Integrating psychosocial support into nutrition programmes in West Africa during the Sahel food crisis

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For optimal physical and cognitive development to occur, a child requires adequate nutrition, but this should occur in addition to physical and emotional stimulation from a caregiver. Programmes, in which interventions for nutrition, maternal mental health and psychosocial stimulation are integrated, provide much wider benefits to a child's psychical and cognitive development than stand alone nutritional responses. With this in mind, United Nations Children's Fund (UNICEF) prioritised the integration of psychosocial stimulation, within their nutrition response, during the West Africa Sahel food crisis. Brief trainings were organised within five West African countries in order to strengthen the capacity of UNICEF and partner organisations to initiate psychosocial activities within their nutritional programmes.

Keywords: child protection, nutrition, psychosocial stimulation, Sahel, training, West Africa

Introduction: Sahel food crisis

In early to mid 2012, a serious food and nutrition crisis was threatening the Sahel region of West Africa, with over 10 million people experiencing food insecurity and over one million children suffering from severe and acute malnutrition, exacerbating existing needs in already vulnerable populations. Unfortunately, as this article is being written, the food crisis continues. Given the importance of adequate nutrition and stimulation on a child's development, this crisis poses a significant risk to the physical and cognitive growth of children in the region.

The impact of malnutrition, under-stimulation and maternal mental health on children's cognitive development

Malnourishment contributes to the deaths of five million children under five, each year, in developing countries [United Nations Children's Fund (UNICEF, 2006)]. Moreover, malnutrition is a major cause of poor brain growth: children who have been severely malnourished as infants under perform at school, have less chance of doing productive work later in life or forming healthy relationships, and are more vulnerable to physical and mental illness (UNICEF, 2012).

The brain grows most rapidly in the first three years of life and is also at its most responsive to stimuli presented (UNICEF, 2012). A child is born with the basics of the brain's architecture already formed, however, for the brain to develop to its full potential, connections must be fine tuned and neural pathways strengthened to allow the brain to process information effectively. In order for this to happen, an infant must be exposed to positive stimulating experiences, ideally within the brains' most sensitive and responsive period of zero to three years (The Center on the Developing Child at Harvard University, 2009). However, according to WHO (2007) and UNICEF (2012), malnourished children, who commonly present with listlessness, apathy and unresponsiveness, often do not receive the stimulation and parental

responsiveness they require for the brain to develop to its full capacity. Further, the caregiver may consequently reduce the amount of stimulation they offer to the child who is listless or unresponsive, and in a cyclic way, the child stops responding to their caregiver (WHO, 2007). A similar cycle has been identified for mothers who experience symptoms of depression (UNICEF, 2012). Ultimately, the children lacking psychosocial stimulation and parental responsiveness are at risk of delayed or stunted emotional, social, physical and cognitive development. Children are, therefore, seriously impacted by the combined crisis of malnutrition and under-stimulation (Figure 1, WHO, 2007). This can also be the case for children with caregivers who are experiencing mental illness, including depression (UNICEF, 2012).

Given the known links between child nutrition, parent/child interaction and bio psychosocial child development, humanitarian organisations responding to food crises can no longer rely solely on physical remedies to address the needs of malnutrition. Psychosocial support initiatives, as part of a child malnutrition emergency response, must be incorporated to ensure the quality and long-term benefits of interventions for children. This was a key driving force in UNICEF's response to the Sahel food crisis. Some of the operational activities are detailed below, following a brief review of some of the evidence on psychosocial stimulation in malnourished children.

