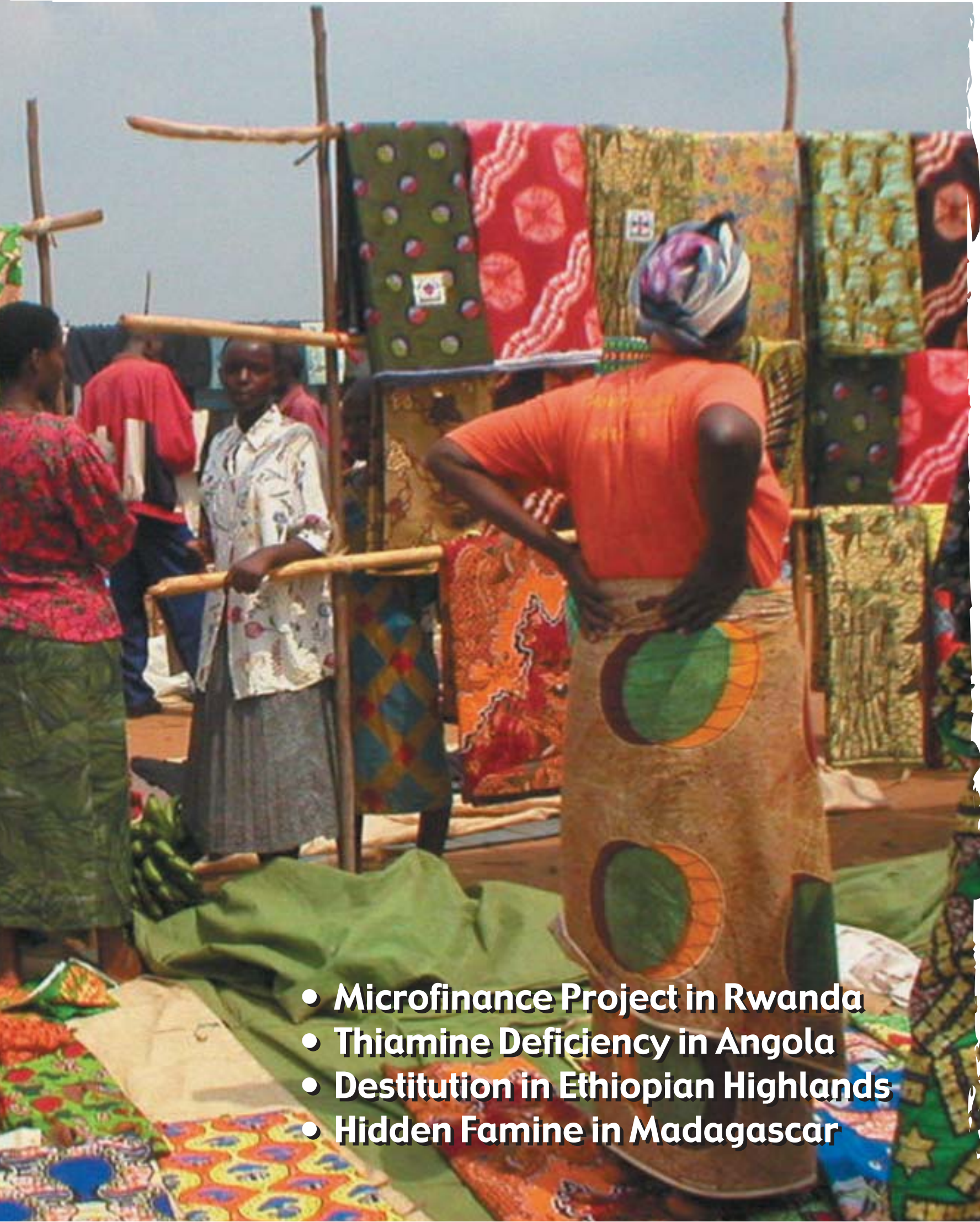


Field Exchange

Emergency Nutrition Network



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I stood perplexed in the bomb blasted shell of what had previously functioned as the regional children's hospital in Somalia's capital, Mogadishu. It was 1991, Somalia was a country gripped by the most brutal of civil wars. Benadir Hospital, Mogadishu acted as a therapeutic feeding centre for malnourished children. I had just been presented with a new admission, a tiny and malnourished infant of about two months of age - Zenab I think her name was. Apparently her mother was severely injured and fighting for her life in another hospital in the city, after the family home had been hit by a shell. Zenab was accompanied by a young aunt who had no children of her own. I remember feeling ill-equipped to deal with Zenab or others like her. She fell outside the standard guidelines for the treatment of severe malnutrition that we had established in the centre. She was 'supposed' to be breastfed and therefore protected from malnutrition. But clearly breastfeeding was not an option here. There were not many like Zenab at the time in Mogadishu but there were some. I remember the correct, but not very helpful, public health message 'breast is best' resounding in my ears. Everything I had learned told me that to buy formula (even if it was available) for this infant was not the right thing to do. I also remember thinking 'how come I don't know what to do with this case - someone somewhere must have been in this situation before and what did they do?'

Field Exchange was established to help field workers like me in similar situations. By providing a forum for sharing field experiences, the hope was that Field Exchange would allow challenges and lessons to be captured rather than lost and that guidelines would, as a result, become more contemporary and better reflect the field reality. It was also hoped that a publication like Field Exchange would help expose 'experts' and researchers to greater field reality.

Twelve years on and much has changed. Significant advances have been made in the food and nutrition sector of emergency response. Field Exchange has attempted to keep its audience up to date. However, there are still many areas where there is inconclusive research and where there is insufficient consensus and guidance. For example, in spite of all the advances in the management of severe malnutrition as well as in therapeutic foods, consensus among experts on how to manage young severely malnourished infants has yet to be achieved (see Debate on the Management of Severe Malnutrition, page 16).

There are also times when the need to demonstrate consensus seems to stifle debate and advance. It appears that in some situations, 'experts' would rather ignore field experiences (that often fail to meet rigorous research design standards due to the emergency context) which may call into

question aspects of current guidelines. This may be done in order to ensure there is consensus between guidelines, out of a legitimate concern that those in the field will be confused if there is more than one message. Whatever the reason, I believe Field Exchange has a responsibility to report independently, encourage debate and advance. This is not always easy and there have been several occasions where the ENN has come under considerable pressure not to publish what was seen as controversial debate or sensitive information.

Readers of Field Exchange will also be aware of the lack of unanimous guidance on supporting safe infant feeding strategies in emergency affected areas, where bottle and mixed feeding is common. This situation may partly reflect the blind adherence to 'dogma' and the fear that recommending anything other than breastfeeding will open the flood gates for the formula industry who will then go on to win 'the battle against the breast'. The assessment findings on infant feeding in Iraq (page 6) highlight how, for political reasons, formula milk is part of the general ration distribution. Though this contravenes best practice and negatively influences the prevalence of breastfeeding, there is a lack of clear practical guidance on appropriate interventions in such a context.

The experience contrasts with recent findings from Uganda (page 15), where HIV-positive mothers whom, after counselling, chose to use formula were not able to access the commodity. Both situations leave a lot to be desired if safe and appropriate infant feeding is to be achieved. Some agencies and institutions are working on this issue but more research is required. I commend the interagency 'core group on infant feeding in emergencies' for their strident efforts to develop practical guidance for field practice in this area.

In the absence of conclusive research, the sharing of programmatic experience is vital. Field workers need to 'keep it real', write in and describe the actual problems which are being encountered and the measures taken to overcome these, so that appropriate guidance can follow. Technical experts need to be open to debate and allow field experience to influence guidance and policy. They need to be pragmatic and develop guidelines for situations which actually occur e.g. where breastfeeding is not an option. More than anything, child well being should be the focus of efforts to improve practice.

So what happened to Zenab? The fact is I made the best of a difficult situation - something field workers often have to do. I scoured through the limited resources available to me, mainly from Oxfam feeding kits or what hadn't been looted from the agency's office and eventually found a 'home-made BMS recipe'. Zenab survived, mainly as a result of the care provided by her aunt, but did not grow very well. Today I would manage cases like this differently, thanks to the guidelines that have been produced and work done in this area resulting largely from the sharing of field experiences.

As this is my last issue of Field Exchange as ENN director, I would like to thank the Interagency Group of Nutritionists responsible for conceiving of the ENN and supporting its work over the years. I wish Marie Mc Grath and Jeremy Shoham every success in continuing the ENN and Field Exchange.

Fiona O'Reilly

Don Redding



Mother with malnourished children in Benadir Hospital, Mogadishu, Somalia, 1991

Lessons From a Microfinance Pilot Project in Rwanda



By Tamsin Wilson

Tamsin Wilson is an independent microfinance consultant. She coordinated Concern Worldwide's qualitative research on microfinance in Angola, Mozambique, Rwanda and Cambodia, and now provides technical support to the Rwandan microfinance programme.

The contribution of Concern Worldwide in producing this article is gratefully acknowledged.

This article describes Concern Worldwide's experiences in developing and managing an innovative microfinance project, Abazamukana¹, in Rwanda.

One of the legacies of conflict in Rwanda is poorer social cohesion. As a result micro-finance initiatives have not fared well. The type of micro-finance project described below relies more on individual participation than traditional models and has therefore proved to be a valuable tool in addressing post-emergency food insecurity. (Ed)

In 2001, Concern initiated a 3-year action research project on microfinance, funded by the Department for International Development-UK, and involving qualitative research in Angola, Cambodia, Mozambique and Rwanda. Informed by the findings of this four-country study², since 2002 Concern has been supporting the development of an innovative microfinance service, Abazamukana, in Rwanda, which was recently evaluation³.

Microfinance in conflict

Our knowledge of how, and indeed if, microfinance can work in war-affected environments has, until the end of the 1990's, been very limited. In the past, microfinance in war-affected countries has often consisted of short-term, poorly planned, rushed interventions by organisations under pressure to disburse funds quickly, using staff that has no expertise in microfinance. Clients have been provided with relatively large loans for long loan periods, to inject capital into the household economic activities. Unfortunately, these strategies and tactics have generally proved inappropriate, resulting in ineffective lending mechanisms, over-indebtedness of clients, poor repayment rates (significantly less than 98%), and low outreach. This has been partly due to diversion of loans to wealthier or more powerful members of the community, and

an over-emphasis on credit at the expense of savings and other services.

History of microfinance in Rwanda

Rwanda today is a relatively peaceful and stable country. Although people are very poor, rural markets are dynamic and organised and attract buyers and sellers from urban as well as rural areas. There has been very little restriction placed on microfinance organisations (MFOs) by the government of Rwanda and overall, this has probably encouraged more non-governmental organisations (NGOs) to get involved in microfinance than if there were exacting regulation. Despite what appears to be a fairly enabling environment, however, only 0.3% of the population have access to NGO microfinance services. With little competition and the highest population density in Africa, why has the entire NGO sector only attracted, on average, 2,900 clients per year since 1994? There are, of course, many causes but there are two particularly important constraints to microfinance. First, skills and education levels are very low, with 91% of the workforce engaged in agriculture, 80% of secondary teachers unqualified and less than one-half of civil servants with secondary education. Without skills, it is difficult to make use of financial services and without skilled microfinance staff, it is difficult to rapidly expand a MFO. Secondly, social capital has been

gravely damaged by the genocide. It created many sub-divided groups in Rwandan society and reduced the prevalence of traditional practices like gift giving, exchange, mutual assistance, collective action and protection of the vulnerable. Individuals are less open to joining microfinance groups when social capital remains so seriously damaged.

Project planning

Complementing the findings of the four-country research in 2001, the Abazamukana intervention was also developed using market research in Rwanda. As well as identifying a high population density (>300 persons /sq km), this preparatory market research provided a critical insight into the market environment, in particular:

- Clients disliked travelling to, and spending time in, group meetings and were willing to pay more for an individualised service.
- The majority (83%) of potential clients were willing to pay at least 5% interest per month on individual short-term loans (but individual loans were costly and risky to provide).
- Clients appeared to have less respect for NGO managed microfinance initiatives following the post-war emergency relief years, when loans were disbursed but not collected.



Steve Townsend, Concern. Rwanda

Mugina market place which is transformed into a place of great activity on the weekly market day



A bicycle repairer in Mugina market who is working with his third loan from Abazamukana

Steve Townsend, Concern. Rwanda

Steve Townsend, Concern. Rwanda



What is microfinance?

Microfinance is the provision of banking services such as savings, credit and money transfer to poorer people who cannot access ordinary mainstream banking services. Microfinance can be provided by specialist microfinance organisations (MFOs), by banks that downscale to reach the poor, by moneylenders, Credit Unions and by community-based organisations. Post-conflict microfinance sits on the edge of the mainstream microfinance sphere but it should not be considered a separate discipline.

- Clients needed to respond immediately to business opportunities and could not wait a long time for loans to be approved.
- Many clients disliked the conventional arrangement whereby all members of a group guaranteed the loan of a fellow member, and were required to repay the loan if the borrower could not.
- Clients could not afford the minimum savings balances and collateral requirement of the local Credit Union.

The weekly market was the focal point for thousands of local and city buyers and sellers, and would be a good location for a branch for cash transactions.

Project design

The design of Abazamukana and its products responded directly to the results of the market research. The poor image of NGOs in the area, who were well known for giving loans and not collecting repayments effectively, alerted Concern to the need to present Abazamukana differently to its predecessors. One approach would have been to create a wholly community owned and managed MFO, with little outside involvement. However, the approach chosen by Concern was to present Abazamukana as a permanent, professional and commercial banking service provider for poorer people. It rented an office in the market place, with a shop front very like others in the area, and aimed to project a serious, professional image.

Abazamukana’s first branch was established in the busy market square, offering innovative and flexible loan and saving products for individuals, rather than groups. Clients could deposit money in their savings account and withdraw money as frequently as they needed, simply by visiting the branch. Loans were made available for short periods of a few weeks or months and repayment was normally weekly.

As there were no group meetings, the organisation depended heavily on the credit agents who made several visits to every client in their own home, to build up a good relationship and mutual understanding before the first loan was disbursed. Because the credit agent and the branch manager approved loans, rather than a committee, clients normally knew in less than a week if their loan application had been successful. Repeat clients with excellent repayment records over the previous three loan cycles simply went to the branch and could immediately obtain a repeat loan of the same size as the last. Instead of group-based collateral, loans were guaranteed by a combination of 20% savings and a personal guarantee from a close family member who became responsible for the loan in case of default.

The credit agents did not carry any cash. Clients called in person at the branch to make all cash transactions, which meant that credit agents were not a target for theft when they travelled in the communities. Credit agents submitted completed loan applications to the branch and a separate cashier disbursed loans to the client.

The more flexible loan product saved time for the client but was more expensive for Abazamukana to provide. Therefore, the loan interest rate (of normally less than four months) was much higher than other MFOs in the area. For the first two loan cycles, 10% interest per month was charged. For subsequent loans, with client credit record established, the interest rate dropped to 5% interest per month. In contrast, the savings product did not create any income for Abazamukana, and therefore did not attract any interest. In the event that Abazamukana becomes a regulated MFO in the future, there is good potential to on-lend funds held, thus allowing savings interest to be paid.

Strengths	Weaknesses
<p>Clients like the individual loan and savings products. In the first nine months, 1,000 people became clients of Abazamukana.</p>	<p>Repayment rates fell sharply when there were delays in getting the motorbikes for credit agents and the organisation continued to disburse loans without any means of following up repayment.</p>
<p>Repayment rates improved when the loan guarantee was developed to include 20% of the loan deposited in the savings account prior to loan disbursement, and a personal guarantee from a close family member.</p>	<p>The initial loan guarantee, consisting of character assessment and social pressure applied by local committees, was not a large enough incentive for clients to repay</p>
<p>Even though this is a pilot project, Abazamukana was designed as if it were necessary for the organisation to become self-sufficient. This has had a positive influence on the attitude of credit agents and cashiers, and on strategic decisions made by management.</p>	<p>Abazamukana remains closely connected and totally dependent upon Concern. It was unsuccessful in distancing itself from Concern probably because Concern vehicles are used for transport, expatriate staff visit the project and for some time, the Concern logo appeared on the client passbooks.</p>
<p>Clients prefer to have credit agents visiting them in their houses rather than them attending group meetings. In a recent satisfaction survey, the majority of clients stated that Abazamukana’s loan was the cheapest in the area despite the fact that based on interest rate alone, it is the most expensive. Their analysis of the cost included non-financial costs like travel to meetings, attendance at meetings, and time spent waiting for loan approval.</p>	<p>Clients do not deposit large amounts of savings in their accounts because they are scared that the NGO Concern, like its predecessors, will one day leave and there is a chance that they might not get their savings back.</p>
<p>Situating the branch in the busy market square has meant that Abazamukana catches a lot of ‘passing trade’, especially on market days.</p>	<p>Short-term loans at high interest rates work well until clients delay repayments and the interest due builds up to un-manageable proportions.</p>
<p>The loan product is perceived to be for the poorest.</p>	<p>The savings product is perceived to be for richer people as there is a mistaken impression that the poor can’t save. In other countries it has been proven that even beggars can save.</p>
<p>By hiring an accountant, Abazamukana has been able to develop transparent accounting systems.</p>	<p>Some people, including a few community leaders, have taken loans without any intention of repaying. Furthermore, they have actively encouraged others not to repay the so-called ‘American money.’</p>
<p>Motorbikes, rather than 4x4 vehicles, are the most appropriate means of transport for the MFO as they keep costs low and suggest that this isn’t a ‘normal’ NGO project.</p>	<p>By not actively targeting women, the microfinance service was used more by men. Of the few people that hadn’t made a single on-time loan repayment, 70% were men, whereas of those with a 95% repayment rate, or better, 70% were women.</p>



Steve Townsend, Concern, Rwanda

Meat seller in Mugina market who has taken two loans from Abazamukana.

Strengths and weaknesses

In general, where Abazamukana strayed from the basic principles that underpin microfinance it has experienced problems, and where it has adhered to them it has been successful. The greatest challenge has been creating the conditions for clients to wish to repay their individual loan, in the absence of the tried and tested group guarantee mechanism. A combination of factors have been employed, including the alternative guarantee mechanism (20% compulsory savings and a personal guarantee), good education and close follow-up by staff, easy access to future loans if the last ones have been repaid, and the organisation projecting the image of a serious and permanent microfinance provider.

Lessons learned

Poor people will pay market rates of interest for a service that they value, and the cost of the savings or credit product is less important than its accessibility and convenience. Time is a precious commodity to poor people and they will pay more for a product that saves them time. Charging market rates of interest helps to create a microfinance service that can grow over time to help more people.

Individual loans can work, especially in areas where social capital has been eroded, but they are more risky than group-based loans. They require a combination of supporting factors, including close follow-up of late payers the day after their repayment falls due, an effective alternative guarantee, support of community leaders and the incentive of future loans to encourage repayment.

Good personnel are the single most important factor influencing the success of an MFO. Although staff are difficult to recruit in war-affected areas, an MFO like Abazamukana should have a professional microfinance manager and a professional accountant. Without this, the chances of success are significantly diminished.

Sustainability should be planned from the beginning. Whereas it is normally expected that MFOs will achieve self-sufficiency in 5-7 years, it may take a few years longer in harsh post-conflict environments. In the interest of sustainability, some necessary decisions may be unpopular with clients – it is impossible to meet all demands.

In-depth market research should be conducted before the MFO is designed, since war-affected situations are quite different to places where microfinance is normally found. However, while microfinance products must be adapted to their environment, they should always adhere to basic microfinance principles.

Poorer people need encouragement and incentives to believe that they should be putting away a few coins a week as savings. They also need to believe that their money is safe. If NGOs do not have a background and technical expertise in microfinance and a commitment to remaining in emergency relief countries in the medium to long term to support the microfinance services that they have established, they should not become involved in microfinance operations. ■

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¹'Abazamukana' is Kinyarwanda for 'Slowly, slowly, we progress together'

²Wilson, T. (2002) Microfinance during and after armed conflict: Lessons from Angola, Cambodia, Mozambique and Rwanda. <http://www.postconflictmicrofinance.org>

³Wilson, T. and Kidney, I. (2003) Concern Worldwide Rwanda: Abazamukana Mid-term Review Report. Internal document.

Comparison of the Efficacy of a Solid Ready-to-Use Food and a Liquid, Milk-Based Diet in Treating Severe Malnutrition

Summary of published research¹

The World Health Organisation (WHO) recommends a liquid, milk-based diet (F100) during the rehabilitation phase of the treatment of severe malnutrition. However, a dry, solid, ready-to-use food (RTUF) that can be eaten without adding water, thus eliminating the risk of water-sourced bacterial contamination, has recently been developed. This food is obtained by replacing part of the dried skim milk used in the F100 formula with peanut butter. RTUF is at least as well accepted by children as is F100, and its availability has raised the possibility of treating severely malnourished cases in the community. However, since the efficacy of RTUF has never been tested in a controlled trial, its recommendation for extensive use in the community might be premature. The objective of a recent study in Senegal was to compare the efficacy of RTUF and F100 in promoting weight gain in malnourished children.

