

A conversation with Development Media International, October 4, 2017

Participants

- Roy Head – Chief Executive Officer (CEO), Development Media International
- Dr. Joanna Murray – Director of Research, Development Media International
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Note: These notes were compiled by GiveWell and give an overview of the major points made by Development Media International.

Summary

GiveWell spoke with Mr. Head and Dr. Murray of Development Media International (DMI) to learn about DMI's progress in 2017 and its future plans. DMI is a GiveWell standout charity. Conversation topics included DMI's randomized controlled trial (RCT) on child survival in Burkina Faso, updates on current programs and priorities, and an update on funding.

Child survival RCT in Burkina Faso

Evidence of increased treatment seeking

DMI conducted an RCT on its child survival campaign in Burkina Faso from 2012 to 2015. The campaign comprised messaging promoting antenatal care (ANC), giving birth in a health facility, and treatment-seeking for children under five exhibiting symptoms of pneumonia, diarrhea, or malaria. The RCT did not find a statistically significant reduction in child mortality, the study's primary outcome. However, data from government health centers indicated that during the RCT health centers in treatment areas recorded statistically significant higher numbers of outpatient consultations for children under five (35% in year one), ANC visits (6-9%), and facility deliveries (6-9%) than health centers in control areas.

The data on consultations for children under five describes only the number of consultations recorded by government health centers, it does not indicate what symptoms children arrived with or what treatment they received (although DMI is exploring whether there is any way of obtaining it). However, DMI believes that treatment seeking was unlikely to have been driven by the 'worried well' because households in treatment areas were located an average of six kilometers from a health center—a long distance to travel unless the child had a serious illness. Further, DMI believes that appropriate treatments for child illness were most likely available in the health centers children attended because average stock outs in government health centers were only 2.4% at baseline. Indeed, the World Health Organization (WHO) performed a Service Availability and Readiness Assessment in

2014—a survey of health centers' stock in 766 facilities—and found high availability of oral rehydration salts (a treatment for diarrhea) and antibiotics in Burkina Faso (99% for ACTs, 90% for ORS, and 89% for antibiotics). Finally, DMI is of the view that children were likely to receive appropriate treatments in health centers. An evaluation survey conducted by the London School of Hygiene & Tropical Medicine (LSHTM) in a sample of Burkina Faso health centers found high rates of compliance with the Integrated Management of Childhood Illness Protocol, the child treatment guidelines developed by the WHO.

Estimating the impact of increased treatment seeking using the Lives Saved Tool (LiST)

DMI and LSHTM have used the LiST—a model developed by the Institute for International Programs at Johns Hopkins Bloomberg School of Public Health that estimates the impact of scaling up health and nutrition interventions on maternal, newborn, and child health, and stillbirths—to estimate the impact of increased treatment seeking on morbidity and mortality. The results ranged from a 6.3% child mortality reduction in year one to 3.9% in year three. The modeled cost per DALY for the national scale-up was \$25 (approximately \$700 per life saved). It hopes to publish the results of this analysis in early 2018. Among other things, the LiST draws on data from the 2010 Demographic and Health Survey (DHS), data about treatment availability, and data about rates of appropriate treatment.

Program updates

Progress in the last 12 months

Burkina Faso

- **Child survival RCT** – DMI expended significant efforts publishing the final results of this RCT; the manuscripts are currently under journal review.
- **Child survival campaign** – Beginning in 2015, DMI has scaled up its child survival campaign to all of Burkina Faso. The campaign primarily targets pneumonia, diarrhea, and malaria—broadcasting treatment-seeking messages on radio stations across the country. Broadcasting will conclude at the end of 2017.
- **Family planning RCT** – DMI is conducting an RCT of its family planning radio campaign in Burkina Faso. Uptake of modern contraceptives is the primary outcome measure for the RCT. The campaign broadcasts a variety of messages including messages describing the benefits of different forms of contraception, messages promoting increased discussion between spouses about family size, and messages advocating for males also taking responsibility for family planning. DMI is also working with Marie Stopes International to broadcast segments where health specialists answer calls from listeners and respond to any questions. The campaign will now be extended by one year, so DMI estimates that the endline survey for the RCT will be conducted between

December 2019 and February 2020. The survey will be conducted by the Abdul Latif Jameel Poverty Action Lab (J-PAL) and Innovations for Poverty Action (IPA).