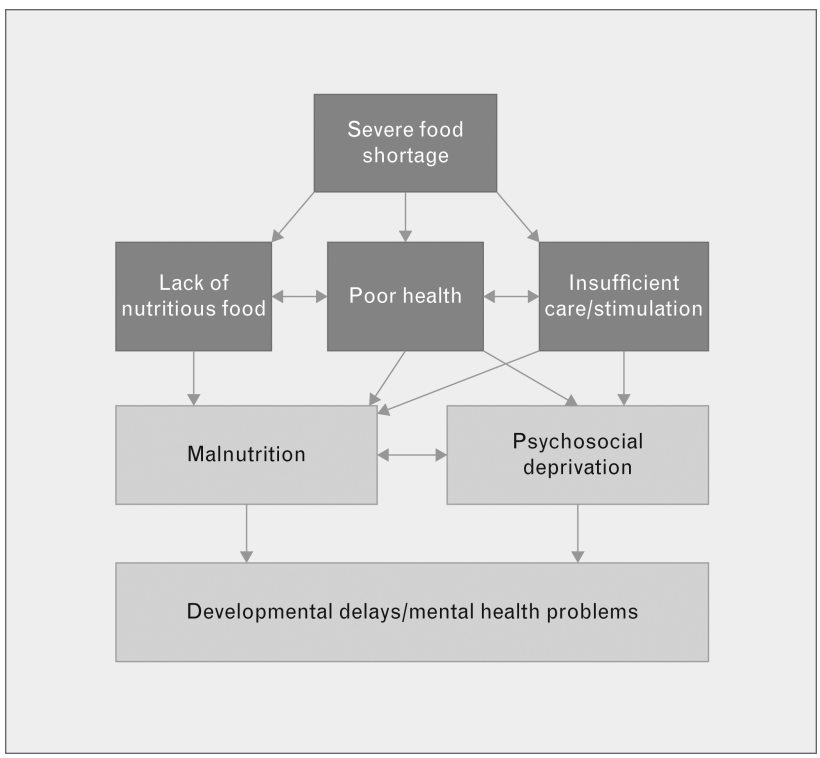

Figure 1: Malnutrition and reduced stimulation: implications for children's development. Source: WHO, 2007.

Box 1: Psychosocial stimulation

'Psychosocial stimulation refers to the extent that the environment provides physical stimulation through sensory input (e.g. visual, auditory, tactile), as well as emotional stimulation provided through an affectionate caregiver-child bond' (WHO, 2007 pg. 3)

Evidence based programming addressing under-stimulation in malnourished children

Research into under-stimulation in malnourished children suggests that combining nutritional programmes with support for positive parenting and psychosocial stimulation are likely to have long-term benefits for children's development and health. In a rigorous study in Jamaica, Grantham-McGregor et al. (1991) demonstrated positive and additive effects on physical and psychological development of children, aged up to seven years. This three-group comparison study demonstrated that the combination of nutritional feeding, plus psychosocial support, had the greatest impact on both the physical and psychological development of children. Taking a slightly different perspective, Morris et al. (2012) found significant links between infant psychosocial stimulation and positive maternal mood in Uganda. Mothers involved in a playgroup, organised within a supplementary feeding centre for severely malnourished children, showed significant increases in positive mood, and subsequently, increases in maternal responsiveness and interaction with their children. This was compared to a control group, where children received only nutritional intervention, and the same increases in mothers' moods or mother–child interactions were not recorded.

These studies in Jamaica and Uganda demonstrate that the additive effect of nutrition and psychosocial support interventions are inseparable. Nutritional programmes that contain both positive stimulation and support for caregivers are more effective in promoting growth and optimal child development than stand-alone nutrition programmes (UNICEF, 2012). Undoubtedly, this is also why the inclusion of psychosocial support and stimulation, as part of food and nutrition programmes, has been included as a key action in the *Inter-Agency Standing Committee (IASC) Guidelines on Mental Health and Psychosocial Support in Emergency Settings* (IASC, 2007; Action Sheet 9.1).

A training programme

As part of their response plan to the Sahel food and nutrition crisis, UNICEF West & Central Africa Regional Office (WCARO) wished to strengthen the capacity of partner organisations to initiate psychosocial activities within their nutritional and conflict responses in five countries across the region: Burkina Faso, Niger, Mauritania, Chad and Senegal.

The first author was seconded to UNICEF, from World Vision Australia's Humanitarian Emergency Affairs team, for a period of six weeks in order to visit the five countries in the region. She spent six weeks providing capacity building and programme design support to UNICEF staff and partner organisations, including community based organisations (CBOs), nongovernment organisations (NGOs), government, local psychologists and health care professionals. The majority of participants involved in the training had influence over the design of nutrition programmes, and some worked within nutrition programmes directly. Many participants also worked in areas receiving refugees from Mali, in addition to being responsible for local emergency response initiatives.

Four training modules were developed and contextualised for this consultancy period. The purpose of these modules was to build a solid knowledge base of infant mental health and cognitive development, maternal

mental health, and designing an integrated psychosocial support and nutrition programme, in addition to mental health and psychosocial support (MHPSS) programming, more generally. The four training modules covered the following topics:

Demystifying mental health and psychosocial support This session provided an introduction to the concept of MHPSS and explored the question of '*what is MHPSS*?' It covered topics such as the impact of emergencies on the mental health of populations and an introduction to the *IASC Guidelines on Mental Health and Psychosocial Support in Emergency Settings* (IASC, 2007). Participants were tasked with designing an integrated MHPSS project within a sector of their choice, basing their programme design on the *IASC MHPSS Guidelines*.

