Integrating Early Childhood Development (ECD) activities into Nutrition Programmes in Emergencies. Why, What and How

INTRODUCTION

>> It is estimated that over 200 million children under 5 years of age in the developing world have significantly impaired growth. The long term effects on human capital are profound.[1] [2] In famine situations children under five are particularly vulnerable.

This document is written for local and international staff running nutrition programmes in emergencies, and for local, regional and national authorities and donors involved in such programmes. The note explains WHY nutrition programmes need to include early childhood development (ECD)[3] activities to maximize the child's development. It provides practical suggestions as to WHAT simple steps are necessary to create integrated programmes in situations of famine or food insecurity[4] and it gives examples of HOW such integrated programmes have been established in other situations,

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KEY POINT SUMMARY: WHY SHOULD EARLY CHILD DEVELOPMENT ACTIVITIES BE COMBINED WITH EMERGENCY FEEDING PROGRAMMES?

- In famines and food shortage situations, providing food alone is not enough
- Child growth and brain development depend on good nutrition AND stimulation and caretaker emotional responsiveness
- The brain is most responsive in the first three years of life. This is when it grows and develops fastest
- There is strong evidence that combined programmes improve growth and developmental outcomes in short and long term
- Early child development activities improve maternal mood if conducted using groups and home visits
- Regular mother and baby groups to do ECD activities build resilience and increase networks of social support. They provide a non-stigmatizing way of supporting vulnerable women and children exposed to violence
- Combined programmes are fun to do!

SOME DEFINITIONS

Growth: the change in weight, height, and circumference of head

Child Development: the process of change in which a child comes to master more and more complex levels of physical activity, thinking, feeling, communicating and interactions with people and objects. This is sometimes expressed as physical, cognitive, emotional and social development

Early childhood: the period between birth and eight years of age. In this document the focus is on children attending emergency feeding programmes, the majority of whom are three or under but who may be up to five years old

Responsiveness: parenting that is prompt and appropriate to the child's immediate behaviour, needs and developmental state

Care: attention to body, health, nutrition, emotional, social, language and intellectual development

According to the Convention on the Rights of the Child (CRC) a holistic approach that guarantees both child survival and development is the child's right. Unfortunately early child development is often addressed in a fragmented manner. With children less than three health and nutritional needs to ensure survival are often prioritized over stimulation to ensure development. Whereas with children over three years, the emphasis is on play and education and nutrition, health and protection needs are sometimes neglected. Nutrition and health should be integrated into any centre or school where early child development activities take place. Maternal and child health programs should include health, nutrition, stimulation and protection. This integrated approach is the best way to ensure good child growth and development. For practical and space reasons this document focuses particularly on the integration of ECD activities into emergency nutrition provision for children under five. Other documents will address other aspects of integration.

WHAT DO YOUNG CHILDREN NEED TO GROW AND DEVELOP WELL?

The first three years are the most important in a child's life. It is during this period that the brain is most plastic, grows fastest and is most responsive to the outside world. Most of the brain's neural pathways supporting communication, understanding, social development and emotional well-being grow rapidly in these first three years.[5] One reason for poor brain growth is **malnutrition**. Children who have been severely malnourished as infants do less well at school; have less chance of doing productive work and forming healthy relationships. They are also more vulnerable to physical and mental illness.

But the brain needs more than food to grow and develop well. Growth and development are complementary but not the same: For example, if the child's muscles do not grow they cannot develop the physical skill to run and play. If the child's muscles grow, but no one plays with them or shows them what to do, they still will not learn the game. To grow and develop, children also need **care, responsiveness and stimulation.** The environment in which a child grows up literally sculpts the brain. When a parent responds quickly to a baby in a warm and loving way, the baby learns that their needs will be met. She feels secure and loved. When a mother sings or talks to her baby, even before he can talk, the baby learns to communicate back. When a father encourages a child's interest and curiosity in the world, the child reaches out to learn more. All of these activities are what is called **stimulation**. Deficiencies in stimulation, and in the quality of the caring relationship experienced by the child in this critical period of life, will stunt their emotional, social, physical and cognitive development.[6] [7]

There is also evidence that when a young child experiences severe, frequent, or prolonged adversity without adult support, the prolonged activation of the stress response can disrupt brain development.[8] The dramatic effects of emotional and sensory deprivation on the brain are illustrated in figure 1. When a child is malnourished and also lacks responsive parenting and stimulation these deficits interact with profound and negative consequences for the child as illustrated in figure 2.