Democratic Republic of Congo (DRC)

Family planning campaign – From May 2014 to May 2017, DMI conducted a family planning campaign on radio and television in Kinshasa, the capital of the DRC, in two separate phases. DMI completed an endline survey for the project in May 2017, which showed a 3% increase in modern contraceptive use among women of reproductive age. The survey conducted at the end of phase I also showed a 3% increase during the first phase.

Mozambique

Nutrition campaign – DMI has been working with the World Food Programme to train community radio stations on nutrition messaging.

Tanzania

Nutrition campaign – In April of 2017, DMI began broadcasting a radio and television campaign aiming to reduce child stunting in Tanzania's Lake Zone. The campaign is one component of a larger program led by IMA World Health that encompasses other interventions such as nutrition counseling. The messaging focuses on nutrition, promoting dietary diversity during pregnancy, exclusive breastfeeding for infants aged zero to six months, and complementary feeding for children older than six months. The campaign also includes messaging on handwashing and early child development. DMI completed a baseline survey in February of 2017. It expects to conduct a midline survey in Fall 2018, and an endline survey in 2019.

Future plans

Early childhood development (ECD) pilot study in Burkina Faso

DMI plans to conduct small pilot studies prior to and as part of all of its future large-scale behavior change campaigns. The first example of this approach will be a pilot study on ECD in Burkina Faso beginning in October 2017. DMI plans to individually randomize approximately 100 women across 10 villages. The treatment group will be exposed via headsets to audio messages on ECD, and the control group will be exposed via headsets to audio messages on other child health issues.

The idea for conducting a study on ECD in Burkina Faso came from an RCT that DMI was involved with four years ago in Jamaica. DMI produced educational videos which were broadcast in health center waiting rooms to parents attending with young children and found a 0.3 standard deviation improvement in children's cognitive scores (note the intervention tested also included a health worker consultation and the distribution of a toy). The Burkina Faso pilot study will test whether or not similar improvements can be achieved by ECD messaging through radio.

DMI would eventually like to develop a proposal for a large-scale ECD RCT in Burkina Faso that incorporates sophisticated modeling of economic impact. DMI believes that a mass media ECD intervention has the potential to impact a vast population because all parents can act on the behavior change messages with few tradeoffs. A rough calculation suggests a 2-3% potential increase in gross domestic product (GDP) if the results from the RCT in Jamaica were replicated across a generation.

Child survival campaign in Mozambique

DMI is planning an 18-month national campaign in Mozambique to promote ANC, giving birth in a health facility, and treatment-seeking for children under five exhibiting symptoms of pneumonia, diarrhea, and malaria. Messaging will be broadcast on the national radio station of Mozambique, which has 19 language services. DMI's programming will be produced in at least 14 of these languages and estimates from DHS data suggest it will reach approximately 70% of the target population.

Monitoring and evaluation

DMI will use administrative data gathered by Mozambique's Ministry of Health to measure uptake of child consultations, ANC attendances, and deliveries in health facilities. To ensure that these data are accurate, DMI will collect information directly from a sample of health facilities in three target regions and compare it with the centrally aggregated administrative data. Prior research conducted by a U.S. academic in Mozambique suggests an error rate of 10% or below in administrative data. To account for the seasonality of diseases like malaria—which may increase uptake of interventions during specific time frames—DMI will conduct time series analyses that compare uptake of child consultations, ANC, and health facility delivery following its intervention to uptake at the same time in prior years.

DMI will administer surveys in the same three regions to measure exposure to the campaign, knowledge of and attitudes towards interventions, and intention to act. This information will allow DMI to evaluate its effectiveness in changing behaviors.

