Shared experiences in infant and young child feeding in emergencies

The following case studies were compiled in the course of an ENN/GIFA project on behalf of the Core group[1] who are currently developing training materials for field staff working in infant feeding in emergencies[2].

The case studies were generated through direct phone and email contact with field staff and individuals between February and May 2003.

This compilation does not advocate these experiences as best practice, but reflects reflect individual experiences in dealing with the reality of infant feeding in the field in varying, and challenging, contexts. This compilation also gives some insight into the wealth of experience that exists amongst field workers, much of which is not documented and whose value may be poorly appreciated. Considering this, it was felt that they should be shared with a wider audience both to inform and challenge current programming, and to encourage others to share experiences of their own, e.g. Field Exchange, NutritionNET.

Finally, many thanks are due to the agency staff, field workers and individuals who took the time to openly share their experiences. The case studies have been invaluable to the Core group in not only gathering field experiences to support technical guidance, but also in challenging current guidance and recommendations and identifying gaps that exist. It is hoped that the second training module will help to fill some of these.

Any comments, feedback or shared experiences can be posted on NutritionNET (www.nutritionnet.net) or emailed to ENN (fiona@ennonline.net)

Abbreviations

ACF	Action Contre le Faim
CSB	Corn Soya Blend
ENN	Emergency Nutrition Network
GIFA	Geneva Infant Feeding Association
LBW	Low birth weight
MSF	Medecins sans Frontieres
NRC	Nutrition Referral Centre
SFP	supplementary feeding programme
SFC	supplementary feeding centre
TFC	therapeutic feeding centre
WSB	Wheat Soya Blend

[1] A group of agency personnel (UNICEF, UNHCR, WFP, WHO, ENN and IBFAN) committed to taking forward the process of improving practice in infant feeding in emergencies through the development and dissemination of appropriate training materials.

[2] Infant Feeding in Emergencies, Module 1 for emergency relief staff. Draft material developed through collaboration of: WHO, UNICEF, LINKAGES, IBFAN, ENN and additional contributors. March 2001.
Module 2, which consists of more technical guidance, is currently being developed and a draft version can be viewed (comments welcome) on the ENN website: www.ennonline.net.

GUIDE TO CASE STUDIES

The case studies are listed 1-52. The following is a guide to the case studies by general theme.

Breastfeeding

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Supplementary feeding programmes

Targeting

Community involvement and education

Case **1**
Location: South Sudan
Source: Caroline Wilkinson, ACF HQ
Time: 2002/ 2003
Issue: **Challenges to complementary feeding education in Sudan**

ACF are working with a population in Juba, South Sudan. Traditionally, complementary foods are not introduced until 18- 24 months of age. Instead, cows milk is introduced soon after birth, and breastmilk and cows milk feeding is continued until the child is abruptly weaned onto adult foods at around 2 years of age.

As a result of these practices, the prevalence of malnutrition is high amongst infants and children aged 6 months to 3 years, who account for the majority of admissions to the TFCs (5-10% of admissions are in 3-5y age-group). This has been compounded by insecurity, where cattle raiding has reduced the available animal milk supply traditionally given to young children. As a result, mothers are using diluted cows milk, or have reduced the frequency of feeding, in infants and young children.

Current recommendations, advocated by ACF, recommend the introduction of suitable complementary foods at around six months of age. This practice is promoted by ACF through the TFCs, SFPs, and nutrition education in health clinics. The general food distribution is adequate and has appropriate foods for complementary feeding. However, despite all the usual emergency supports being available (such as feeding programmes, general food rations), and a lack of animal milk, the traditional practices persists. Foods available, suitable and advocated for use are not offered to older infants and young children. In the interest of understanding this practice further, and with view to targeting programming accordingly, ACF are investigating more deeply the factors influencing local infant and young child feeding practice.

Case **2**
Location: Many programmes in different countries and contexts
Source: Caroline Wilkinson, ACF HQ
Time: 2002/ 2003
Issue: **Complementary feeding frequency: the reality**

Interviews with carers of defaulters from SFPs, in both displaced and stable populations, have found that feeding frequency is consistently less than current recommendations advocate. Typically, infants and young children are fed complementary foods once or twice daily (ACF recommends frequent feeding, six times per day). Basic porridges are often given, based on the local staple food and fortified with oil. Feeding children coincides with feeding the family – more frequent preparation of meals, requiring cooking may be impractical.

Case **3**
Location: Ingushetia
Source: Caroline Wilkinson, ACF HQ
Time: 2002/ 2003
Issue: **Use of commercial complementary foods**

Commerical complementary foods are not routinely used by ACF. Instead, local-based recipes are advocated. However there have been instances where commerical products have been used, such as in the Chechen camps of Ingushetia. In response to requests from mothers, a commercial baby rice (required mixing with water) was purchased locally. The distribution was targeted, well controlled, only given to mothers with eligible infants and with supporting nutrition advice.

Case **4**
Location: Liberia, Burundi, Afghanistan
Source: Caroline Wilkinson, ACF HQ
Time: 2002/ 2003
Issue: **Supplementary suckling and the importance of staff training**

A supplementary suckling (SS) technique is recommended in ACF guidelines in the management of malnourished infants aged under six months. Whilst advocated for use in all TFCs, in reality, implementation is highly dependent on the level of belief, acceptance and practice of the TFC staff. ACF have found that convincing staff is critical to the successful outcome of SS.

In-country training is carried out by ACF for field workers in TFCs. This training is adapted to local needs and conditions and typically involves a theoretical component, formal workshops, and practical 1:1 training using "real life" cases from the TFC. One of the difficulties encountered in Afghanistan is that programmes are organised as many small therapeutic feeding units over a considerable area, rather than one or two large TFCs. This makes training much more difficult. Also in Afghanistan, a considerable component of the training has been focused on convince staff of the merits of the technique.

Case **5**
Location: Liberia, Burundi, Afghanistan
Source: Caroline Wilkinson, ACF HQ
Time: 2002/ 2003
Issue: **Supplementary suckling in practice**

Currently, SS is only used by ACF in the TFC setting. Breastmilk is offered first, and mums are encouraged to feed for at least 20mins at each feed. Frequent feeding is advocated (10-12 times per day), in between which mums are encouraged to breastfeed more if they so wish. A supplementary feed is offered at least 20mins after each of the breastfeeds. As the baby gains weight, the volume of supplementary feed is slowly reduced (according to ACF protocol) until the infant is, eventually, exclusively breastfed. Once the supplementary feeds are stopped, the mother and infant are observed for a few days to ensure weight gain continues and both are doing well.

Case **6**
Location: Liberia, Burundi, Afghanistan
Source: Caroline Wilkinson, ACF HQ
Time: 2002/ 2003
Issue: **Supplementary suckling in practice: influences on response**

The response of infants to SS, and the time taken to re-establish breastfeeding, varies. Some infants can soon demonstrate weight gains of 25g/kg/d, while for others, progress is slower. There are many factors which may influence response, e.g. presenting condition of the child. However in ACF's experience, outcomes are greatly linked to the confidence of the staff and the time taken to counsel and support the mother. The success of SS has been less in Afghanistan than in other programmes, and there are many factors contributing to this including practicalities of training, staff knowledge, convincing mothers, as well as possible psychosocial maternal-child issues.

