

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

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## OUADINUT project

### ► 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.

ACF has been implementing the nutrition programme in 35 health centers in Kanem since 2008; total number of beneficiaries in 2014 was 45,065



## Project objectives

- 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.

\*OTP programme:

*a home based treatment and rehabilitation with a special formulated readily available therapeutic food (RUTF) provided on a weekly or bi-weekly basis, medical treatment using simplified medical protocols, and regular follow up for children with severely acutely malnourished without health complication.*

## Research hypothesis

- Improving water quality and hygiene-related care practices at household level would **decrease incidence of WASH-related infections** among SAM cases, 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.

## Study design

**Matched-pair 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 will be included into the study and followed for 8 months (2 months of treatment, and 6 months after successful discharge).

## Household WASH package

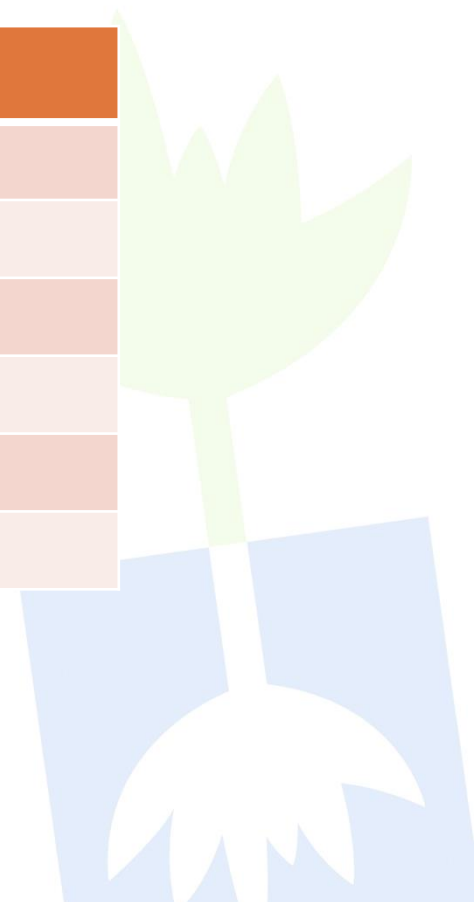
The proposed WASH intervention will be added to already existing nutritional activities and it will include:

1. Household **water treatment and hygiene kit** provided at beginning of SAM treatment;
2. Sessions of **Hygiene promotion** provided weekly at health center level;
3. **Household visits** and hygiene sessions made during the treatment;
4. **Group discussion** on hygiene and care practices made with mother at community level after successful discharge.

# Water treatment and hygiene kit

1 kit distributed per household

Content
Soap 200g
Aquatabs 67g
Cup
Jerry can 20L
Plastic kettle for hand washing
Instructions leaflet



# Hygiene promotion training material

## Hygiene promotion flipchart



- Allocate a protected space for children to play, limiting the likelihood of them ingesting soil or animal feces;
- Wash the child with soap (hand, face) when outside the protected area;
- Cleaning and rapid burial of children's stools;
- Systematic hand washing with soap for the child caretaker, after defecation, contact with human or animal fecal material, and before preparing / serving food;
- Store drinking water in a closed container located in an elevated place out of reach of animals;
- Once weaned, drinking water provided to the child should be water treated with chlorine or boiled;
- Once weaned, avoid giving to the child leftover food, or only after warming it again (including messages on dishes' hygiene);



# Instructions leaflet



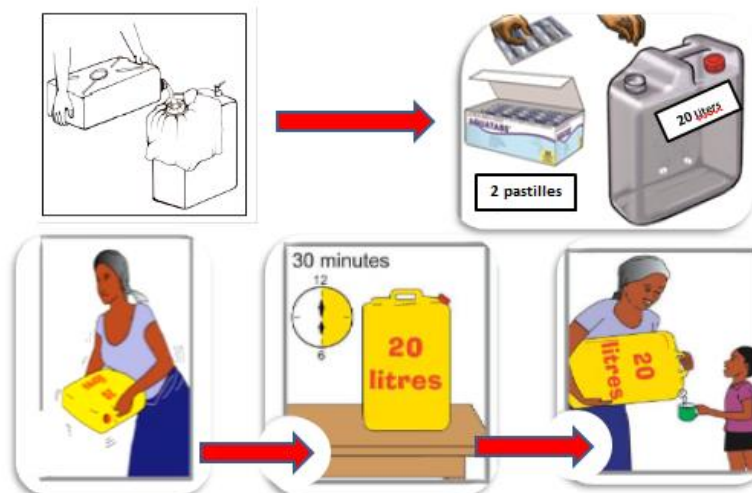
Rappel des 2 messages d'hygiène les plus importants pour votre enfant



1. Lavez-vous les mains avec du savon après tout contact avec le caca, et avant tout contact avec la nourriture



2. En plus du lait maternel, donnez à votre enfant uniquement de l'eau de boisson traité avec des Aquatabs, ou bien bouillie



## Utilisation de l'Aquatab 67mg

Conservation: Stocker les Aquatabs dans un récipient non-métallique, hermétique, à l'abri de la chaleur, de la lumière et de l'humidité.

### Instructions:

- Vider complètement le bidon d'eau de 20L;
- Remplir le bidon d'eau de 20L complètement;

Attention : Si l'eau est turbide, filtrer avec un linge propre en la versant dans le bidon

- Mettre 2 pastilles d'Aquatab sans les toucher avec la main;
- Fermer le bidon ;
- Secouer le bidon à l'envers et à l'endroit pour mélanger ;
- Attendre 30min avant de consommer l'eau ;
- Boire en versant l'eau dans un gobelet.



Attention: ne pas ajouter de l'eau à un récipient contenant encore de l'eau traitée: vider d'abord complètement le récipient, et le remplir complètement avant d'ajouter deux nouvelles pastilles!

## Evaluation outcomes

**Primary outcome:** relapse rate

**Secondary outcome:** treatment duration (reduction of 5 days is expected), weight gain (an increase of 3 g/kg/day), anthropometric status, 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

Relative reduction of 40% is expected or 5% difference in relapse rates between the intervention and the control group.

- ♦ Reduction in **diarrhea incidence** during the outpatient treatment program for severe acute malnutrition (relative reduction of 30% is expected)

- ♦ Improvement of **household water quality and hygiene related knowledge and practices**

## Partnerships

### International scientific partner :

**Pr. Dr. Patrick Kolsteren, Head of the Nutrition and Child Health Unit, the Institute of Tropical Medicine in Antwerp, Belgium;**

### National scientific partner :

**Dr. Mahamat BECHIR, ASRADD (Sahel Association of Applied Research for Sustainable Development);**



Do you have any questions?