The open-labelled, randomised trial took place in a therapeutic feeding centre attached to a clinic² in Dakar, Senegal, that is attended by poor families. Recruitment and follow-up were conducted between March and September 2001, the peak season for malnutrition. Eligible children were identified by the study physician, based on anthropometric criteria.

A total of 70 severely malnourished Senegalese children, aged between 6 and 36 months, were selected. Each was randomly allocated to receive three meals containing either F100 (n = 35) or RTUF (n = 35), in addition to the local diet. Most of the children (27 in F100 group, 29 in the RTUF group) were fed by their mothers, while the remainder (n=14) were fed by another member of the family. All efforts were made to have children fed ad libitum. Breastfed children were offered their meals after being breastfed.

Data from 30 children in each group were available for analysis. The main findings were:

- The mean daily energy intake in the RTUF group was 808 ± 280 kJ³/kg/day (95% CI: 703.8, 912.9) and in the F100 group was 573 ± 201 kJ/kg/day (95% CI: 497.9, 648.7, $p < 0.001$).
- The average weight gains in the RTUF and F100 groups were 15.6 g/kg/d (95% CI: 13.4, 17.8) and 10.1g/kg/d (95% CI: 8.7, 11.4), respectively ($p < 0.001$).
- The difference in weight gain was greater in

the most wasted children ($p < 0.05$).

- The average duration of rehabilitation was 13.4 days (95% CI: 12.1, 14.7) in the RTUF group and 17.3 days (95% CI: 15.6, 19.0) in the F100 group ($p < 0.001$).

These results suggest that RTUF, given in a supervised setting, is superior to F100 in promoting weight gain during the rehabilitation phase of the management of severe malnutrition. The authors of the study recommend that further work be undertaken to measure the effectiveness (in terms of weight gain) of RTUFs consumed at home. Weight gain at home is likely to be lower than that in a controlled setting since the RTUF might be shared with siblings and will be consumed with less supervision. Yet, achieving a rapid weight gain is not as important at home as it is in a residential treatment unit, for economic, social, and familial reasons. Also, the lower risk of cross infection from other children in a family setting makes a rapid recovery less important. A lower weight gain seems acceptable during home-based treatment; even so, the weight gain observed in the current study was over ten times the weight gain of well-nourished children of the same age.

The authors reflect that if effectiveness studies of RTUF and of its locally produced equivalents in a community setting yield positive results, the widespread use of these foods could change the way we treat severe malnutrition. ■

¹El Hadji Issakha Diop, Nicole Idohou Dossou, Marie Madeleine Ndour, André Briend, and Salimata Wade (2003). Comparison of the efficacy of a solid ready-to-use food and a liquid, milk-based diet for the rehabilitation of severely malnourished children: a randomised trial. *Am J Clin Nutr* 2003;78:302-7.

²Dispensaire Saint Martin, Rebeuss, Dakar, Sénégal

³Conversion of kJ to kcal: $\text{kJ} \times 0.2388 = \text{kcal}$



Kwashiorkor case, before and after management using RUTF (oedema resolved). Nutritional Rehabilitation Centre (Dispensaire Saint Martin), Senegal 2001

Infant Formula Distribution in Northern Iraq

Summary of assessment¹

Veronika Scherbaum



Mother breastfeeding, Northern Iraq, 2003

Between 19th June and 12th July, 2003, a nutrition and mother and child health assessment was carried out in Northern Iraq (NI), commissioned by Caritas Austria and Cordaid Netherlands. Focusing on the needs of those in the Kirkuk and Mosul areas (both internally displaced people (IDP) and returnees), the objectives of the consultancy included an assessment of the situation of the local hospitals and the health centres in terms of coverage and treatment of malnourished children, and an estimation of the impact of the cessation of the Oil for Food (OFF)² programme on the malnourished. The investigations were based on a collection of qualitative and quantitative data, including epidemiological health and nutrition indicators (where available), institution-derived data and qualitative information from interviews with staff and beneficiaries. This summary focuses on the observations and concerns regarding the inclusion of infant formula in the general food ration.

Oil for food (OFF)

Since 1996, the World Food Programme (WFP) has been responsible for the distribution of food aid to the northern regions, as provided by the Government of Iraq (GOI) under UNSCR 986 distribution plans. The significant improvements in both chronic and acute malnutrition in NI since 1996 can be related to the cumulative effect of improved household food security (continuous distribution of food rations via OFF), implementation of an OFF-associated targeted nutrition programme (TNP), increased health

Research

inputs and improved local economy.

The current distribution of the general ration is scheduled to continue until November 22, 2003³. One general ration supplies about 2200 kcal per person per day and is usually distributed on a monthly basis (a 3-monthly food ration was distributed before the war started). For the last trimester of pregnancy and the first four months after delivery, a woman receives an additional ration of 1 kg sugar (from WFP)⁴ and High Protein Biscuits (from UNICEF). A family with an infant below 1 year of age receives an additional ration of 3.6kg infant formula (8 tins per month), 0.9 kg complementary infant food, 1 bar of soap and 0.5kg detergents.

Infant formula distribution

Since 1997, the distribution of infant formula in NI has increased from 1.8 kg to 3.6 kg per month. A recent survey in NI found a high percentage of bottle-fed infants (64%), ranging from 51% (0-2 months) to 69% (9-11 months), and representing a 25-30% increase since August 1996⁵. Correspondingly, exclusive breastfeeding rates were low, at 7% for infants aged 0-6 months. Between 6 and 9 months, just over half (53.4%) of infants received complementary food in addition to breastfeeding, despite their inclusion in the ration (currently 0.9 kg/month). The most commonly reported health problems were diarrhoea and acute respiratory infections⁶.

According to information from beneficiaries, the current distribution system is inadequate. Infant formula No. 1 (suitable from birth to 6 months), No. 2 (follow-on formula, six months onwards) and Cerelac (a commercial weaning food) are given on a monthly basis to each infant during the first year of life, sometimes irrespective of his/her age⁷. The instructions on the infant formula are written in English and Arabic only and not in Kurdish language, even then 51% of the women in NI are illiterate. No acknowledgement or advice is given on the use of different formula by age - if mothers have no knowledge about this difference in the composition of breast milk substitutes, or have no possibility to exchange the tins with relatives or neighbours, infant feeding is very likely to be greatly inadequate.

The presence of infant formula in the food basket continues to discourage mothers from breastfeeding. In addition, it is frequently mixed with unclean water, available in limited quantities and handled under extremely hot conditions. Consequently, bottle-feeding coupled with inadequate water and sanitation facilities is a major contributing factor to infant malnutrition, morbidity and mortality, especially for those living in remote areas where there is limited access to medical facilities.

Reports of health institutions suggested an association between severe malnutrition among infants and the high prevalence of bottle-feeding in NI. For example, in Erbil governorate, 44.7% of severely malnourished admissions were below the age of 6 months, of whom none were exclusively breastfed, nearly one-third (30.7%) of the infants were exclusively bottle-fed and 69.3% received mixed feeding (bottle and breastfeeding)⁸. Furthermore, institutional based data and visits to four different paediatric wards revealed several limitations in the management of severe malnutrition. These included lack of therapeutic milk and modified oral rehydration solution during the initial stage of treatment and lack of awareness about the importance of a rehabilitation phase. Education on infant feeding practice was also lacking. During visits by the assessor, mainly undiluted ORS - sometimes mixed with therapeutic milk - was offered by feeding bottles for severely malnourished children with diarrhoea. Mothers continued to offer mixed or bottle-feeding during their stay in the hospital as they did before admission. Many of the mothers with children admitted in paediatric wards believed that they did not have enough breast milk.

A UNICEF study in NI (2002)⁹ revealed that 51.1% of doctors and health staff have not yet heard about the concept of exclusive breastfeeding.

Recommendations

The following recommendations were made as a result of the assessment:

The untargeted distribution of infant formula is inappropriate. Strategies to protect and support breastfeeding are urgently required. Breast milk substitutes should only be distributed to infants where the individual need is specifically established. The current system is, undoubtedly, contributing to infant morbidity and malnutrition rates, in a region ill equipped to deal with the consequences.

Worryingly, plans to meet infant feeding needs after November 2003 are not confirmed. A new food distribution system, targeting vulnerable groups according to predefined social/health and nutrition-related criteria such as young children, pregnant and breastfeeding mothers, elderly and disabled people is needed, rather than a blanket distribution of food to the whole population.

Training of medical personnel is urgently needed in promotion of exclusive breastfeeding and the management of severe malnutrition.

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Veronika Scherbaum

Returnees in a rural area of Dibaga sub-district in Erbil governorate, Northern Iraq, 2003

¹Final Report, Nutrition/Mother and Child Health Consultancy in Northern Iraq, 19/6 - 12/7/2003, Dr. Veronika Scherbaum, on behalf of Caritas Austria and Cordaid Netherlands.

²A Memorandum of Understanding (MOU) was signed in 1996 between the United Nations (UN) and the Government of Iraq (GOI). The UN Security Council Resolution (SCR 986) permitted the GOI the export of \$2 billion of petroleum every 6 months and the use of the revenues to import items related to basic humanitarian needs of the population.

³Source: WFP nutritionist in Suleimanyiah, Northern Iraq
⁴At the time of the assessment, WFP provided 1kg sugar and 4kg of oil (substituted with pulses when oil not available) to this group. This ration has since been revised to 2kg oil, 1.02kg cheese, 1kg milk (18 September 2003).

⁵UNICEF, 1996 multiple indicator cluster survey - Iraq, results from Northern governorates.

⁶UNICEF-Northern Iraq and the Regional Ministries of Health & Social Affairs. Nutritional status of children in autonomous Northern Governorates (Dohuk, Erbil and Suleimanyiah) of Iraq, data collected November 2002, report 23 March 2003.

⁷The ration scale of infant formula (3.6 kg per month) was planned by the Iraqi Trade ministry, and is not a standard scale of the WFP programme. Source: WFP Nutritionist, Suleimanyiah, Northern Iraq.

⁸Directorate of Health data from Erbil Nutrition Rehabilitation Centre, n=144, Jan to March, 2003.

⁹UNICEF-Northern Iraq (2002) KAP survey on exclusive breastfeeding among doctors and health staff.

Infant Formula Distribution in Northern Iraq

By the World Food Programme (WFP)

Given the considerable reference to WFP activities in this assessment, WFP were invited to offer their perspective.

There are a number of points which the WFP would like to raise, in light of the assessment findings from Iraq. Under the oil for food (OFF) programme, the Ministry of Trade (MOT) has been responsible for procurement of all food commodities including infant formula. WFP is responsible for the distribution in Northern Iraq only and not in the centre and the south. Following the war in 2003, WFP is facilitating the procurement of all commodities already negotiated by the MOT.

With regard to targeting infant formula I and II by age, this issue was also raised by the WFP and United Nations Office of the Humanitarian Coordinator for Iraq (UNOHC) food observers in 1997/98, when the Government of Iraq was responsible for procuring and distributing the food ration. As part of WFP's observation mandate, WFP analysed the nutrient contents of formula-I and formula-II distributed in Iraq in 1998 (over 60 brands) and did not find significant difference in contents of the two formulas. Following a request for advice posted on Ngonut¹, personal communication from two nutritionists/professors suggested the differences reflected marketing stunts rather than any real difference in nutrient profile. WFP, therefore, saw no reason to advocate for pursuance of the expensive, and almost impossible, task of identifying infants below and above 6 months of age and then plan, procure, transport, and distribute different milks to such a large, and changing, population on a monthly basis.

Breast milk substitutes should only be distributed to infants where the individual need is specifically established - this is internationally agreed upon policy. Despite WFP's consistent advice against the blanket distribution, the MOT has not agreed to exclude infant formula from the general ration. This is to avoid any disquiet that is likely to occur when an established ration is reduced/modified in the prevailing political situation in Iraq, especially given the discontent shown in 1996 when infant formula was removed from the ration by the government. At present, UNICEF is trying to develop a strategy for targeted distribution, in collaboration with the Ministry of Health and Ministry of Trade.

Regarding plans for after November 2003, WFP is mandated by the UN resolution to take the responsibility of Public Distribution System of Food until November. After that it becomes the responsibility of the Coalition Provisional Administration (CPA) whose plans are not yet available. ■

¹ Ngonut was a forum of email exchange between nutritionists, since replaced by Nutritionnet (www.nutritionnet.net)

What Triggers Humanitarian Intervention?

Summary of published paper¹

It is commonly assumed that massive media coverage of a humanitarian crisis will lead to increased allocations of emergency funds. This is often referred to as the 'CNN effect'. A recent study has examined the validity of this assumption.

The hypothesis of the study is that three main factors, working either in conjunction or individually, determine the volume of assistance. These are the intensity of media coverage, the degree of political and security interests that donors have in a particular region or country where a crisis occurs, and the institutional framework and strength of the network of humanitarian organisations involved in the country or region concerned.

In the study, four case-study comparisons are made. The first examines the Indian cyclone of October 1999 and the Mozambique floods of late-January 2000. The remaining three comparisons deal with complex emergencies and involve Angola, Sudan, the Balkans, the Democratic People's Republic (DPR) of Korea, and Afghanistan.

Data on the level of media coverage and volume of emergency assistance were collected for each case study. Media sources were two major television channels in Denmark, as well as 23 leading newspapers; United Kingdom (5), Germany (3), France (3), Italy (2), the United States (7), Spain (1) and Denmark (2). Financial data were derived from OCHAs² and ECHOs³ databases. Data on level of media coverage were collected for selected periods of time, namely at three month intervals during the central years.

Data were also gathered about the scope and severity of the unfolding emergency situation and the need for outside assistance. Attempts were made to judge the number of people affected and/or the need for food assistance. For the India and Mozambique comparison, figures were compiled from the CRED/OFDA⁴ database. For the other situations, figures were derived from the relevant UN consolidated inter-agency appeals (CAP) and mid-year CAP updates. Other sources of data included World Food Programme /Food and Agricultural Organisation food aid needs estimates. It was not possible to derive any quantifiable indicators for level of stakeholder commitment to a given crisis, thus this part of the analysis is built upon qualitative judgements.

Apart from the India - Mozambique comparison, none of the other cases lead to an 'unambiguous confirmation' that media attention is the most significant explanation as to the amounts of emergency aid going to specific crises. For example, the conspicuous differen-

ces in aid allocations to Angola, Sudan and Kosovo in 1999 were undoubtedly also a result of immense vested European political and security interests in Kosovo. The authors of the study claim that the massive international emergency assistance to Kosovo became one of a number of crisis management tools used by Western powers in their warfare against the Serbs. They make the same claim about Afghanistan after September 11th where here, security concerns were at the forefront so that the sudden massive level of international assistance became an instrument for crisis management. Similarly in North Korea, donor interests - or more specifically security concerns - were paramount. In the words of the authors, "it seems difficult to explain the relatively high level of emergency assistance to a Communist one-party state with extremely limited media access and very meagre possibilities for aid evaluation".

The authors also assert that even crises that are largely ignored by the media may very well uphold a substantial, albeit insufficient, level of emergency assistance - either because there are significant donor interests in the area or because the stakeholder commitment is long-lived and strong. Sudan and Angola are held up as examples of this, where humanitarian networking and continuous lobbying by well co-ordinated United Nations agencies and international non-governmental organisations are prevalent.

The study concludes that media attention is no more crucial than donor interests in mobilising international resources for humanitarian crises. Rather the case seems to be that the media play a crucial role only when there are no vital security issues at stake, namely when a humanitarian crisis occurs in a place of little strategic importance to aid-funding governments.

The authors also suggest that natural disasters and complex emergencies have a greater tendency to become 'forgotten crises' when major aid donors have no particular security interests vested in the afflicted regions. In such cases, two factors may very well determine the volume of emergency aid that is allocated - the presence and strength of humanitarian stakeholders in the region, and the curiosity and persistence of the international press. ■

¹ Olsen G, Cartensen N and Høyen K (2003). Humanitarian Crises: What determines the level of emergency assistance? Media coverage, donor interests and the aid business. *Disasters*, 2003, 27 (2); pp 109-126

² Office for the Co-ordination of Humanitarian Affairs (OCHA)

³ European Commission Humanitarian Organisation (ECHO)

⁴ Centre for Research on the Epidemiology of Disasters (CRED)/Office of United States Foreign Disaster Assistance (OFDA)

Destitution in Ethiopia's Northeastern Highlands

Summary of unpublished report¹

Working with a number of local partners, the Institute of Development Studies (IDS) and Save the Children UK (SC UK) have recently published a report on destitution in Ethiopia's north eastern highlands. The background for the study was conflicting evidence over whether poverty in rural Ethiopia was increasing, as well as a growing concern that diversion of increasing volumes of international assistance, to meet emergency appeals and annual food deficits, was displacing investment to address the underlying causes of chronic food insecurity.

The study area encompassed three zones of Amhara National Regional State, formerly known as Wollo province. Of a population totalling approximately 4.5 million, 90% were rural dwellers and engaged in smallholder agriculture as their primary occupation. Funded by the Department for International Development (DFID), the study set out to provide answers to the following questions:

- What is destitution?
- How do people become destitute?
- How many people in Wollo are destitute?
- Is destitution in Wollo increasing?
- What are the most appropriate policy measures to address destitution in Wollo?

Destitution was defined as a state of extreme poverty that results from the pursuit of unsustainable livelihoods, meaning that a series of livelihood shocks and/or negative trends or processes erode the asset base of already poor and vulnerable households until they are no longer able to meet their minimum subsistence needs. They lack access to the key productive assets needed to escape from poverty and become dependent on public and/or private transfers.

Fieldwork-based data were collected during the dry season months of November 2001 to March 2002. A household questionnaire was designed and administered to a stratified multi-stage random sample of over 2,000 households. The questionnaire included sections on household demographics, livelihood activities, ownership of and access to productive resources, migration, participation in social institutions, access to formal and informal transfers, achievement of basic needs, and a self-assessment of household well-being.

In order to determine numbers of destitute, three approaches were used.

i) To facilitate self-assessment, households were asked "are you unable to meet the household's needs by your own efforts and unable to survive without support from the community or government?" In response to this, 14.6% households were classified as destitute, over half (54.9%) were classified as vulnerable, and 30.6% were considered to have viable livelihoods.

ii) Seventeen indicators of destitution were assessed, with cut-off points for each indicator applied. The proportion of households classified as destitute in terms of a single indicator ranged from 4.2 to 41.1%, with an average of 19.4%.

iii) A composite destitution index, combining



Kay Sharpe

A blacksmith and a potter



Kay Sharpe

Mapping urban linkages



Kay Sharpe

Counting households

the 17 single indicators, was scaled and weighted using principal components analysis. Overall, 95% of the 310 self-assessed destitute fell in the bottom 40% of households, as ranked by the destitution index. The 293 households that satisfied both these criteria were defined as destitute (13.8%), and much of the subsequent analysis was based on comparing this distinct group against the larger sample.

The study found that destitution in Wollo is gendered. One in three female-headed households, compared to one in twelve male-headed households, was destitute. Destitute households were more likely to be smaller than average – more than half of all single-person households were destitute – contradicting the common assumption that the poorest households tend to be large, with high dependency ratios. Labour constraints were also highly significant determinants of destitution. In this study, two-thirds of destitute households had no able-bodied males.

Respondents were asked to categorise themselves at four points in time – ten years ago, two years ago, one year ago and at time of interview. This showed that the proportion of destitute had increased nearly threefold over the past 10 years, from 5.5% to 14.6%, while vulnerable households had increased even more dramatically from 17% a decade ago, to 55% in 2001/2.

The analysis found that carrying capacity is the main cause of destitution – too many people trying to make a living from too little land. The poorest households in Wollo faced resource constraints of all kinds – land, livestock, labour, credit, inputs – which inhibited their ability to construct viable livelihoods and left them highly vulnerable to shocks that could push them over the edge at any time. Dependence on rain-fed agriculture, for example, exposes rural communities to recurrent livelihood shocks following rain failure. Idiosyncratic shocks are another source of destitution, i.e. loss of adult males through divorce or widowhood, or major health shocks like HIV/AIDS.