The SS technique has been successfully implemented by ACF in Liberia and Burundi. More recently in Burundi, there have been less successful outcomes in managing infants under six months, as the prevalence of malnutrition in the under five population has increased. This has led to

increased overall admissions to the TFC, which it is suspected, has impacted on the staff time that can be allocated to supporting mothers with young infants to breastfeed.

Case **7**
Location: Afghanistan
Source: Olivia Friere, Field Nutritionist, ACF
Time: 2003
Issue: **Supplementary suckling technique**

When malnourished infants under six months of age present to the TFC, they are managed using the SS technique and diluted F100. Typically, breastfeeding will have stopped recently and relactation is quite successful. However, we have found it can be more difficult to re-establish breastfeeding in older infants (4 months plus), than in younger infants.

Case **8**
Location: Liberia
Source: Corrine Machin, ACF Liberia
Time: 2002/2003
Issue: **Management of malnourished infants under six months**

We have found that not all infants under six months who present with malnutrition require supplementary suckling – some require breastfeeding support only.

In terms of reasons why infants present with malnutrition, poor feeding practices, e.g. early introduction of foods or non-exclusive breastfeeding, are significant contributing factors. In particular, rice water (water in which rice has been boiled) is sometimes given to young infants in addition to breastmilk., and infants are often suddenly weaned from breastfeeding onto family meals with no transition period. The use of infant formula and feeding bottles is not high in Liberia since formula is expensive and not widely available. Even so, their use likely contributes to 1-2 admissions per month to the TFC.

Supplementary suckling has been established for four years or so in the ACF programme in Liberia. It is here that Mary Corbett carried out her MSC thesis on the technique, hence there was considerable training at the outset. Management is according to the ACF protocol.

Case **9**
Location: Liberia
Source: Corrine Machin, ACF Liberia
Time: 2002/2003
Issue: **Management of malnourished infants under six months in SFP**

On discharge of infants under six months from the TFC, the mother is enrolled into SFP for a three month period. For the first month, she attends weekly for a food ration for herself and the infant is monitored. For the second month, she attends fortnightly and receives a two week ration, and the infant is reviewed. In the third month, she presents once for review.

In reality we have found that once attendance progresses to fortnightly and into the third month, defaulter levels rise. Follow-up is made difficult since many of those who attend are internally displaced, addresses given are temporary and families typically move on and are hard to trace.

Case **10**
Location: Burundi

Source: Florence Le Guelinel , ACF Burundi
Time: 2003
Issue: **Supplementary suckling in malnourished infants under six months**

Infants under 6 months are admitted to the TFC if they don't have enough energy to suck or if their mother don't have enough milk. The two criteria are often linked because mothers may often experience problems with breastfeeding in a crisis situation, perhaps because of psychological trauma or intensive stress, and also, because of fatigue and lack of food in quantity or quality.

To allow the infants to recover, we use the supplementary suckling method which gives them the quantity of milk they need and at, the same time, stimulates the lactation of their mother. The mothers also receive two porridge meals and a minimum of 2 litres of fluid to drink per day.

At first this protocol seems strange to the mothers, but with health education, they accept it. The main problem is that sometimes, they "forget" to breast feed the child before the suckling technique. So, they need health workers to be very alert. They need as much attention as other children in the TFC and the number of staff who ‘belong’ to infants under 6 months are accounted for in the planning as much as for the others. These staff duties must be protected and maintained, even if the overall number of admissions to the TFC increases.

For this age-group in the TFC, mortality is quite rare. The period in TFC for those children is often long, more than 30 days in general. They are more vulnerable to lot of infectious diseases, and are assigned a special reserved area to protect them.

Case 11
Location: Burundi
Source: Florence Le Guelinel, ACF Burundi
Time: 2003
Issue: **Managing infants under six months on discharge to SFP**

Infants under six months who have been discharged from the therapeutic feeding centre are followed up in the supplementary feeding programme. The mothers are the food beneficiaries and receive the premix ration (Corn Soya Blend plus oil), providing 1400Kcal per day, which is distributed weekly.

During the first month following discharge, mothers attend weekly and receive a seven day ration. During the second month, they attend and receive rations every two weeks, and in the third month, they attend and receive a one month ration. At each attendance, the infant is anthropmetrically and medically reviewed.

Case 12
Location: Liberia
Source: Corrine Machin, ACF Liberia
Time: 2002/2003
Issue: **Defining diarrhoea in infants under six months**

There are practical considerations in diagnosing diarrhoea in infants under six months. The frequent stools of an exclusively breastfed infant are not the same (but may be interpreted as such) as diarrhoea. Staff often ask someone else to have a look to confirm stool as “normal”. Also, in transition stages, if older infants start on porridge, there may be an alteration in bowel habit which again may be interpreted as abnormal, rather than as a normal reaction and adaptation to a change in diet.

Case **13**
Location: Liberia
Source: Corrine Machin, ACF Liberia
Time: 2002/2003
Issue: **Long term education strategies in acute programming**

Long-term education is critical if there is going to be a change in practice. Currently, health and nutrition education is targeted at the mothers in the TFC, and often they will do what you recommend or tell you what you want to hear whilst attending the centre. However, on return home, follow-up by our staff have found that they usually revert back to old practices. Other family members and men are significant influences on what mothers do. Men ultimately hold the power and control on how household income is used. Alternative health education strategies targeting men, for example, are required to complement current activities if they are to have any sort of long-lasting impact.

Case **14**
Location: Afghanistan
Source: Olivia Friere, Field Nutritionist, ACF
Time: 2003
Issue: **Admission of infants under six months to TFC**

In Afghanistan, malnourished infants under six months pose a particular problem as they are making up a higher proportion of TFC admissions than in other countries where ACF operate. In other countries where we work, this age-group make up 2-3% of admissions, while in Afghanistan they can represent 8% of admissions. Mothers often present reporting insufficient breastmilk and may have recently stopped breastfeeding as a result.

Case **15**
Location: Afghanistan
Source: Olivia Friere, Field Nutritionist, ACF
Time: 2003
Issue: **Cultural challenges to breastfeeding**

In Afghanistan, it is culturally acceptable for a woman to say "I have no breastmilk". In other countries in Africa, for example, it is culturally the norm to have breastmilk, with lack of breastmilk perceived as the exception rather than the rule.

In Afghanistan, women are extremely inhibited in exposing their breasts to feed. Typically in the TFC, they will turn to face the wall when they breastfeed. They will breastfeed while continuing to wear a burka and will need to negotiate feeding the infant under layers of clothing. It takes a considerable and consistent investment of time to explain and support breastfeeding. Staff need considerable training, particularly in techniques such as supplementary suckling.

Case **16**
Location: Afghanistan
Source: Olivia Friere, Field Nutritionist, ACF
Time: 2003
Issue: **Inappropriate infant feeding activities**

In Afghanistan, bottle feeding is a contributory factor to infant malnutrition and lack of maternal education on appropriate feeding of the child. There have been inappropriate distributions of infant

formula by smaller non-governmental organisations in Kandahar. Typically it is those agencies with little or no expertise in nutrition that become involved in such activities, unaware of their implications for infant health. In response to untargeted distributions, the Ministry of Health circulated a letter advising all agencies of the dangers of such activities.

