



# PS SAM - A QUALITATIVE STUDY TO UNDERSTAND FACILITATORS AND BARRIERS TO IMPLEMENTATION OF PSYCHO-SOCIAL STIMULATION INTERVENTIONS IN THE CONTEXT OF SEVERE ACUTE MALNUTRITION

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## BACKGROUND AND OBJECTIVES

Psychosocial stimulation interventions are recommended in the current WHO guidelines on the management of severe acute malnutrition (SAM) (1). There are several studies that show psycho-social stimulation interventions improve both growth and neurodevelopmental outcomes in children with SAM (2). The studied interventions however are resource intensive and may not be feasible in all settings.

Several studies are ongoing to evaluate context relevant interventions and pilot different approaches in different countries.

- 1.) Gain an understanding of the range of current practice with regards to psychosocial stimulation interventions across different contexts
- 2.) Identify facilitators and barriers to the implementation of psychosocial stimulation interventions in the context of SAM.

## RESULTS/EXPECTED RESULTS

Survey included:

- 42 Respondents from 18 Countries across a range of contexts including research, government and humanitarian.
- 33 (78.6%) offered some form of psycho-social intervention with most common being facilities available to play (87.9%). Only 20% of those offering interventions had a formal psychosocial stimulation intervention. Limited number offered MDT approaches including physio and occupational or psychology input.
- Most common barrier was financial and human resources

KII’s included:

- 12 Respondents – 12 countries including doctors, nurses, nutritionists and program managers from government, NGO, academic and humanitarian contexts.
- 7 (58%) offered a formal psycho-social intervention however these all varied across contexts.

*‘I wouldn’t say a priority, I wouldn’t prioritise them over treating infections or treating dehydration, no of the other things but it’s definitely it has to be an essential part of our treatments’ - Paediatrician*

*‘I think that’s definitely a priority but oftentimes the issue is they say we’re understaffed and there are kids that need life saving, immediate life saving interventions’ – Nurse*

*‘the whole inpatient care can be quite traumatising for mothers and children, it can also be quite traumatising for staff, so if they see that mothers and children are having some fun that might also help put a smile on their face because it is tough work and they see lots of children die.’ – Nurse/Manager*

*We only focus on doing the anthropometry, erm getting the mums erm, the kids, their rations, but those kids spend a long time there that we don’t even use that opportunity to actually encourage play between mums, between kids and with us actually deliberate like as a deliberate action’ Nurse*

## STUDY DESIGN

The study consisted of two components:

- 1.) A global survey of practitioners involved in SAM care and program management undertaken between July 2021 and September 2022. The survey collected key demographic information about the project respondents were based in and current practice at their site of practice.
- 2.) The second component consisted of semi structured key informant interviews (KII’s) with a subset of practitioners from the survey. KII’s utilised a topic guide that was developed following discussions with subject matter experts.

KII data was transcribed verbatim with transcripts uploaded to NVIVO. Data was coded utilising a deductive approach based on the Consolidated Framework of Implementation Research (CFIR) tool which was designed a priori.



### Facilitators and Barriers - Identified

CFIR domain	Facilitator	Barrier
Innovation characteristics	<ul style="list-style-type: none"> <li>Improving psycho-social interventions do not necessarily have to cost more money and may prevent future problems</li> <li>The evidence that does exist suggest a positive benefit and there is evidence in programmatic data</li> <li>Can be implemented in different ways and some designs complement work on malnutrition unit making for a more pleasant environment</li> <li>If shown to prevent future complications may prove cost saving by preventing recurrence.</li> </ul>	<ul style="list-style-type: none"> <li>Perceived to require additional staff and resources which are not always available</li> <li>Strength of evidence to support this is not that strong and challenging to develop best evidence in context where interventions happening, especially</li> <li>Ability to adapt this intervention to fit into the basics of care for children with acute malnutrition</li> <li>There is a lack of consensus on exactly what is constituted by psycho-social stimulation interventions in SAM care</li> </ul>
Outer Setting	<ul style="list-style-type: none"> <li>Incorporation into government guidelines and WHO guidelines guides practice.</li> <li>Engagement of ministries of health in ECD and incorporation into planning from national to regional level</li> </ul>	<ul style="list-style-type: none"> <li>Overall funding for healthcare system is limited in many settings.</li> <li>Interventions take place in contexts of low health literacy and awareness of ECD, with limited availability of resources including for transport to attend follow up.</li> <li>Relatively underprioritized at the national level by health policy makers</li> </ul>
Inner Setting	<ul style="list-style-type: none"> <li>Potential to enhance working environment for staff and patients</li> <li>Opportunities for staff development</li> <li>Incentivising in local clinical practice</li> <li>Seeing children engaging in psycho-social interventions is rewarding for both staff and mothers.</li> <li>Staff and parental awareness of the issue and need for intervention</li> </ul>	<ul style="list-style-type: none"> <li>Lack of space, funds and staffing</li> <li>Caregivers having more immediate priorities such as preserving livelihoods and surviving in challenging humanitarian contexts</li> <li>Staff prioritising immediately lifesaving care</li> <li>Rationale for intervention poorly understood by families and staff, with limited access to education.</li> </ul>
Characteristics of individuals	<ul style="list-style-type: none"> <li>Individual staff buying into the intervention.</li> <li>Seeing the value of the intervention and advocating its importance</li> </ul>	<ul style="list-style-type: none"> <li>Lack of individual staff’s knowledge and belief on the intervention.</li> <li>Perceptions of the intervention not being priority relative to other things</li> </ul>

## DISCUSSION

This is the first implementation study looking at current a practice with regards to the of psycho-social stimulation in the care of children with SAM across multiple contexts.

### Conclusions

- There is a hierarchy of priorities in SAM programming where psycho-social interventions come below immediate life-saving care
- Benefits are recognised by practitioners with many programs offering something and staff recognising why it is important
- Significant perceived cost and human resource barriers.
- Gold standard interventions from clinical trial evidence not feasible in many settings or being offered.
- There are examples of innovative practice that has been evaluated but not published in academic literature.
- Limited interventions in outpatient setting where most CMAM occurs.

### Study Limitations

- This study had a small sample size may limit generalisability of results to all contexts.
- Due to convenience sampling there was likely response bias in those interested in responding to the survey and interview with coverage likely below the 78% in the survey.
- The study was conducted only in English

### Areas for further research

- Review of national SAM guideline specificity
- Local Implementation Studies
- Pragmatic intervention studies looking at more feasible interventions including outpatient interventions and integration with other services
- Interviewing caregivers for their experience and perception of these intervention.

## ETHICS STATEMENT

The study received ethical approval from the Institute of Life Course and Medical Science Research Ethics Committee at the University of Liverpool on 13th July 2021 (reference 8682).

### References

- 1.) WHO Guidelines Approved by the Guidelines Review Committee, in Guideline: Updates on the Management of Severe Acute Malnutrition in Infants and Children. 2013, World Health Organization
- 2.) Daniel, A.I., et al., Psychosocial stimulation interventions for children with severe acute malnutrition: a systematic review. J Glob Health, 2017. 7(1): p. 010405.