The authors of the study concluded that for the labour constrained destitute, little can be advocated except more comprehensive and effective safety nets or social protection transfers, although these are expensive and logistically complex to administer. For the working destitute, enhancing their access to productive resources is arguably the only feasible way of reversing processes of impoverishment, phasing out chronic dependence on food aid and empowering poor households to achieve sustainable livelihoods. Access can be improved, not only through asset ownership, but also community ownership. Support to both farming and the rural non-farm economy is essential. This requires market integration, investment in infrastructure and small town development. Proximity to small towns provides a clear route out of destitution and vulnerability for rural households and communities in the catchment area. Recommendations, therefore, fall into two categories, those that promote enhanced access to assets and those that promote more productive livelihoods. ■

¹ Sharp K, Devereux S and Amare Y (2003). Destitution in Ethiopia's northeastern highlands (Amhara National Regional State). IDS, SC-UK Ethiopia. A policy research project funded by DFID. April 2003

Famine Avoided Despite Drought and 'Zud' in Mongolia

Summary of published paper¹

Nomadic herding remains at the core of Mongolian society, employing a significantly larger proportion of the population than any other economic activity. A series of liberalising reforms between 1989 and 1992, sparked by the breakdown of the Soviet Union and a termination of subsidies, led to the privatisation of the herd collectives (negdels) and the wholesale transfer of livestock and other assets to private ownership, mainly by individual herders. Services, formerly provided for free, were mostly either discontinued or made available only at a cost. As a result, use of these services contracted or collapsed. The number of herding households more than doubled from 69,000 in 1989 to 154,000 in 1993, as newly unemployed city-dwellers sought to take advantage of the privatisation of negdel herds while fleeing food and job shortages in urban areas. Cash shortages in the countryside led to the reappearance of a barter economy and a sharp decline in the consumption of purchased foods in favour of self-provisioning.

A recently published article based on field research in two districts of Bayankhongor province Mongolia, examines how famine has been avoided amongst the population against a backdrop of 'Zud', despite the increased risk associated with this form of subsistence. Zud denotes any one of a range of winter conditions which threaten livestock survival, such as unusually abundant snowfall, the formation of an impenetrable ice layer over pastures, or a lack of sufficient winter fodder following a summer drought or due to soil compaction by grazing animals. In the past decade, Zud winters in 1993 and 1997 were followed by an unprecedented three-year sequence of dry summers and extremely harsh winters between 1999-2002. Weakened by inadequate summer feeding and lacking sufficient supplementary feed, several million animals died each winter in blizzards and temperatures as low as 50 degrees below zero in some areas. Overall, the national herd size decreased from 33.6 million in 1999 to about 25.1 million in April 2002.

Between 1999 and 2002, the number of livestock in the study area declined by 65% in one district and 22% in the other, as a result of Zud. Over two weeks, 14 herding households, most of whom had suffered heavy livestock losses, were interviewed in each district about coping strategies employed, help received and recovery prospects. Additional information was obtained by consulting statistics and interviewing officials and NGO staff at state, provincial, and district levels.

Why was there no famine?

One reason posited by the authors is the existence of democracy. Mongolia has had an active democratic system since 1989, with a powerful elected parliament containing representatives of several parties, an active opposition and a free press. The devastating impacts of the droughts and Zuds of 1999-2002 have been debated at length in parliament and in the newspapers. The government has been open about what was happening and within the limits of its resources, has acted effectively.

Another reason is the behaviour of herders. Winter preparation by herders has been important. Although the lack of milking animals had a significant impact on food quality, winter food stores – augmented by borrowing – ensured that for most herder households, the real impact of animal losses on livelihoods was delayed. Good income from cashmere sales filled the gap in 1999-2000. When cashmere and other livestock products income crashed after 2000, herders turned to alternative sources, relying particularly on pensions and other social insurance benefits as well as on assistance from family and patrons, to maintain a minimum level of consumption while conserving their remaining herd. Extra loans were sought, as was supplementary income in farming, gold mining and casual jobs. In 2000, some households benefited from generous relief and restocking.

However, the authors caution that after three Zuds in as many years, each following a drought summer, the capacity of some households may be stretched to near collapse. One indication of this is the recent increase in child malnutrition in Bayankhongor province, which doubled between December 2001 and May 2002. While most households had sufficient food at the end of 2002 derived from a bundle of food and income sources, many are extremely vulnerable and are likely to face severe difficulties as winter stores run out, new loans are not available and old ones cannot be repaid.

In a broader sense, coping in terms of maintaining a sustainable livelihood has failed for many households. For poor households with small herds and little prospect of acquiring more animals, herding no longer yields enough to provide for long-run subsistence. Realising this, many herders, particularly in the Gobi region, are considering migration to cities in order to find non-herding employment. Many have already done so and nationally the rural population has decreased, for the first time since transition, by 7.6% over the past 2 years.

Others who either do not want to migrate or are constrained by lack of funds, obligations to care for elderly parents in the countryside, or owing to the absence of city-based family or friends, are seeking alternative sources of income in or near their home districts.

The authors conclude that for many households, the losses of the last winter have triggered the beginning of 'coping failure' and the necessity to switch from 'coping' to 'adaptation' – moving from short-term responses to temporary food shortages, to permanent changes in the ways in which food is acquired. Unlike farmers, herders with too few animals cannot hope that a single good year will restore them to economic health. If another Zud occurs before herders have had an opportunity to re-build their resource bases, the resulting increase in food insecurity and economic and social upheaval for affected households may well be far more widespread. ■

¹ Siurua, H and Swift, J (2002). Drought and Zud but no famine (yet) in the Mongolian herding economy. IDS Bulletin vol 33, no 4, 2002

Government versus NGO efficiency, Bangladesh

Summary of published paper¹

It is often assumed that during emergencies, nutrition and food interventions can be more efficiently managed by NGOs than by government. A recent study on an integrated nutrition programme in Bangladesh may challenge this assumption, even though the programme was conducted in a non-emergency setting. The study also found that the supplementary feeding component of the intervention was very costly in terms of providing calories. Given the limited data in the public domain on the costs (and cost-efficiency) of emergency supplementary feeding programmes, the findings may be of interest to emergency programme planners - Ed

The Bangladesh Integrated Nutrition Programme (BINP) was adopted to improve the nutritional status of the population, especially of women and children, through community based nutrition interventions. The community based nutrition component focuses on growth monitoring of children, dissemination of nutrition-related information and supervised supplementary feeding of target women and children in Community Nutrition Centres (CNCs) at village level. The government has adopted the National Nutrition Programme (NNP) based on experiences and lessons learned from the BINP, and intends to provide a similar mix of services to those being delivered under the BINP. Scaling up the activities to the whole country will cost approximately 150 million dollars a year.

The BINP experimented with two models of delivery, one using government management structures and the second using non-governmental organisations (NGOs) working in the local community. A recent study has compared the efficiency of the government of Bangladesh (GOB) and NGO management in the provision of nutrition services and involved a detailed cost-

ing to estimate cost of delivering nutrition services from the CNCs. The number of individuals enrolled, the number actually participating in the programme, and person-days of service delivered were used as effectiveness measures.

Thirty-five CNCs were randomly selected from five BINP areas, of which 21 were in GOB-run areas and 14 in NGO-run areas. The cost of providing nutrition services per enrollee was US\$24.43 for GOB-run CNCs and US\$29.78 for NGO-run CNCs.

The analysis implies that the NGO facilities are not more efficient in the delivery of nutrition services when cost per person/days of service delivered is considered. One potential criticism of this type of comparison is that it assumes enrolment and participation without looking into potential mis-targeting. If the expected enrolment is calculated by using prevalence of malnutrition rates found by the BINP, it is clear that enrolment rates were lower in GOB facilities and higher in NGO facilities than otherwise expected for rural Bangladesh. However, enrolment does not equal participation. Re-estimating the cost-effectiveness measures with expected enrolment

numbers makes the NGO facilities even less efficient compared to GOB facilities.

On average, the BINP delivered food supplementation of 480 kcals per participant at a cost of about US\$0.25 per day. Allowing for administration and management costs, the actual food cost becomes US\$0.20 per participant per day. If the project were to use this amount of money to buy rice from the local market, the calorie content of the rice would be more than 2000 kcals. Unless the food supplementation process generates other types of benefit, such a high level of cost cannot be justified. The study authors conclude that even if other benefits such as nutrition education and community involvement are generated, policy makers should compare a programmes' relative efficiency and effectiveness with its separable components, to determine whether concentrating on specific components will generate higher levels of social benefits per dollar spent. ■

¹ Mahmud Khan, M and Ahmed, S (2003). Relative efficiency of government and non-government organisations in implementing a nutrition intervention programme – a case study from Bangladesh. *Public Health Nutrition*; 6 (1), pp 19-24, 2003

Women's Contributions to Reducing Micronutrient Deficiencies

Summary of published research¹

A number of agencies have adopted 'gender sensitive' policies, which aim to strengthen the role of women in controlling intervention resources in emergencies. The rationale for such policies is that empowerment of women will contribute to improved impact of the intervention. The findings of a recent study in non-emergency situations lend some support to this approach. (Ed)

The International Centre for Research on Women, with partners in Ethiopia, Kenya, Tanzania, Peru and Thailand, implemented an intervention research programme to find ways to strengthen women's contributions to reducing micronutrient deficiencies. The trial interventions focused on:

- Improving women's skills and knowledge in food production, processing and preparation methods and feeding practices, to improve vitamin A intake in Ethiopia.
- Promoting the adoption of new varieties of beta-carotene-rich sweet potatoes by women farmers in Kenya and encouraging their consumption to improve vitamin A intake.
- Increasing women's access to, and utilisation of, a modified solar drying technology to increase year-round availability of vitamin A-rich foods in Tanzania.
- Strengthening women's skills in decision-making, problem solving and management to improve quality of services in Peruvian commu-

nity kitchens and improve iron status of kitchen members and other consumers.

- Strengthening women's problem-solving and leadership skills to organise community-based interventions and so reduce vitamin A, iron and iodine deficiencies in rural Thailand.

All five country interventions achieved significant nutrition outcomes and succeeded in reaching their nutrition objectives in less than 18 months. The approaches appear to have achieved objectives in two specific ways – first in terms of entry point and second, in terms of decision-makers. The Ethiopia, Kenya and Tanzania studies began by addressing women's practical resource needs as they related to food production, care and feeding practices. The Thailand and Peru studies began by strengthening women's capabilities as problem solvers, decision-makers and community leaders, followed by development of nutrition specific interventions that addressed women's practical resource needs.

The two approaches are described in the article as the 'power and technology pathway' and the 'technology' pathway. The entry point for the two-step power and technology pathway strengthens individual capabilities to solve problems, take decisions and lead their communities. This pathway merges with the 'technology' pathway when the decision-makers identify the practical resources needed to improve access to food, care

and health and develop interventions based on that diagnosis. The author suggests that as individuals realise their power to make decisions, lay claim to resources and exercise freedom of choice, they may engage the very institutions that created and perpetuated differential power dynamics. Thus, the "power and technology" pathway will lead to more sustainable nutrition outcomes.

The Thailand and Peru studies took a total of 9 and 16 months respectively, while the other studies took between 9 and 18 months. Even more remarkable was the time needed for the nutrition-specific intervention in Peru, taking a mere four months to implement and demonstrate equivalently significant results. The authors suggest that the relative efficiency and effectiveness of the Peru and Thailand studies probably reflects 'who' made the decisions. In the Peru and Thailand cases, women applied their enhanced skills to make decisions about which problems they needed to address and how to solve them, including the types of resources they needed and means to access them. The development professionals served as facilitators and technical resources, not as the primary decision-makers. In contrast, the decision-makers in the other studies were the research team. While community members, including women, provided information to the technical specialists and participated in the intervention trials, their decisions were limited to the choice of whether or not to adopt a technology or modify a practice.

The authors state that although care must be given to drawing conclusions from this retrospective analysis, it should not be a surprise that investing in women's decision-making power and expanding their freedom of choice was an efficient and effective way to achieve results ■

¹ Johnson-Welch, C (2002). Explaining nutrition outcomes of food-based interventions through an analysis of women's decision-making power. *Ecology of Food and Nutrition*, 41, pp 21-34, 2002.

Hidden Famine in Madagascar

Summary of published paper¹

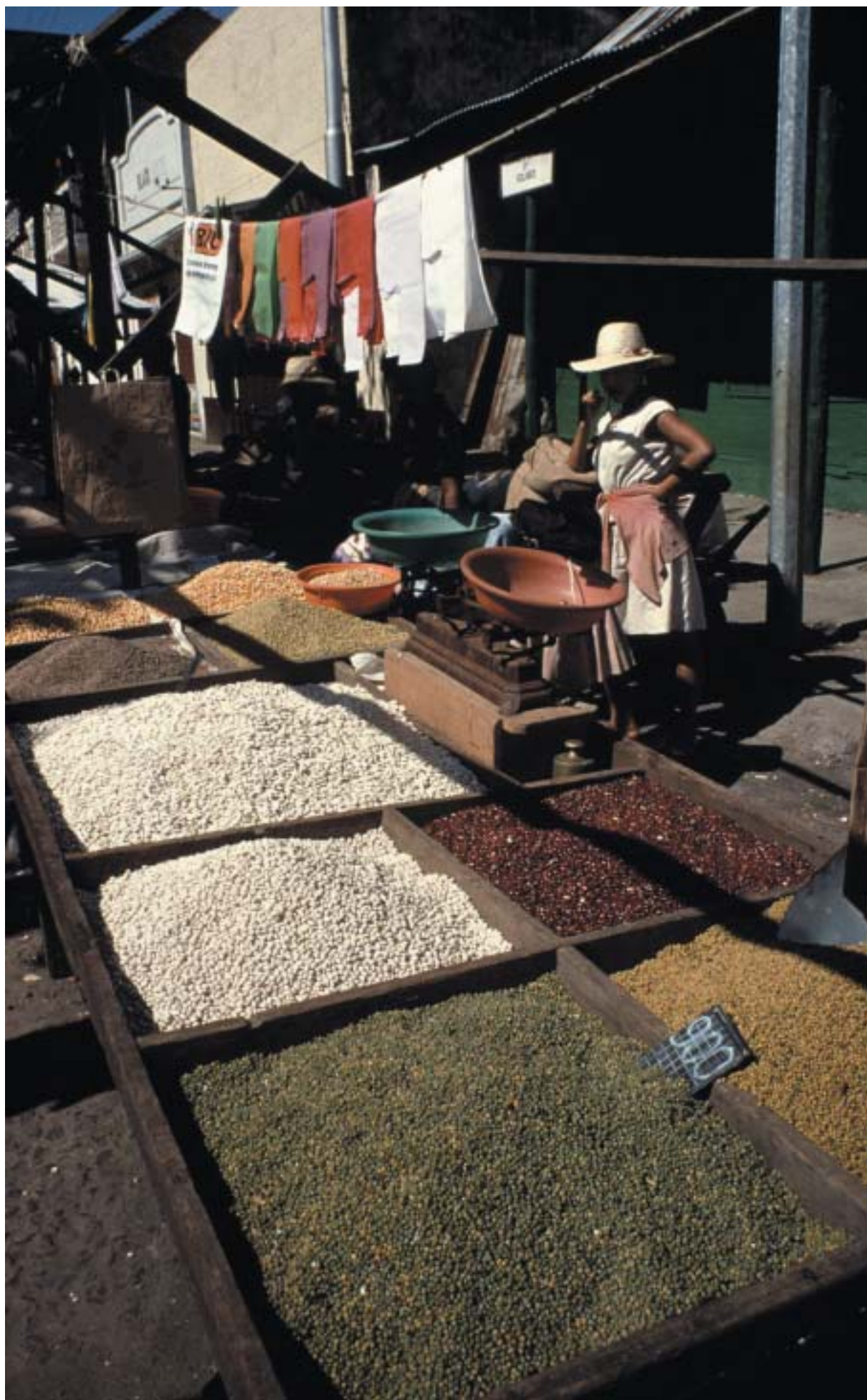
The political economy of an urban famine in Madagascar is the subject of a recently published article. The famine occurred in the capital city, Antananarivo, between 1985-86 but remained hidden for a long time, eventually uncovered by analysing the demographic data of registered deaths in the city.

Antananarivo lies in the highlands of central Madagascar and in 1985 had a population of approximately 577,000 people. For the period 1976-95, the mortality data recorded for the city showed a typical famine in 1985-6, where mortality levels increased markedly, and life expectancy fell from 59.4 years in 1975, to 49 years in 1986. The mortality increases bore all the characteristics of a famine - a strong relative increase among children, especially 5-9 year olds, and young adults, particularly young men aged 20-34 years old. In absolute terms it was estimated that about 7,600 persons died in 1985-6 in excess of baseline mortality levels, about half of whom were children under 15 years of age, with a small excess of boys. Adults aged 15-59 years comprised one-third of excess deaths, nearly three-quarters (74%) of whom were men. The remaining deaths were amongst the elderly, again with a higher male mortality. These figures imply that 1.3% of the population died because of famine, a rate that compares with some other 'mild' famines. However, the main evidence that this was a famine lies in the 'causes of death' profile, which is especially clear for young adults. Mortality from malnutrition (starvation) among adults hardly existed before 1984 and after 1988, whereas it showed a huge peak in 1986.

The explanation for the Antananarivo famine appears quite clear. Rapid deregulation of rice prices and rice markets, following a long period of strict state regulation, led to a rapid increase in the price of rice, the staple food of the large majority of a poor population. The poorest could not cope with the increasing cost of what constituted 80% of their food intake. Furthermore, poverty had been increasing in Madagascar over the period preceding the crisis and started to decrease only ten years later, after 1996.

Beyond market failure and institutional failure (i.e. lack of government policies to off-set the rice price inflation), several other factors may have played a role in the famine. The geographical isolation of the capital city in the highlands, together with a very poor road system, may have contributed to market segmentation, already aggravated by the lack of incentives to rice farmers during the 1972-84 period as a result of the state controlled economy. The changing economic situation during 1984-6 created a market trap with effects similar to those of a blockade - rice was available in the country or could easily be imported, but people could not access it because of a lack of entitlement. If people had commanded higher incomes or had access to credit, they would have been able to survive the crisis.

The Madagascar famine seems to have been 'hidden' from the start, probably in an attempt to hide the major failures of pre-



(c) IRD - Base Indigo. Photo by Vincent Simmonneaux, 1998

A market in Tulear, Madagascar

vious policies and not to put the changing policies at risk. Surprisingly the famine was hidden not only to the press, but also to economists working at that time on the economic reforms. It is argued in the paper that had the press been free to report the case, and had economists been properly informed of the situation, public 'coping mechanisms' could have been put in place.

Little is known of the situation in rural areas. However, the mortality increase seen among children in the capital over the 1975-86 period, with a peak in 1985-6, was also visible in the nationally

representative sample of the Demographic and Health Surveys, in both urban and rural areas.

The author concludes that improved information technology, as well as more integrated markets in Madagascar, makes another famine of this nature quite unlikely in the future. ■

¹ Garenne, M (2002). The political economy of an urban famine. *IDS Bulletin*, vol 33, no. 4, 2002

Implementation of WHO Guidelines on the Management of Severe Malnutrition in South Africa and Ghana

Summary of published research¹



Dietitian interacting with ward nurse at Mapuleng hospital, Northern Province, South Africa 2002



Rehabilitated child at Catholic hospital, Battor, Volta Region, Ghana 2001

In the past, Field Exchange has addressed issues faced by international humanitarian agencies in phasing out emergency therapeutic feeding programmes and leaving behind improved and sustainable capacity for treatment of severe malnutrition. The study summarised below provides additional evidence that at least in non-emergency situations, improved and sustainable practices can be promoted (Ed).

The study set out to investigate the problems, benefits, feasibility and sustainability of implementing World Health Organisation (WHO) guidelines on the management of severe malnutrition². A postal questionnaire was sent to 12 African hospitals inviting them to participate. Five hospitals were evaluated and two were selected to take part in the study - a district hospital in South Africa (Battor Hospital) and a mission hospital in Ghana (Mapulaneng Hospital). At an initial visit, an experienced paediatrician reviewed the situation in the hospitals and introduced the principles of the guidelines through a participatory approach. During a second visit about six months later, the paediatrician reviewed the feasibility and sustainability of the introduced changes and helped find solutions to problems. At a final visit after one year, the paediatrician reassessed the overall situation.

Implementation of most of the main principles of the WHO severe malnutrition guidelines was feasible, sustained over a one-year period, and affordable to the institutions (see table 2). Although relatively labour intensive, the process was successful because hospital staff were involved in planning the changes from the outset, logistical limitations were acknowledged and local modifications to the generic approach were developed. The success can also be attributed to the enthusiasm of the resident paediatricians and the follow up by the visiting paediatrician. As the resources for implementation came from the hospital budgets (except for a supply of mineral and vitamin pre-mix), financial sustainability is likely.