Case **17**
Location: Western Nile/Uganda
Time: 1991
Source: Barbara Krumme
Issue: **Relactation in difficult circumstances: rising to the challenge**

During the time that I worked in rural Western Nile / Uganda (where I started to work in January 1981) I remember well that relactation was practiced and well known as a measure to save the life of infants, whose mothers had died during delivery. Maternal deaths were quite common before we arrived because people experienced civil war and most of them had been refugees in Zaire (today Democratic Republic of Congo) for some time. During 1981, they returned home during the first three months of the year, but had to seek refuge again in Zaire in June 1991 where we joined them.

The health system was totally destroyed by that time. At first we practiced in an old church building which was out of use, since the hospital was still occupied by Tanzanian soldiers. Later we managed to effect their moving out. By the time insecurity started again in June, the hospital which we left behind was fully functional again.

It was in this context that I saw an elderly woman who breast-fed her grandchild, the child of her eldest daughter who had recently died. The grandmothers' own, last born child was aged between 7-9 years old. She pretended to be 30 years old but looked much older.

Whilst working here, an infant was brought to us whose mother had also died. It was already wasted but thirsty and eager to drink. It was difficult to guess the age of the child. I believe it was about 2 months old. It had been fed by the grandmother (mother of the father) with diluted cow milk and some maize soup and experienced diarrhoea before it was brought to the hospital. I asked a lactating woman to feed this child in addition to her own, since she had enough milk for two. Initially it was quite difficult to get her agreement. I was told that it was culturally unacceptable as the child was no relative. The priest had to help me to persuade her at least to breastfeed the infant until it would recover and reach normal weight. We also promised her extra food for herself. The next day, a young woman was brought to the hospital and introduced as the younger sister of the dead mother. She agreed without any resistance to breastfeed her related child. As far as I remember, this young woman had never given birth to a child herself before.

These two women saved the infant's life. The orphan had to be fed frequently. With every feed it was attached at first to the aunt's breast to suck. As soon as the sucking became slightly weaker, the baby was attached to the breast of the other lactating woman to satisfy the baby before exhaustion and frustration. We didn't try to attach a tube simultaneously in order to avoid frustration, as it is recommended today. As the infant was already wasted, we didn't wish to take the risk and didn't let it suck too long at a time. Of course both women had a hard time because of the frequent feeds throughout the nights.

As far as I can remember, it took at least 2-3 weeks until the young woman was fully able to breast-feed the infant. The two women became quite close to each other. After some time when the older mother had to go to the market or cook, the young woman would comfort her baby as soon as it cried, and attached it also to her breast.

The baby developed well. After one month, the young woman went home with her “new” baby and was very proud of her achievement. I saw the woman together with her parents and brothers again in Zaire after they became refugees three. By this time, the baby was still breastfed and had received some complementary foods, and was quite healthy. This young woman managed in spite of the difficult circumstances with the help of her family, and behaved like a real mother.

Case **18**
Location: Western Nile/Uganda
Source: Barbara Krumme
Time: 1991
Issues: **Influence of household needs and family support on infant feeding**

During my work in Pakistan in refugee camps together with an Afghan NGO, we found it quite difficult to persuade mothers to continue breastfeeding, even during the first 6 months. Many of them wrongly believed not to have enough milk. We managed because, besides our empathy and advice, we also provided food for pregnant and breast-feeding mothers and thus facilitated their daily search for food to a certain extent (general rations were not provided for political reasons by that time).

There was much less family support inside these refugee camps in Pakistan as the Afghan families structures were often disrupted. Young women, especially, found it difficult to manage without the support of older, more experienced women. Therefore we were happy to work with health workers from the refugee community trained on the job and eager to help their peers.

Case **19**
Location: Ethiopia
Source: Elizabeth Hormann (plus reference below)
Time: 1988
Issue: **Relactation – age is no barrier**

"In 1988 in Ethiopia, I was introduced to a woman who had relactated for her nine month old twin grandchildren after her daughter ran away. The Western physician who verified this experience had told her she would have to breastfeed the babies or they would die...and she did. Nor was she a young grandmother as we suppose some breastfeeding grandmothers to be. She pulled her breasts out of her dress for me to see and told me proudly, "These old breasts were 56 years old when they made milk for my grandbabies".

Ref: *Hormann, Elizabeth. Stillen eines Adoptivkindes und Relaktation. Munich: La Leche Liga Deutschland Nr. 57-D, 1998, 11.*

Case **20**
Location: Juba, South Sudan
Source: Cécile Bizouerne, psychologist, ACF
Time: August 2002 onwards
Issues: **Psychosocial issues affecting infant and young child feeding**

It is a primarily displaced population in Juba with whom ACF are working. Displacement has brought about considerable disruption of the family organisation, and gender roles and relationships within families.

Traditionally, men in the family were responsible for securing the main source of income. However, many of the mothers attending with their malnourished children in the TFC come from female-

headed households where they carry all the responsibilities for the family. Husbands have died, either through sickness or killed in ongoing conflict, or are military men, out of town most of the time. Traditionally brothers of husbands take responsibility for widows and families, but they too are often not present, or have fallen on hard economic times and cannot support extended families.

Through this decline in the social structure support, women carry all the responsibilities of the family, including securing income and food, and looking after and caring for the children. Many of the displaced were landowners and used to growing their own food. They have arrived to where they have no land, no jobs and must secure some income, somehow. Household food rations are distributed to the newly displaced in theory, but it is often the well established displaced who know the system that, in reality, secure the food rations.

Alcoholism, amongst both women and men, is a major issue in the area where ACF are working. Women often disappear from the TFC during the day, and return having consumed excess alcohol. Alcohol is locally brewed, often by the women as a source if income. Alcoholism has a strong impact on care practices, some of the street children had left home because of this.

It seems that mothers attending the TFC are quite overwhelmed by the responsibilities and tasks they have to face. Often they must spend considerable hours away from the home, e.g. searching for firewood/grass to sell. They therefore cannot care adequately for their children and even young breastfed infants may be left at home with a sibling for 4-5 hours while the mother goes out. They often do not carry the infants with them on their back since they are engaging in heavy work that will otherwise be restricted if they have an infant with them.

Case **21**
Location: Juba, South Sudan
Source: Cécile Bizouerne, psychologist, ACF
Time: August 2002 onwards
Issues: **Improving mother and child relationship**

To try and improve the mother and child relationship, improve mothers self esteem and stimulate children recovering from malnutrition, mother and child play stations have been developed in the TFC. Since it started, it has been observed that through playing together, the mother is suddenly aware and interested in what the child can and cannot do and takes pride in what her child can achieve. Once children are in phase 2 and are involved in the play station activities, they are always asking for play. These activities have also helped mothers and staff in managing children who were being force fed by mothers– playing detracts a little from the feeding and is a more positive, less pressured, environment to encourage feeding. The TFC team have also responded positively – instead of seeing the beneficiaries in the programme as a mass of malnourished children, through interaction they are now much more aware and in tune with individual needs and problems.

