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RESEARCH SUMMARY

STIMNUT: Psychosocial stimulation for children aged 6 to 23 months suffering from severe acute malnutrition.

An innovative community-based approach developed in Koutiala, Mali.

NOVEMBER 2023



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WHO SHOULD READ THIS RESEARCH SUMMARY?

Healthcare staff, psychosocial workers, nutrition experts, clinicians, policy makers and anyone concerned with the care of malnourished children in humanitarian and low-income contexts.

TO FIND OUT MORE

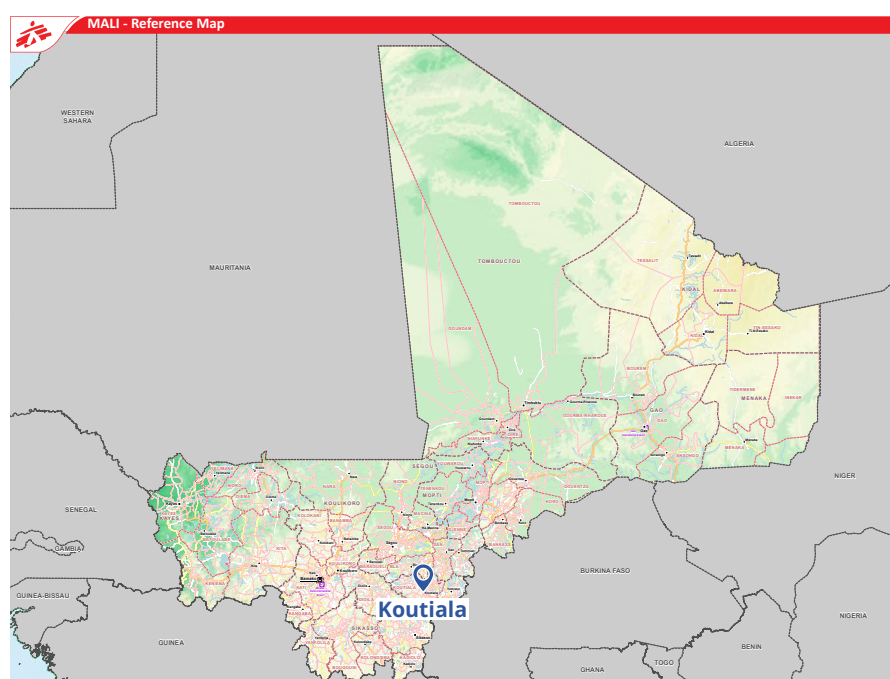
<https://epicentre.msf.org/en/stimnut-innovative-community-led-research-action-psychosocial-stimulation-intervention-improve>

Image: © Aissatou Diallo

BACKGROUND

Koutiala, in Mali's Sikasso region, is the country's 3rd largest town. In 2022, the prevalence of global acute malnutrition and severe acute malnutrition was 11.5% and 2.6% respectively in the Koutiala health district [1].

MSF has been supporting and delivering preventive and curative care in the Koutiala district since 2009 to reduce infant morbidity and mortality. The innovative community-based approach illustrated in this study targeting severe acute malnutrition (SAM) is one of the activities carried out in collaboration with the Malian Ministry of Health.



This map is for informational purposes only and has no political significance.

WHAT ARE THE CONSEQUENCES OF SEVERE ACUTE MALNUTRITION?

SAM leads to repercussions at multiple levels:

- **On children** with an increased risk of infection and death, and physical, mental and emotional development disorders.
- **For families:** mothers of severely malnourished children often experience a deterioration in their mental health, with depressive and/or anxiety disorders. Providing care to severely malnourished children can be more challenging, as they are often more apathetic and irritable. This can lead to a loss of emotional bond and a sense of discouragement that is commonly found in mothers and parents.
- And more broadly **within the society**: educational success rates and economic productivity are lower in countries with higher rates of severe acute infant malnutrition.

WHAT IS PSYCHOSOCIAL STIMULATION AND WHY IS IT IMPORTANT FOR SEVERELY MALNOURISHED CHILDREN?

Psychosocial stimulation is defined as care practices through which the child benefits from a range of sensory input activities which contribute to emotional and cognitive development through interactions with his/her parent(s) or principal caregiver.