Whether the WHO guidelines, once implemented, are effective is another important and relevant question. At Battor, the mortality was unchanged, possibly because diagnoses of severe malnutrition were more precise during the study year - this is supported by a decrease in the number of admissions classified as severely malnourished from 81 at the beginning, to 39 during the study. At Mapulaneng, the mortality halved. This may have been because all cases of severe malnutrition, not only those with complications, were admitted, as suggested by the increase from 29 cases pre-study to 125 cases during the study. Also, the study was not blinded so some bias in the reporting may have occurred during the study year.

Comparisons aside, some would still regard the 18% fatality rate from severe malnutrition at both hospitals during the study period as unacceptably high, considering the guidelines target mortality rates of 5-10%. Guideline components that were not implemented or sustained may have been crucial to achieving further decreases in case-fatality rates. Furthermore, guideline practices believed to be in place may have been implemented inconsistently or poorly in reality. Also, the influence of HIV on malnutrition mortality was not measured specifically. The primary cause of death in some cases was probably advanced acquired immunodeficiency syndrome (AIDS), in which case the deaths would not have been preventable.

Hospital staff questioned the evidence base of some of the guideline components and felt that the evidence behind certain recommendations - such as the single approach for managing marasmus and kwashiorkor, feeding frequencies, routine antibiotics, and requirements of micronutrients other than vitamin A, folic acid and zinc - was inadequate. Documentation of the technical basis of these specific recommendations, or research to provide the necessary evidence, would promote wider acceptance of the guidelines.

The study intentionally selected two general hos-

pitals that seemed to have a good chance of implementing the guidelines. Although the findings cannot be generalised to all small hospitals in Africa, the study gives an idea of what may or may not be feasibly implemented with a minimum of intervention. It is difficult to predict whether similar African hospitals would have the same success in improving care management practices by following the guidelines, particularly without external consultant support. Conversely, more intensive input and support might allow implementation of all components of the guideline but with less assurance of sustainability.

The authors of the study concluded that wider implementation of the guidelines in similar settings is possible but that the guidelines could be improved by including additional information on how to adapt specific components to local situations. Furthermore, additional information is needed about certain components of the guidelines and their impact on mortality. ■

¹ Deen J et al (2003). Implementation of WHO guidelines on management of severe malnutrition in hospitals in Africa. Bulletin of World Health Organisation, 2003, 81 (4), pp 237 - 242

² Management of severe malnutrition: a manual for physicians and other senior health workers. WHO, 1999

Table 1 Summary of the feasibility and sustainability of the main components of the WHO guidelines for the management of severely malnourished children

Category	Battor and Mapulaneng Hospital	Mapulaneng Hospital	Battor Hospital
Feasible and sustained	<ul style="list-style-type: none"> Routine admission of all severely malnourished children Using key signs, oedema of both feet or severe visible wasting, for the diagnosis Measurement of height and calculation of weight-for-height Measures against hypoglycaemia, e.g. early feeding on admission, nasogastric tube feeding when necessary Measures against hypothermia, e.g. blankets, heaters, keeping the children dry Restricting the use of intravenous fluids only to those with shock or severe dehydration Preparation and use of starter (75 kcal/100 ml) and catch-up (100 kcal/100 ml) formulae Delaying the administration of supplemental iron 	Triage, urgent assessment and management	<ul style="list-style-type: none"> Allowing mothers to stay with the children all day and night Routine administration of oral antibiotics to those without complications
Feasible with adaptation or special provision	Frequent feeding, all day and night Supplemental electrolytes, minerals, and vitamins	Routine administration of antibiotics to those without complications	
Feasible, but implemented inconsistently or not sustained	<ul style="list-style-type: none"> Measurement and recording of feeding Daily measurement and charting of weights Transition from starter (75 kcal/100 ml) to catch-up (100 kcal/100 ml) formula 		
Not feasible	<ul style="list-style-type: none"> Preparation and use of rehydration solution for the severely malnourished (ReSoMal) Calculation of weight gain in g/kg/day Target case-fatality rate of 5-10% 	Allowing mothers to stay with the children all day and night	Triage, urgent assessment and management

VitaGoat

By Frank Daller, Vice-President
of Malnutrition Matters.

micro-enterprise responds to malnutrition

Looking beyond short term feeding solutions, Malnutrition Matters is a non-profit organisation dedicated to providing sustainable, affordable and locally available food technology solutions for malnutrition. Staff have been involved in food technology projects in over 30 countries, although the emphasis has been in the regions of the Former Soviet Union, in Africa and in India. Most recently, Malnutrition Matters has developed a completely non-electric, versatile food processing system called VitaGoat improving upon previous systems (SoyCow and VitaCow) which both require a reliable supply of electricity.

The VitaGoat system comprises of a pressure-cooking vessel, a bicycle-powered grinding system, an energy-efficient steam generator and a mechanical press. The system can process soybeans into soya-milk and derivatives, as well as

fruits, vegetables and cereals into aqueous solutions or juices, soups, purees, and gruels. There is no food wastage with the processing. The 'Okara' residue from the soya processing is available for breads, as additions to other foods, or can be used as animal feed. Using only its bicycle grinder, the VitaGoat can also grind dry cereals and grains to produce flour, and meal, and process nuts into pastes or 'butter' such as peanut butter. It can also grind roasted coffee.

The VitaGoat can be used in a number of settings including humanitarian projects, social institutions (hospitals, schools, etc) and sustainable micro-enterprises. The technology also facilitates the development of projects for processing and preserving foods and can for example be useful in situations of seasonal 'glut' where waste can occur due to lack of local markets or processing options, e.g. mangos and tomatoes.

Launching in October, the projected local selling price should be under US\$2,000 when technology-transfers are completed. Thereafter, construction, training and parts for the systems will be provided locally. The system will at first undergo a six-month pilot programme test in partnership with Africare in Guinea, Chad and Mozambique. After this, it is intended to transfer responsibilities for the VitaGoat to manufacturers in two or more African locations. Similar initiatives are planned for other regions, inclu-

ding Latin America, and South and South-East Asia, when appropriate sponsors and NGO partners are identified.

For further information, contact: Malnutrition Matters, 498 Rivershore Cres, Ottawa, ON, Canada K1J 7Y7,
email: matters@malnutrition.org,
tel: 1 613 446 0205, fax: 1 613 446 2072.
See online at <http://www.malnutrition.org> ■

VitaGoat system, left to right: steam boiler, cooker with press, cycle grinder



Malnutrition Matters

Antiretroviral Therapy and Nutrition

technical guidance¹

Access to antiretroviral drugs (ARVs) is increasing among people living with HIV/AIDS (PLWHA) in developing countries, as a result of local, national, and international efforts. Issues related to antiretroviral therapy (ART) in resource limited settings have become increasingly relevant to PLWHA, caregivers, service providers, and programmers. Drafted by the Food and Nutrition Technical Assistance Project (FANTA), a technical note now provides information and guidance on

the food and nutrition implications of ART and how to manage these in resource limited settings.

Managing the interactions between ART and food and nutrition is a critical factor in the extent to which the therapy is effective in slowing the progression of HIV/AIDS and improving the quality of life of PLWHA. In resource limited settings, many PLWHA lack access to sufficient quantities of nutritious foods, which poses additional challenges to the success of ART. Programmes working with people taking ART may need to strengthen human capacity to address nutritional issues, establish linkages to programmes addressing food and nutrition issues, and incorporate information about drug-food interactions into communication materials, staff training and orientation, and supervision systems.

This technical note summarises the types of ARVs commonly used, offers a framework for understanding drug-food interactions, describes key issues and steps for managing ARV-food

interactions, identifies areas of knowledge gaps, and lays out the specific food and nutrition implications of ARVs commonly used in resource limited settings.

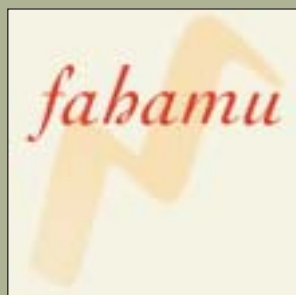
While the document focuses on ART, it notes that individuals infected with HIV have special nutritional needs, irrespective of whether they use ART. Furthermore, although access to ART in developing countries is increasing, the majority of PLWHA still do not have access to ART.

¹Food and Nutrition Implications of Antiretroviral Therapy in Resource Limited Settings - DRAFT, Tony Castleman, Eleonore Seumo and Bruce Cogill, FANTA, June 2003

The document is available online at www.fantaproject.org or email: fanta@aed.org ■

JustWrite

an online course in effective writing



If you find writing a chore, perhaps know what you want to say, but not how to say it, or feel you need to polish your writing skills, then JustWrite may be what you need.

Developed by the not-for-profit organisation Fahamu, JustWrite is an online course on effective writing, which can help individuals to build up effective writing skills over a period of a few weeks. It provides health workers with an opportunity to develop effective writing skills without absenting themselves from work, and benefit from extensive professional guidance. The course is ideal for anybody producing any substantial piece of writing, such as an advocacy document, paper for publication, or research report.

The course takes three intensive weeks and combines study material, stimulating interactive exercises, lively online discussion with your fellow participants and individual tuition. Study is broken down into daily hour-long slots, making the course suitable for those in full time employment.

A specially designed CDROM is provided containing all the study materials, including interactive exercises and assignments. It also contains sections on grammar, punctuation and stylistic issues - together with a reading list and guides to further study. You can be anywhere in the world to benefit from this course, you only need access to a computer and email.

The cost of the course is currently £300 sterling. For participants from developing countries who are without sponsorship, the fee will be negotiable. For further details on course dates and a registration pack, write to Hilary Issac, email: jw-info@fahamu.org

With bases in the UK and South Africa, Fahamu is a not-for-profit organisation that aims to support progressive social change in the south through using information and communication technologies. For further information, see online at <http://www.fahamu.org.uk> ■



Local production in Malawi, 2002

Nutriset



Distribution of Plumpy'nut in a plate of rice, Madagascar in 1996

Nutriset

Local Production of Plumpy'Nut

By Anne-Laure Glaisner and Beatrice Simkins, Nutriset

The French company, Nutriset, has been involved in projects aimed at establishing local production of Plumpy'nut - a ready-to-use food product (RTUF) employed in feeding programmes for the management of severe malnutrition. Plumpy'nut can also be used as a nutritional supplement for children and adults.

The product was originally developed in partnership with the IRD (Institut de Recherche pour le Développement) and has been jointly patented by Nutriset/IRD. The practical value of this product - especially in situations where there are few trained staff available and in home-treatment programmes - has meant that it has been adopted by a number of non-governmental organisations (NGOs). A wide variety of stakeholders have been interested in local production in order to make access to Plumpy'nut more sustainable.

Experience with local production

The first project to attempt local production of Plumpy'nut was in Senegal, in partnership with the University of Dakar and the ITA (Institute for Food Technology) in Dakar. Production is currently taking place within the university and a comparative study is being carried out into the effectiveness of locally produced Plumpy'nut compared to the product manufactured in France. The aim of the project is to promote

small-scale local production in each feeding centre so as to increase the availability of the product in a way that it can become an integral part of public health programmes in Senegal.

A second project, which developed out of the concerted action of a number of NGOs, is underway in Malawi. In December 2002, Nutriset carried out a technical audit in the field to identify a potential local producer. The product and the manufacturing process have been adapted to local conditions, taking into account the availability of raw materials, production equipment and packaging. A licence was granted to the manufacturer, free of charge, for the production and sale of Plumpy'nut in the social work/humanitarian sector. In order to ensure product quality, Nutriset supplies the essential minerals and vitamins used in the form of a premix. This premix is sold to the NGOs who will be using the final product, and it is delivered for processing to the local manufacturer. A second visit is planned for October 2003.

A third project has been the initiative of a small food company in Lubumbashi, Democratic Republic of the Congo. The idea held three attractions for the company: helping to meet an increasingly pressing local need, a means to diversify its production, and becoming more involved in the 'social fabric' of the region. In June 2003, Nutriset and its project partners carried out a technical audit and market study. Funding is currently being sought. Nutriset will provide the company with technical support and will ensure staff training for production and

quality management. A licence for the production and sale of Plumpy'nut to the humanitarian sector will be granted free of charge. However, the company is also planning to develop a similar product for distribution on the local market. This product will be distinguished from Plumpy'nut by its name, its formula and its packaging. Nutriset will also help in the design and development of this product.

These three projects show that the process of setting up local production of Plumpy'nut cannot be standardised and will depend on local conditions. Furthermore, the most critical aspect of setting up local production is establishing quality management. Conscious of its role as leader in this type of project, Nutriset is planning to set up an experimental production line reproducing, as far as possible, the manufacturing conditions encountered in developing countries. The purpose of this is to help staff understand more precisely the problems local producers have to deal with, in order to help them find solutions. Licencing Plumpy'nut local producers is another key area for quality control. A licence effectively becomes a quality guarantee for NGOs and other users.

For further information, contact Anne-Laure Glaisner, Research and development, or Beatrice Simkins, International communication and development, email: nutriset@nutriset.fr, NUTRISET - BP 35 - 76770, Malaunay, France
tél : +33 (0)2 32 93 82 8) fax : +33 (0)2 35 33 14 15
<http://www.nutriset.fr/> ■

HelpAge International

Leading global action on ageing

Training Course on Ageing in Africa

HelpAge International are planning a training course on Ageing in Africa, to run between 23- 27 February, 2004 and based in Nairobi, Kenya.

Aimed at mid-level or senior programme managers, social and healthcare professionals, senior government officers, or those simply with an interest in ageing issues, topics to be covered include:

- Demographic situation and socio-economic implications for Africa
- HIV/AIDS and its impact on older people
- Gender dimension of ageing
- Poverty
- Research and Policies on ageing

A course fee of US\$400 is chargeable for those requiring accommodation and US\$150 for those who make their own arrangements.

For more information, contact HelpAge International at email: helpage@africaonline.co.ke

New FAO/WHO Manual on Living Well with HIV/AIDS¹

FAO and WHO have recently produced a manual on nutritional care and support for people living with HIV/AIDS, called 'Living well with HIV/AIDS'. The manual aims to provide practical recommendations for a healthy and balanced diet for people living with HIV/AIDS in countries or areas with a low resource base. It aims at improving nutrition in a home-based setting. It is also applicable to people with HIV/AIDS in hospitals and other institutional settings, including hospices.

The food requirements of people with

HIV/AIDS are described and recommendations given on foods and eating habits to meet these requirements. The manual also explains how to address the nutritional aspects of HIV-related conditions. Practical recipes using locally available foods are suggested, as well as some simple home remedies for easing some of the problems people with HIV/AIDS may experience.

The manual consists of:

i) Guidelines, with accompanying information and explanations, intended for use by:

- Health service providers and other extension workers, as well as those involved at the national and community level in the many different aspects of counselling and home-based care
- Community based organisations working with people with HIV/AIDS who need information for programming and counselling purposes
- Planners in the health, social and nutrition services so they can develop national or local guidelines for nutritional care and support for people living with HIV/AIDS
- International agencies that support national and community-based support programmes for

people with HIV/AIDS

ii) Summary sheets that can be used as handouts, listing the main points for each key topic.

The summary sheets and leaflets are specifically for use by people who are living with HIV/AIDS or who are caring for a person living with HIV/AIDS, who want to be better informed.

The annexes contain:

- further technical information
- suggested recipes for home treatments and foods for different conditions
- forms to monitor food intake and weight
- sources of literature and information on institutions providing support for people living with HIV/AIDS.

¹ Further information and a full text version of the manual is available online at the WHO website <http://www.who.int/disasters>, and at the FAO website at <http://www.fao.org> ■

Facing up to the Storm



Seedling nurseries will help replant India's devastated east coast after the 1999 Orissa cyclone destroyed over a million trees.

Recently produced by Christian Aid, *Facing up to the Storm* is a disaster management book which looks at how local communities can cope with disaster, and the potential for community-based approaches to disaster management. Original case studies, based on first-hand experiences from Orissa and Gujarat in India, show how people, even in the poorest parts of the developing world, can survive disasters if they are involved in all aspects of managing disasters from response to prevention. This approach differs greatly from the top-down, government-led approach experienced by most communities and from the practice of most governments and many agencies.

The book is available to download at <http://www.christianaid.org.uk/storm>.

A limited number of hard copies are available through the UK suppliers, tel: +44 (0)8700 787788 or by international mail order, email: vhai@vsnl.com, Attention: Megha Sharma, tel: ++ 91 11 2651 8071/2 (India) ■

HIV-Positive Mothers in Uganda Return to Breastfeeding

Summary of published research¹

An increasing number of mothers with HIV in Uganda are breastfeeding their babies after UNICEF stopped donating free infant formula, according to a recent news piece published in the *Lancet*.

Under the prevention of mother-to-child HIV transmission (PMTCT) project, between 2000 and 2002, UNICEF donated infant formula for HIV-positive mothers who, on counselling, chose to use formula rather than breastfeed their newborn infants. However, according to UNICEF in Uganda, they found that those who were in need did not have access to formula, and since it was expensive, it was not sustainable. Nationally, only 32% of the HIV-positive mothers opted for formula feeding. The remainder chose to breastfeed either because of stigma, or their living conditions made formula feeding risky. Even among those who chose formula, many were breastfeeding at night for convenience.

Ministry of Health (MOH) figures were not available as to how many mothers had reverted to breastfeeding. At one of the urban sites, Nsambya, while 50% of the women formula fed their children last year, this has now dropped to less than 20%.

Uganda's Child Health Commissioner has expressed concerns that the reduced availability of infant formula will slow efforts to reduce mother-to-child HIV transmission. However, the MOH is finding it difficult to respond to requests to procure infant formula, given the limited resources available and many other basic antenatal needs that remain unmet within the health system. ■

¹ News, *The Lancet*, vol 36, no.9383, 16 August 2003.

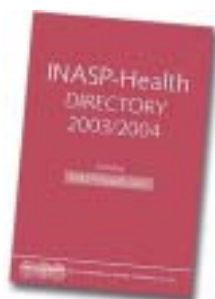
INASP Health Directory 2003/2004

The International Network for the Availability of Scientific Publications (INASP) has launched the online INASP-Health Directory 2003/2004. The Directory is a networking tool for building professional relationships and sharing information, and a reference for those who are seeking technical and financial support. Listings include 240 international organizations and programmes worldwide that are working to improve access to information for health professionals in developing and emerging countries. Each entry gives full contact details and a short description of relevant activities.

Presented in two parts, part 1 includes organisations that provide health information, while part 2 describes organisations that support book, library and information development, including a section on health.

The INASP-Health Directory 2003/2004 is supported by Exchange, a networking and learning programme on health communications for development (<http://www.healthcomms.org>). Available free of charge at <http://www.inasp.info/pubs/healthdir/>, it is

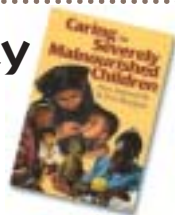
designed to complement 'INASP Health Links', the internet gateway to selected websites for health professionals, medical library communities, publishers, and NGOs in developing and transitional countries (see online at <http://www.inasp.info/health/links/contents.html>)



The Directory is also available on CD-ROM (thanks to e-TALC), and a limited number of printed copies will be available free of charge to medical libraries in developing countries.

For comments, suggestions for improvement, and recommendations for new entries, contact Neil Pakenham-Walsh at email: health@inasp.info ■

Caring for Severely Malnourished Children: Book Review



The last issue of Field Exchange reported on the publication of a new book 'Caring for Severely Malnourished Children' by Ann Ashworth and Ann Burgess. The book describes how to manage severely malnourished children in hospitals and other health units with inpatient facilities. Due to criticisms of the content by Prof. Mike Golden, the authors, TALC and the publisher together agreed to have the book reviewed. Three independent experts in the field were asked to address the following questions:

1. Does the book deviate from WHO guidelines on treatment of severe malnutrition.
2. If so would these deviations be detrimental to children's health.
3. Does the book provide the information required for health workers to manage severely malnourished children successfully.

The findings of the reviewers were as follows;

Does the book deviate from WHO guidelines?

Only minor changes were noted.

- i) The use of a larger daily dose of folic acid i.e. 2.5mg instead of the recommended 1 mg
- ii) The option of using 2% magnesium sulphate when CMV or the electrolyte/mineral solution is unavailable
- iii) The option of using crushed Slow-K tablets when CMV or potassium chloride solution is unavailable
- iv) Advocating the use of metronidazole.

Would these deviations be detrimental to children's health?

