaiting confirmation of a \$2-2.5 million foundation grant to fund approximately half of the first two years of this campaign. If secured, it would seek

in-country co-funding to cover the other half. Once the campaign is initiated, DMI would seek funding to extend it by an additional two years.

The Democratic Republic of the Congo

Child survival campaign

Current one-year child survival radio campaign

DMI designed and recruited funders for a one-year child survival campaign in DRC. It is currently broadcasting in 4 different languages on 35 stations, in eight of the country's 11 provinces. DMI chose to work with radio stations located in provinces where IMA World Health, one of the campaign's main funders, was already working. The campaign also includes a small number of family planning messages.

The DRC radio campaign is running for one year on a budget of approximately \$1 million. The set-up period lasted four months, and broadcasting runs for eight months ending December 2015. DMI has subcontracted the distribution work to an NGO that was already working with a network of community radio stations across the country. This may not be a long-term solution, but it has allowed DMI to initiate the program in a timely manner.

Campaign scale-up

DMI would like to extend and scale up the campaign beyond December 2015. It estimates that with about twice its current budget, the campaign could scale up from 2.5 million to approximately 10.5 million listeners. DMI has already created a lot of content for the campaign; this content could be reused in additional provinces.

DMI is also researching alternative ways to distribute spots to community radio stations. DMI is considering broadcasting exclusively on Radio Okapi. This would be more expensive, but would reach a very large audience. DMI is looking into how Radio Okapi approaches local broadcasting. It would also like to learn about the effect of Radio Okapi's local language programming on listener numbers (e.g. whether broadcasting three times per day in Lingala increases its audience).

It might take DMI some time to consider all of the options for the next phase. These efforts could lead to a temporary gap in broadcasting.

Funding for DRC campaigns

Three funders are supporting the current DRC child survival campaign:

1. UNICEF
2. IMA World Health
3. Save the Children

DMI is in the process of approaching in-country bilateral agencies and NGOs for support in funding the 2016 scale-up of this campaign. The DRC has many in-country funders with large budgets, which makes it more likely that DMI will obtain the necessary funding.

The DRC is a very challenging country to work in. For example, some of the workers involved in DMI's recording and filming sessions show up without the necessary equipment (e.g. sound gear, costumes, make-up, etc.). However, mass media campaigns tend to experience fewer logistical problems than other kinds of development interventions. DMI's ability to overcome in-country obstacles and successfully implement the campaign's first phase will increase its chances of obtaining follow-on funding for the scaled-up campaign.

Family planning radio and television campaign in Kinshasa

DMI is currently running a radio and television family planning campaign in Kinshasa. It is funded by the David & Lucile Packard Foundation. The broadcasting period lasts until December 2015. As the campaign involves both radio and television broadcasting, it has been logistically complex. However, coordination has been relatively straightforward, as DMI is only partnering with local radio and television stations.

Plans for funding and scaling up programs

Use of unrestricted funds

DMI is weighing a number of different options for how to use its unrestricted funds. In general, DMI prefers to scale up campaigns in countries where it has established a solid team, network of broadcasters, and infrastructure before expanding to new countries. Initiating a campaign in a new country is more costly than adding new campaigns in countries where it already has established a team.

Burkina Faso

DMI has considered using unrestricted funds to scale up television campaigns in Burkina Faso.

DMI is also considering providing solar panel arrays to partner stations. This would give the stations access to reliable electricity, and would help DMI build its relationships with its partners. Partner stations are not able to afford the upfront costs of solar panels, but the approximately \$500,000 project is more affordable for DMI (relatively). DMI is currently seeking funding for this project; one potential funder is the Government of Taiwan.

Mozambique

DMI could use unrestricted funds to cover potential funding gaps in its upcoming early childhood development campaign in Mozambique. For example, if it secures the \$2.5 million foundation grant it has applied for and obtains \$2 million from in-country agencies (e.g. USAID), there would be a gap of \$500,000.