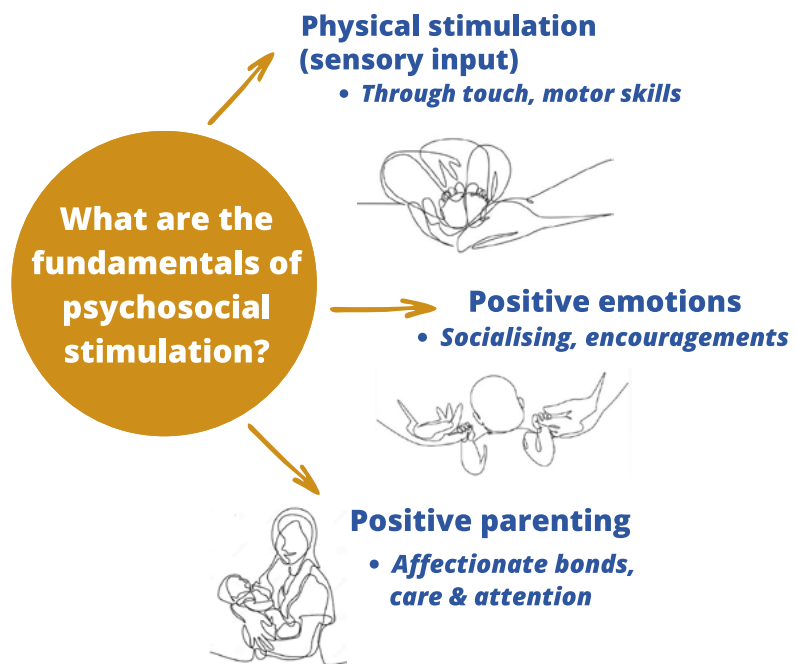


Figure 1 Psychosocial stimulation.

Psychosocial stimulation can have **beneficial effects on a child's development** in the medium and long term. It is recommended as a complement to SAM treatment, as it helps to speed up the child's recovery and limit the after-effects of severe malnutrition on the child's development [2].

Action Contre la Faim (ACF) has developed an approach in which **psychosocial stimulation is integrated into the standard treatment of SAM** in the FUSAM (*Follow-Up of Severe Acute Malnourished children*) manual developed in Nepal [3].

