Mental Health and Psychosocial Well-Being among Children in Severe Food Shortage Situations





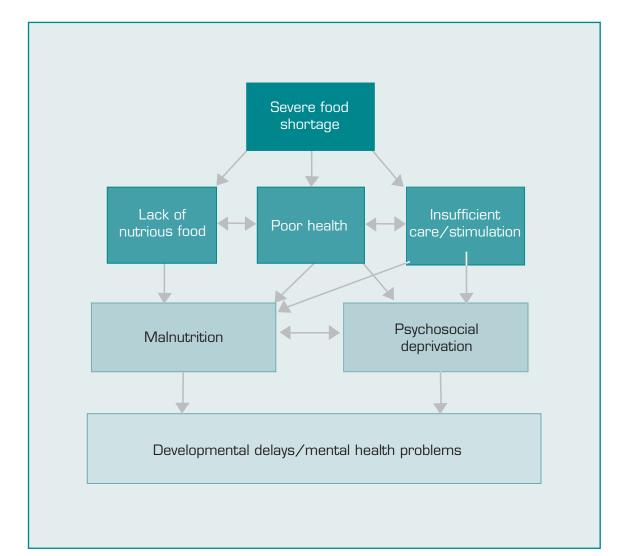
Mental Health: Evidence and Research Department of Mental Health and Substance Abuse in collaboration with the Department of Child and Adolescent Health Department of Health Action in Crises Department of Nutrition for Health and Development

Psychosocial stimulation, attachment, and feeding in early child development

• A strong maternal-infant (or caregiver-infant) bond provided through psychosocial stimulation is essential for positive child development. The formation of this bond at the beginning of life is an essential step that sets the stage for cognitive, emotional, and social development later in life. Feeding and other care practices provide opportunities for psychosocial stimulation and help to establish a positive attachment between caregiver and child.

Malnutrition and reduced psychosocial stimulation: implications for children's development

- A severe food shortage threatens the nutritional status of communities. This can cause malnutrition among affected populations including micronutrient deficiencies. Such deficiencies can inhibit intellectual and physical potential and cause lifelong disability.
- Many caregivers are unavailable or unable to provide psychosocial stimulation to their children during food crises due to their own poor physical or mental health. A lack of psychosocial stimulation has adverse consequences for children's development (cognitive, motor, language) and mental health.



Malnutrition and reduced psychosocial stimulation

Box 1 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.

- The first two years of life are critical periods in which brain and physical growth are most active. Nutritional and psychosocial deficits during this time period can result in lifelong impairment and disability. Cultural habits of food distribution, in some contexts, can leave infants and young children the last to receive aid, which can increase their risk for malnutrition.
- Nutritional deficiencies and a lack of stimulation create a vicious cycle in which deprivation in one can result in further deprivation in the other. For example, a malnourished infant may show reduced psychomotor activity (e.g., the child is less likely to crawl and engage in creative play). As the child becomes more apathetic and less demanding, parents often provide less stimulation. The interaction between parent and child becomes less mutually rewarding, and ultimately their bond is threatened, opening the door for lifelong repercussions.
- The combination of malnutrition and a lack of psychosocial stimulation are particularly harmful. Improving both nutritional status and stimulation has an added impact on a child's development and recovery. Therefore nutritional and psychosocial interventions should be integrated.

Micro-nutritional deficiencies and risks for poor child development

- Lack of iron: Iron plays an important role in cognitive development during fetal life. It is therefore crucial to prevent iron deficiency during pregnancy and the first years of life.
- Lack of iodine: Iodine is required for cognitive development. Infants whose mothers were iodine deficient during pregnancy are at risk of brain damage that is irreversible. It is important that iodine deficiency is prevented during pregnancy and the first two years of life.



Interventions to promote positive child development and to reduce the chance of mental health problems for mother and child



Key public mental health interventions, psychosocial support, and nutritional interventions must be instituted in situations of severe food shortages to facilitate caregiverchild relations and prevent developmental delays and mental disorders. With appropriate intervention, these problems are largely preventable.

Prevention strategies

- Information on appropriate feeding practices and the importance of psychosocial stimulation should be disseminated to key groups, such as healthcare providers, donors, and humanitarian aid workers.
- Psychosocial support and education regarding appropriate feeding practices should be provided to caregivers. Caregivers with physical or mental health problems may need extra support to ensure that they are able to give care to their children. Improving maternal mental health (e.g., reducing maternal depression) may be one of the most important interventions in situations of severe food shortages for both the mother and child.