All reviewers agreed that these would not be detrimental. The first three are alternatives to the formulations advised by WHO and relate to the availability of suitable preparations, so that the question is about whether it is preferable to give something or nothing. Their conclusion was that a pragmatic choice to provide a formulation that is available is appropriate. Concerns over whether a larger dose of folic acid interferes with antifolate antimalarial drugs like Fansidar are addressed by the reviewers. There is no firm evidence of an effect but the consensus is that there is ongoing debate and well designed studies are needed to further address the issue of dosage and risk of malaria.

The WHO guidelines state that the use of metronidazole is accepted practice in many units and the reviewers agreed that it is effective in treating small bowel overgrowth (SBO). There is some discrepancy among the reviewers as to the importance attached to SBO in malnutrition.

Does the book provide the information required for health workers to manage severely malnourished children successfully?

All reviewers answered this question in the affirmative. One concluded the book "is an excellent summary of optimal management under prevailing conditions". Another stated "the manner in which the book is set out is helpful, and meets the need for a book more orientated to nurses and healthcare workers than the WHO manual". A third stated that the book "is far superior to any other options available and provides in clear language an approach which would improve the care of children in general and the care of severely malnourished children in particular".

This book is available at a subsidised low price (£3.15 + postage) only from Teaching-aids At Low cost (TALC), PO Box 49, St Albans, Herts. AL1 5TX, United Kingdom (info@talculc.org). The book is also available on CD ROM which in addition includes a comprehensive guide for trainers 'Improving the Management of Severe Malnutrition' and the TALC slide set 'Treatment of Severely Malnourished Children'. The combined cost of the book + CD is £4.50 + postage. The book is also available from Macmillan country offices and through local bookshops. For contact details of local offices, please see www.macmillan-africa.com/Contacts. ■

Debate on the Management of Severe Malnutrition

by Marie McGrath, Fiona O'Reilly and Jeremy Shoham (ENN).

Over the past six months, ENN has been a party to debate regarding technical aspects of the management of severe malnutrition. We believe that transparency and information sharing leads to clarity not confusion, and so wish to share the following key areas of debate. This article was circulated pre-publication to those involved, who were invited to respond in the form of a letter for inclusion in the same issue of Field Exchange.

In May 2003, a new publication, *Caring for severely malnourished children*, Ashworth and Burgess, 2003¹, met with some technical criticism from Professor Mike Golden in the form of a book critique submitted to ENN, and circulated to the publishers and supporting agencies (see Field Exchange 19, pp 19). In response, a review by independent experts was co-ordinated by TALC and the findings of the review are summarised in this issue of Field Exchange². Through this process it emerged that issues raised in the original book critique primarily concerned aspects of the 1999 WHO guidelines on the management of severe malnutrition³ and consequently, subsequent publications which reflect these guidelines, e.g. Ashworth/Burgess 2003. Drawing on a number of sources, we were able to determine where there is some consensus over potential challenges to the 1999 WHO guidelines and other derivative publications. Largely based on the original critique, the following key areas of debate have emerged.

Management of severe malnutrition in infants less than six months

The 1999 WHO guidelines do not specifically extend to include malnourished infants under six months of age. Differences in field approaches to managing malnourished infants under six months have already been highlighted by the ENN - a recent study by ENN and GIFA (Geneva Infant Feeding Association) to support technical training material on infant feeding in emergencies, concluded that an urgent consultation by technical experts and field practitioners was required to achieve consensus on the management of severe malnutrition in young infants⁴.

In the ENN/GIFA study, the most significant areas of contention were the role of breastfeeding, and the choice of therapeutic feed (if any) to use in managing young, malnourished infants.

The majority of guidelines/field protocols reviewed relied on breastfeeding (if necessary supported by supplementary suckling) to treat young infants. In contrast, WHO draft guidance available to the review advised that breastfeeding could not be relied upon, and that the first priority is the therapeutic feed to ensure infant survival. This position is echoed in the recently published 'Caring for Severely Malnourished Children' (Ashworth and Burgess, 2003).

The WHO draft guidance recommend giving supplementary therapeutic milk before each breastfeed. This is contrary to the supplemental suckling technique⁵ and expert breastfeeding recommendations, where breastmilk is always offered first⁶.

The WHO draft guidance recommend the use of F75 during stabilisation and full strength F100 during recovery of infants under six months. Argument against the use of full strength F100 in infants under six months revolves around water balance and renal function in young malnourished infants (see Field Exchange 19)⁷. Instead, the critique considers diluted F100 the formula of choice for young malnourished infants, while F75 and infant formula are considered safe to use but less pragmatic options. The Ashworth/Burgess publication recom-

mends using a "starter formula" which is likened to F75. However the starter formulation given is of higher osmolarity than standard F75, which, it has been argued, may precipitate osmotic diarrhoea.

Management of severe oedema

The Ashworth/Burgess publication recommends energy intake of 75 kcal/kg/d in the initial treatment of children with severe oedema. The critique argues that, in practice, the degree of oedema is overestimated by clinicians, particularly the inexperienced, and nowhere warrants a reduction in intake from 100 to 75 kcal/kg/d. Overestimation of oedema will lead to underfeeding, which may not necessarily contribute to increased mortality, but delays progress and recovery. The critique also questions the evidence base for prescribing reduced energy intake in severe oedema cases.

Diarrhoea and dehydration

Management of diarrhoea and dehydration has been identified as one of the most contentious and difficult issues in the management of severe malnutrition. The 1999 WHO guidelines recommend using 50 - 100ml Resomal for each stool loss for children under 2 years, which, the critique argues, risks providing dangerous amounts of sodium and over re-hydration.

Blood transfusions

The 1999 WHO guidelines state that very severe anaemia can cause heart failure and specifies that children with very severe anaemia need a blood transfusion. The critique argues that heart failure due to anaemia (where the peripheries are warm, the pulse full and the heart overactive) is uncommon in the malnourished child. Other forms of heart failure are common and lead to breathlessness with a weak, rapid pulse, which often coincide with anaemia. Further, heart failure due to fluid overload is always associated with a fall in haemoglobin (so called dilutional anaemia). These may mislead the inexperienced clinician. Giving a blood transfusion in these circumstances is hazardous, with evidence to suggest it should only be considered in the first 24 hours of treatment. Furthermore, fluid shifts and electrolyte imbalance during treatment⁸, which occur more rapidly with modern therapeutic feeds, make children much more vulnerable to therapeutic errors - inappropriately transfusing to correct a dilutional fall in haemoglobin is, the critique warns, usually fatal.

Antibiotics

The 1999 WHO guidelines recommend the use of cotrimoxazole as first line antibiotic treatment, where there are no signs of infection or complications. The critique suggests that since nearly all severely malnourished children have small bowel bacterial overgrowth (SBO)⁹, oral amoxicillin is preferable since (unlike cotrimoxazole) it is active against SBO. This alleviates the need to use metronidazole for SBO suppression, recommended in the Ashworth/Burgess publication (2003).

The evidence base

While these issues are derived from field experience and documentation not readily

Debate on the Management of Severe Malnutrition: A Response

By Professor Ann Ashworth, London School of Hygiene and Tropical Medicine

accessible, they do represent current thinking, often controversial, in addressing severe malnutrition. Gaps in evidence are also partly due to the difficulties of conducting operational research in emergencies. Certainly, individuals and agencies should bear some responsibility in sharing and writing up their experiences and findings. However there is also a sectoral responsibility to promote and support this process, and a technical responsibility to consider this informal evidence base when developing or updating guidelines.

Differing and convincing opinions on practice exist between, and are recognised by, the experts themselves. Yet alternative approaches to managing malnutrition can sometimes suggest conflicting opinions when, in reality, there are none. For example, the perspective of the clinician may present an entirely different viewpoint and set of priorities than the public health expert, more concerned with the population at large. However, conflicts and errors can arise when approaches encroach on one another, without involving the "expert other". Thus, simplifying complex clinical management, targeted at the majority of health workers but without careful clinician input, risks suggesting that such treatment is easy to administer and may be open to error. Equally, basing guidance for all on the management of the clinical complexities of individual cases, useful for specialist and experienced practitioners, risks alienating many of those working in the field who need simple, practical and pragmatic advice that will, on balance, do most good and least harm to the majority. There is room for all approaches, but a collaborative effort and consultation is required to make this work.

The way forward

The production of the 1999 WHO guidelines, has, without doubt, improved morbidity and mortality and the care of the severely malnourished, which may be substantially attributed to standardisation of care. Initiatives to improve the accessibility of standard guidance to those with few resources and limited support are long overdue and welcomed.

Although published in 1999, the current WHO guidelines were first drafted in 1992 - many of the areas of contention stem from field practices and experiences over the past 10 years. Given the ever-changing face and challenges of emergency nutrition, guidelines need to be managed as working, "living" documents. The technical issues summarised here suggest the need for a formal review of the evidence base of the 1999 WHO guidelines for the management of severe malnutrition. Such a review process needs to include a mechanism to engage with field practitioners, and should take into account the largely informal evidence base that is guiding current field practice. Updating and revision of guidelines takes time. Where there are identified gaps in recommendations, interim guidance generated through expert consultation, for example - could be considered. This, in turn, could be tied in with the review process, e.g. valid for a given period. The WHO, as lead technical agency, would be well placed to initiate this process.

For further information about this piece, or to contribute views, opinions or data related to this issue, contact fiona@enonline.net or marie@enonline.net

¹ Ashworth A and Burgess A, 2003. Caring for severely malnourished children. Published by Macmillan, supported by Teaching Aids at Low Cost (TALC), funded by the US Agency for International Development (USAID) through the Food and Nutrition Technical Project (FANTA) of the Academy for Educational Development (AED), 2003

² News, Caring for severely malnourished children: book review, Field Exchange 20.

³ Management of severe malnutrition: a manual for physicians and other senior health workers. WHO, 1999

⁴ ENN/GIFA Project, summary of presentation, Field Exchange 19, p28

⁵ Field Exchange 9, Infant feeding in a TFP, p7, Mary Corbett

⁶ 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

⁷ Diet and renal function in malnutrition, Summary of presentation, Field Exchange 19, p24

⁸ Wharton BA, Howells GR, McCance RA. Cardiac failure in kwashiorkor, Lancet 1967; 2:384-387

⁹ Unpublished data. Eva Lamm. Breath hydrogen excretion in children when malnourished and during recovery. MSc report, University of Uppsala, 1998

Background

Many individuals and organisations, including NGOs, have contributed to the improved treatment of children with severe malnutrition, but case-management remains very poor in most hospitals in developing countries and many children die as a result. Children with severe malnutrition are usually treated at district hospitals (i.e. at the first-referral level) but medical and nursing students are usually trained in tertiary hospitals and they may go through their entire training without having managed a severely malnourished child or been taught best-practice. The WHO manual¹ and the more recent WHO-IMCI guidelines² aim to fill the knowledge gap about how to care for severely malnourished children. The Ashworth & Burgess book³ follows the WHO guidelines and is part of this endeavour. It describes in simple terms what to do and why, and is primarily for nurses, clinical officers and medical assistants working in poorly-resourced hospitals. The WHO Training Course⁴ teaches practical skills as well as knowledge, and hospital teams from over 20 countries have been trained in the last two years. Some national training courses have been held and more are planned.

Although the WHO manual and WHO-IMCI guidelines differ only slightly, the latter reflect an international consensus of opinion as to what constitutes 'best practice' for first-referral hospitals. Ministries of Health are adopting the international guidelines, and medical and nursing schools are being encouraged and enabled to include the guidelines in their curricula. Case fatality rates are beginning to fall, but it will need the combined efforts of many people to scale-up existing efforts.

Management of infants less than six months

There are two concerns regarding the severely malnourished young infant: i) immediate welfare of the child (stabilisation with F75 and catch-up, with continued breastfeeding) ii) long-term welfare of the child at home (especially breastfeeding). Stabilisation of the child has to have priority on admission to ensure survival and return of appetite and strength. Diluted F100 is discouraged for the stabilisation phase because its potential renal solute load and sodium and lactose contents are more than twice those of F75. Thus F75 is more suited metabolically for stabilising severely malnourished infants than diluted F100. In the catch-up phase, diluted F100 may be preferable to full-strength F100 for very young infants (<4m) but this has not been tested. A randomized trial is being planned. In rapid growth, although F100 has a higher potential renal solute load than diluted F100, solutes are channeled into new tissue and do not need to be excreted by the kidney.

Although supplemental suckling has been reported as successful, this is not always the case. This technique requires considerable support and supervision and when implemented as part of routine hospital care, the results are variable. For example in Afghanistan, many infants had no weight gain for weeks with this technique. More data are needed before any conclusion can be made about the role of supplemental suckling in the care of severely malnourished infants.

In the Ashworth & Burgess book, F75 is called 'starter formula' because experience showed that a 'functional' name was more meaningful to indigenous health workers. We found mistakes were made when it was called F75 as some health workers misinterpret F75 to mean 'give 75ml'.

Management of severe oedema

In the stabilisation period, the target energy intake is 100kcal/kg body weight/day, and 'per kg body weight' is referring to metabolically-active tissue mass. The weight of severely oedematous children does not reflect their true tissue mass as their weight is elevated by oedema fluid. The WHO-IMCI Working Group took a figure of 20% as being a reasonable estimate of the proportion of weight due to oedema fluid in children with severe oedema (i.e. oedema of the feet, legs, hands, arms and face). So for severely oedematous children, the guidelines advise 100ml/kg/day of F75 instead of 130ml/kg/day (roughly a 20% reduction) which will lead to a daily energy intake of approximately 100kcal/kg oedema-free body weight/day. This achieves the target intake without risking heart failure from sodium and fluid overload. It is not 'underfeeding', as the intake /kg true weight/day is met.

Diarrhoea and dehydration

Children with profuse watery diarrhoea can become dehydrated if no action is taken to replace the lost fluid. WHO suggests 50-100ml of ReSoMal as a guide after each watery stool. This is consistent with data from the International Centre for Diarrhoeal Disease Research, Bangladesh, where the typical range for stool loss is 50-100ml/watery stool. The Centre treats many hundreds of severely malnourished children with diarrhoea each year and stool collections are made for every child. Most hospitals and TFCs have no provision for measuring stool losses and so replacement volumes will always be a matter of judgement as stool losses vary, but a guide of 50-100ml is reasonable given the large body of evidence from Bangladesh.

Blood transfusions

There is no divergence of views. Very severe anaemia may not be common but when it does occur action is required. The WHO manual and guidelines define the circumstances when a blood transfusion is needed and describe appropriate treatment. Repeat transfusions should not be given even if the haemoglobin level stays low and this is stated in the WHO-IMCI guidelines. The risk of heart failure from fluid overload is stressed in the WHO manual and guidelines, and actions to avoid fluid overload are described.

Antibiotics

The choice of antibiotics for first-referral hospitals was guided by effectiveness, availability, and cost. The need for flexibility due to local patterns of pathogen resistance was recognised.

Way forward

If there are robust new data that challenge the treatment practices advocated by WHO then these should be placed in the public domain and reported in a manner that will allow scrutiny and peer review. Divergent protocols cause confusion and distrust among health workers, and weaken the message. We should all speak with one voice. No new data have been published or presented to WHO that challenge the guidelines. There is, however, a growing body of evidence to show their effectiveness. ■

¹ Management of severe malnutrition: a manual for physicians and other senior health workers. WHO, 1999.

² Management of the child with a serious infection or severe malnutrition. Guidelines for care at the first-referral level in developing countries. WHO, 2000.

³ Caring for severely malnourished children. Ashworth A, Burgess A. TALC, 2003.

⁴ Training course on the management of severe malnutrition. WHO, 2002.

Dear ENN,

Further to your article on the technical debate regarding the management of severe malnutrition, I wish to offer some contextual information to the development of the World Health Organisation (WHO) guidelines, and agency field protocols.

Initial guidelines for the treatment of malnutrition, written in the 1970s in Jamaica, were published by the Pan American Health Organisation (PAHO) and subsequently by the World Health Organisation (WHO) in the 1980s. They were based upon practice at the tropical medicine research unit (TMRU) in Jamaica, treating small numbers of children (about 50 children a year). The researchers, clinicians and staff were all highly trained and had ample access to sophisticated instruments, literature and funds. They were 'overstaffed' to facilitate research measurements, which allowed labour intensive individual treatment to be given. The guidelines were not even implemented in the paediatric wards next to the unit where they were written.

Non-governmental organisations (NGOs) and agencies used the practical guidelines published by Medecins sans Frontieres (MSF) - in most hospitals no generally accepted guidelines were being used. In the early 1990s, when I drafted the current WHO guidelines, I simplified them as much as I thought safe. The big step was to formulate the diets, instead of giving individual ingredients by weight of child. Nevertheless, the basis of the management was the experience of a research ward.

The draft guidelines were given to the NGOs in 1994. Action Contre le Faim (ACF) took these draft guidelines, wrote practical protocols based upon the principles and provisions, and persuaded Nutriset to start to produce the diets commercially. Their protocols have since been adopted by most NGOs. These NGOs have now treated many hundreds of thousands of children using the guidelines and have amassed an enormous body of data, information and experience. For example, in Burundi from January 1999 to December 2001, 80,419 severely malnourished patients' characteristics and outcomes were entered into the national database, coordinated and maintained by UNICEF. The main expertise in applying the protocols and the effects of their variation now lies with the NGOs. However, in most places the data are not systematically collected or analysed. Yvonne Grellety made a very detailed analysis of over 10,000 patients from 13 countries in Africa. Interestingly, she confirmed, en masse, the importance of the old physiological data showing the sensitivity of these children to sodium and their propensity to develop heart failure in several different situations and analyses.

The original draft guidelines have been treated as a 'living document' that has gone through an evolutionary process - like computer software, we no longer use dos 3.1 (the operating system used for the original draft). The analyses, together with frequent field evaluations, in many different contexts and countries, shows where the critical points in the protocols lie and where difficulties of training, understanding, application and scale arise in practice, particularly in resource limited situations or emergencies. This has resulted in a number of changes in both detail and emphasis. The modified protocols are greatly simplified. They are relatively easy to apply in the field by nurses and nurse-assistants. The results being obtained are, in some places, as good or better than those obtained in the research ward in Jamaica. It is relatively easy to get good results from an adequately resourced, dedicated team in a research setting, it is quite a different matter to maintain good results in routine service. Nevertheless, at a national scale the results are a success story. The mortality rate (2000/2001) for Angola was 6% (3,976 deaths, 66,165 discharges) and 5% (3,552 deaths, 74,759 discharges) in Burundi. The current data for Ethiopia appear to have an even lower mortality rate, with the best centres reporting around 1% mortality.

The main changes are of emphasis. Some aspects we thought were vital fifteen years ago are now known to be either minor or in some cases detrimental. Conversely, other aspects that were not emphasised were omitted, or compromises made in the original guidelines are now seen to be critical. The aspect of emphasis and approach is far from trivial. It determines where resources are directed when they are limited.

The challenge is to find a mechanism for both translating this very extensive body of knowledge into internationally endorsed guidelines within a reasonable time span, and to create a procedure for regularly updating the guidelines so that they are not outdated or used to produce derivative training material years later, when the State of the Art has moved on.