SOME EXAMPLES OF STIMULATION ACTIVITIES: LOVE, PLAY AND COMMUNICATE

Play is the main component of early childhood stimulation and central to good mother-child interaction. **Play is an opportunity for all the significant activities that enhance good development to take place.** Babies, infants and children learn through play. Play strengthens the bonds between parents and children. From birth, **play** provides an opportunity to receive and show **love**, through paying warm attention, smiling and talking; to **communicate** through touch, expression, listening and trying out new words; to explore and understand the world through touching, looking, building, and to develop new physical and sensory skills while doing so. Play demands attention and concentration. It develops problem solving, decision making and learning skills. Play enhances relationships, both with parents and other children. Children learn how to take turns and cooperate, learn rules, negotiate and resolve conflicts. In play parents and caregivers can model the best approaches to all the above and allow the child to experiment and explore safely on their own. Play also provides a space to try out multiple identities.

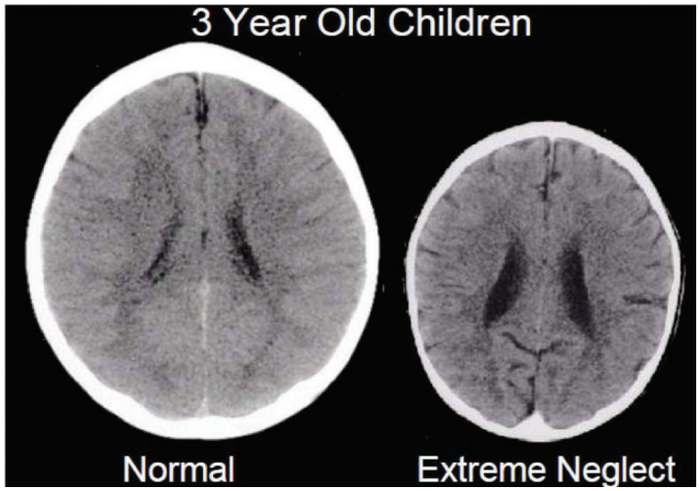

Figure 1: The scan on the left is an image from a healthy three year old with an average head size (50th percentile). The image on the right is from a three year old child suffering from severe sensory-deprivation neglect. This child's brain is significantly smaller than average (3rd percentile) and has enlarged ventricles and cortical atrophy)

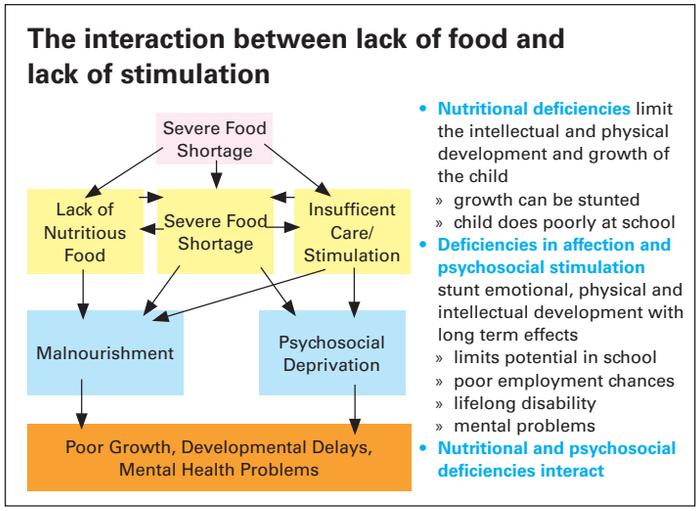

Figure 2: Adapted from WHO [9]

Through fantasy and role playing children can master fears, process upsetting events, explore difficult feelings and develop the resilience needed to cope with stress and loss. Play is a chance for parents and caregivers to provide undivided attention to the child and to see the world from the child's perspective.[10] [11] The resources listed in Appendix I provide details of materials and manuals on how to use age appropriate play and communication to enhance development. A summary card from Care for Development is also attached (Appendix II) suggesting some simple activities for babies, infants and young children.