Box 2

Children at greater risk of malnutrition/lack of adequate stimulation

- Children separated from caregivers
- Children whose caregiver has a physical or mental disability
- Children whose caregiver is alcohol or drug dependent
- Children who are unaccompanied
- Children living in custodial care arrangements (e.g., orphanages)

- Breast milk is an ideal food for healthy growth and development. Breast feeding protects against many infections and may be helpful for mother-child bonding. The distribution and use of breast-milk substitutes at emergency sites should be strictly controlled in an effort to promote breastfeeding. Breastfeeding women may need care, encouragement, and psychological support to continue breastfeeding. Among mothers who are HIV positive, the risk of the child being infected with HIV through breastfeeding should be carefully weighed against the risk of the child becoming seriously ill or dying if he or she is not breastfeed.
- Education strategies that model psychosocial practices may be the most effective teaching strategies.
 Caregivers are able to learn through experience gained at feeding centres.
- Attempts should be made to ensure that all households have an adequate quantity and quality of food. In acute emergencies, where food requirements are initially unknown, a mean daily per capita intake of 2100Kcal and 46g of protein is recommended (UNICEF/UNHCR/WFP/WHO, 2004). It is important to ensure that rations cover micronutrients. In addition, efforts should be made to improve household access to food (e.g., seed distribution, income generation activities, etc.)
- Children who are moderately or severely malnourished should be referred for combination nutrition/stimulation programmes.

Combined nutrition/stimulation programmes

 Combination nutrition/stimulation programmes that emphasize appropriate feeding practices and responsive parenting (e.g., proactive stimulation and appropriate responses) have a greater impact than either intervention alone. Indeed, nutrition programmes that contain a psychosocial component are more effective in promoting growth and positive child development than nutritional programmes without a psychosocial component. They may also help to decrease maternal depression.



Community/home-based selective feeding/stimulation programmes



- Whenever possible, community and home-based approaches to nutrition and psychosocial stimulation should be promoted. Children with severe malnutrition with no medical complications nor severe oedema can be treated in their homes through community-based therapeutic feeding programmes. Please refer to the reference section for resources on (a) assessing and monitoring nutritional deficiencies and (b) guidelines on supplementation and correcting micronutrient deficiencies.
- Guidance to improve child-caregiver interaction and increase the physical stimulation provided by the environment appears in Table 1. These principles aim to help caregivers feel positive about themselves, feel positive about their children, and encourage them to have positive interactions with each other. Further information on psychosocial programmes is available in the reference section.
- Children with medical complications (e.g., child is severely malnourished and has malaria) need treatment in a health facility/therapeutic feeding centre.
- Psychosocial activities at health facilities/therapeutic feeding centres include the following:

 Educate caregivers and healthcare providers about the negative consequences of sensory deprivation in a culturally sensitive matter.

Explain that children need to have physical contact with the environment around them to stimulate their development.

Practices that involve wrapping or tying an undernourished child to prevent movement or covering the child's face should be discouraged with the understanding that they limit this needed contact and therefore limit psychosocial stimulation. In cultures where traditional practices involve restricting child movement (e.g., swaddling) this issue will need to dealt with in a sensitive manner so that the caregiver's confidence and role are not undermined. Education about this issue should be given to all members of the family, including the extended family as appropriate.

- Ensure that a caregiver is present in the feeding centre and encourage the caregiver to feed, hold, and play with the child as much as possible. Activities for older siblings who are not malnourished should also be provided at the feeding centre to encourage women to attend who otherwise might not be able to because of commitments to other children. It may be helpful for these activities to contain an educational component on nutrition since older children may play a role in the feeding of younger children at home.
- Make the environment as stimulating as possible with bright colours, home-made mobiles, and a radio for music if possible.
- Ensure that children spend time with other children in informal play groups. A nurse or a volunteer should be responsible for developing a curriculum of play activities. Activities should be selected to develop motor and language skills. An example of a play-based curriculum and ideas on how to make toys using homemade materials are available in the reference section. After discharge and during follow-up continue stimulation at the community level.

Table 1- Psychosocial s	stimulation:	principles an	d 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 to the child (e.g., hold and cuddle the child).	
	Encourage verbal and non-verbal communication between the child and caregiver	Communicate with the child 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 vocalize. Teach the child 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 behaviour (e.g., crying, smiling).	
	Show appreciation for what the child manages to do	Provide verbal praise for the child's accomplishments. Also, show non-verbal signs of appreciation and approval (e.g., clapping, smiling).	
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 opportunities for the child 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 him/her to stack them. Older children can sort bottle tops by colour and learn concepts such as "high" and "low". Describe to the child what is happening around him or her.	
	Provide opportunities to practice skills	It is important to play with each child individually at least 15-30 minutes per day, as well as to provide opportunities for play with other children.	