Yours
Professor Mike Golden
Email: mike@pollgorn.net

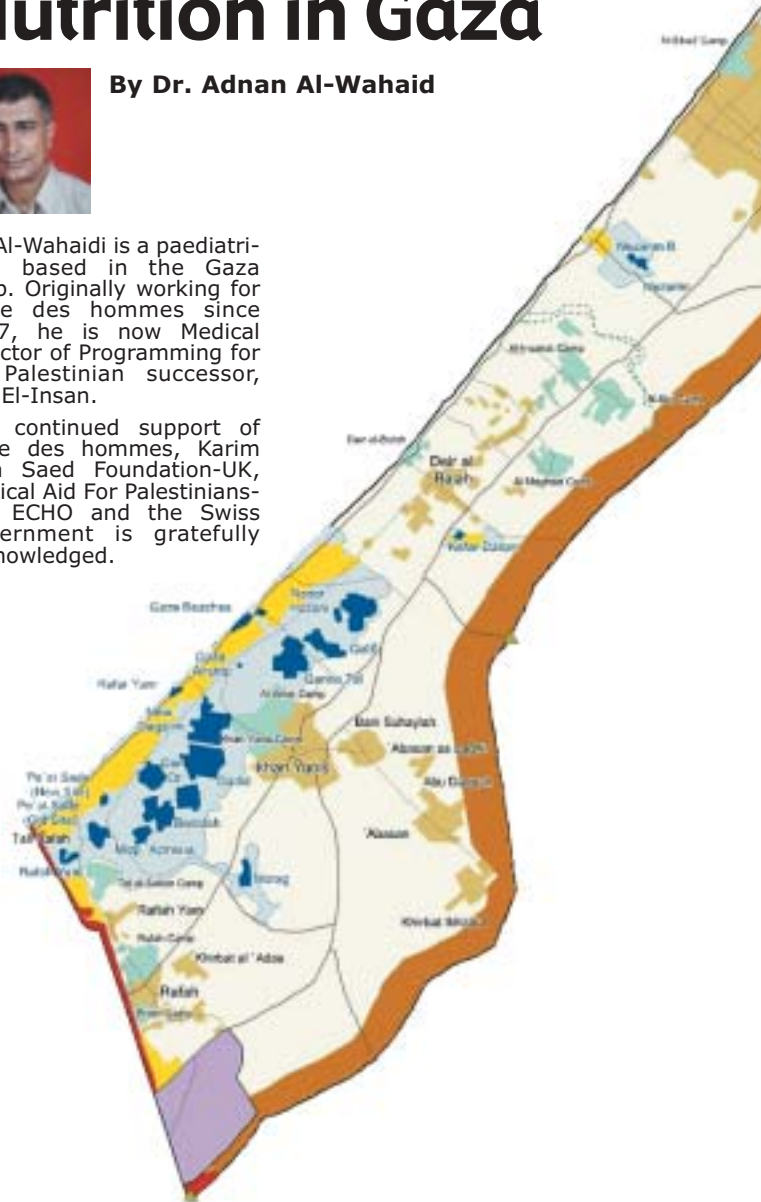
Border Closures and Nutrition in Gaza



By Dr. Adnan Al-Wahaid

Dr. Al-Wahaidi is a paediatrician based in the Gaza Strip. Originally working for Terre des hommes since 1987, he is now Medical Director of Programming for its Palestinian successor, Ard El-Insan.

The continued support of Terre des hommes, Karim Rida Saed Foundation-UK, Medical Aid For Palestinians-UK, ECHO and the Swiss Government is gratefully acknowledged.



This article describes the nutritional and health consequences of the closure system in Gaza, as experienced by a paediatrician working there.

The political situation in the Gaza Strip has resulted in a high level of international media attention. The vulnerability of the Palestinian people is easy to see by walking through the streets of the overpopulated Gaza Strip, especially in the refugee camps. Population density is estimated at 3,278 individuals per square kilometre, one of the highest in the world. The 362 square kilometres of the Gaza Strip are inhabited by 1,196,591 Palestinians, with one-quarter of the land occupied by less than 5,000 Israeli settlers who began arriving in 1967. The Israeli settlers consume the majority of underground water, which is derived from the coastal aquifer. More than 66% of the Gaza Strip population are refugees who lost their homeland 'Palestine' when Israel was formed in 1948.

Poverty has drastically increased over recent years, while Israeli activities continue to undermine the already poor resource situation of the Palestinian National Authority (PNA). Poverty and poor access to employment have been most responsible for an alarming deterioration in the nutrition and health status of Palestinians, affecting more than 65% of the Gaza Strip population. Local, national and international organisations have implemented well-intentioned interventions in order to address existing food and nutritional problems. However, the quality and relief focus of this work has, on occasion, drawn criticism, particularly with regard to sustainability.

Ard El Insan Palestinian Benevolent Association (AEI) is the Palestinian counterpart of the Swiss organisation Terre des hommes (Tdh). Many international organisations⁴ contribute to AEI to support its activities in advocacy, child and family health and community nutrition. Recognising the interdependence of nutrition with health and other sectors, AEI undertakes a variety of preventive and curative health care activities, as well as work aimed at improving the nutrition and food situation of the Palestinian people, especially during stress periods.



Food security in the Gaza Strip

Palestinians are well known for being generous. Their hospitality is, to some degree, measured by the variety of foods served to their guests. However, nowadays, people partly define their grinding poverty in terms of no longer being able to serve their guests a diverse meal. The population is now dependent on rations or food donations from outside. The loss of self-sufficiency, and absence of land that allows choice of food, creates a strong sense of indignity. These difficulties are compounded by political and military actions, which can result in border closures and demolition of houses, crops and gardens.

Most people in the Gaza Strip buy their food from the market since they lack land for cultivation. Although there are many types of food in the market, supplies are irregular. Unemployment has reached catastrophic levels in the Gaza Strip (more than 60%). This has translated into very limited purchasing power for food. Dependency ratios have increased dramatically and in many families, food purchase is sacrificed for other urgent needs such as treatment of diseases or paying back debts and loans. Other factors which constrain access to food include difficulties in importing/exporting goods due to disrupted logistics caused by Israeli activities, prolonged sieges, curfews, border closures, road blockades and the direct impact of military operations, incursions or raids.

The lack of capacity to cook food on a daily basis is another big problem, often caused by inability to buy the gas or fuel, which is more expensive in the Gaza Strip and the West Bank than in any of the surrounding countries. People are therefore forced to borrow the fuel or borrow cash for fuel purchase. There are also numerous occasions when fuel or gas cannot be imported into Gaza, or may not even be allowed to be conveyed from one area to another inside the Gaza Strip, simply because of border closures lasting from hours up to several days. Electricity supplies are also problematic due to the poor infrastructure, resulting from decades of 'disabling' Israeli regulations and the complete dependency on Israel. Poor households cannot pay the bills and may lack refrigerators. Hence

they are deprived of adequate storage facilities for fresh foods. Resulting dependence on dry food rations and canned alternatives, in addition to poor quality water, are direct causes of micronutrient deficiencies like iron deficiency anaemia and rickets.

This tragic situation has dramatically affected the nutritional and health status of the Palestinian people. Contributing factors to malnutrition include poverty, poor infrastructure, low levels of sanitation and high levels of food insecurity. Vulnerable groups such as children and pregnant or lactating women are compromised further as a result of inadequate nutritional supplementation, leading to higher risk of stillbirths, premature deliveries and low birth weight babies. Chronic nutritional deprivation is adversely affecting the majority of the Gaza Strip children and other vulnerable groups, ensuring a legacy of poor health status as well as impaired physical and mental development.

Nutritional status of Palestinian children

The deterioration in nutritional status of Palestinian children has become well recognised at both national and international levels. Results of a nutrition survey carried out in August 2002² found 13.2% of children in the Gaza Strip suffering from acute malnutrition. This compares unfavourably with survey figures from 1995, where only 5.7% of children under 5 years were acutely malnourished (<-2SD of the reference weight for height)³. More recently in March 2003, provisional findings from a study by AEI and Accion contra el Hambre (Madrid) indicate considerable food insecurity and economic vulnerability in the Gaza population⁴.

AEI activities

The main target groups of AEI are those living in the most needy areas, those who reside near the Israeli settlements, and areas subjected to military Israeli incursions. Alongside relief and medical care, community health programmes have been developed which include intensive breastfeeding counselling plus health and nutrition education. This approach aims to increase people's capacity to cope with the ever increasing nutritional and health demands, while working closely with the Ministry of Health and other health providers to incorporate longer term national nutrition strategies.

AEI have four operational centres in Gaza - one at Nusseirat middle camp, one in Khanyounis and Rafah, one in the south and one in the north (Jabalia camp of refugees). The community health team operate as two mobile groups, one in the north and another in the south, and comprises 24 community health workers. These work in support of the centre-based activities and outreach services into more inaccessible areas.

Each operational centre comprises:

- a medical and nutritional assessment unit
- a growth monitoring unit (GMU) which

provides follow-up of severely and moderately malnourished children, and nutrition education

- a special care unit for specific nutritional treatment, such as nutritional anaemia, coeliac disease, and rickets
- a breastfeeding counselling unit, for mothers who present with breastfeeding difficulties.

During 2002, 8,163 new cases were managed at the centres, of which 6,750 were undernourished and/or anaemic children. Overall, 40% of new cases (n=3265) were assessed at the medical and nutritional assessment unit, 589 cases (7.2%) in the special care unit, 604 cases (7.4%) in the GMU and 16.4% (n=1344) in the breastfeeding counselling unit. In the community, 3,116 undernourished children were treated in the same period.

The unprecedented magnitude of the health/nutrition and socio-economic problems currently seen in the Gaza Strip has led to an expansion and strengthening of AEI services. New staff members have been recruited and more activities have been directed to the deprived areas and locations where life has become extremely difficult due to Israeli military activities, e.g. Rafah, Beit-Hanoun, and areas close to the settlements. However, our capacity remains stretched, while a combination of food insecurity and safety problems continues to pose enormous challenges to the Ministry of Health and non-governmental organisations (NGOs). Many of the challenges to food security and nutrition, including the role of the Israeli 'occupation', the safety of Palestinians and the deteriorating food nutritional situation, were raised in a UN meeting 'food as a human right', attended by AEI and Palestinian NGOs in Gaza in July 2003.

Concerns for the future

Continued and prolonged food deprivation will clearly lead to further deterioration in the nutritional situation of Palestinian children and other at risk groups. This will in turn lead to higher morbidity, e.g. respiratory tract infections, diarrhoeal diseases and intestinal parasites and resulting mortality. Unless steps are taken to ameliorate the situation, this will have significant and unacceptable nutrition and health implications for future generations of Palestinians.

For further information, contact: AEI, email: aei-pal@hally.net or Mr. Khalil Marouf, Tdh, e-mail: khalil.marouf@tdh.ch ■



Dr. Adnan A. Al-Wahaidi



Dr. Adnan A. Al-Wahaidi

"AEI have four operational centres in Gaza, where they work closely with the Ministry of Health and other health providers to incorporate longer term national nutrition strategies"

Malnutrition on Political Grounds

By Hadas Ziv

Based in Israel, Hadas Ziv works for the organisation Physicians for Human Rights – Israel, and is Project Director for the Occupied Territories.

The last three years have witnessed a severe deterioration in the relationship between Israel and the Palestinians in the Occupied Territories. Civilians in both societies became victims of appalling acts of violence, betrayed by their leaders who are unable to courageously initiate an alternative. While this is true, we believe that Israel, both because it is already a well-established and powerful state, and because it is the Occupying Power, bears the responsibility to initiate an end to the hostilities. It is also clear that as long as Israel retains control of the Occupied Palestinian Territories – it is responsible for the well being of all people under its control. Poverty is a direct result of the closure system and therefore Israel is accountable for the impaired welfare of the Palestinian residents of the Occupied Territories. In our clinics in the West Bank we encountered similar situations to those described by Dr. Adnan Al-Wahaidi. We were struck by the high level of bed wetting in the 7-12 year old age group. We also encountered cases of diarrhoea due to bad water, and problems in child development due to malnutrition.

Physicians for Human Rights (PHR) - Israel was established in 1988 as a non-partisan, non-profit organisation. It brings together volunteer health workers and human rights activists who work against abuses of human rights in general, and champion the right to health in particular. Its members and staff attach deep significance to close cooperation with Palestinian civil society, human rights activists and medical organisations and workers. In our medical and human rights work we strive to construct, even if on a small scale, an alternative to that of violence and hostility, thus showing that such an alternative is possible.

PHR-Israel has been prevented from entering the Gaza Strip for three years now, refused by the Israeli security apparatus on the grounds of our staff's personal safety. However, our experience in the West Bank, where we have been conducting mobile clinics every Saturday in cooperation with various Palestinian health NGOs for the past 14 years, shows that our activity is welcomed and appreciated.

Our work in the Gaza Strip is therefore severely restricted. We keep in close contact with human rights and health organisations, campaigning and advocating for the freedom of movement of medical staff and patients both on an individual case-by-case basis, in emergency cases, and also on a collective basis regarding policies of entry and exit. We also monitor the treatment of prisoners and detainees from Gaza who are held in Israel away from their families. We then disseminate the information to our public. Israel has now resumed full control of the Occupied Territories,

and exerts total authority over the everyday lives of Palestinian residents. At the same time, the Israeli government prefers to contact foreign and international organisations and ask them to provide humanitarian assistance to the Palestinian residents of the Occupied Territories¹.

Israel's regime of severe restrictions imposed on freedom of movement within the West Bank and Gaza Strip - as well as between the two, and between them and the outside world - has severely affected the Palestinian economy, causing deterioration in their standard of living, nutrition and health. According to the World Bank "the second year of Intifada witnessed a further steep decline in all Palestinian economic indicators. By the end of 2002, Real Gross National Income (GNI) had shrunk by 38 percent from its 1999 level. Poverty - defined as those living for less than US\$2.1 dollar per day - afflicts approximately 60 percent of the population"². The effects of these indicators on health are evident: "the health status of the Palestinian population has deteriorated measurably. Real per capita food consumption has dropped by up to a quarter when compared to 1998 levels."³ The effects are especially visible on women and children with higher levels of malnutrition and anaemia. The decline in economic activity leads to a steep fall in tax payment, which in turn causes a growing inability of the Palestinian Authority to supply basic services, let alone develop its infrastructure. Although invaluable to the lives of Palestinians, international assistance is problematic, since it addresses a situation to which the solution can only be political.

"The *sine qua non*⁴ of economic stability and recovery is the lifting of closure in its various forms, and in particular internal closure. As long as Palestinian internal economic space remains as fragmented as it is today, and as long as the economy remains subject to extreme unpredictability and burdensome transaction costs, the revival of domestic economic and Palestinian welfare will continue to decay"⁵.

As long as the occupation continues, the State of Israel's commitment to provide such assistance is both a moral and legal concern. ■

¹ The Mission Report 11-19 August, of Ms. Catherine Bertini, UN Personal Humanitarian Envoy of the Secretary-General, states her appointment was in response to - among other things - "a request from Prime Minister Sharon of Israel to the Secretary-General to assist in addressing humanitarian needs arising from the ongoing Israeli-Palestinian Conflict..." (p. 1).

² World Bank, Twenty Seven Months - Intifada, Closures and Palestinian Economic Crisis, An Assessment, May 2003, p. xi.

³ see footnote 2, p. xiv.

⁴ an essential condition or element

⁵ see footnote 2, p. xvii.



MSF Holland in Afghanistan

Summary of Evaluation¹

Last year, MSFH Holland (MSFH) commissioned an evaluation of their activities in Afghanistan between May 2000 and May 2002. The evaluation set out to:

- i) understand MSFH's role in Afghanistan and how MSFH adapted nutritional and health programmes in a rapidly changing political and operational context in the cultural setting of Afghanistan
- ii) examine how MSFH used its proximity in the region to witness violations of humanitarian principles and law and how MSFH positioned itself in its advocacy work.

This summary of the evaluation findings concentrates on the first of these objectives.

Methods

Two external consultants with backgrounds in nutrition and health undertook the evaluation. Field work took place in Kabul, Herat and Kandahar where interviews were carried out with MSFH project staff, personnel from INGOs, local NGOs, UN agencies, and MoPH staff. The consultants also attended a regional workshop in Ashgabad and a medical co-ordination day in Amsterdam. Phone interviews were conducted with staff in Quetta, Pakistan while a number of MSFH staff no longer involved in the programme were interviewed in London and Amsterdam.



Kandahar, Afghanistan, 2002

Fiona O'Reilly

MSFH implemented traditional emergency feeding programmes in a number of open settings partially to collect data which would be useful in advocacy but also to prevent severe malnutrition. However, there was limited evidence of 'alarming' levels of malnutrition and traditional feeding programmes were found to be inappropriate to the cultural setting so that eventually these were either discontinued or adapted (e.g. mobile SFP).

Thorough investigation of outcomes in terms of malnutrition and mortality was not rigorously undertaken by MSFH. However where other agencies managed to undertake thorough representative investigation mortality was found to be high and related to disease while levels of malnutrition were lower than expected in the context of a food crisis.

There was a considerable need within Afghanistan for credible information on how the drought was impacting the health and nutrition of the population. As a health agency with historical capacity in nutrition the evaluators suggested that MSFH could have capitalised more on their comparative advantage in the health sector by analysing and highlighting the health component of the crisis and by focussing their interventions more fully on the health sector, i.e. investing more resources in further strengthening and expanding health programmes and integrating nutrition components (where necessary) into these health programmes. Also MSFH was well placed in the regional paediatric ward to strengthen and support health information systems and analysis and strengthen links in referring clinics, however this was not done. This may have been a better option than focussing on a sector (food aid) where MSFH were dependent upon the commitment and

response capacity of other agencies.

MSFH placed too much confidence in rapid MUAC assessments which it saw as a viable alternative to weight for height surveys. Rapid MUAC assessments found alarming rates of Global Acute Malnutrition (GAM) which were not the case where weight for height surveys were undertaken. Similar prevalences of GAM were not identified in a limited number of surveys reviewed where both indicators were measured. The correlation between weight for height measurements and MUAC requires further analysis in this setting before MUAC can be used with confidence in place of weight/height to define prevalence of malnutrition. Trend analysis was also affected by assessments carried out on changing populations and using varying age and height cut-offs.

The high dependency on expatriate staff with sometimes limited experience and short contracts, for project management led to lack of continuity of approach. The difficulties experienced by MSFH in human resource management were often related to inability to fill positions by expatriates. Yet MSFH's experience has shown that management capacity can be accessed locally.

At the time MSFH did not have policies which addressed some of the issues that arise in connection with working in the type of longer-term health crisis that exists in Afghanistan. Such a context raises issues on project management, how to work with, through or independently of local partners and infrastructure, the degree of dependence on expatriate staff, coherence of health strategies and methods of withdrawing from programmes. Arguably, this absence of policy led to a modus operandi that was not always appropriate for the context.

Limitations of the evaluation

Limitations included lack of a central repository for reports and information on the programme. Much information was lost or misplaced during the evacuation. The high staff turnover meant that most MSFH international staff connected to the programme over the time period in question were no longer in Afghanistan at the time of the field visit nor were many key personnel from other INGOs and UN agencies present during the period under question.

Findings

Within a context of the appalling health status of women and children and poor access to basic health facilities in Afghanistan, the focus of MSFH's operational activities was affected by 'what the Taliban would allow', security, a developing drought induced food crisis, lack of reliable information and how MSFH perceived its role (i.e. whether it should focus on needs arising out of crisis, human rights monitoring, or health needs of the most vulnerable). Over the time period in question the focus changed from improving health care access in rural areas to focusing on health needs in cities and eventually to safe motherhood in remote areas.

MSFH's primary analysis of the impact of the drought was in keeping with many other agencies, i.e. that there was a developing food crisis, which required emergency food and nutrition interventions. Although MSFH's perception was that a General Food Distribution (GFD) was the most appropriate response, staff were conflicted about whether MSFH should take on an implementing role. Ultimately the decision was taken (based on many factors and previous experience) that MSFH would not 'do' GFDs. MSFH therefore focused on advocating for improved GFD and later implemented Blanket Food Distributions (BFDs) as stop gap measures. Although much of the advocacy work was important, MSFH were largely unable to influence or affect the mobilisation of GFDs in areas where they were implementing BFDs.

Fiona O'Reilly



Weighing supplementary rations, Mazlak IDP camp, Herat 2002

Key recommendations

The evaluation contained a number of recommendations related to the above findings. Key recommendations that related specifically to nutrition and food security aspects of the programme were as follows;

- MSFH could further clarify its policy and strategy on implementation of general food distributions based on an analysis of past experience and the internal debate on this issue that has taken place over the past decade. This clarified policy should set out options on what to do in circumstances where food insecurity is severe and undermining MSFH health programmes.
- MSFH could increase capacity to support epidemiological analysis in areas of operation as well as competence in integrating food security, health status and nutritional status analysis.
- Unless the current consensus changes (as evidenced by new research) MUAC assessments and surveys should be treated with the appropriate caution. ■

¹ O'Reilly F., Shoham J. MSF Holland in Afghanistan Mission Evaluation: May 2000-May 2002



One of the project villages, 300 families, 100% rain-fed agriculture on land 1700m above sea level, 15km away from the district capital with its bazaar and health facilities. Saqawa. September 2002

Chris Op Reis

Targeted Food Distribution to Women and Children in Northern Afghanistan



By Regine Kopplow, Concern Worldwide

Regine Kopplow is a senior nutrition advisor with Concern, working in Afghanistan since April 2002. Previous field experiences include Namibia and Sierra Leone.



This article describes the impact of a food distribution programme targeting households of malnourished women and children in northern Afghanistan. The observations reflect the challenges of anthropometric measurement in this population, and also raise questions over the efficacy of short-term BP5 supplementation programmes. The nutritional vulnerability of Afghan women is also highlighted¹.

Concern Worldwide has been operational in northeast Afghanistan since 1998, following an intervention in response to the earthquakes that struck the northern part of the country. With a landscape of high mountains and narrow lush plains, north-eastern Afghanistan is an extremely remote area and access to many villages is only possible on foot or by donkey/horse. Poverty is a major issue. Water for irrigation is scarce, access to markets severely limited, and almost all the population are involved in subsistence agriculture.