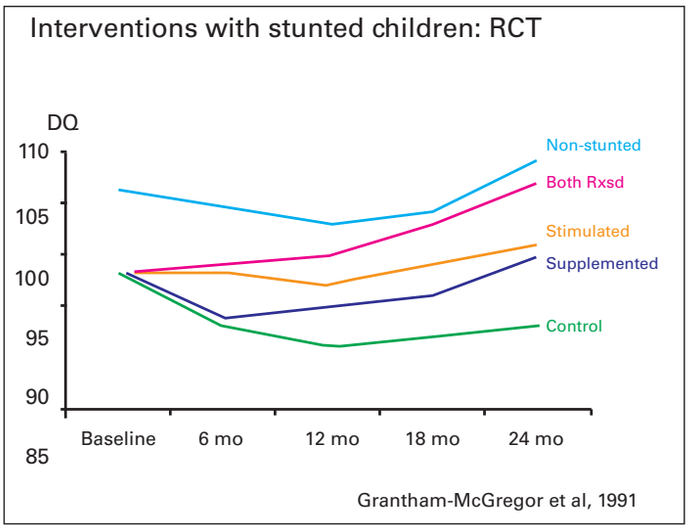

Figure 3: The stronger effect of stimulation alone over nutrition alone on development. [14]

HOW WILL COMBINING FOOD AND EARLY CHILDHOOD DEVELOPMENT ACTIVITIES HELP CHILD GROWTH AND DEVELOPMENT?

There is an increasing amount of evidence from low resource settings that programmes to improve infant stimulation and enhance parenting have a beneficial effect on children's long term mental health.[12] They have additive effects when combined with nutrition programmes. They improve children's growth and developmental outcomes in the long term. For example in a study of the impact of providing food supplements and stimulation to stunted and non stunted 9-24 month old children in Jamaica, the stunted children who received both interventions weekly over a two year period had higher developmental scores than those who received neither intervention, or only the nutrition intervention. Significantly the group of children who received stimulation on its own or stimulation combined with food, showed enduring cognitive benefits, which were still evident at age seventeen. These benefits had not endured in the children who received nutrition alone.[13]

There is also evidence that, in socially adverse environments, depressed mothers (both those with clinical depression and depressive symptoms) are more likely to have undernourished children with poor health. [15] [16] [17] [18] One possible mechanism is that mothers with depressive symptoms are less engaged and involved with their children, play with them less and are less responsive to their needs. The neglected baby becomes more apathetic and irritable and less able to engage their mother. In the longer-term, undernourished children may contribute to maternal depression because mothers experience increased feelings of guilt and incompetence. There is a downward spiral that creates or exacerbates malnutrition and poor health.[19] The longer term consequences for the child may include behaviour problems, cognitive delay and poor academic performance, and childhood depression.[20]

The most vulnerable parents and children are found in the harshest environments, particularly after natural disasters, in conflict and post conflict areas, drought affected regions, and in refugee and IDP camps. In these emergencies the established networks of care that normally protect the health, safety and security of the child are disrupted, and food is scarce. Displaced, exhausted parents are less able to provide the stimulation, nurturance and care that their infants need. Mothers are particularly vulnerable to depression in these areas. [21] It is likely that the combined interactive effects that occur in such settings contribute to poor outcomes in children. These connections are illustrated in figure 4.

