

TISA (INTEGRATED TREATMENT OF SEVERE ACUTE MALNUTRITION)

THE IMPACT OF INTRODUCING WASH MEASURES IN THE HOMES OF CHILDREN IN TREATMENT

TREATING SEVERE ACUTE MALNUTRITION IN CHILDREN

17 million children suffer from severe acute malnutrition (SAM) globally, which increases their risk of infectious diseases and death. Community-based management of severe malnutrition has significantly changed the standard practice of SAM treatment. Now, cases of SAM without medical complications are mostly treated on an outpatient basis. This has helped to increase coverage and reduce the cost of treatment for both health systems and affected individuals. However, this means that treatment has moved to the home, which implies a less controlled environment where the risk of infection due to environmental threats, such as contaminated water or poor hygiene practices, may be higher. The question is, can access to quality water improve the management of severe acute malnutrition in children under 5?

THE TISA PROJECT: HOW ADDING WASH MEASURES IMPACTS TREATMENT

To answer this question, Action Against Hunger, the London School of Hygiene and Tropical Medicine and the Cheikh Anta Diop University of Dakar in collaboration with the Ministry of Health of Senegal are conducting a research project on the health impact, process and cost-effectiveness of WASH (water, sanitation and hygiene) kits to improve the effectiveness of outpatient treatment of children with severe acute malnutrition. It is hypothesised that adding a household WASH package - including water treatment products, a safe water container and hygiene promotion recommendations - to the standard national protocol for outpatient treatment of severe acute malnutrition without complications in children aged 6-59 months could improve community management of acute malnutrition.

WHAT EXACTLY DOES TISA CONSIST OF?

TISA is a study conducted in the Louga/Podor area of northern Senegal involving 1,720 children aged 6-59 months suffering from severe acute malnutrition in 89 treatment centres, who were divided into control and intervention groups. The control group receives the national standard of care for SAM patients, while the intervention group receives the same plus a simplified WASH kit which consists of a

20-liter bucket, two bars of soap and aquatabs, plus awareness-raising activities and two home visits. The project evaluates the impact this has on SAM recovery and other health outcomes, such as infections, contamination of household drinking water and the cost-effectiveness of the intervention against the national standard. A parallel qualitative study will assess compliance, acceptability, feasibility and sustainability of the intervention. The results will inform decision-making and policy generation in Senegal and other areas of the Sahel where malnutrition conditions are similar.

10 RESULT PACKAGES

10 bundles of outcomes have been identified within the project as a result of the consortium partners' analysis built on the evidence generated by the trial. These 10 outcomes are divided into 3 research blocks, each pursuing an objective of change.

BLOCK 1: Strengthening the SAM treatment protocol

Outcome 1: Demonstrates the efficacy of adding the WASH kit in the treatment of SAM. The efficacy of adding the WASH kit to improve the treatment of severe acute malnutrition will be evaluated.

Outcome 2: To assess the acceptability of the WASH kit in the treatment of SAM by users and their families.

Outcome 3: Cost-effectiveness of the WASH kit in the treatment of SAM. Analysis of the cost of treating severe acute malnutrition using the current protocol and adding the WASH kit.

Output 4: Assessment of the environmental impact and the measures that can be implemented to reduce, mitigate or absorb it.

BLOCK 2: Improving knowledge of the determinants of SAM in humanitarian contexts

Outcome 5: To quantify and evaluate resistance to anti-biotics around CMAM. Study of the intestinal flora of malnourished patients and antibiotic resistance of these pathogens. This will be useful, not only to develop effective measures to tackle malnutrition, but also other common pathologies in the under-five population.

Outcome 6: Analysis of access to quantity and quality of water by participants and their families. The quality of drinking water is important for public health.

Outcome 7: Analysis of the **contamination of the food consumed**. This information is essential to better define the cause of diarrhoea in the study group during nutritional treatment.

BLOCK 3: The challenge of improving the quality of research programmes/processes

Outcome 8: Evaluation of the implementation process and research problems. An analysis of how it was conducted

The research project was carried out, drawing lessons to improve future work in this area.

Output 9: Cost analysis of the research, which will allow measuring the resources that have been allocated for this exercise and the funding constraints.

Outcome 10: Definition of the **scaling-up process of the washing kit** and its integration into the protocol for the treatment of severe acute malnutrition.

NEXT STEPS AND SPACES FOR COLLABORATION

Evidence building

- Work is continuing in each research group to use the information collected to answer the research questions developed in the project's theory of analysis. It is expected that all data will be analysed by the end of 2024.
- A repository of new research questions that will emerge from the analysis will be established.
- Generation of graphic-video material on the implementation of the project and the impact of the incorporation of the WASH Kit in the nutritional treatment in Senegal.

Dissemination of results

- During the second quarter of 2024, the restitution of results in the community and to the Senegalese authorities of the evidence generated will be made.

- Dissemination of results in technical discussion spaces (congresses / technical cluster meetings).
- At least 2 publications are expected during 2024.

Discussion of results with operations teams

- A discussion with the teams involved in the interventions is planned for the second quarter of 2024 to convert the results of the study into actions within the Action Against Hunger intervention.

Search for new funding

- The process of seeking the funding required to increase the analytical capacity of the research teams and to implement the recommendations of the study will continue.