Case **22**
Location: Kabul, Afghanistan
Source: Cécile Bizouerne, psychologist, ACF
Time: November, 2002
Mission: **Psychosocial issues affecting infant and young child feeding**

In the Kabul TFC, a considerable proportion of admissions comprised of infants under six months of age. Many mothers were reporting that they had not enough milk. Through investigations, we identified a number of issues as having a significant influence on feeding practices, and contributing to malnutrition in infants under six months.

- Cultural factors – many mothers do not immediately initiate breastfeeding, and other fluids to the infant instead. Breastfeeding is not well established.

- Poor education of the mothers regarding infant feeding practice. Women reside with their family-in-laws and typically have poor/conflict relationships with their mother-in-law. A first time mother will be offered little advice and support in breastfeeding her new infant. She will try to feed and in case of difficulties, she will often report that she "does not have enough milk". It seems quite acceptable to say this in Kabul and some tins of milk will be bought and given to the infant as a result, rather than supporting the mother.

- Mental health of women – lots of the mothers exhibit the signs of depression, anxiety, and as a result have difficulties in the relationship with their child. They do not sleep well, have repeated worries, and nightmares. The association between maternal depression and malnutrition is well documented, and in Kabul it is very clearly seen.

- Interaction with newborn infants in Afghanistan is quite different than in other cultures. It is felt that there is no need to engage with young infants in terms of talking, playing, and socialising with family members. Infants are often swaddled, covered and left on their own. Poor developmental progress and malnutrition are possible sequelae as a result.

Case **23**
Location: Uganda
Source: Amanda Agar, Concern
Time: 2002
Issue: **Supporting street children and abandoned babies**

The children's home where I worked took in street children and abandoned babies, and was situated in the suburbs of Kampala in Uganda. At the time I was there, the home had approximately 37 children ranging in age from a few days to 15 years. The numbers of children varied at any time depending on the numbers coming in, the number at boarding school, and amount of adoptions (the home acts as an adoption agent both in Uganda and internationally).

The children usually arrive at the home by referral from the police-most were in a bad way when they arrived as they have spent considerable time on the streets or if they are babies, they usually had been found abandoned by the public.

When the children arrived at the home, they stayed permanently, unless their families could be traced or they were adopted, and were cared for by resident 'mamas'.

When I arrived at the children's home, the standard meals were very poor, consisting of large amounts of staples and very little protein and no vegetables. Fruit and eggs were available occasionally. Part of my time at the home was spent training the cooks, programme manager and 'mamas' on how to purchase a better variety of food and how to portion meals adequately.

While I was there, there were five infants or young children children that were malnourished when they arrived, and that we had to treat with what we had. There were three babies under six months and two boys approximately two/three years old.

Our nutrition protocol
All children, including babies less than 6 months, who arrived at the home and were under 80% weight-for-height were given a two stage diet to allow for catch-up growth.

Stage 1
This diet was given for seven days. The diet consisted of milk, sugar and oil and provided 80 kcal and 0.6 g of protein per 100 ml.

Ex: 200g of fresh milk (or 30g dried whole milk)
100g of sugar
30g of oil
Made up to 1000ml with boiled water.

The children were given 120 ml per kg of bodyweight per day. The amount was divided into 8 feeds per day (every 3 hours, day and night).

Stage 2
Older children were given a porridge based on CSB at this stage.

The babies under 6 months were given the following diet of milk, sugar and oil. This diet provided 135 kcal and 3 g of protein per 100ml.

Ex: 900ml of fresh milk (or 125g dried whole milk)
70g of sugar
55g of oil
Made up to 1000ml with water.

The babies were given 150 ml per kg of bodyweight per day. The amount was divided into 6 meals (every 4 hours). As the babies improved they were given as much as they could eat at each meal.

Vitamin A and other vitamin and mineral supplements
The babies under 6 months were given 100,000 IU of Vitamin A on arrival to the home. No other supplements were given.

An exception to the above
One baby arrived at the home weighing only 1.4 kg and was estimated to be approximately 4 days old. A special newborn baby formula was purchased solely for his consumption (baby 3 below).

Baby 1
The first baby arrived at the home aged three months. She was born in May 2002 and her mother had died in childbirth. The grandmother tried to care for the child, feeding her on sugar and water solution, but after three months realised the child was weak and handed the child to the home. As far as I am aware the child was never breastfed.

When she arrived, the infant girl had a very low weight for age, had diarrhoea and often vomited her food. (At this stage, babies were fed by bottles and high energy milk was used, using cow's milk).

The weights that I recorded were:

October	3.4 kg (taken by hospital and not actual date recorded)
6/11/02	4.3 kg (feeding started, diarrhoea and vomiting stopped)
25/11/02	4.8 kg
30/12/02	5.4 kg (feeding stopped)
End Jan	approx 6 kg (this is from memory, cannot remember exactly)

During late December, this child started to visibly gain weight and although she was still low weight for age, her weight for length was above the reference. We slowly started to introduce complementary foods, based on local foods and of mixed variety, while at the same time, reducing the high energy milk. This child still lives at the home. At the time, the hospital doctor advised not to give this baby Vitamin A as she was due for her measles vaccination, which included a dose of Vitamin A.

Baby 2
This baby was found abandoned and brought to the home around during the second week in November weighing around 3.5 kg (from memory) and placed on the feeding programme. Her estimated age was around three months. The notes I have for her weight are as follows:
30/12/02 4 kg
15/01/02 4.7 kg

By mid-January, the baby was taken off the high energy milk and was introduced to cow's milk with plans to introduce complementary foods at the end of January. This baby was given 100,000IU of Vitamin A at the start of the feeding programme. This baby continued to vomit small amounts of her feed when sleeping – I had no solution to this.

Baby 3
This baby arrived at the home on 17th December 2002, having been found abandoned and handed to the police. The estimated age was four days and he had been delivered by a birth attendant (the umbilical cord was tied professionally - doctor's observations). The baby weighed 1.4 kg at the time of arrival, had no diarrhoea or vomiting but was very thin.

This baby was not put on the high energy milk as I felt it was not wise to give a new born baby cow's milk. Baby formula was purchased especially for this baby and he was fed by cup and spoon. Initially he was only taking 1 fl oz every 3 hours but by end of January he was taking 3 fl oz and doing well. A dose of 50,000IU of vitamin A was given shortly after arrival. His weight at the end of January was 2.6 kg (from memory). This baby was also kept isolated from the other babies and children and a 'mama' employed solely to care for him. Needless to say, the feeding and employment of extra staff were a drain on the resources of the home and questions were raised as to whether the home could take on such babies.

Two boys
Boy 1 Length 86 cm Initial weight 8 kg Final weight 12 kg (from memory)
Boy 2 Length 71 cm Initial weight 6.7 kg Final weight 9.1 kg (from memory) – this child showed signs of marasmic-kwashiorkor on arrival.