Infant and child mental health and psychosocial support in nutrition programmes This central session explored the importance of nutrition, and emotional and physical stimulation on a child's cognitive development. It focused on the links between food shortage, malnutrition and a lack of psychosocial stimulation. Various emotional and physical stimulation techniques, relevant to a child's stage of development, were also introduced. These were practised using the WHO Mental Health in Food Shortages intervention table (Table 1, WHO, 2007), and the UNICEF & WHO Care for Development Counselling Cards (UNICEF & WHO, 2012). Participants made dolls from local materials, which were then used in the training to represent a malnourished infant. Using these dolls, participants practised psychosocial stimulation techniques, such as responding to infant's communication cues, looking into their infant's eyes and smiling, talking or singing to the infant. Training also included sessions on how to make toys from local materials, such as rattles, mobiles and puzzles. Furthermore, the importance of considering harmful traditional practises was explored through drama presentations. Examples included the father's role in childcare, discipline within the family or attitudes towards playing with children. The dramatisations were then discussed as to whether such behaviours should be encouraged and built upon, or addressed within programmes to encourage change. Lastly, options for integrating psychosocial stimulation into the various nutrition programmes were explored with participants tasked with designing their own integrated nutrition and psychosocial stimulation projects.

Box 2: Quotes from participants

'I feel regret that I did not use such techniques on my own child, however, I pray that I will be given a second chance if my children bless me with grandchildren…' (Participant, Burkina Faso)

'After yesterday's training, I went home and looked into the eyes of my 3 week old daughter. I then smiled at her and I could see her respond. I am very grateful that this training will allow me to be a better parent, and encourage other parents in Burkina Faso to show love and affection to their children.' (Doctor, Burkina Faso)

Maternal mental health This session provided an introduction to maternal mental health; exploring the risk factors for maternal mental illness and the impacts of maternal depression on a child's physical and cognitive development. Participants were introduced to various intervention ideas to prevent and support caregivers experiencing psychosocial concerns including; psychological first aid (PFA), woman and infant friendly spaces and stress management techniques. For more severe cases, the need to refer to specialised services was emphasised, and participants mapped referral pathways for mental health concerns that existed within their communities.

Table 1. Psychosocial stimulation: principles and examples

Type of stimulation	What to do	Examples
Emotional stimulation: Interventions to improve child/caregiver interactions are important in order to facilitate children's emotional, social, and language development. This can be accomplished through educating caregivers on the importance of emotional communication.	Express warmth and affection to the child in a manner consistent with cultural norms.	Encourage caregivers to look into the child's eyes, smile at him or her, especially during breastfeeding. Express physical affection towards the child (e.g., hold and cuddle the child).
	Encourage verbal and nonverbal communication between the child and caregiver.	Communicate with the child as much as possible. Ask the child simple questions and respond to his or her attempts to talk. Try to get a conversation going with sounds and gestures (smiles, glances). Get the child to laugh and vocalise. Teach the child '*action words*' with activities. For example, say '*bye*' when waving goodbye.
	Respond to the needs of the child.	Respond to the child's sounds and interests. Be attentive to his or her needs as indicated by his or her verbal or nonverbal cues (e.g., crying or smiling).
	Show appreciation for what the child manages to do.	Provide verbal praise for the child's accomplishments. Also, show nonverbal signs of appreciation and approval (e.g., clapping and smiling).

(*continued*)

Type of stimulation	What to do	Examples
Physical stimulation: Children need a physically stimulating environment in order to develop their psychomotor and language skills and to enhance cognitive development.	Ensure that the environment provides adequate sensory experiences for the child.	Provide ways for children to see, hear, and move. For example, place colourful objects around the child and encourage the child to reach or crawl to them. Sing local songs and play games involving fingers and toes.
	Provide play materials.	Inexpensive and fun toys such as a puzzle and a rattle can be made out of cardboard boxes and plastic bottles. See reference section for examples.
	Provide meaning to the child's physical world.	Help the child to name, count, and compare objects. For example, give the child plastic bottle caps and teach them to stack them. Older children can sort tops by colour and learn concepts such as *'high'* and *'low'*. Describe to the child what is happening around them.
	Provide opportunities to practice skills.	It is important to play with each child individually, for at least 15–30 minutes per day, as well as to provide opportunities for play with other children.

Source: WHO, 2007.

