Researchers
Günther Fink
Swiss Tropical and Public Health Institute

Dean Karlan
Northwestern University

Robert Osei
Institute of Statistical, Social and Economic Research (ISSER), University of Ghana

Christopher Udry
Northwestern University

Staff
Gloria Abankwa
Research Associate

Loïc Watine
Senior Director, Right-Fit Evidence

Madeleen Husselman
Country Director, Ghana

Martin Sweeney
Research Analyst

Radhika Lokur
Research Analyst

Issah Mohammed
Research Associate

John Balanko Sumbo
Field Manager

Timeline
2012-2015

Sample Size
216 villages (4,269 households)

Data Repository
https://dataverse.harvard.edu/dataset.xhtml?persistentId=doi%3A10.7910/DVN/CQRN...

Research Implemented by IPA
Yes

Communication for Development in Ghana

Abstract

A large number of child deaths in sub-Saharan Africa are preventable, and many programs aim to prevent disease and death by improving health knowledge. In Ghana, researchers evaluated the impact of a complementary health communications program on health behavior. To complement a national communication and community health worker program, live theater performances, video screenings, and live radio broadcasts were rolled out in selected communities. Mobile health messages were also sent to selected mothers on the same five behaviors. Preliminary results indicate that the community-based activities did not have an impact on any of the key health behaviors; small improvements on selected

behaviors were found for voice messages.

Policy Issue

Substantial progress has been made worldwide in reducing child deaths over the last 25 years, yet on average 17,000 children under five still die every day, mostly from preventable causes and treatable diseases.[1] Sub-Saharan Africa has the highest child mortality rate relative to other regions—92 deaths per 1,000 live births. The leading causes of death among children are preterm birth complications, pneumonia, complications during labor and delivery, diarrhea, and malaria. One problem could be insufficient knowledge of how to prevent disease. If so, promoting positive health behaviors through information campaigns may increase demand for services and products that reduce the risk of preventable disease and death. The problem may also, at least in part, lie elsewhere: people may be informed about healthy behaviors, but habit, peer influence, or other factors may prevent behavior change. Existing evidence suggests that mobile phone messages, which are inexpensive to administer, can nudge people to follow through on their intentions. Since mobile phone usage has proliferated in sub-Saharan Africa in recent years, this could be a cost-effective channel to deliver key messages in this context. This research aimed to investigate if and how information campaigns, with and without salient reminders, improve health behaviors.

Context of the Evaluation

Infectious diseases and malnutrition have been major public health concerns in Ghana. In 2008, 14 percent of children under five were underweight and 28 percent were stunted, and malaria was the leading cause of death nationwide. In response, UNICEF and the Ghana Health Services, an agency within the Ministry of Health, launched the Communication for Development (C4D) program in March 2012 in twelve districts in the four poorest regions of Ghana, with the aim of increasing awareness of common health problems and reducing the risk of disease and death, particularly for children under five.

Details of the Intervention

Innovations for Poverty Action worked with researchers to conduct a randomized evaluation to measure the impact of selected approaches included in the C4D program and an expanded version with a mobile phone component (M4D) on five key behaviors:

1. Exclusive breastfeeding for the first six months of life
2. Hand washing with soap
3. Sleeping under an insecticide-treated bed net (ITN) to prevent malaria
4. Treating diarrhea with oral rehydration solutions
5. Using a skilled birth attendant

The selected C4D activities promoted these behaviors through live radio broadcasts, video screenings, and theater dramas. Of the 216 communities in the study, 108 were randomly assigned to receive various combinations of additional complementary C4D program

components.

Additionally, 2380 households with cell phones were enrolled in a sub-study evaluating the impact of mobile voice messages on the five key health behaviors. The program, called Mobile for Development (M4D), was developed by VOTO Mobile, with technical support from IPA, UNICEF and GHS. Mothers of children under five randomly enrolled in the program received 15 unique voice messages, sent to their mobile phones, encouraging them to practice five key health behaviors.

Researchers measured the impact of the interventions on awareness, knowledge, behavior change, and whether any changes were sustained over time.

Results and Policy Lessons

Preliminary results*

While all of the targeted behaviors improved substantially over the project period, no impact was found for the complementary community-based C4D activities (live radio, theater, and video screenings).

Overall exposure to program activities seems to have been very limited, with on average less than one event attended by respondents in the treatment group. In comparison, the national program (which was rolled out in treatment and control areas) appears to have reached a large majority of the study sample through radio and personal visits by health workers, and likely contributed substantially to the overall improvements in health behaviors observed in the entire study sample.

Results were more positive for mobile health messaging: M4D alone appears to have increased ITN utilization (for both mothers and children) and the presence of soap in households by about 5 and 8 percentage points, respectively. The mobile messages didn't have any impacts on breastfeeding, ORS treatment, or skilled delivery, however.

**These results are preliminary and may change after further analysis and/or data collection.*

Lessons Learned

While the selected C4D interventions did not have any measurable impact, the overall increase in good health practices suggests that major improvement in key behaviors is possible within a relatively limited time frame. Even behaviors traditionally perceived as hard to change, like skilled birth attendance, increased by more than 10 percentage points in poor areas.

This change may have been due to complementary interventions outside the scope of the evaluation, which speaks to another lesson learned from the project: Multi-faceted behavioral change programs are difficult to evaluate without a carefully controlled rollout. C4D involved many means of messaging, each of which was implemented by a different organization, and

some of which overlapped with outside programs. Future evaluations of large-scale behavioral programs should involve a more detailed rollout and monitoring plan for implementers, as well as coordination with external organizations to prevent spillover from similar projects.

Finally, in spite of the challenges faced by evaluators, the results from the M4D intervention suggest that simple phone messages can indeed change behaviors. While the observed effect size is not large, the low cost of sending messages means that these interventions may still be cost-effective.

Sources

1. UNICEF, “Level and Trends in Child Mortality.” Report 2014. Retrieved March 11, 2015: http://data.unicef.org/corecode/uploads/document6/uploaded_pdfs/corecode/Child_Mortality_Report_2014_195.pdf

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