Both were enrolled in the feeding programme for 9/10 weeks. A dose of 200,000IU Vitamin A given, and snacks of boiled eggs and fruit given when available. The boys moved onto the same local foods as other children once they had recovered weight.

Case **24**
Location: Tanzania
Source: Lucas Machiyba, UNHCR
Time: 2003
Issue: **Targeting pregnant women**

Between 1994 and into 1996, the low birth weight (LBW) rate in the camps was extremely high (over 30%). A concerted effort was made to address this, including active targeting of pregnant women for supplementary feeding rations. The average LBW rate for the camps is now under 10%.

Case **25**
Location: Tanzania
Source: Lucas Machiyba, UNHCR
Time: 2003
Issue: **Supplementary feeding for pregnant and lactating women**

Until recently, the supplementary feeding programme (SFP) ration consisted of 200g Corn Soya Blend (CSB), 20g oil, 20g sugar. This was revised to 150g CSB, 50g maizemeal, 20g oil and 20g sugar. This revision was mainly brought about to reduce costs (CSB more expensive), but in a way which did not significantly compromise the energy, protein and micronutrient content of the ration.

Initially in the SFP, different rations were used for pregnant and lactating women, and children. In practice, this proved too difficult to manage and this was revised to a standard ration for all beneficiaries.

Case **26**
Location: Tanzania
Source: Lucas Machiyba, UNHCR
Time: 2003
Issue: **The management of infants under six months and the impact of HIV/AIDS**

On average, there can be 5-6 infants under six months per camp therapeutic feeding centre (TFC) (13 camps). The majority of severely malnourished presentations in this age-group are LBW or premature infants, and in a smaller number of cases, are orphans.

When malnourished infants present with their mothers, the focus and mainstay of their management is supporting breastfeeding. Initially they are admitted for 24 hour care and are kept under the close supervision of the nutrition assistants. Overall they respond well, the main problems arise when infants are medically unwell. Infants may typically spend two months in the programme.

In the past, wet nursing was the main way of managing orphaned infants, was culturally practiced and accepted. Since the advent and increased awareness surrounding HIV/AIDS, however, wet nursing has become much less likely.

Where no breastmilk source is available, we use diluted F100 or sometimes if stocks of F100 are low, a locally sourced infant formula. Such infants are usually discharged to the care of a relative, and will be supplied with the breastmilk substitute, and closely supervised by the outreach community health worker or traditional birth attendant in the area. Infant formula is used only under strict prescription and supervision for special cases – exclusive breastfeeding is promoted through the programmes and the outreach education work.

Case **27**
Location: Tanzania
Source: Lucas Machiyba, UNHCR
Time: 2003
Issue: **Community outreach work**

Outreach workers are a critical part of our work. They are given specific and key messages on heath, water and sanitation, nutrition and target their community area. The camps are organised into villages, all of which have assigned health workers. They are part of the community and are best placed to effectively deliver health messages.

Case **28**
Location: Tanzania
Source: Lucas Machiyba, UNHCR
Time: 2003
Issue: **Field challenges in HIV/AIDS and infant feeding**

Where we are working, there is considerable activity in promoting awareness of HIV/AIDS and highlighting the risks. With the emphasis on informed choice regarding infant feeding, if a woman currently decides not to breastfeed her child, this poses a practical dilemma for field operations. There are little resources and capacity to offer alternatives, nor are the conditions in the camp suitable for artificial feeding. In some cases, e.g. where a mother has died suddenly and left behind an infant, the community locate a wet nurse for the infant. This infant may then present to the health service a few days later, being wet nursed. Although there potentially are risks of HIV transmission to this child, field workers do not feel they are in the position to challenge this decision, particularly when there are no viable alternatives to offer. Increased awareness regarding HIV/AIDS issues in the camps has certainly contributed to a decline in wet nursing of infants.

Case **29**
Location: Burundi
Source: Florence Le Guelinel, ACF Burundi
Time: 2003
Issue: **Role of education in activities**

In our programmes, health education plays a large and significant part of our activities.
In the TFC, we have developed a participatory method during the sessions, which has demonstrated that the beneficiaries and their caretakers remember and understand the information given much better. In the SFC, it has been also implemented with the same good results.

Case **30**
Location: Afghanistan
Time: 2003
Source: Concern Afghanistan
Nature: **Challenges to implementing SFPs**

There may be many challenges to implementing feeding programmes in emergencies, and teams often have to adapt existing guidelines to the reality of where they work. In 2003, Concern Afghanistan was implementing a targeted dry SFP for malnourished children (6-59 months) and women (aged 15 years or over). Operating in the cultural and geographical environment in Afghanistan posed many challenges.

Much of the target population lived in extremely remote villages, with largely no access by vehicle. The nearest health centre was more than 4 hours away and was therefore not a realistic option as a location for screening, measurement and distribution of food. The weather in summer is extremely hot and makes walking to a real challenge, while in winter it is extreme cold and the roads and footpaths are dangerous to pass

To reach women, you need a female translator and female nutrition/health staff. However female Afghans are not allowed to travel without a male relative as a chaperon and most women are illiterate, making it nearly impossible to find female staff. Men are not allowed to see or touch women but they can work with the children.

Food rations must be distributed to the male family members because women are not allowed to leave their home villages without chaperons, nor speak to the people distributing the food.

Case **31**
Location: Afghanistan
Time: 2003
Source: Concern Afghanistan
Nature: **Difficulties in targeting women**

Besides the needs of children, women themselves have nutrition needs, however due to the Afghan culture it is really difficult to get access to them. Without the agreement of the male population and the local mullah, no female project is possible. Men normally ignore the needs of their wives as long as there is no benefit for them with any intervention.

Case **32**
Location: Afghanistan
Time: 2003
Source: Concern Afghanistan
Nature: **Cultural influences on maternal screening**

The biggest problem is not that the mothers don't breastfeed, but that they exclusively breastfeed far too long, some of them for 2 years. There is little knowledge about when to initiate complementary foods and what types of foods are good to introduce. Coupled with a lack of traditional knowledge about health, all issues regarding the human body are underdeveloped and are often "taboo" to talk about. To "undress" the arm for MUAC is nearly impossible, for example, and most women feel ashamed to show so much skin to another women.

Case **33**
Location: Afghanistan
Time: 2003
Source: Concern Afghanistan
Nature: **Targeting households of malnourished women and children**

To each household with at least one malnourished person (children or women), a monthly food ration is given out for a period of 5 months. This ration is calculated for the average family size of 6 and provides 100% of the needed household food.

Case **34**
Location: Afghanistan
Time: 2003
Source: Concern Afghanistan
Nature: **SFP rations: adapting to the local context**

Fortified food, for example as CSB or WSB, is not traditionally used (no porridge is consumed in Afghanistan) and the remoteness of villages doesn't allow for individual training in preparation techniques. Thus in the dry SFP, we decided not to give out fortified food but, instead, used locally

adapted and culturally accepted products. Each family affected by malnutrition receives a monthly ration consisting of 45kg wheat, 45kg rice, 10kg beans, 5kg oil (vegetable oil enriched with vitamins). This ration weights 105 kg and is nearly the maximum that can be transported by donkey in one journey.