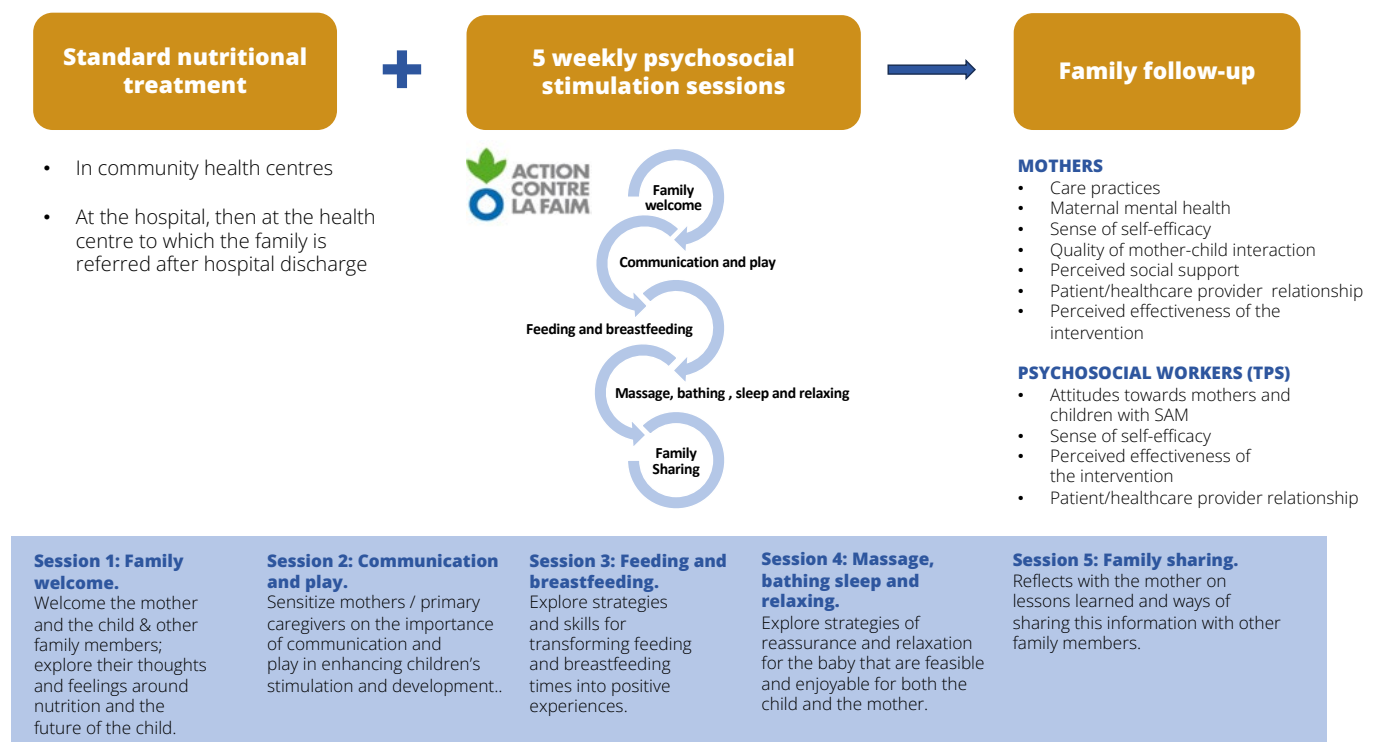


Figure 2 Integration of psychosocial stimulation into nutritional treatment and follow-up measures (diagram inspired by the FUSAM research summary) [3].

TARGET POPULATION

Mothers (or principal caregivers¹) and their children suffering from severe acute malnutrition (SAM) aged between 6 and 23 months and followed up in one of the 3 study sites: the MSF hospital and 2 community health centres in Koutiala.

STUDY OBJECTIVE

To assess the feasibility and acceptability of integrating a psychosocial stimulation intervention into the existing nutrition programme in Koutiala.

METHODS AND MAIN RESULTS

Feasibility of the intervention

- The FUSAM manual developed by ACF was adapted to the Koutiala context using a **participatory community process**. More than **50 people took part** in the process during working meetings, including parents of children with SAM, traditional healers, doctors, social workers, representatives of ministries and other NGOs.
- The sessions were carried out by **three supervised psychosocial workers** (PSW), on an individual basis (with a single family) for more than 80% of the sessions, the rest being group sessions.



149 psychosocial stimulation sessions were conducted with:



36 families (including 34 mothers, two grandmothers and eight other carers such as fathers, uncles, or brothers).



17 families were included in the hospital and 23 in a community health centre.

Acceptability of the intervention

Family results

After the intervention, more mothers said they “**enjoyed sharing certain activities** with their child” (significant differences for: massage, playtime, feeding, and bathing / toilet times).

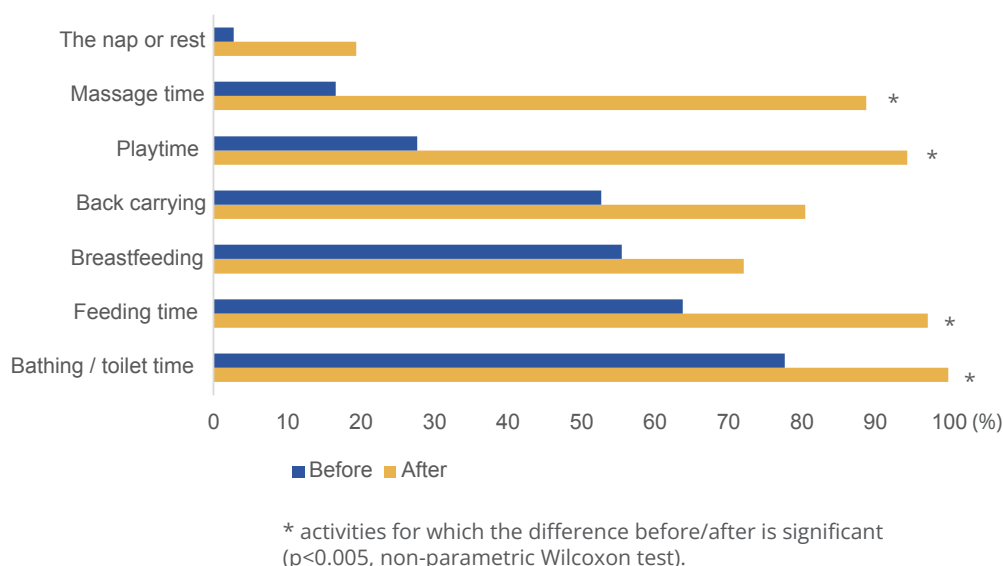


Figure 3 Percentage of mothers who answered enjoying sharing some activities with their children, before and after the intervention.

1 For the purposes of this research brief, the term “mother” includes mothers and other primary caregivers such as grandmothers.

Perinatal depression syndromes were found in 53% of mothers before the intervention and 28% after the intervention (significant difference, $p=0.001$).