References/Source Used

Grantham-McGregor S, Schofield W, Harris L. Effect of psychosocial stimulation on mental development of severely malnourished children: an interim report. *Pediatrics*. 1983;72:239-43.

Grantham-McGregor S, Powell C, Walker S, Chang S, Fletcher P. The long-term follow-up of severely malnourished children who participated in an intervention program. *Child Dev.* 1994;65(2 Spec No):428-39.

ICCIDD/UNICEF/WHO. Assessment of iodine deficiency disorders and monitoring their elimination. Geneva, WHO, 2001.

Inter-Agency Standing Committee (IASC). *Guidelines* for Mental Health and Psychosocial Support in Emergency Settings. Geneva: IASC, forthcoming. (Please consult for guidance on mental health and psychosocial support in emergencies in general, as well as for specific guidance on assisting young children in emergency settings).

Sphere Project. Humanitarian Charter and Minimum Standards in Disaster Response. Geneva: Sphere Project, 2004. Website: http://www.sphereproject.org/handbook/hdbkpdf/ hdbk_c3.pdf

Super CM, Herrera MG, Mora JO. Long-term effects of food supplementation and psychosocial intervention on the physical growth of Colombian infants at risk of malnutrition. *Child Dev.* **1990;61:29-49**.

The Consultative Group on Early Childhood Care and Development. Website: http://www.ecdgroup.com

UNICEF/UNU/WHO. Iron Deficiency Anaemia. Assessment, Prevention And Control: A Guide For Programme Managers. Geneva, WHO, 2001.

UNICEF/UNHCR/WFP/WHO. Food And Nutrition In Emergencies. World Food Programme, Rome, 2002.

WHO/UNICEF. A Joint Statement By The World Health Organization And The United Nations Children's Fund: Preventing And Controlling Micronutrient Deficiencies In People Affected By The Asian Tsunami. Website: http://www.who.int/topics/nutrition/publications/emergencies/Tsunami%20May%2005. pdf

WHO. Integrated Management of Childhood Illness (ICMI).
Available from the Department of Child and Adolescent Health and Development, WHO. Tel: +4122 791
3281 or email: cah@who.int

WHO. Improving The Psychosocial Development Of Children. Geneva, WHO, 1995.

WHO. The Critical Link: Interventions For Physical Growth And Psychological Development. Geneva, WHO, 1999. Website: http://www.who.int/child-adolescent-health/New_Publications/CHILD_HEALTH/ISBN_92_4_159134_X.pdf

WHO/UNHCR/IFRC/WFP. The Management Of Nutrition In Major Emergencies. Geneva, WHO, 2000.

WHO. Management Of Severe Malnutrition: A Manual For Physicians And Other Senior Health Workers. Geneva, WHO, 1999. (Also includes information on how to make homemade toys and a sample play-based curriculum). Website: http://www.who.int/nut/documents/manage_severe_ malnutrition_eng.pdf

WHO. Involving Mothers in Care: Training Course on the Management of Severe Malnutrition. Geneva: WHO, 2002.

WHO. Mental Health in Emergencies: Mental and Social Aspects of Health of Populations Exposed to Extreme Stressors. Geneva, WHO, 2003 (available in Arabic, Bahasa Indonesian, English, French, Russian and Spanish). Website: http:// www.who.int/mental_health/emergencies/en/

Further information

For further information, please contact Dr Jodi Morris (morrisj@who.int) or Dr Mark van Ommeren (vanommerenm@who.int) of the Mental Health: Evidence and Research Team (Coordinator: Dr Shekhar Saxena).

Collaborators

This document was developed by the Department of Mental Health and Substance Abuse (MSD) Mental Health: Evidence and Research (MER) team (Jodi Morris, Geetika Chopra, Leah Hathaway, Mark van Ommeren, Shekhar Saxena), in collaboration with the Department of Child and Adolescent Health (CAH; Meena Cabral de Mello); the Department of Health Action in Crises (HAC; Giuseppe Annunziata); the Department of Nutrition for Health and Development (NHD; Sultana Khanum and Zita Weise Prinzo).

Reviewers

This document benefited from reviews by Fathia Abdalla (UNHCR); Myron Belfer (Harvard Medical School); Cécile Bizouerne (ACF); the Consultative Group on Early Childhood Development; Patrice Engle (UNICEF); and Mike Wessells (CCF).