There are multiple entry points to break the cycle illustrated above. (See figure 5). The obvious ones are providing health and nutritional support for mother and child. These are the usual priorities in emergencies. Comprehensive sexual and reproductive health programmes also provide support for the mother. Programmes that directly address maternal psychosocial needs, including addressing previous traumatic events, and her security in the camp, her access to social support, will help her to be more responsive to her child. What is less well known is that infant stimulation programs designed to improve parental responsiveness, through home visits and group interventions, also directly improve maternal mood and wellbeing.[22]

A review of 23 studies showed that programmes that used mother to mother group support and home visits to improve mother-child interaction also improved maternal mood, enhanced maternal wellbeing, and improved the child's nutritional status and growth outcomes, as the mother became more responsive to the child's needs. A randomized control study of a five month long group psychosocial intervention conducted with war-affected mothers and slightly older children (average age 5 years) in post-conflict Bosnia showed both improved maternal mental health and child weight gain. The intervention combined psycho-education and support to enhance the natural coping of mothers and children who had suffered traumatic events, with a training to "promote sensitive emotional expressive communication; promote enriching, stimulating interaction; and reactivate indigenous childrearing practices."[23]

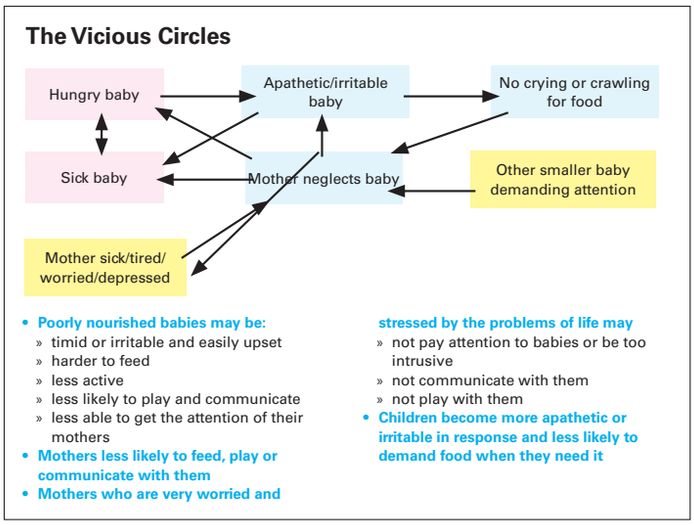

Figure 4: How mother and infant problems in stressful environments may interact

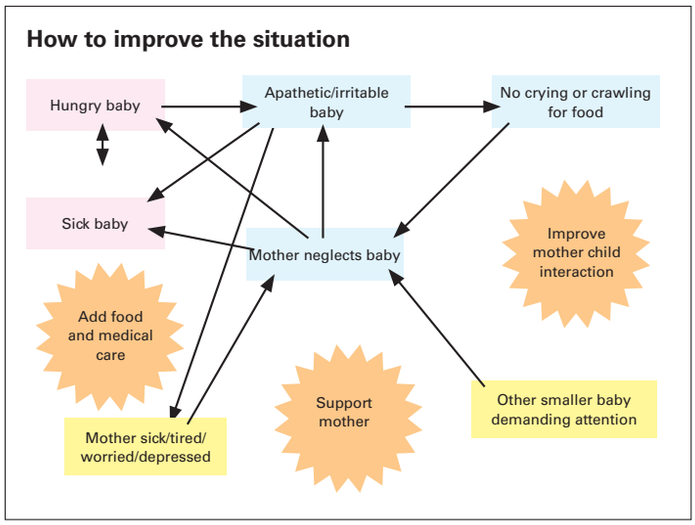

Figure 5: Intervention points

Combined interventions are likely to have the biggest impact. Moreover programmes designed to enhance early childhood development may have **multiple** beneficial effects: on child development, mother child interaction and maternal mood. For these reasons WHO now advocates combined psychosocial and nutritional programming in food shortage situations in order to address the physical, social, emotional, and intellectual developmental needs of the child and to enhance maternal well-being.[24] The IASC Guidelines on Mental Health and Psychosocial Support in Emergencies also recommend the integration of psychosocial interventions such as ECD into nutritional support,[25] as do the INEE guidelines for Early Child Development in Emergencies.[26] During food shortage emergencies, integrating simple early stimulation, learning and play activities with nutritional support is crucially important to increase and sustain the impact on a young child's health and nutritional status.