Box 3: Training observation

The 'referral system' for those experiencing severe mental illness in West Africa generally begins within the family, then moves to the religious leader or traditional healer. If cases cannot be adequately treated by these traditional approaches, individuals were generally referred to other specialised services, such as the hospital.

Psychological first aid (PFA) training followed on from the maternal mental health session. PFA was highlighted as a skill set to assist those working with caregivers and children showing signs of distress. PFA is a humane, supportive response to those who may be suffering and in need of support (World Health Organisation, War Trauma Foundation & World Vision International, 2011). Participants were trained on the action principles of PFA; Look, Listen & Link (Table 2) using a number of crisis simulations. It was highlighted that all staff and volunteers working directly with women and children should be trained in PFA to equip them to deal appropriately with those in distress, allowing them to feel supported, and to prevent further harm from inappropriate responses to that distress.

Box 4: Response to PFA training

'The 'Good and Bad Listening Exercise' [in the PFA training] helped me to feel how disrespected and unsupported someone can feel if we do not provide them with our full attention as we listen to their needs and concerns.' (Nutrition actor, Chad)

Training outcomes

At the end of the training, participants spent time designing an integrated project, including psychosocial stimulation, maternal mental health considerations and PFA, within their existing or planned nutritional activities. Planned activities varied according to country and context, however, the vast majority of partner organisations in attendance indicated solid plans to integrate these approaches within their programmes. Planned activities included: undertaking a training of PFA and psychosocial stimulation for all staff working directly with caregivers and children in nutritional programmes (Chad); hiring local artists to design posters and communicate messages on the importance of psychosocial interactions (Burkina Faso); establishing caregivers clubs within feeding centres to promote psychosocial stimulation (Niger, Burkina Faso, Chad, Mauritania); and ensuring psychosocial stimulation is a core component of all UNICEF funding agreements with nutrition partners going forward (Senegal) (Table 3). Initial project data coming out of Senegal indicates substantial findings in the average duration of treatment of malnourished children, which was 12 days prior to the integration of psychosocial support, with the average duration reduced to 8 days after an integrated approach had been adopted (UNICEF, 2013).

Social norms and harmful traditional practises

One significant finding during the trainings was the vast child protection issues directly impacting children's nutritional status and psychosocial wellbeing. For example in Niger, the firstborn child is traditionally given to the grandmother at birth and is commonly shown minimal affection or human interaction. Consequently, participants reported that firstborn children are known to have behavioural problems. In another example, the Chief of UNICEF Nutrition in Chad reported that children who refused to eat due to illness and/or malnutrition often have the uvula cut (the

Table 2. Action principles of PFA: Look, Listen, Link

Principle	Actions
LOOK	-Check for safety.
	-Check for people with obvious urgent basic needs.
	-Check for people with serious distress reactions.
LISTEN	-Approach people who may need support.
	-Ask about people's needs and concerns.
	-Listen to people, and help them to feel calm.
LINK	-Help people address basic needs and access services.
	-Help people cope with problems.
	-Give information.
	-Connect people with loved ones and social support.

Source: World Health Organisation, War Trauma Foundation & World Vision International, 2011.

projection at the back of the throat), leading to the child's inability to swallow food, which then also contributes to severe malnutrition. Or, those with breathing difficulties have their chests cut deeply, as it is believed this will facilitate breathing. In another example, children with diarrhoea were reportedly treated by having their anus burnt with hot irons in an effort to stop the diarrhoea, leading to infections that further impacted the child's health and nutritional status. These examples show the importance of a holistic approach in children's health, protection, nutritional and psychosocial needs, where education on the importance of combining these elements of child wellbeing is essential.

Challenges and opportunities

One of the greatest challenges of the MHPSS response in the Sahel food crisis was the lack of French speakers with combined expertise in psychosocial support and nutrition – not only to facilitate the training, but to also support the implementation of programmes. The consultant deployed for the training was not a French speaker and thus required translation throughout the six-week period. While UNICEF advertised the position widely, there is a lack of expertise in this area globally, and most prominently in Francophone countries. This is an area that the MHPSS sector needs to rapidly build capacity, especially in light of the projected increases of food crises in coming years. Another challenge was a lack of *'buy in'* from key stakeholders in many of the affected countries. For those who had worked in the field of nutrition for some time, it was difficult for them to understand the holistic nature of the approach and to see the benefit of adding a *'soft'* activity (such as stimulation) alongside *'hard'* nutritional inputs. This was especially challenging as measurement of the benefits of the *'soft'* activities, such as psychosocial support for mothers and parent/infant stimulation, are often difficult to quantify.