Table: Nutritional composition of monthly household ration to families with a malnourished member

	Rice	Wheat	Oil	Beans	Total
Amount [g]	250	250	27.5	55.5	
Kcal	900	825	245	185	2155 kcal
Fat [g]	1.25	3.75	27.7	0.83	33.5g
Fat [%]					14%
Protein [gg]	17.5	30.75		12.21	82.3g
Protein [%]					11.2%

Case **35**
Location: Afghanistan
Time: 2003
Source: Concern Afghanistan
Nature: **Dry SFP and the use of BP5 biscuits**

In the targeted dry SFP, each malnourished child with a MUAC <=124mm received BP5 biscuits (4 biscuits a day for a period of 4 weeks). We expected that the biscuits would be redistributed among all small children in a family. No differentiation was made between moderately or severely malnourished children, or between different ages of children.

Case **36**
Location: Afghanistan
Time: 2003
Source: Concern Afghanistan
Nature: **Wet versus dry supplementary feeding**

In Afghanistan, our decision to implement a targeted dry SFP, rather than a wet SFP, was based on a number of factors. The target population was dispersed over a huge are,a with up to 9 hours walk for beneficiaries to the distribution location. Women and children were not able and not allowed (afghan culture) to come to the distribution places, so the male representatives collected the food. In cases of female-headed households this caused problems, with women having to send the youngest male child or to pay other community members to bring their food. School feeding was not possible due to a lack of schools in the project villages.

Case **37**
Location: Afghanistan
Time: 2003
Source: Concern Afghanistan
Nature: **The strength of cultural influences on infant feeding practice**

In our programmes in Afghanistan, we asked whether it would be culturally appropriate to breastfeed a child from another mother if the mother has none or not enough milk. The answer was no, even if the child has to die because no alternative milk was available.

Case **38**
Location: Afghanistan
Time: 2003
Source: Concern Afghanistan
Nature: **The value of listening and learning**

Good feeding practice starts with knowledge. If there is no knowledge about nutrition, then no food will be able to improve the nutritional status in the long term. Here they all ask for clinics and drugs because they think this will help. Some of them refuse to spend a few more minutes a day to feed the child properly. Instead they ask for a pill not understanding that this won't help. They don't believe in their own skills anymore, a belief that is reinforced by many aid workers.

People mostly they have good reasons for their behavior but we never listen to them. Listening takes time, which we are not ready to invest. For us it is so much easier to come with our readymade solutions, while the donors 'force' us to present quick results. Listening to beneficiaries doesn't cost anything but this, and providing training, takes time, and the results often won't be visible within the project period. We distributed BP5 biscuits in our programme only because we had them in store, donated by another agency although they were not requested. I gave them out, all children gained weight and the mothers were happy. Six weeks after the last distribution we measured all children again and most of them lost weight, some having returned to the previous weight. What did we gain? Nothing - this is quick impact without any long term benefit, and is, I feel, a waste of money and capacities.

Case **39**
Location: Tanzania
Time: 2002
Source: Fatia Abdullah, UNHCR
Nature: **Experiences of supporting breastfeeding**

My experiences regarding infant feeding in Tanzania were good – a reflection, I feel, of good inter-agency co-ordination and co-operation. Here, 500,000 refugees were managed. Initially, women who were reporting difficulties in breastfeeding were admitted to the SFPs and the mother received supplementary rations, with encouragement to breastfeed her infant. However, this proved less effective in practice. Many of the women could ill-afford to spend time in the centre, with commitments to other children at home. Also, there was a tendancy for the programme to turn into a social centre with lots of sleeping, chatting and socialising between the women, diverting attention from feeding issues. As a result, an alternative strategy was used. Instead, mothers were not admitted to the SFP but were supported from home by community support groups of peers. We found this worked much better.

Case **40**
Location: North Korea
Time: 1998/99
Source: Fatia Abdullah, UNHCR
Nature: **Experiences of supporting breastfeeding**

When I was working in North Korea, there were a considerable proportion of infants under six months who presented to their centres there without a carer. There were many dilemmas on how to appropriately feed the infants, particularly since mothers were not present and breastmilk was not an option. Why these infants were without carers was not fully established e.g. were they teenage

mums, social issues, etc. Traditionally lots of mothers went out to work and left their infants in care centres from the age of around 3 months.

Case **41**
Location: Khartoum, Sudan
Source: MSF France
Time: 2003
Issue: **Managing orphaned infants under six months and challenges to technical guidance**

Recently, we were asked by the Ministry of Health to intervene in an orphanage in Khartoum. We found we were faced with a situation where they have 100 infants under six months, who had been abandoned and are were being looked after in the orphanage. When we arrived, the reported mortality was 75%. We were faced with managing malnourished infants who are not breastfed, and at the same time, attempting to cater for infants who were not malnourished but urgently required an alternative to breastmilk. We took decisions that were practical, pragmatic and after massive consideration, we felt appropriate. However in doing so, we did feel out on a limb in terms of training and guidance and that we were, somehow, breaking all the infant feeding "rules'.

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Location: Bangladesh
Time: 2003
Source: Orla O'Neill, Concern Bangladesh
Issue: ***Context of Concern Bangladesh case studies***

Concern responded to the influx of 250,000 refugees from the Rakhine state in Myanmar and have been providing health and nutrition services in the camps since 1992. Today only one camp is managed by Concern – approximately 8,500 refugees reside. MSF-H manage the second camp in Nayapara (approximately 11,500 refugees).

Concern Bangladesh is managing a TFC and SFP for approximately 8,500 Rohingya refugees (Myanmar) located in south-eastern Bangladesh. The refugee population has been in Bangladesh since 1992. Concern also conducts regular surveillance of the nutrition status of under fives (currently MUAC), and provides centre based supplementary feeding for moderately malnourished under fives, pregnant and lactating women (up to 6 months post partum).

The TFC is a day care centre (8 am –4 pm). Complicated cases are referred to the 24 hour inpatient department (IPD). Concern also operates a community based urban (slum based) programme in three locations – Dhaka, Khulna and Chittagong. In the community-based nutrition programme we still operate two Nutrition Referral Centres (NRCs) (like rehabilitation units) providing therapeutic feeding and care for severely malnourished (weight-for-height<70%) and/or presence of oedema for under two years children. Again, it is a day care facility and operates 6 days a week.

The current community based nutrition based programme has evolved from Concern's past efforts providing supplementary feeding at rehabilitation units to severely malnourished children living in urban slums. The current programme was initiated in 2000.Only 2 NRCs now operate, one in Khulna, the other in Chittagong. The programme was designed to compare two approaches to tackle malnutrition in urban slum areas. As part of the operations research component the Dhaka project does not have a NRC operating and relies on local health facilities to refer complicated cases for therapeutic care.

Case **42**
Location: Bangladesh
Time: 2003
Source: Orla O'Neill, Concern Bangladesh
Issue: **Assessment of infant feeding practice and education activities**

Breast feeding practices are investigated and exclusive BF for the first 6 months is promoted. Ration sharing is investigated and weaning practices and awareness of the necessity to use clean safe foods at this stage is addressed with the mothers.