Positive changes were perceived by the mothers as the sessions progressed: Their sense of parenting skills was strengthened, their children's health improved and those around them became more involved in childcare practices.

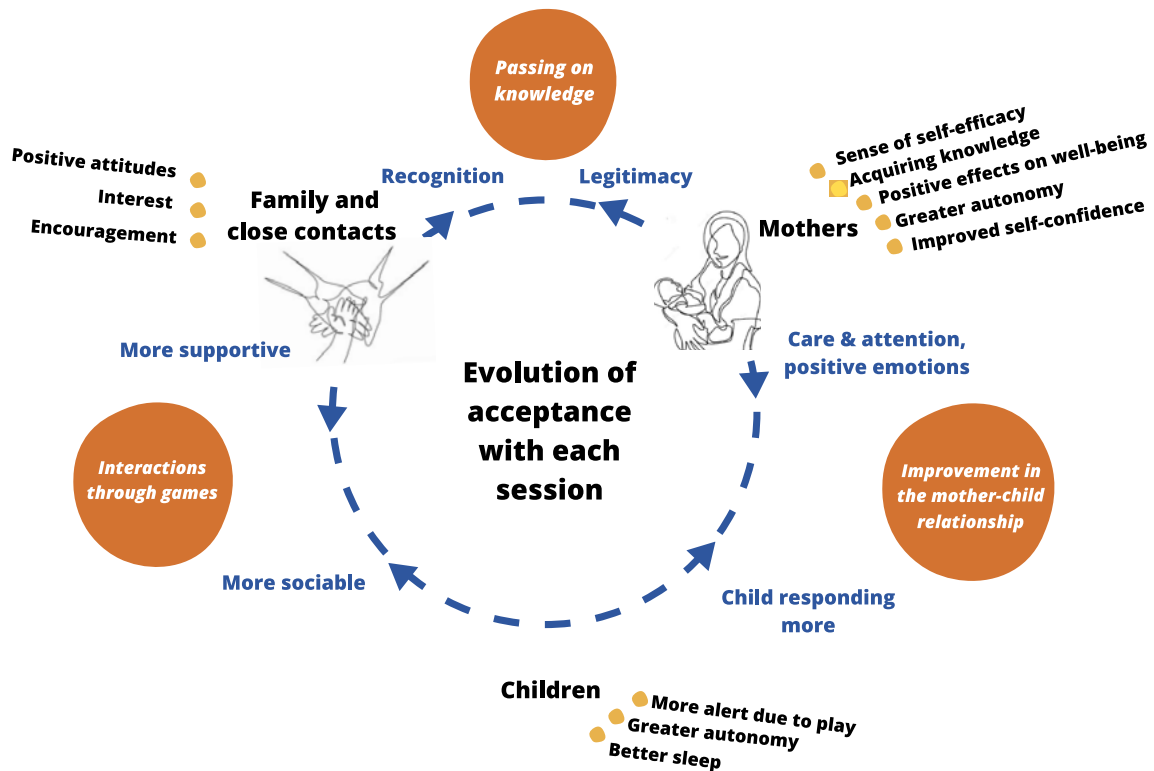


Figure 4 Evolution of acceptance with each session as seen by mothers.

As shown in figure 4, the acceptability of StimNut is based on the evolution of the different types of interactions.

1. Positive changes in the interactions between the child and those around them and, particularly through play.
2. Positive changes in the mother-child relationship (observed in 83% of families after the 5-week intervention), manifested in the mothers' expression of positive emotions, more affectionate bonds, more frequent and appropriate responses by the mother to the child's emotional state, greater support from the mothers for their child and the acquisition of parenting skills.
3. Positive changes in the interaction between mothers and those around them, manifested through recognition of mothers' expertise and an increase in the perception of social support.



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Results for health workers

- All the health workers interviewed considered psychosocial stimulation to be an effective technique for improving children's nutritional status and contributing to their well-being.
- The StimNut experience has been an essential resource in deconstructing the PSW's prejudices towards mothers of SAM children and in building a relationship of trust between parent and health care provider.