In fact emergency nutrition programmes provide an ideal opportunity to feed the body and to feed the mind. They are already widely recognised as an entry point for integrated, holistic care. When a mother or another caregiver brings the child for nutritional supplements they usually receive education in multiple related domains: such as breastfeeding, good nutrition, weaning, hygiene promotion, looking after a sick child, HIV prevention, family planning and the importance of proper spacing between children. This is also the best time to teach the importance of early childhood stimulation, responsive parenting and to improve maternal knowledge of early child development. There is no stigma attached to services delivered in this way and it is possible to reach a large, diverse group of vulnerable mothers and infants.

WHAT MAKES FOR THE MOST EFFECTIVE EARLY CHILDHOOD DEVELOPMENT PROGRAMMES?

There are some KEY LESSONS from the research. [27] [28]
Early childhood development programmes should

- be integrated with existing family support, health, nutrition, or educational systems
- be targeted toward younger and disadvantaged children
- be high quality (whether formal or informal)
- include direct contact with children beginning in early in life
- provide direct learning experiences to children and families, with opportunities for children to initiate their own learning and exploration of their surroundings with age-appropriate activities
- blend traditional child-rearing practices and cultural beliefs with evidence-based approaches
- provide parents and child care workers with education and support; including systematic curricula and training opportunities that use active strategies to show and promote caregiving behaviours—e.g. practice, role play, or coaching to improve parent–child interactions

HOW COULD EARLY CHILDHOOD DEVELOPMENT ACTIVITIES BE INTEGRATED INTO EMERGENCY FEEDING PROGRAMMES?

Emergency feeding programmes in famine affected countries take a variety of forms. Methods of delivery differ according to the political and geographical context, but contain many of the same core components. These include Supplementary Feeding Programmes (SFP) for undernourished children where families usually attend fortnightly to collect rations to supplement the child's diet;

Outreach Therapeutic Programmes (OTP) that support both acutely and moderately malnourished children on an outpatient basis; and stabilization centres or therapeutic feeding programmes where more severely malnourished children, or children who are both malnourished and sick, are admitted with their caregivers to receive intensive care. Children's needs should be addressed through the provision of child friendly spaces and early child development centres which often incorporate nutritional programmes.

Below are some practical suggestions on how to integrate early childhood development activities into these various kinds of nutrition programmes. The training manuals, materials and human resources required are listed in the appendix.

1. Integrate the key facts of the impact of early childhood development activities and simple messages on how to do them into ALL nutritional materials: Currently stimulation and enhancing emotional responsiveness are not seen as an essential part of feeding activities and are rarely mentioned.[29] Psychosocial activity is seen as a separate domain associated with protection. This perception can easily be changed by briefly flagging the topic and adding key messages in all reports and training materials on nutrition. National and international Infant and Young Child Feeding (IYCF) guidelines should always contain a section on this topic. This is already well done with other topics such as hygiene and childhood illnesses.

2. One to one counseling* while weighing/assessing child and handing out supplements: All nutrition and associated volunteer staff who have direct contact with mothers can be trained to provide simple health messages to give to the mother while discussing other familiar topics. For example messages on the importance of breast feeding can be combined with messages on how it provides the opportunity to show warmth and love and communicate through singing, touch, and facial expression. The care provided in this way is as vital as the breast milk as both are needed.