In the community based Nutrition Referral Centres (NRC), we try to address diet and support beneficiaries to use affordable foods within their means to enhance the variety and quality of their diet as well as improve the feeding and caring practices for their children. A "demonstrative" food packet is given at community nutrition centers to provide additional food for severely malnourished children and underweight pregnant and lactating women (as per the National Nutrition Programme).

More in-depth discussion of feeding issues are held at the TFC and NRC during the stay. At home, follow up of growth faltering children also enables field trainers to assess feeding problems within the home.

Case **43**
Location: Bangladesh
Time: 2003
Source: Orla O'Neill, Concern Bangladesh
Issue: **Supporting young mothers of malnourished/ low birth weight infants**

We have found that very young and malnourished mothers giving birth to very low birth weight infants, can have difficulty breastfeeding and often feel not able to feed regularly enough. Mothers attending the TFC often do not feed the child at night and share their own rations among older children, therefore any catch up is difficult to attain. Motivating mothers in child development issues can be difficult when the mothers themselves are often thoroughly depressed and under nourished.

To meet the needs ot young mums, our TFC now has a separate breast-feeding corner, which provides privacy for young mothers to feed their child. More experienced mothers are encouraged to support those who are not comfortable with feeding practices, in this more relaxed environment. This has been a welcome and successful initiative in allowing younger mothers to overcome their shyness and lack of confidence, especially within the very conservative refugee community with whom we work.

Case **44**
Location: Bangladesh
Time: 2003
Source: Orla O'Neill, Concern Bangladesh
Issue: **Supporting infants too weak to suckle**

The mother is still encouraged to offer the breast, and supplemental sucking techniques have been used at the NRC to assist infants who cannot latch on, but to maintain the mothers milk flow. Even though the infant may be spoon or cup fed in the absence of breastfeeding, latching on and positioning the infant on the breast is still practiced and promoted. Continued and close observation of the infant and the mother is necessary, to assess if and when latching on becomes feasible when

the child is stronger, and to determine whether exclusive breast feeding will suffice the child's feeding needs.

Case **45**
Location: Bangladesh
Time: 2003
Source: Orla O'Neill, Concern Bangladesh
Issue: **Infants over six months during rehabilitation in TFC**

At the TFC, mothers are encouraged to work with the nutrition assistants to prepare solid foods, so that they are aware of the correct consistency and variety of foods appropriate to supplementary feeding. This allows us to manage complementary feeding in older infants who have been severely malnourished where re-introduction of solids, following phase 1 (milk only regimen), is required.

Mothers are encouraged to breast feed between feeds during the day. Infants less than 6 months are monitored to observe if breast feeding is sufficient and the child is satisfied. Infants over 6 months are encouraged to breastfeed on demand between supplementary feeds as per daily protocol.

Case **46**
Location: Bangladesh
Time: 2003
Source: Anna Maria Campos, CRS Angola
Issue: **Considering cultural context**

Cultural and traditional practices underlie infant and child feeding practices in Angola. Grandmothers are an important influence on how a mother manages her child. Any education strategies need to bear in mind that they may be carrying new messages that are contrary to practices engaged in for centuries.

Case **47**
Location: Bangladesh
Time: 2003
Source: Anna Maria Campos, CRS Angola
Issue: **Essential community involvement and participation**

In our community programme, community activists visit homes at least once a month. If they find a sick child, they advice the mother to bring the child to the clinic. They then return a few days later to ensure the child has been treated.

The community workers are voluntary women, identified by the community and live in the areas they are targeting. During the initial set up of the community programme, all the village elders are gathered together. CRS explains to the leaders the nature of the programme and that it will not involve any distributions but sharing of information. A general assembly is then held with all the community involved in choosing the most appropriate community members to train as health activists. The feeling is that the women who are chosen to act as activists are generally representative of the community. Inevitably there will be a leader's wife included, but overall the process is felt to be representative of the community at large.

In terms of monitoring of the activists activities, random visits are made by supervisors to homes. They carry out quick interviews with mothers to check whether they have received and understood the health messages.

Community activists do not receive any payment for their work, other than items that may have been donated to CRS, though payment is a frequent request.

Often the community activists use music and role play to carry out their activities. Once a year, a party is held in each community to which all the community is invited to. A quiz with questions and answers on health messages is held, with small prizes usually related to the topics, eg soap. All the community activists then perform their music, songs and dance that they use in their teaching activities. These sessions have proved very popular and are often "gate-crashed" by those from neighbouring villages.

In terms of training on breastfeeding support, two key areas identified are position of the infant and suckling technique. It is often believed that the nosier the sucking, the more effective it is. Pictures are used to illustrate techniques and an imminent addition to the training is a breastfeeding doll. Most of the women are illiterate, so information needs to be kept to the minimum. Every year, revision of training is carried out.

As back up to the activists activities, support is given to the health clinics in the area. Staff training is carried out, which has a more technical basis. Here, nurses often consider that nutrition education is not part of their role and tend to focus attentions on treatment rather than preventative activities.

Case **48**
Location: Not country specific
Time: 2003
Source: Kari Egge
Issue: **Frequent feeding advice in complementary feeding**

Current guidelines on complementary infant feeding recommend frequent feeding of infants and young children. Lower feeding frequency has been identified as a relevant contributing factor to malnutrition. There have been some successes in promoting frequent feeds but, in reality, it can be difficult to implement. Obstacles include lack of time of mothers, fuel scarcity, the practicalities of managing a household.

Sometimes in emergency situations, we, as field staff, can become "obsessed" with the needs of young children. This is understandable, however programming increasingly needs to consider family decision-making which may lead to choices that may not be entirely compatible with recommendations, but may be the most pragmatic decision for the household. For example, is it realistic (or fair) to expect a mother to prepare and give food to her youngest child, if there are other hungry children in the household? These issues are likely to increasingly feature in households of the chronically ill, which includes families with members living with HIV/AIDS.

Case **49**
Location: Southern Africa
Time: 2003
Source: Kari Egge
Issue: **Inappropriateness of the general food ration for older infants and young children**

There remains a failure to consistently and adequately meet complementary feeding needs in general rations. For example, currently in Southern Africa, although CSB/fortified cereal is in the distribution plan and is recognised as necessary, it is not being distributed due to pipeline difficulties. As a result, in Malawi maize, oil (with occasionally small amounts of CSB) are being distributed. There are very few alternatives to feed children, since the population are highly dependent on food aid. There is a strong risk of malnutrition and micronutrient deficiency (with unconfirmed reports of pellagra cases at some health centres). This issue is not getting the attention and priority that it deserves.

Case **50**
Location: South Africa
Time: 2003
Source: Kari Egge
Issue: **Potential commercial influences on infant feeding practice**

South Africa is more commercialised than many other areas in Africa. Here there are commercial companies that are responding to local needs and potential markets that are opening up as a result of the crisis. For example, food products that include mebendazole or fortified milk drinks have been marketed to NGOs. Whilst large NGOs with good technical knowledge may dismiss such advances, there is a risk of smaller operations availing of these. This is also a potential risk regarding infant formula, particularly in a population where it is generally available and artificial feeding has been practised. Also, with problems in the food pipeline in supplying appropriate foods in the ration for young children (i.e. lack of CSB), then there is a greater chance of local, and potentially inappropriate, commercial products being procured.