If one of those sources does not materialize, DMI may use unrestricted funding to cover a larger funding gap. However, DMI prefers to pursue all of the available in-country funding options before committing unrestricted funding.

The DRC

DMI could use unrestricted funds to extend and expand its child survival campaign in the DRC.

Cameroon

DMI is considering starting a campaign in Cameroon. As there are fewer in-country agencies working in Cameroon than in Mozambique, it might be more difficult to obtain start-up funding there. As a result, DMI may prioritize a campaign in Mozambique over opening a campaign in Cameroon.

If DMI had \$2 million in unrestricted funding, it could begin a campaign in Cameroon. Once the campaign is initiated, it would be relatively easy to obtain follow-on funding.

Minimum budget required to initiate a new country program

Funding is DMI's primary consideration when deciding where and how to expand into new countries. To initiate a campaign in a new country, DMI requires a minimum annual budget of approximately \$800,000. This amount would not cover a large amount of broadcasting. If DMI needed to clearly demonstrate impact at the end of the first year to obtain follow-on funding, the initial budget would need to be larger.

DMI was able to cover its set-up costs, such as hiring a country director and setting up partnerships, in Mozambique and the DRC by using unrestricted funding from the Mulago Foundation.

Media Million Lives initiative

DMI is looking to implement its *Media Million Lives* initiative, which aims to save one million lives through DMI's child survival campaigns.

DMI has projected a potential pathway to saving approximately 1.1 million lives by 2024. In the proposed timeline:

- DMI's programs would reach national scale in Burkina Faso and DRC in 2016, and in Mozambique and Cameroon in 2017
- DMI would initiate campaigns in Chad, Ethiopia, Mali, and Niger in 2017 (reaching national scale in 2018)
- DMI would initiate campaigns in Cote d'Ivoire and Tanzania in 2018 (reaching national scale in 2019)
- DMI would initiate a campaign in some parts of Nigeria in 2019 (reaching national scale in 2020)

The proposed budget for *Media Million Lives* is approximately \$185 million, or around \$24 million per year. This is a significant increase from DMI's current \$5 million per year budget, which encompasses all of its current campaigns (including campaigns not focused on child survival).

DMI must also consider the fact that some of the funding it receives will be for campaigns that aren't focused on child survival. DMI expects that approximately 50-65% of the funding it receives will be for child survival campaigns.

Room for more funding

In 2016, DMI would be able to use approximately \$7.5 million of additional funding. This would enable it to set up campaigns in three new countries. Scaling up at this pace would be challenging, but feasible.

If DMI were to receive the \$24 million per year *Media Million Lives* budget in 2016, it would not be able to spend all \$24 million in that year. As DMI scales, it aims to be large enough to implement the *Media Million Lives* initiative, while still remaining an efficient organization with minimal bureaucracy.

Securing funding is the main obstacle towards scaling up DMI's operations. Hiring high-quality staff is also difficult, but Mr. Head is confident that DMI will be able to find good people for future campaigns.

The pre-campaign in-country time (funded by the Mulago Foundation) has worked well in the DRC and in Mozambique. This period has allowed DMI to build its in-country network prior to the start of the campaigns.

DMI's campaign priorities

DMI intends to pursue its child survival *Media Million Lives* scale-up plan. However, child mortality rates are falling and the proportion of child deaths due to neonatal causes is increasing. DMI's programs are less likely to have an impact on neonatal mortality rates, as these deaths are often related to supply-side factors.

Some funders are shifting focus to maternal health interventions, given that maternal mortality rates have not been decreasing. Countries with high post neonatal child mortality rates tend to be engaged in conflict (e.g. Afghanistan, northeast Nigeria). DMI's campaigns would likely be less effective in conflict settings.

As a result, DMI expects to shift from focusing solely on child survival to having a few key priorities (including child survival). It is awaiting endline results from the Burkina Faso RCT before confirming its future priorities.

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