3. Interactive health messaging with mothers/caregivers queuing to receive supplements: Many SFP and OTP sites already use the opportunity provided by waiting mothers and caregivers to deliver health messages to promote good hygiene, proper nutrition etc. Simple messages on infant stimulation and early child development can be delivered in the same way using large pictorial cards and interactive methods. Some simple dos and don'ts are:

- Make sure the group is small enough for all the mothers/caregivers to be able to see the pictures on the card
- Make sure the group is comfortable
- Choose one picture and one topic to discuss
- Be interactive: ask the audience to answer simple questions. Praise and build on any correct replie
- Take advantage of the presence of babies, infants and young children to praise and draw on existing good practice in the group
- Encourage mothers/caregivers to try out particular simple activities, such as cooing or smiling, there and then
- Keep the sessions short with a practical focus
- Begin and end with a key 'take home' message

The above methods are straightforward and after a short training they can usually be incorporated into the existing practices of the established nutrition staff and volunteers already working in emergency feeding programmes. The interventions suggested below require more time and resources and therefore more staff or volunteers: However they are more likely to be effective in changing parental and caregiver behavior. Ideally an emergency nutrition programme should include an ECD specialist as part of the team who is responsible for working with the nutrition coordinator to ensure an integrated approach and train nutrition and psychosocial staff and volunteers in early child development activities. Psychosocial staff/volunteers could be recruited directly from the community and could have a nutrition, health or education background. For example they could be kindergarten teachers, or traditional birth attendants. ECD program integration has also worked successfully when mothers and caregivers with limited formal education have been given direct training to act as group facilitators, mentors and peer educators. (See Appendix III for concrete program examples.)

Mother/caregiver and baby groups at OTP and SFP sites: Mothers/caregivers and babies can be invited to attend mother and baby groups on the same day that they collect nutritional supplements, if safe, clean, baby friendly spaces are created. This can be done by demarcating dedicated time in existing child friendly spaces, or establishing separate baby tents as was done in the Haiti example given in Appendix III.

* The UNICEF Care for Development package uses the term ***counselling*** to mean 'supportive conversation or discussion with another. For many mental health professionals, the term ***counselling*** is reserved for clinical mental health support provided by a trained professional. That is not the meaning intended here.

Facilitators can be trained to deliver a simple six to ten week curriculum. This can be developed using resources like the UNICEF Care for Development package. Tents can be equipped with the UNICEF ECD kits and toys made by parents. Mother/caregiver and baby groups not only enhance maternal knowledge and practice of early childhood development activities, they also increase connections between women and break down feelings of isolation. This aspect of providing direct and continuing social support is probably one of the key elements in improving maternal mood and fostering resilience. The baby tent also provides a safe space for babies to interact with their caregivers, for caregivers to watch and learn from each other, and for babies to interact and play with one another. The groups can become self sustaining. They provide a place for parents to meet and develop their own agendas, including topics like domestic violence. Mother/caregiver and baby groups can also be run **at hospital sites and within stabilization centers.** The advantage here is that because of the mother's continual presence, groups can be run on a daily basis, with a new group of mothers/caregivers each week. It should be emphasized that other caregivers including older sibs, grandparents and fathers are welcome in the group.

Home visits: Visiting a parent and child in their own home or tent allows for an integrated holistic approach tailored to that infant or young child's needs. This is particularly beneficial for infants with developmental delays or disabilities, who may need additional individual attention. These children should also be included in and have access to group activities. Nutrition, health, hygiene, and enhancing infant stimulation and responsive interactive parenting can all be addressed in a supportive manner with the parent. Home visits provide an opportunity to praise good parenting and feeding practice and model additional ideas. The UNICEF Care for Development package provides specific guidance as to how to conduct home visits.

Community participation: communities should always be engaged in the discussing, planning, decision making, implementing, monitoring and evaluating of all these early childhood development activities from the outset. Open discussion meetings can be advertised and held at OTP sites on non feeding days for example, to explain the ideas and agree best methods of programming. This will also help get the message out about the importance of these activities.

Child Participation: Young children are active agents in their own development process and shape their environment through their participation. When families and communities recognize the views of the child, this reinforces a positive sense of self in the young child. Caregivers should be encouraged to listen and consult with their infants and children on their engagement in any activities. Creative mediums of art and play might be used as a way for very young children to express their views. Children with HIV or mental and physical disabilities, for example, are at higher risk of being neglected, of not receiving appropriate nutrition and lacking play opportunities. They are also less likely to be consulted. Every effort should be made to ensure the willing participation of children who are from vulnerable groups.