Case **51**
Location: Sierra Leone
Time: 2003
Source: Janet Omoro
Issue: **Community and cultural influences on infant feeding choice**

During my visits around Sierra Leone, I chatted with women in the host community regarding nutrition and health issues affecting their children. The main topics touched upon were the immunization status of their under-five children, children's health status, feeding habits and food choices. Reasons for food choices included what is available in the local markets at the time and what the household can afford. A number of the mothers who have had a reason to visit the health clinics did mention that there is nutrition talks given on what foods are good for children, but the reality is that they can only give what is available and at their disposal. Basically what this tells us is that in some of the communities, nutrition education may need to be combined with some collaborative action on other non-health sectors such as agriculture.

Concerning infant feeding, women suggested that they have been advised to exclusively breastfeed in the clinics. However, some remarked that they do not have enough breastmilk and besides, water, it is believed, is also good for the babies (culturally engrained practice). Consequently, despite the information they get, they “cannot” exclusively breastfeed.

My own observation is that a number of women in locations visited were definitely malnourished and there will be need to target them in selective feeding programmes. When a mothers’ nutritional situation is compromised by lack of adequate food, and given all the stresses of trying to provide food for her family, it is not uncommon to hear mothers complain of lack of breastmilk. This

applies to host communities, as well as refugee populations. However this is not the only factor. Even in the refugee camps of Sierra Leone, where there are supplementary feeding programmes for pregnant and lactating mothers, women continue to supplement breastmilk with water.

Case **52**
Location: Iraq
Time: 2003
Source: Anne Marie TerVeen
Issue: **Meeting the needs of artificial fed populations: the reality**

This is the first six months of a camp for refugees and internally displaced population - an emergency situation. The majority of mothers are not breastfeeding exclusively, and are used to receiving a distribution of infant formula for infants until the age of 12 months. Approximately 50% or mothers are illiterate and there are high rates of anemia in mothers and young children. There is a significant amount of malnutrition and infant diarrhoea. Powdered milk has been part of the routine monthly ration, but is likely to run out in the next 20 days.

People are arriving at the camps, there are Mother and Baby tents set up where they are to present. What do we do with infants 6-12 months when mothers who do not breastfeed ask for formula? The recommendations suggest formula for infants until six months but can we implement this in the immediate term, given the situation and what the population are used to? Do we say to mothers "sorry but use your own supplies of milk powder and we'll give you the micronutrient supplements to add to the milk" or do we opt for the more pragmatic option and give iron-fortified formulas (considering also high rates of anaemia) for the immediate (six months) phase of the emergency? We can then focus on the immediate factors that will influence survival of infants, e.g. water and sanitation, and build in strategies within the interventions to promote better infant feeding practice, e.g. support of exclusive breastfeeding for all newborns.

Case **53**
Location: Ethiopia
Source: Veronika Scherbaum
Time: 1991
Issue: **Relactation under extreme circumstances**

Note 1: *Three pictures available for this case study*

Note 2: *All use of this case study should acknowledge the contribution of Veronika Scherbaum in sharing a very personal and emotive account of her own experiences.*

The following interview[3] deals with an extraordinary experience which Veronika Scherbaum had with an abandoned baby while she was staying in Ethiopia with her husband and young son. They had gone to Ethiopia because her husband, a medical doctor, had contracted to work at a District Health Center in Nejo, West-Wollega, Ethiopia. Veronika worked as a nutrition consultant and did research with regard to improving the therapy of severely malnourished children, as well as home schooling of her son during her stay.

HB: Veronika, how did you become the surrogate mother of a newborn baby girl whom you then began to breastfeed?

[3] Veronika was interviewed by a close friend, HB, for the purpose of generating this case study for module 2.

VS: In 1991, close to the end of our three year stay in Ethiopia, I was recovering from a severe case of hepatitis A. At the same time the clinic was dealing with a meningitis epidemic and the clinic was understaffed and overworked. At this time a 16 year old girl came to the Clinic alone and complained of severe stomach cramps. Later in the day she delivered a baby girl. When the midwife gave the baby to her to breastfeed, she rejected the baby and refused to breastfeed it.
I can not begin to speculate about the mother's situation which lead her to her later actions. However, the fact that she was unaccompanied by another woman at the time of birth was highly unusual. A woman about to give birth is always accompanied by another woman who takes care of her during her clinic stay. She did not seem to know the cause of her stomach pains.

In any case, she left the clinic the next morning. The midwife saw her leaving without the baby. This caused alarm among the staff who began a search of the area to find the baby. Unfortunately, they were not successful.

Three days later a stillborn baby had to be buried behind the hospital. The clinic guard was in charge of this task and when he went to the allotted burial site, he saw a small hand reaching out from a mound of earth covered by thorn bushes. Because it was the dry season and the mother could not dig a grave, she had piled clumps of earth over the baby and then, to protect the grave from wild animals, covered it with thorn bushes. The baby had been able to survive.

Because the clinic staff was so overworked, my husband brought the baby to me although I myself was sick.
At least I was physically present for the baby.

HB: How did you finally begin breastfeeding the baby?

VS: Along with Alamitu, the woman who was helping in our household during the day, I began the project of spoon feeding the baby with cow milk diluted with water and added sugar. Although this was not a satisfactory dietary solution, there were no commercial baby milk products available at the time. Feedings were time consuming and the baby - which we called Talile - was still weak. Particularly nights were difficult when I was alone with the baby because my husband was often on night duty. I was still weakened by my bout with hepatitis and I quickly reached my own physical limits. Therefore, mainly for convenience, I started to breastfeed Talile during the night. Soon I noticed that my breasts had become firmer and I continued to breast feed her also during the next day in addition to spoon feeding. I had, of course, heard of women taking over for another woman with breast feeding in cases of need. It is a natural process and breastfeeding was fully established in about one week. In fact, I continued to nurse her day and night in order to avoid mastitis when my breasts became too heavy. As a nutritionist, I was also happier with giving her breast milk rather than diluted cow milk.

HB: What happened when you had to leave Ethiopia?

VS: Well, you can imagine that a strong bond developed between myself and the baby during the short time we were together. My husband and I actually went to Addis Ababa to inquire about the possibility of adoption. At the Ministry of Social Affairs we were told a child had to be an orphan with proof that neither parent was still alive. Of course this was not the case.

We returned to Nejo and found that our stay would probably be terminated earlier than planned because of the dangers of civil war in the region. I found an Ethiopian woman called Ebisse who would be able to take care of her when we left. Together we began a transition phase, which lasted

about two months. I slightly reduced breast feeding during this time while we both cared for the child. Talile is still in the care of this woman today.

HB: Have you remained in contact with the child or her caregiver?

VS: Yes, we have remained in contact and continue to support her. Unfortunately, the traumatic experience during the first three days of her life left her with some nerve damage, which has resulted in partial paralysis. Now, Talile is in school although she has learning difficulties.
I still do hope that Talile may have benefited for her future life from our common breastfeeding period.