

## OUADINUT project

### Research on the benefits of a household WASH package to Community Management of Acute Malnutrition (CMAM) program in Chad

#### ► Project duration

24 months, starting from September 2014.

#### ► Area of intervention

The study is taking place in Chad, in Mao and Mondo health districts of the Kanem region.

#### ► Project objective

The ultimate goal is to contribute to the reduction of mortality and morbidity in children < 5 years as well as to decrease the prevalence of Severe Acute Malnutrition (SAM) in the community. The objective of the research is to assess the effectiveness of adding a Household WASH component to the standard outpatient treatment of severe acute malnutrition.



#### ► CONTEXT

The ACF nutrition project in Kanem started in 2008, and now is set up in 35 health facilities divided across 2 health districts: Mao and Mondo. The management of severe acute malnutrition is done in both OTPs (Outpatient Therapeutic Program) and in TFCs (Therapeutic Feeding Centers). Between the treatment of SAM in OTPs and TFCs, and the number of curative consultations, the total number of beneficiaries is expected to be 45,065 in 2014 (without double counting).

Clear evidence exists that some Water, Sanitation and Hygiene (WASH) interventions can successfully prevent diarrhea. For instance, interventions aiming at improving water quality at household level or at promoting hand washing with soap do reduce significantly diarrhea incidence. Estimations showed that WASH interventions have a small but measurable benefit on length growth, but not on weight or weight/height. Yet, to our knowledge, no impact of WASH interventions has been assessed, neither during nutritional rehabilitation where children are particularly

vulnerable to infections, nor after discharge where immune recovery is still incomplete.

In the context of nutritional rehabilitation of SAM (Severe Acute Malnutrition), we hypothesize that improving water quality and hygiene-related care practices at household level would decrease incidence of WASH-related infections, such as diarrhea, nematode and environmental enteropathy. As such, it would improve weight gain, decrease relapses after successful discharge, and overall, could decrease over time the incidence of acute malnutrition in the community.

The proposed WASH intervention will be added to already existing nutritional activities and it will include: i/ Household water treatment and hygiene kit (water container, water disinfection consumables, soap, cup, hygiene promotion leaflet) provided at beginning of SAM treatment; ii/ sessions of Hygiene promotion provided weekly at health center level iii/ Household visits and hygiene sessions made during the treatment; // group discussion on hygiene and care practices made with mother at community level after successful discharge.

## ▶ STUDY DESIGN

Cluster-randomized controlled trial comparing two interventions:

- 1) **Control group:** outpatient management of children diagnosed for severe acute malnutrition only
- 2) **Intervention group:** outpatient management of children diagnosed for severe acute malnutrition + “household WASH package”

2000 children, aged between 6 and 59 months, admitted to 20 OTP centers for SAM (outpatient treatment program for severe acute malnutrition) will be included into the study and followed for 8 months (2 months of treatment, and 6 months after successful discharge).

## ▶ EVALUATION OUTCOMES

**Primary outcome:** treatment duration and relapse rate;

**Secondary outcome:** anthropometric status (Weight for Height Z-score, Height for Age Z-score, MUAC), occurrence and duration of diarrhea episodes, household water quality, hygiene related knowledge and practices;

Both, primary and secondary evaluation outcomes will be measured and compared between the intervention and control group.

## ▶ EXPECTED RESULTS

- ◆ Reduction in relapse rates of children admitted to OTP centers for SAM
- ◆ Reduction in diarrhea incidence during the outpatient treatment program for severe acute malnutrition
- ◆ Improvement of household water quality and hygiene related knowledge and practices

## ▶ PARTNERSHIP

### ◆ International scientific partner :

Pr. Dr. Patrick Kolsteren, Head of the Nutrition and Child Health Unit, the Institute of Tropical Medicine in Antwerp, Belgium; [PKolsteren@itg.be](mailto:PKolsteren@itg.be)

### ◆ National scientific partner :

Mr. Mahamat BECHIR, ASRADD (Sahel Association of Applied Research for Sustainable Development); [mahamatbechir@gmail.com](mailto:mahamatbechir@gmail.com)

### ▶ Implementation agency

- ◆ Action Contre la Faim – France

### ▶ Sponsor and donor

- ◆ Action Contre la Faim – France
- ◆ Nutrition Embedding Evaluation Program (NEEP)

### ▶ Scientifics partners:

- ◆ Institute of Tropical Medicine in Antwerp, Belgium
- ◆ Sahel Association of applied research for sustainable development (ASRADD)

### ▶ For more information...

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