To better compare the populations exposed and unexposed to messaging, DMI is considering utilizing propensity score matching—a statistical technique that may reduce the risk of bias from confounding variables.

Funding

DMI has budgeted \$2.7 million for the child survival campaign in Mozambique. It received roughly 50% of funds from Unorthodox Philanthropy. Other funders include the Mulago Foundation, Founders Pledge, and the Swiss government. DMI also allocated \$400,000 of funding from GiveWell to the campaign.

Scoping work in Francophone West Africa

Modelling impact

DMI has determined that the countries in which it can save the most lives are those located in Francophone West Africa—including Guinea, Chad, Mauritania, Niger, Mali, and Ivory Coast. It came to this conclusion by creating a model that incorporated DMI’s impact on the causes of mortality (derived from its child survival RCT), population size, baseline mortality rates, and media penetration, inputted into LiST. DMI also takes into account prevalence of other organizations doing similar work.

A major reason why the model found countries in Francophone West Africa to have the greatest need was that they are not being served by USAID—one of the largest funders of mass media interventions. The Department for International Development—another funder of mass media—also does little work in Francophone West Africa. Much of the funding for global health in this region comes from the French government, which does not tend to fund mass media interventions.

Feasibility trips

In the past nine months, DMI’s regional director for West Africa has conducted feasibility trips in Niger, Guinea, Ivory Coast, and Mali. Findings indicate that funding for mass media interventions in these countries is limited and often disbursed in relatively small amounts of approximately \$200,000. DMI has the capacity to scale up interventions in Francophone West Africa, but funding is currently a limiting factor.

Improving operational effectiveness

Reducing evaluation costs

DMI is experimenting with different methods of achieving low-cost campaigns. Its goal is to reduce operational expenses by at least 50%. One method of simplifying operations and reducing the cost of campaign evaluations could be to use administrative data from governments instead of conducting expensive surveys. Administrative data will have greater statistical power to detect effects and may also be of higher quality than information gathered from surveys.

DMI is not planning to modify any aspect of *Saturation+*—its model for maximizing the reach of messaging—as part of an attempt to reduce costs.

Reducing operational costs

DMI previously had 35 staff members in Burkina Faso creating messaging for radio spots—costing roughly \$1-2 million. These ideas—which total over 1,000—can be reused for future campaigns in other countries, although they need to be adapted to and tested in each new context. DMI expects this fact to enable it to operate campaigns mainly out of its London offices and reduce overseas staff by over 90%—compensating by slightly increasing staff in London. Reducing the amount of overseas staff will likely be more cost-effective because DMI would not be incurring

large startup costs for new campaigns. DMI believes that operating 10 campaigns in this manner would be feasible and not exceed its management capacity.

Reducing overseas staff would not affect DMI's ability to monitor its campaigns because it hires external contractors for this purpose. DMI plans to continue monitoring activities for all future campaigns.

DMI will not be employing this model for the upcoming child survival campaign in Mozambique (there will be around 10 overseas staff on that project). It hopes to test the model in future campaigns in Francophone West Africa.

Building government capacity

Most governments have health promotion ministries. To leverage its impact, DMI would like to test building up the capacity of these departments. It has translated its model into an eight-step program that can be taught to government officials. In the implementation phase, DMI expects that it would control the flow of project funds and have two staff members working overseas with the government. The government agency would be largely operating the program, and DMI would provide support as needed.

Funding update

DMI's annual spending is roughly \$4-4.5 million, of which \$500,000 are unrestricted funds. These come from GiveWell, which has provided around \$735,000 over three years, and the Mulago Foundation—which has provided around \$150,000 per year.

DMI has an ongoing fundraising cycle. It expects to raise \$4-4.5 million in the period leading up to April 2019 but is hoping to raise more. It believes it already has the capacity to scale up to a \$10 million per year operation undertaking significant work in Francophone West Africa.

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