Between 1999 and 2001, Concern assistance targeted rural water supply, health education, and shelter rehabilitation. In the second half of 2001, Concern began to assist and support IDP (internally displaced persons) settlements in Takhar province and extended its FFW (food for work) infrastructure projects to Baghlan province. By 2002, Concern began to adopt a longer-term strategy, reflected in the programming approach in Rustaq district, an area with a population of 167,455 people. Here, the many villages surrounding the relatively large market town of Rustaq are hampered by poor land consisting mainly of rock formations, with little arable potential. In Rustaq district, community based organisations were established, through which Concern began to address food security needs. The early FFW and FoodAC (food for asset creation) projects were replaced by community based agricultural activities such as seed distributions, seed banks and livestock vaccination, water projects to provide safe drinking water and irrigation systems, as well as infrastructure projects to construct roads, bridges and dams with a voluntary community component.

Nutrition and food security

Following three years of drought, a food security and nutritional assessment by Concern in December 2001 showed alarming results. Although the sample size was small (100 households in 7 villages), it indicated that there were pockets of great need that required immediate intervention to prevent death, displacement and destitution. Women seemed particularly affected. In the surveyed villages, 36.5% of the females measured, had a MUAC (mid-upper arm circumference) <215mm, indicating chronic severe malnutrition, and a further 27% had a MUAC <230mm, suggesting a high risk of becoming malnourished. In comparison, malnutrition rates (MUAC <125mm) for children aged 1 to 5 years were 10.1%. Meanwhile, the 2001 WFP VAM² report suggested that 60% of the population in Rustaq district were drought affected and required food assistance until the end of June 2002.

In response, Concern intervened to assist and support malnourished vulnerable families in Rustaq district. Aiming to meet immediate basic food needs, the project objectives³ included provision of:

- a balanced food basket for the malnourished to improve their nutritional status before/over winter
- fortified food (BP5) to malnourished children and severely malnourished women to improve their nutritional status before/over winter.

Targeting

The project operated in two main phases. Phase One (August to December 2002) targeted 12 villages, while Phase Two (December 2002 to April 2003) targeted a further 16 villages. The 28 targeted villages were located between 5 and 35km from Rustaq town. The average population was 122 households per village, of which 9% constituted vulnerable groups, e.g. elders, disabled, unaccompanied children, returnees or female-headed households. Overall, 24 of the 28 villages were wholly dependent on rain-fed agriculture.

In the villages, all women aged 15 years and older and children aged between 6 and 59 months were assessed using MUAC. In order to facilitate nutritional monitoring and determine programme impact, all registered beneficiaries were later assessed using Body Mass Index (BMI)⁴ for women and weight-for-height % of the median (WH) for children.

All households with at least one person fulfilling MUAC criteria (women £220mm and children £124mm) were issued with a ration card. In total, 2734 women and 2127 children under 5 years were screened and 1294 households qualified to receive a monthly dry food ration over a period of 5 months. Based on an average family size of 6 members and given many years of war

and drought, the recent earthquake, exhausted coping mechanisms and empty food stores, the aim was to supply 100% of calorie need (2100kcal/day/person).⁵⁶ Monthly family rations consisting of 45kg wheat, 45kg rice, 10kg dried beans and 5kg vegetable oil, provided an individual daily intake of 2156 kcal, 60.5g protein and 33.7g fat.

Over a four-week period, BP5 biscuits (4 bars = 1000kcal) were distributed to selected children in Phase One and Two and women in Phase Two only, in addition to the monthly household ration. For children in Phase One, entry was based on MUAC only (≤ 124 mm) while Phase Two entry included weight-for-height criteria (MUAC ≤ 124 mm and $< 80\%$ WH). Entry for women in Phase Two was based on MUAC and BMI criteria (MUAC < 185 , and/or BMI ≤ 16 ⁷).

The nutrition team consisted of two female nurses, one female translator, two male nutrition workers, one driver and an international female nutritionist.

MUAC screening

MUAC cut-off points were identified after a thorough review of nutrition surveys conducted in Afghanistan by different agencies, and cross-checking during screenings at the start of the project. MUAC, BMI and WH (% of the median) criteria used in screening and nutritional surveillance, are outlined in table 1.

Village MUAC screening of women and children identified rates of malnutrition necessitating immediate intervention. From 2127 children screened, 12.9% were moderately malnourished and 2.3% severely malnourished (15.1% global acute malnutrition). Malnutrition rates were not evenly distributed in children, most notably,

- the prevalence of global acute malnutrition was highest in children aged 12 to 23 months (37.2%) followed by children aged 24 to 35 months (28.4%).
- under 48 months of age, girls had higher rates of global acute malnutrition than boys.
- of those who were classified as severely malnourished (n=48), 39% comprised infants under 1 year of age.

From a population of 2734 women screened, moderate malnutrition rates were particularly high (39.6%). The overall prevalence of severe malnutrition was 1.0%. Women aged between 20 to 29 years had the highest prevalence of both moderate (38%) and severe malnutrition (0.9%). Among malnourished women aged 20-29 years (MUAC ≤ 220 mm), 17% were pregnant and 41.5% breastfeeding. Meanwhile, half (50%) of those aged 15-19 years were pregnant (26.9%) and/or breastfeeding (23.1%).

Weight-for-height (WH) and body mass index (BMI)

Amongst children with a MUAC ≤ 124 , the vast majority (85%) had a WH $\geq 80\%$. Similarly, over half (64%) of the women classified as malnourished using MUAC had a normal/overweight BMI (≥ 18.5). Using BMI, only 31% of women registered in the programme were classified as moderately malnourished (BMI $\geq 16 < 18.5$). Conversely, the proportion classified as severely malnourished (BMI < 16) increased. Compared to women with a normal BMI ($\geq 18.5 < 25$) and MUAC ≤ 220 , the severely malnourished group were older (39y versus 34y), taller (1.55m versus 1.52m) and had an average BMI of 14.98, and MUAC of 192mm (BMI 20.22, MUAC 209 in normal BMI group).

Impact of monthly food ration

After five months of food distribution, all Phase One beneficiaries were reassessed using BMI (women) or WH (children). Prevalence of moderate and severe acute malnutrition fell to acceptable levels amongst children (see table 2). However global acute malnutrition rates remained unacceptably high for women (28%), while severe malnutrition rates halved but remained



Chris Op Reis

Boy on a donkey in Saqawa village, the normal transport facility, Saqawa. September 2002

Classification	Children 6-59 m		Women ≥ 15 years	
	MUAC mm	WH %	MUAC mm	BMI %
Severe	< 110	< 70	< 185	< 16
Moderate	$\geq 110 \geq 124$	$\geq 70 < 80$	$\geq 185 \geq 220$	$\geq 16 < 18.5$
Global acute	≥ 124	< 80	≥ 220	< 18.5

Classification	Children 6-59 months and MUAC ≥ 124 mm		
	MUAC screening	WH pre-intervention ⁹	WH post-intervention
n	2127	306	275
Severe	2.3%	2.0%	0.4%
Moderate	12.8%	13.1%	6.9%
Global acute	15.1% (n=320)	15.1% (n=46)	7.3% (n=20)

Classification	Women ≥ 15 years and MUAC ≥ 220 mm		
	MUAC screening	BMI pre-intervention ¹⁰	BMI post-intervention
n	2734	808	749
Severe	1.0%	5.1%	2.4%
Moderate	39.6%	30.9%	25.6%
Global acute	40.6% (n=1110)	36.0% (n=291)	28.0% (n=210)

⁹ MUAC prevalence rates refer to the total population, while weight-for-height figures refer to the sub-group of the population with MUAC ≤ 124 .

¹⁰ BMI prevalence rates refer to the sub-group of the female population with a MUAC ≤ 220 and excludes women pregnant and/or lactating (infant under one year). See footnote 8.

elevated (2.4%), (see table 3). It should be noted that the statistical significance of these findings was not tested.

Impact of BP5 distribution

BP5 biscuits were distributed to 207 children and 37 women over a four week period. All women and children receiving BP5 were weighed before, weekly during, and 6 weeks after the intervention. During the distribution, the nutritional status of both women and children improved. However amongst children, nutritional status declined once supplementation ceased (see figure 1). Since different entrance criteria were used for the children in Phase One and Two, children entering Phase Two had a lower starting WH than those in Phase One. Children in Phase Two, with an average WH of 77.5%, showed a very rapid response to the 4 weeks of BP5 supplementation, reaching a higher WH than Phase One (starting WH 88.4%). However, six weeks

after the last BP5 ration, the Phase Two WH had dropped to 86.9%.

Since only women in Phase Two received the BP5 supplement, it was possible to compare their improvement in nutritional status between Phase One and Two. With BP5 supplementation, the mean body weight increased by an average 2.7kg (36.6kg to 39.3kg) and the improvements were maintained 6 weeks following cessation of supplementation (see figure 2). However, the same gain was found in the group without BP5 supplementation (36.1kg to 38.8kg). It should be noted that participation in the final weight monitoring was only 50% for the non-BP5 supplemented group.

Women's nutritional vulnerability

The limited impact of the interventions on women can, at least in part, be explained by those longer-term factors underpinning nutritional vulnerability of Afghan women. The cultural



Cecil Dune

Girls in one of the project villages observing sceptically the screening process. Rustaq/north-east Afghanistan. March 2003

and social consumption patterns within the household do not favour women in terms of dietary quantity or quality. Culturally, it is less acceptable for women to move out of the confines of the village than men. Consequently, there are fewer opportunities for women to improve the quality of their diet, through purchasing or consuming vitamin/protein rich foods during visits to the market, for example. Similarly, access to health systems is reduced by this restricted movement. There is also poorer access to health education at a time when there appears to be considerably less transfer of inter-generational knowledge, especially in the rural areas. Finally, pregnancy patterns suggest insufficient time for nutritional recovery between births.

Conclusions, recommendations and lessons learnt

A discrepancy was found between estimated malnutrition levels using different indicators. Amongst children, the vast majority who had been classified as acutely malnourished using MUAC, did not fulfil weight-for-height criteria. Only one-third of the women deemed moderately malnourished using MUAC, were classified as such using BMI criteria. On the contrary, the prevalence of severe malnutrition in women was higher using BMI criteria. Women, overall, appeared 'unusually' shorter than men. While we have no clear explanation for these observations, contributing factors may include phenotype, as well as chronic malnutrition and many early pregnancies influencing female development and body stature. Also, the inclusion of adoles-

cents (10-19 years as defined by WHO) in our comparison, and the lack of standard BMI cut-off points for this group, may influence interpretation of population-based figures. Ultimately, these findings highlight that MUAC cut-off points for malnutrition need to be further reviewed in Afghanistan. Further research may be needed on the Cormic Index¹¹ to obtain more reliable anthropometric reference data of Afghan adults.

BP5 is a compact energy rich food with easy storing, transporting, distribution and preparation character. The acceptability is high. However in our intervention, the full weight gains were not sustained in children. Amongst women, weight gains were sustained although these were similar to those who had not been supplemented. Though interpretation of responses amongst women is limited due to incomplete data, it would be valuable to investigate how, and the extent to which, the factors contributing to the long-term nutritional vulnerability of Afghan women impacted the effectiveness of BP5 distribution. The experience also illustrates the need for clear education and training on the rationale, use and constraints of BP5, for both the beneficiary and the community.

In some of the targeted villages, Concern has been implementing community-based interventions that are at risk of being undermined by free food distributions. The use of high-energy BP5 with a likely quick impact strengthens this tendency. Even when beneficiaries receive the

necessary training to understand the concept of the intervention, non-beneficiaries only see the quick nutritional improvement. Furthermore, it is common among staff and beneficiaries to call the BP5's "biscuits". This engenders a sense that normal biscuits are appropriate foods for children and endorsed by clinics and NGO's. In many cases this led to severely malnourished children being exclusively fed with normal biscuits. In emergency situations, BP5 seems to be an appropriate supplementary food for short-term interventions, showing a quick impact on malnourished children. However, to reduce the chances of deterioration following the intervention, it is vital both to comprehend and concurrently address the underlying causes of malnutrition in the intervention community.

Our findings highlight that nutrition surveys in Afghanistan should include women. Focusing exclusively on children, and even pregnant women in the third trimester does not reflect the entire dimension of malnutrition in the country. Considering the prevalence of early and frequent pregnancy and the potential implications for maternal and infant nutritional status, addressing the needs of Afghan women is all the more critical. ■

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¹ Emergency Complementary Food Supplies To Drought Affected Vulnerable Populations in Afghanistan, Ref: 605/11285/CON 08 02, 17 April 2002-30 April 2003, Concern Worldwide

² World Food Programme/Vulnerability Analysis Mapping

³ The project had other key objectives and activities relating to health and nutrition education, and hygiene which are not included here but are detailed in the main report (see footnote 1)

⁴ Body Mass Index (BMI) is calculated as weight (kg) divided by height squared (metres)

⁵ This meets Sphere standard on food aid requirements.

⁶ In effect, this meant that the project provided a general, rather than complementary, food ration.

⁷ Slightly different BMI cut-off points were used for severe malnutrition in women for surveillance (BMI<16) compared to BP5 distribution (BMI≤16). As various standards exist, a cut-off point was accepted at the beginning of the project, which was later revised as the project progressed.

⁸ All pregnant women (12%) and those breastfeeding infants under six months (7.8%) were excluded from this comparative analysis. Thus, 219 women (19.8%) of the total group (n=1110) were not included. Of the remaining 891 eligible for measurement, 808 women were available and BMI calculated.

¹¹ The Cormic Index assesses the relative contribution of the trunk and legs to stature. It is calculated as the ratio of sitting height (SH) to standing height (H) SH/H and expressed as a percentage. A means of standardising BMI using Cormic Index has been proposed, for both males (BMI =0.78(SH/S)-18.43) and females (BMI=1.19(SH/H) - 40.34), and detailed in the RNIS supplement, Assessment of nutrition status in emergency affected populations, Collins S, Duffield A, Myatt M, July 2000. See online

at <http://www.validinternational.org/tbx/docs/ACF88.pdf>

Figure 1: Mean weight-for-height ratio for children under BP5 treatment (n=207)

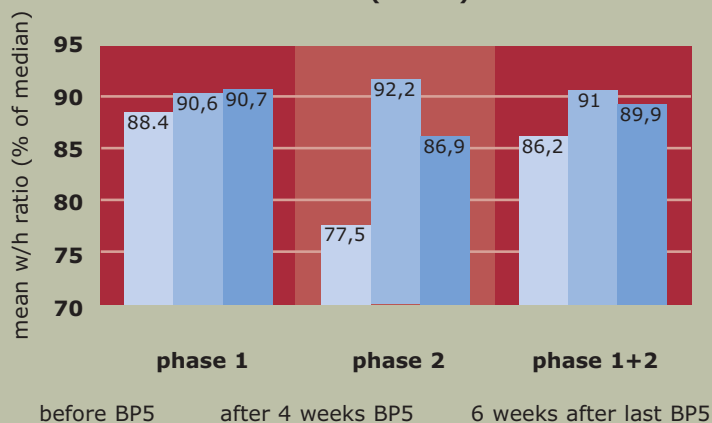
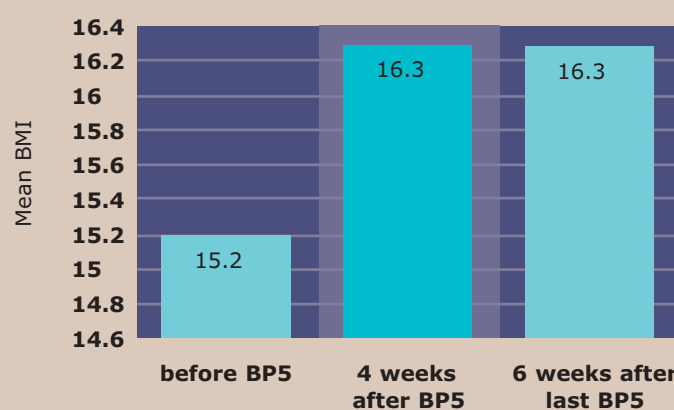


Figure 2: Mean BMI of women under BP5 treatment (n=37)





Tdh feeding centre, Haiti. 1999

Field Exchange interviewed Philippe Buchs, joint head of the Terre des hommes (Tdh) programmes department, and Rebecca Norton, headquarters (HQ) nutrition advisor based in Lausanne, Switzerland. Philippe has worked for Tdh for 20 years (most of his working life). Five years of this has been spent in the field and the remainder at HQ. His background is in political science. Rebecca has been a nutritionist at Tdh HQ for almost three years.

Tdh was formed in 1960 following the 'war of decolonisation' in Algeria. This war had a profound effect in France and French speaking Switzerland, raising awareness for many of the extensive problems in developing countries. Tdh continues to work in Algeria to this day, typifying how the agency tends to become involved in a country following an emergency and then stay on to undertake longer-term development work. This pattern has recurred in countries like Vietnam, Bangladesh (following partition), Ethiopia, Rwanda, and Kosovo. However, there is no institutional split within Tdh between emergencies and development. In fact, the very first emergency co-ordinator was only employed in 2003.

Tdh is a relatively small non-governmental organisation (NGO) - the budget in 2002 was a modest 22.7 million euro. Approximately 83% of the revenue comes from private donations and the remainder from public funds, e.g. the Swiss government development agency and decentralised government at canton and commune level. The cantons hold a development budget, which a 'federation of NGOs' allocate to members. Tdh have working groups in the 23 Swiss cantons - approximately 2,500 volunteers in all. The volunteers support Tdh through fund-raising and profile building, e.g. events in shopping centres. Tdh is also a member of the Tdh alliance, which has ten members (the principal ones being Germany, Switzerland and Italy). As Tdh funding sources are diverse, their funding base is relatively stable. For emergencies, most funds come from a centralised body called 'Swiss Solidarity'. This body generates funds through the media, with a com-

Interview by Jeremy Shoham

Name.....	Terre des hommes, Tdh
Address.....	En Budron C8, 1052 Le Mont sur Lausanne, Switzerland
Telephone.....	+41 21 654 66 66
Fax.....	+41 21 654 66 77
Internet Site.....	www.tdh.ch
Year Formed.....	1960
Secretary General.....	Peter Brey
Overseas Staff.....	24 expatriate and 800 local
HQ Staff.....	90
Annual Budget.....	22.7 million euro (expenditure in 2002)

mission deciding how to distribute monies amongst the various NGOs.

Tdh now operates in 30 countries. In 2000, there were 43 country programmes, but this has slowly been reduced as country situations have improved - Tdh moved out of Bosnia two years after the war ended, for example. If Tdh move into a new country, they will usually phase out gradually from another programme.

Tdh feeding centre, Haiti. 1999



Philippe explained how Tdh is a child-focused agency whose two main pillars of work are "operational and advocacy." He outlined three main sectors of Tdh work, which are maternal and child health (MCH) and nutrition, children in difficult circumstances, e.g. street kids, and child rights, such as fighting against child trafficking. Rebecca explained how there are currently seven specialist advisors at HQ. As the nutrition advisor, she advises the desks, partners and delegations on request. She is only the second nutrition advisor in the organisation, the first one being appointed four years ago.

In the past, Tdh nutrition programmes were mainly selective feeding, e.g. supplementary and therapeutic feeding. Nowadays, these activities are often coupled with education and health interventions. According to Philippe, "there has been an evolution towards a more integrated and holistic approach, with greater focus on community based interventions over the past five years. The idea is to listen to the community more and not give out ready made messages". Rebecca explained how the emphasis is now on greater integration of nutrition programmes into existing mother and child health programmes, so that improved treatment of malnutrition becomes longer-term and sustainable. Rebecca also stressed that Tdh are not an organisation like Medecins sans Frontieres, who are able to rush into emergencies and hit the ground running. Tdh lack the capacity for this and only really work effectively where they have long-term experience and local knowledge.

Philippe reasoned that as Tdh is a small NGO, it has to specialise in areas like improving inadequate maternal and child caring practices or improving health services (at the district level). It, therefore, has little capacity for food security work and will team up with other agencies that have complementary abilities. Also, as a small agency, Tdh tend to work at health district rather than national level. While the agency always attempts to integrate programmes into local public health systems, this can be a problem in more remote areas where health systems are not working well. The temptation is then to set up Tdh's

own programme independently. Rebecca identified difficulties in holding onto good staff as a problem. Tdh are putting a lot of effort into training local nutrition and health staff but the good ones tend to be snapped up by the better paying agencies.

