A NEW COMMUNITY APPROACH TO TREATING ACUTE MALNUTRITION

The Eleanor Crook Foundation is a growing private philanthropy committed to research, capacity building, and advocacy to end global malnutrition. Through an Eleanor Crook Foundation RISE for Nutrition grant, the International Rescue Committee (IRC) researches ways to improve treatment of severe acute malnutrition in South Sudan. A new set of easy-to-use, low-literacy tools could allow community health workers to provide treatment for acutely malnourished children without medical complications in their own homes. This research has the potential to transform treatment of uncomplicated severe acute malnutrition on a global scale.

Globally, severe acute malnutrition (SAM) affects nearly 19 million children under five years of age (CU5). Roughly half of all CU5 deaths worldwide are related to malnutrition. Current protocols for community management of acute malnutrition (CMAM) center largely on treatment through health facilities. For millions of children whose lives are threatened by SAM, receiving proper treatment requires repeated trips to the nearest health facility — often over long distances, through difficult conditions, and with significant risk and opportunity costs to struggling families. As a result, only about one in ten severely malnourished children receives life-saving treatment.

Currently, community health workers (CHWs) in many countries are able to treat other frequent causes of child mortality — including diarrhea\(^1\), malaria\(^2\), and pneumonia — at the community level, reducing the need for children and their caregivers to make difficult trips to official health facilities. This approach, known as integrated community case management (iCCM), has vastly improved access to care for vulnerable populations around the world.

Unfortunately, a similar approach for treating uncomplicated SAM cases\(^3\) at the community level has not yet been thoroughly tested among low-literate providers. An effective community-based protocol could make treatment more accessible for millions of children suffering from uncomplicated SAM.

Low literacy and numeracy among CHWs in many low-income countries has been one of the main obstacles to development of a community-based treatment protocol. CHWs require literacy and numeracy skills in order to complete tasks such as filling out patient registers, recording mid-upper arm circumference (MUAC) and weight measurement, and calculating daily and weekly dosage of ready-to-use therapeutic foods (RUTF).
The IRC has developed a simplified set of tools to guide low-literate CHWs through the treatment process. If shown to be feasible, these tools could allow low-literate CHWs to effectively treat uncomplicated SAM cases, potentially transforming community nutrition and health for millions of children.

With funding from the Eleanor Crook Foundation through a RISE for Nutrition grant, the IRC is currently conducting research to test the feasibility and acceptability of these simplified tools in Northern Bahrel Ghazal State, South Sudan. With funding from the Eleanor Crook Foundation through a RISE for Nutrition grant, the IRC is currently conducting research to test the feasibility and acceptability of these simplified tools in Northern Bahrel Ghazal State, South Sudan.\(^4\)

In South Sudan, a conflict-affected country with poor infrastructure and a weak health system, the malnutrition burden is especially high. A full course of treatment for SAM requires patients to return to the clinic each week for up to sixteen weeks, based on South Sudanese treatment protocol. Given the long distances and associated costs, families are often unable to travel to health facilities for treatment, and as a result, 60% of severely malnourished children in South Sudan are not enrolled in lifesaving treatment programs.

This research seeks to establish evidence that low literate CHWs can effectively treat uncomplicated SAM cases using simple and easy-to-use diagnostic and treatment tools. To test the effectiveness of these tools, IRC researchers train CHWs to use the tools and then measure CHW capacity to successfully treat uncomplicated SAM cases at the household level under the close supervision of IRC staff. If the tools are shown to be feasible, children may soon receive in-home treatment for uncomplicated SAM, potentially saving tens of thousands of lives in South Sudan.

The Path Forward: A Global Research Coalition

The Eleanor Crook Foundation has recently increased funding for the IRC research project to test the tools across three additional countries, including Kenya, Malawi and Nigeria. This expanded research project, coordinated by the IRC, includes support for a coalition of some of the world’s most reputable International Non-Government Organizations (INGOs), including Save the Children-UK, Malaria Consortium, Concern Worldwide, and Action Against Hunger. This newly established research coalition will carry out additional tests and further solidify evidence around these potentially groundbreaking tools. Under the IRC’s leadership, coalition partners will use findings from their collective research efforts to produce a set of global guidelines to support wide-scale rollout of the community-based simplified treatment protocol.

Conclusion

The present model of treating uncomplicated SAM through visits to distant health facilities fails vulnerable children around the world. The cutting-edge research that the IRC and partners are currently undertaking with support of an Eleanor Crook Foundation RISE for Nutrition grant has the potential to fundamentally improve access to treatment for millions of children with uncomplicated SAM.

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1 For cases where diarrhea has been present for fewer than 14 days and there is no blood in the stool.
2 For cases where fever has been present fewer than 7 days
3 Children with SAM are classified as “complicated” if they have other medical complications or loss of appetite. “Uncomplicated” cases are children with SAM who are otherwise clinically well.
4 This research study focuses on uncomplicated SAM cases only. All complicated SAM cases are referred to inpatient services.

Full toolkit for low-literate Community Health Workers, including a modified MUAC tape, dosage scale, dosage calculator, patient register, and counseling flipchart. | Photo: Annie Zhou/The IRC

Community Health Workers use a dosage calculator to easily convert daily dosage into weekly rations of Ready-to-Use Therapeutic Food. | Photo: Annie Zhou/The IRC