ADDRESSING POTENTIAL CHALLENGES TO THE IMPLEMENTATION OF INTEGRATED PROGRAMS:

Too many mothers/caregivers want to attend group and crowd into tent: Run more groups. Allow mothers and babies to observe by sitting round the outside of the group. Identify able lead mothers/caregivers within group who are willing to run similar groups in different parts of the camp. Support, equip and supervise them in doing so.

Mothers/caregivers don't attend consistently: run a rolling curriculum so that mothers who miss a particular session can sit in when it comes round again.

Conditions are too insecure: Integrating early childhood development activities into feeding programmes in very insecure conditions such as in Somalia presents the greatest challenge because of difficulties of access and the lack of security for staff. For example in the 2011 famine, blanket supplementary feeding was supplemented with wet rations (three hot meals a day for IDPs in transit) and targeted feeding for acutely malnourished children. Lack of security may mean that neither staff nor parents and children want to delay to attend programmes. However, simple messages about early child development activities and their importance for the young child could be given in pictorial leaflets and attached to all rations. They might then be used as the basis of ad hoc group or individual interactive sessions when opportunities arise.

Unaccompanied infants and children or children with mental or physical disabilities are not benefitting from the programme: Ensure that these children have designated caregivers, and that these caregivers are particularly welcome at any of these ECD activities. Make regular home visits to these children. The issues of early childhood stimulation and emotional responsiveness will be important, as these children will be particularly vulnerable to neglect.

APPENDIX I: PRACTICAL STEPS TO BE TAKEN IN ESTABLISHING EARLY CHILDHOOD DEVELOPMENT ACTIVITIES WITHIN CONTEXT OF AN EMERGENCY FEEDING PROGRAMME

1. **Ethnographic study** of current child rearing practices (focus groups and key informant interviews with mothers/caregivers)

2. **Cultural adaptation** of training materials

3. **Identification of psychosocial staff/volunteers** to lead psychosocial activities at OTP/SFP sites. At least one per site

4. **Capacity building** through
   a. Theoretical training in early child development and enhancing infant stimulation and caregiver responsiveness for nutrition staff and psychosocial facilitators (4 days)
   b. Practical training in running groups, home visits, health messaging (2 days)
   c. Supervised 6- 10 session pilot group with mothers/ caregivers and babies
   d. Supervised home visits
   e. Continuing refresher trainings in ECD including special trainings for working with vulnerable children

5. **Monitoring and evaluation:**
   a. Knowledge and practice (KAP) pre and post testing of staff/mothers/caregivers attending trainings
   b. Infant outcomes suitable for emergency settings are the standard growth outcomes used in nutrition site and additional simple measures of mother child interaction, such as the HOME scale.[30] The UNICEF MICS ECD questionnaire could also be used. This is a 17 item questionnaire which allows trained volunteers to collect data communication. It is based on observation and report and designed for use by trained volunteers who interview the parent and observe the child.[32]
   c. Maternal mood can be measured using culturally appropriate scales.[33]

Ideally all these outcomes should be evaluated against a similar comparison group which does not receive the psychosocial programme, but is waitlisted for one at a later date.

RESOURCES

1. ***HUMAN RESOURCES***
   Nutrition staff in emergencies need training to understand the principles of practice and to be able to integrate key messages into their work. For groups and home visits more staff time is required. Ideally local staff or volunteers should be trained as ECD facilitators. Another key resource is mothers and caregivers themselves. In all situations lead mothers can be identified who should be supported and trained to run small groups with other mothers. In some programmes high school level youth have been trained as peer educators.

2. ***MANUALS***
   UNICEF and WHO have developed the ***Care for development training package***[34] which guides 'health workers and other counselors as they help families build stronger relationships with their children and solve problems in caring for their children at home'. It includes detailed modules on how to stimulate children through play and communication as well as