Additionally, the question of who *'owns'* and drives this approach, both within UNICEF and partner organisations, is a question that needs to be systemically addressed in humanitarian coordination sectors. The promotion of psychosocial support and stimulation within nutritional programmes has links with nutrition, early childhood development and child protection. This has blurred the lines designating which sector had ultimate responsibility for ensuring these initiatives were prioritised, and

Table 3. Training and planned intervention overview

Country	Training schedule	Number of participants	Sample of planned interventions
Burkina Faso	- 5 June: Demystifying MHPSS	30	-Training of 60 nurses working in therapeutic feeding centres in psychosocial support in nutrition & Psychological First Aid
	- 6 June: MHPSS in Nutrition		-Training for feeding centre managers across 15 dioceses in psychosocial support in nutrition & Psychological First Aid
	- 7 June: Maternal Mental Health		
	- 8 June: PFA		
Niger	-12 June: MHPSS in Nutrition	30	- Establishment of caregiver clubs within 50 feeding centres to allow inclusion of psychosocial stimulation activities
	-13 June: Maternal Mental Health		- Training of health/nutrition/ social workers in 40 centres in psychosocial support in nutrition & Psychological First Aid
	-15 June: PFA		-Awareness raising activities in 100 villages
Mauritania	-22 June: MHPSS in Child Protection	30	- Training of 95 health workers across six regions of Mauritania centres in psychosocial support in nutrition
	-23 June: PFA		- Training of 28 community workers working within feeding centres in Malian refugee camps in psychosocial support in nutrition

(*continued*)

Country	Training schedule	Number of participants	Sample of planned interventions
Chad	-2 July: MHPSS in Nutrition	60	-Social service, health and nutrition actors operating across 10 regions of Chad trained in psychosocial support in nutrition and equipped to train other actors working with malnourished children and their caregivers
	-3 July: Maternal Mental Health		-UNICEF Early Childhood Development kits provided to nutrition centres whose health/social workers and volunteers were trained in psychosocial support in nutrition
	-4 July: PFA		
Senegal	-10 July: MHPSS in Nutrition	20	-Form a MHPSS working group to ensure continuation of interest, ensure training roll out and to share lessons learnt in addition to tools and resources
	-11 July: Maternal Mental Health and PFA		-Ensure MHPSS inclusions are part of all nutrition funding agreements going forward
			-Provide input into the development of MHPSS communication and training material to be developed at the regional level

implemented, in the overall Sahel response. Ideally, collaboration should exist between the various departments to ensure programme quality and holistic integration.

A further challenge encountered was the profile of participants. While the training was targeted at programme implementer level (i.e., feeding centre staff), many participants were, in fact, government delegates, UN agency country headquarters staff and office based NGO staff. Therefore, it raised concerns as to whether these participants would take the training and their learning towards operational implementation. Also, there was no capacity for the mentoring of participants and the monitoring of the quality of programmes they implemented as a result of the trainings. Ideally after any training, mentoring and follow-up should be provided to ensure quality and that momentum is maintained.

Finally, the evidence base for combining psychosocial support and stimulation activities into nutritional programmes needs to be strengthened. Currently, the majority of recommendations are based on a small evidence base, plus theories on infant neurological development and the bio psychosocial needs of malnourished children. Nonetheless, this evidence base creates an opportunity for the nutrition and MHPSS sectors. In the meantime, there remains a great need for more targeted and longitudinal research into maternal mental health and infant stimulation programmes operating within health and nutrition programmes, including specific research from the West and Central Africa regions, where food crises and child malnutrition is bound to be an ongoing challenge. Therefore, an investment of rigorous research, randomised control trials, and improved standards for monitoring and evaluation of programmes should be undertaken to ensure evidence of impact is further established. This would also support further opportunities for funding of such programmes in the future.

Conclusion

While evidence is still lacking from lower to middle income countries, the limited evidence that does exist suggests that an integrated nutrition, maternal mental health and psychosocial stimulation programme provides much wider benefits to a child's psychic and cognitive development than stand-alone nutrition responses. It is encouraging that UNICEF prioritised the establishment of this approach within the Sahel food crisis response, and it is hoped that the capacity building conducted across the region will feed into the existing evidence base and establish this approach as the *'norm'* within nutritional programming. This will, therefore, enable the next generation of children living in areas vulnerable to food crisis to reach their full potential.

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