“ I’m happy today. When I first came to the health centre **I was like a sick person**, because for a woman to be happy her child has to be happy too. If a mother’s child isn’t content, the mother will never be either. **Even breathing was difficult for me** when I first came to the health centre, I was always agitated. **The sessions have allowed me to relax.**” – Mother, 30 years old

“ The relationship has really changed, **it’s become a positive relationship.** [Before] Ha! We didn’t communicate with each other, we didn’t play, I didn’t have the time to play with him. **Now, he wakes me up even if I’m sleeping, asking me to come play with him.**” – Mother, 36 years old



CONCLUSION

The development and implementation of a community-based psychosocial intervention is feasible in humanitarian and low-income countries, in collaboration with local stakeholders and health personnel. This type of initiative also contributes to increasing child nutrition care systems and for these reasons is recommended and should be pursued.

HOW WERE THESE RESULTS OBTAINED?

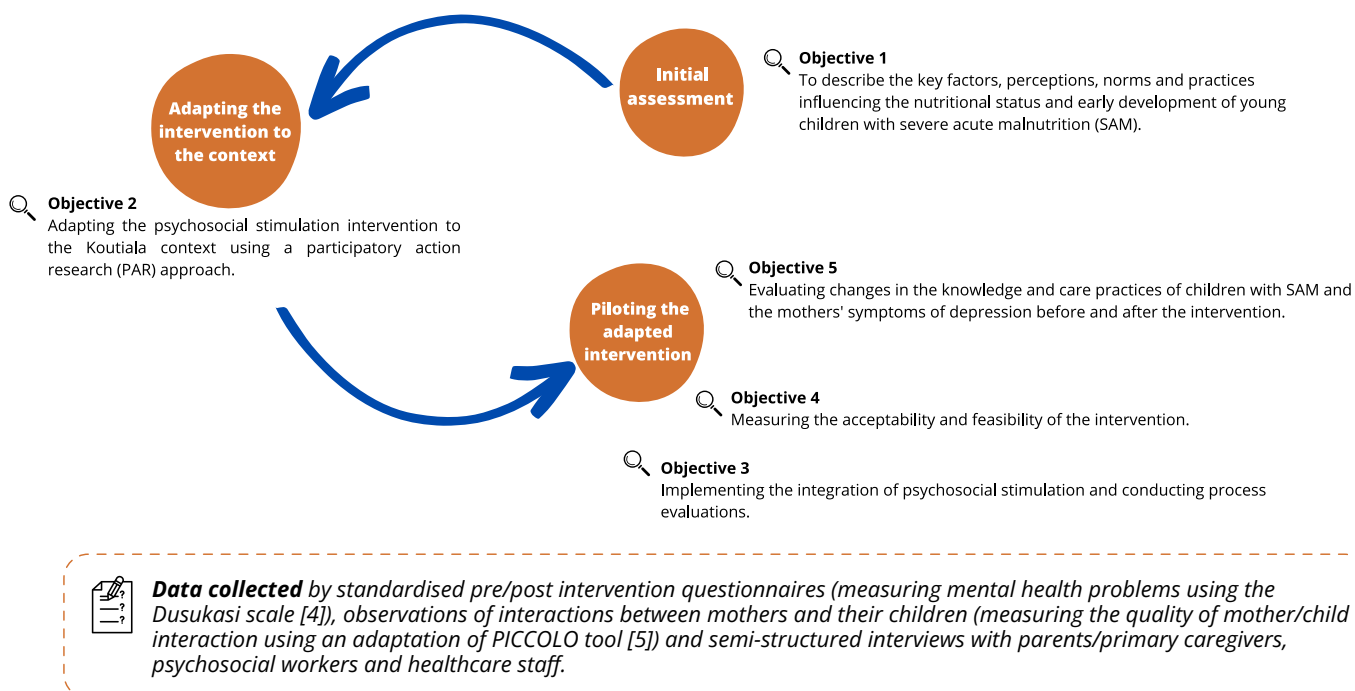


Figure 5 Main phases and specific objectives of the StimNut study.

NEXT STEPS

The expected impact of the study is the development of a framework for adapting and replicating the psychosocial stimulation intervention in other contexts. In Koutiala, it would be advisable to continue this intervention to improve care for children with SAM and help families to support their children’s development.

ACKNOWLEDGEMENTS

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SUGGESTED QUOTE

STIMNUT: Psychosocial stimulation for children aged 6 to 23 months suffering from severe acute malnutrition. An innovative community-based approach developed in Koutiala, Mali. Novembre 2023. C. Bossard, S. Payotte, A. Diallo, P. Lissouba, G. Scarpa, K. Le Roch, J.G. Ndong, S. Nafarche, R. Kabera, Y. Diam Sibide, P. Coulibaly, O.B. Samake, G. Keane. Epicentre, Médecins Sans Frontières..

CONTACT

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