Two other 'nutritional' challenges are faced by Tdh, according to Philippe. First, the small size of the agency with only one nutritionist (supported by a public health doctor) means that local teams have a lot of autonomy, but not always a lot of support from HQ. As a result, Tdh try and work in networks of other agencies in order to obtain support from elsewhere, when needed. Secondly, too little emphasis has been placed on the psychosocial components of malnutrition. The emotional and social environment of families needs to be addressed much more. This is also very important in emergencies. Tdh are currently involved in operational research in Nepal, which started in 2001, looking at psychosocial factors leading to malnutrition. The research is very much based on listening to mothers and then providing appropriate counselling. Results from the study show how long it takes to provide the necessary psychosocial support and train community people in taking on this role. The study report and a film of the study 'Down by the river – listening to mothers' are now available (see news section of this issue).

Rebecca went on to outline the following new developments and initiatives in the nutrition sphere:

- Greater emphasis on integrating nutrition programmes within existing Mother and Child Health programmes.
- Providing more psychosocial support for families with malnourished children.
- Strengthening capacity to provide breastfeeding counselling - the first Tdh breastfeeding counselling course will be held in Africa this year.
- Collating and disseminating key lessons learnt/best practice, and providing this in the form of a knowledge management system with software to field staff. It is hoped that this will be available by the end of 2004.

When asked about the specific strengths and uniqueness of Tdh, Philippe made a number of points. Tdh are present when an emergency arises (as they work in emergency prone countries) so they know the culture, region and people. Prior knowledge is critical in the early stages of emergency response. They are a very 'grass roots' agency and know their partners and their abilities well. Most of these partners are local NGOs, the majority of whom have been helped by Tdh to establish themselves as an NGO. By helping the institutional development of partner NGOs, this engenders a deep relationship with partners of shared culture and tradition. Tdh attempts to be flexible and not impose ready made solutions – field staff have a decentralised approach and Tdh will always aim to add value to a project rather than just fund, i.e. they take part in project planning.

When asked to describe the 'culture' of his agency, Philippe commented that, in many regards, it was a 'typical Swiss entity' - "the Swiss government has been politically stable, since 1959 and very much consensus driven. Tdh has no political affiliation and advocates based on what it sees in the field, rather than ideology or global theories. With some exceptions - being openly against the recent war in Iraq, for example - Tdh does not make political statements. It is an agency which bases programmes on field reality and trying to change reality where necessary". Rebecca's response to the same question was that Tdh is a very people-oriented agency and nowhere is this better epitomised than in the excellent way in which staff are treated. ■

Suspected Thiamine Deficiency in Angola

By Manuel Duce, Dr. Josep M. Escriba, Dr. Cristina Masuet, Dr. Paula Farias, Dr. Elena Fernandez and Dr. Olimpia de la Rosa

Dr. Paula Farias, Dr. Elena Fernandez and Dr. Olimpia de la Rosa are all medical doctors currently working in emergency situations with MSF. The support of Pilar Perez Vico (documentalist), Simone Rocha (advocacy) and Dr. Gloria Bassetts (director of the medical department), in the preparation of this article is acknowledged and appreciated



Manuel Duce is currently the HQ nutritionist at MSF-Spain. Prior to this, he worked for 11 years in the field, mainly for MSF in Africa, Asia, Latin America and the Caribbean.



Josep M. Escriba is a medical doctor, who currently is working as the HQ epidemiologist.



Cristina Masuet is a medical doctor, currently working as a volunteer with MSF in epidemiology and nutrition.

This article describes MSF-Spain's field experience in the detection and management of a suspected outbreak of beriberi in Angola.

The conflict between the government of MPLA (Popular Movement for the Liberation of Angola) and the 'rebel' forces of UNITA (National Union for the Total Independence of Angola) has been ongoing for more than 25 years. In February 2002, the leader of UNITA was killed and a ceasefire signed by the warring parties. Despite the cessation of hostilities, and the fact that humanitarian agencies have been able to move more freely, access to particular areas continues to be a serious problem.

Medecins Sans Frontieres (MSF)-Spain has been working in Angola since 1989, carrying out emergency and post-emergency interventions. For months before the end of the conflict, MSF teams in Caala and Matala had been receiving information on a location called Chipindo, where, allegedly, the population had been confined with virtually no freedom of movement and hardly any assistance being provided by the authorities, despite enormous need. Many of the inhabitants of Chipindo had come from the north-eastern and eastern parts of the Huila province – areas formerly under the control of the rebels. Chipindo, itself, had been under UNITA control for over 13 years until it came under government control in March 2001. The area lacked any infrastructure and was effectively a military base. In order for the military to have control over this displaced population, no one was allowed to leave without the express permission of high-ranking military officials.

Rapid assessment

Access to Chipindo had been impossible for humanitarian organisations since the resumption of the war at the end of 1998. Following the 2002 ceasefire, an MSF team were able to conduct a rapid assessment in Chipindo on April 27th and 28th, 2002, although roads were insecure and difficult to travel and the airstrip was mined.

The assessment team found between 14,000 and 18,000 people, most of who had arrived in Chipindo between May and September 2001. Using MUAC screening, the prevalence of global acute malnutrition was 30% and severe acute malnutrition was 15%, in children aged 6-59 months.

Later, in August 2002, MSF-Spain conducted a mortality survey using systematic sampling. A total of 449 families and 2,193 individuals were included. Crude mortality rate (CMR) and under five mortality rate (U5MR) were calculated for the period 15th October 2001 (start of rainy season) to August 2002:

- CMR 4.7/10000/day (95% CI 4.1-5.3)
- U5MR 15.2/10000/day (95% CI 12.5-18.0)

Most mortality occurred between October 2001 and March 2002 (76.8%). Overall, malnutrition was reported as the main cause of death (42.1% of all deaths). Malnutrition affected all age groups, particularly those under 15 years old (42.3% of all deaths occurred in this age group). This might be linked to the fact that the area was affected by a measles epidemic in February 2002.

Suspected cases of beriberi

In response to the initial assessment and with



Manuel Duce



Manuel Duce



Manuel Duce

Suspected cases of beriberi, TFC Chipindo. May/June 2003

improved access, on the 3rd of May 2002, MSF Spain opened a therapeutic feeding centre (TFC) and supplementary feeding centre (SFC) in Chipindo. During the first days of operation, 384 children under five years of age and 60 adolescents and adults were admitted to the TFC, while 668 children and 468 adolescents and adults were admitted to the SFC. As some of the patients in the TFC had a combination of high output heart failure, leg oedema and polyneuropathy, beriberi was suspected and thiamine (vitamin B1) treatment was initiated.

Categorisation¹ and treatment protocols for beriberi were based on WHO² recommendations (see box). Since laboratory facilities were not available, it was impossible to confirm deficiency of thiamine biochemically. Therefore, in order to confirm the disease and the efficacy of the treatment, a monitoring form was developed to follow the progress of patients during the course of treatment. It is important to note that as these protocols were initiated at the start of an emergency intervention, and given the considerable demands on staff and resources, the findings of the study have limitations and should be viewed with some caution.

Those affected by thiamine deficiency in Chipindo had been eating an extremely limited diet. Patients reported that the first symptoms of thiamine deficiency appeared after they had been reduced to eating "batata dulce" (sweet potato) with wild leaves as their main food for two months. With little potential for food production, most of this population were completely dependant on food aid rations. However, donor response to the emergency was slow and general food rations were implemented very late. At the time that the field team detected the

first cases of beriberi, no general food distribution had been implemented in the area.

A total of 52 suspected cases of thiamine deficiency, with a mean age 21.3 years³ (ranging 4 months-82 years), were treated and observed. Those under 15 years of age proved most at risk, accounting for 61.6% (n=32) of all cases. Twelve cases were in children under five years of age, and 36.5% (n=19) in those over 15 years. Overall, there was no significant difference in incidence between males (42.3%, n=22) and females (57.7%, n=30). However, in those over 15 years old, females were almost three times more susceptible to beriberi. As yet there is no proven

explanation for this difference.

Based on the WHO classification, seven patients (13.5%) showed dry or neuritic beriberi (decreased reflexes or touch, algescic (pain-related) and/or motor disorders) while nearly one-third (30.8%, n=16) demonstrated a wet or cardiac beriberi (heart failure or oedema). Twenty-eight patients (53.9%) demonstrated a mixed beriberi, and one four month old infant (1.9%) an aphonic beriberi. Half of the suspected cases (53.8%, n=28) had at least two or more signs/symptoms that affected different organic systems, and thirty-five patients showed neurological signs. Table 2 includes an outline of the

Table 1 Beriberi attack rates for main demographic groups

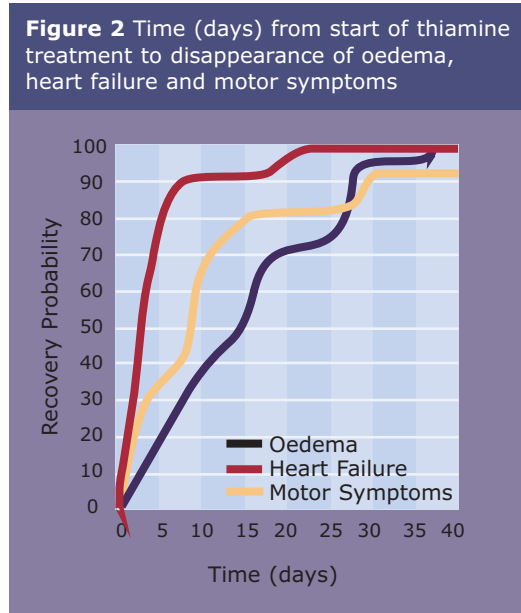
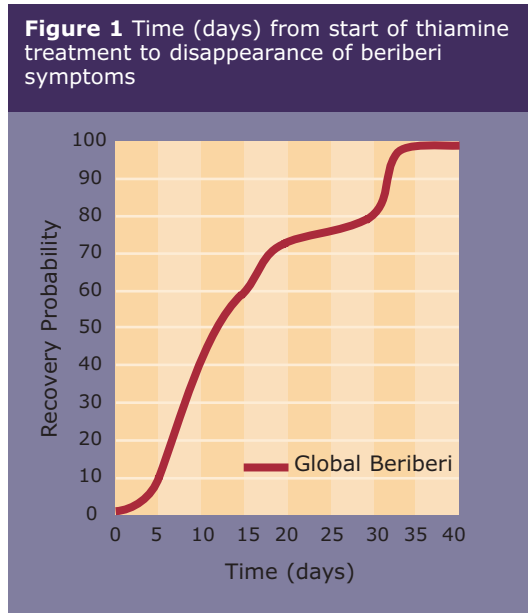
		Frequency of beriberi (n)*	Total population**	Attack rates
Male	<15 y	17	3,970	4.28/1,000
	=15 y	5	4,851	1.03/1,000
Female	<15 y	15	4,130	3.63/1,000
	=15 y	14	5,049	2.77/1,000
Total		51	18,000	2.83/1,000

*The age of one patient is unknown.
**The population numbers are estimated following the method described in "MSF Refugee Health. An approach to emergency situations", 1997.

Table 2 Clinical characteristics and recovery time of beriberi cases

Clinical characteristics		Total affected	Group recovery	Median time to recovery
		%* (n)	%** (n)	days (range)
Neurological	Motor	65.4 (34)	79.4 (27)	6 (1-31)
	Touch	23.1 (12)	100 (12)	3 (1-14)
	Pain	17.3 (9)	33.3 (3)	15 (5-31)
	Reflexes	5.8 (3)	33.3 (1)	4 (4-5)
Cardiac	Oedemas	61.5 (32)	81.3 (26)	10.5 (1-38)
	Heart failure	28.8 (15)	73.3 (11)	4 (1-21)
Other	Loss of voice	5.8 (3)	66.7 (2)	5 (3-5)
	Gastrointestinal	3.8 (2)	50.0 (1)	18 (5-31)

*Percentage of affected patients by overall sample
** Recovery percentage of affected patients by group
Forty-one patients (78.8%) were treated using prescribed thiamine dosages for treatment of moderate beriberi, and 11 patients (21.2%) were treated using dosages for severe beriberi (nine of whom demonstrated motor deficits and oedema).



clinical characteristics of this sample.

Overall, median recovery time was 15 days (6 to 31 days). Recovery rates and median time (days) for disappearance of specific clinical symptoms (recovery) are shown in table 2. Our results, reflected in figures 1 and 2, are comparable with those reported in the literature, i.e. heart failure is the first symptom that responds to treatment, followed by motor signs and oedema respectively.

Ten people died (19%) during the intervention. Seven deaths (3 girls and 4 boys) were among those under 16 years of age. Of these, four cases had wet beriberi (3 boys and 1 girl) and three cases had mixed beriberi (1 boy and 2 girls). In addition, three adult women died, two with mixed beriberi and one with wet beriberi.

Conclusions and lessons learned

It is usually assumed that beriberi only occurs amongst populations consuming rice as their main staple. Our experience shows that this is not always the case. If untreated, thiamine deficiency leads to death and in Chipindo, mortality rates were high even with treatment. This may have been due to other complicating factors, such as measles, diarrhoeal disease, acute respiratory infections and malaria commonly found in this population. Unfortunately, these other factors were not assessed.

It was difficult to estimate the magnitude of the problem in the area. Less than 1% of the population was suspected of having vitamin B1 deficiency (and treated). This constitutes a 'mild' public health problem as defined by WHO. However, as the symptoms of mild thiamine deficiency are vague and can easily be attributed to other problems, the magnitude of the problem may actually have been greater.

As clinical manifestations of beriberi are easily confused with many other diseases, beriberi can be diagnosed most successfully by combining an assessment of the clinical symptoms with a dietary history suggestive of a low thiamine intake. Moreover, this study has shown that evidence of vitamin B1 deficiency can be confirmed with the disappearance of clinical signs under treatment. Other studies have had similar results⁴. However it remains likely that some 'unidentifiable' groups had sub-clinical deficiency diagnosis. It is therefore important to continue efforts to develop field-friendly methods for the biochemical assessment of thiamine deficiency.

It is clear that when people depend entirely on emergency food rations, they are prone to developing a wide range of micronutrient deficiencies. These deficiencies are, in the main, both predictable and preventable. However, the international humanitarian community continues in failing to prevent the occurrence of outbreaks such as we experienced in Angola. We, therefore, have to ask the question, what is it we need to do to prevent such outbreaks occurring in the future?

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Chipindo town

Manuel Duce

A guide to thiamine deficiency and beriberi

Case definition

Beriberi is a clinical syndrome that arises insidiously as a result of severe, prolonged deficiency of dietary thiamine. In the early stages, it is characterised by anorexia, malaise and weakness of the legs, frequently with paraesthesia, there may be slight oedema and palpitations. The disorder may persist in the chronic state or may, at any time, progress to an acute condition characterized by either cardiac involvement with oedema, or by peripheral neuropathy, or a combination of the two.

Diagnosis

Laboratory facilities are required to assess thiamine status through biochemical assays (blood thiamine, urinary thiamine excretion, blood pyruvate and lactate, transketolase activity).

Source of thiamine (vitamin B1)

Thiamine is present in almost all plant and animal tissue although most sources contain low concentrations of the vitamin. Body storage of thiamine is minimal and it has a high turn over rate. Therefore a continuous supply of the vitamin is needed.

The major causes of thiamine deficiency include:

- Inadequate diet (when the diet consists mainly of white (milled) cereals, including polished rice and starchy staple foods such tubers)
- Inappropriate cooking methods
- Consumption of food containing thiaminases or antithiamine factors (e.g. fermented fish, tea leaves)
- Poor absorption
- Increased metabolic demand

Categories of beriberi

In adults, characteristics of wet and dry beriberi include:

Wet beriberi	Dry beriberi
<ul style="list-style-type: none"> • swelling (oedema) • increased heart rate (tachycardia) • lungs usually clear • enlarged heart related to • no cyanosiscongestive heart failure 	<ul style="list-style-type: none"> • pain • tingling, or loss of sensation in hands and feet (peripheral neuropathy) • muscle wasting with loss of function or paralysis of the lower extremities • loss of ankle and knee reflexes.

Thiamine deficiency can also occur in infants. Three main types of infantile thiamine deficiency are classified:

Cardiologic or pernicious form	Aphonic form	Pseudo meningitic form
<ul style="list-style-type: none"> • peak prevalence in breastfed babies of 1-3 months of age • colic, restlessness, anorexia, vomiting • oedema, cyanosis and breathlessness with signs of heart failure leading to death 	<ul style="list-style-type: none"> • peak prevalence in 4-6 month old infants • initially hoarse cry until no sound is procded while crying • restlessness, oedema, breathlessness and death 	<ul style="list-style-type: none"> • peak prevalence in 7-9 months old infant • nystagmus (involuntary eye movement) • muscle twitching • bulging fontanelle • convulsions and unconsciousness

Treatment

In cases of mild deficiency, a daily oral dose of 10 mg thiamine is administered during the first week, followed by 3-5 mg for at least six weeks. In severe cases the following dosages we used:

Infantile thiamine deficiency: 25-50 mg of thiamine slowly administered intravenously followed by a daily intramuscular dose of 10 mg for one week. This is followed by 3-5 mg of thiamine per day orally for at least six weeks

Critically ill adults: 50-100 mg thiamine administered slowly intravenously, followed by 3-5 mg of thiamine per day orally for at least six weeks.

Source: Thiamine deficiency and its prevention and control in major emergencies WHO/NHD 999.13, WHO 1999 ■

¹ Up to eight clinical syndromes related to lack of vitamin B1 have been described. See Golden M. Diagnosing beriberi in emergencies, Field Exchange 18

² WHO. Thiamine deficiency and its prevention and control in major emergencies. WHO/NHD, 1999

³ The age of one patient is unknown, hence n=51 for age-related data

⁴ Ahoua L, Etienne W. Epidemie de beri beri a la maison d'arret et de correction d'Abidjan. Epicentre/Medecins Sans Frontieres, 2003



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Carlos Navarro (ACF), Mary Corbett (DCI)

People in Aid

CTC workshop

A three day workshop was held by CONCERN Worldwide and Valid International on the Community Therapeutic Care (CTC) approach to addressing malnutrition in emergencies, in Dublin, Ireland between 8th-10th of October. Bringing together interested agencies, key academics and donors, the aim was to discuss and develop strategies and policies to harmonise the future implementation of CTCs. The proceedings of this workshop will be prepared and disseminated by the ENN.



Clockwise from top:

- Mike Golden (Ind), Tahmeed Ahmed (ICDR'B)
- Anne Callanan (WFP), Fiona O' Reilly (ENN)
- Anna Taylor (SC UK), Mark Manary (University of Washington)
- El Hadji Issakha Diop (University of Dakar), Salimate Wade (University of Dakar), Anne Nesbitt (Queen Elizabeth Hospital, Malawi)
- Paul Rees-Thomas (Concern), Chris Brasher (MSFFrance)
- Yvonne Grellety (Ind), Jeremy Shoham (ENN)
- Montse Saboya (MSF France), Sophie Baquet (MSF Belgium)





PSP course

Between 14 and 27 September, the biannual MSF PSP (populations en situation precare) course was held in Paris, France. Targeting experienced, ideally MSF, medical staff at co-ordination level, the 12 day training included epidemiology, vaccination, nutrition, water and sanitation and emergencies.

Thirty-six people took part in the course

Group picture:
36 participants of the PSP + permanent team



Sub-Group: Sophie Baquet, Joseph Leberer, Cecile Chapuis, Juncal Gonzalez, Janet Raymond and Johanne Sekkenes



Permanent team: Isabelle Beauquesne, Johanne Sekkenes, Catherine Bachy, Gloria Puertas, Brigg Reilley



Cecil Dune

Regine Kopplow with Nutrition team:
Roya translator,
Fawzya nurse,
Laila nurse,
Aslam driver,
in front sitting Saber nutrition field worker,
Ahmir Khan nutrition field worker with his son Belal.
Rustaq Concern field office/north-east Afghanistan,
April 2003.



@ Jon Berkeley



Fiona O'Reilly

We would like to draw your attention to the fact that this is the last issue of Field Exchange in phase three of the ENN. Sadly, this coincides with the departure of our colleague, Fiona O'Reilly, who is retiring from the ENN as co-director. Fiona and I established the ENN in Trinity College, Dublin at the end of 1996. As a resident of Dublin, it fell to Fiona to establish the office and deal with all practicalities related to running a publication as well as the other activities that the ENN have become increasingly involved with over the years. Fiona managed many of these tasks single-handedly and had to learn a huge variety of skills 'on the hoof'. These included desktop publishing, financial accounting, company legal affairs and staff management. Fiona has made many invaluable contributions to the ENN. Most notable amongst these has been the development of a unique presentational style for Field Exchange, which is the envy of many other publications. Fiona has also insisted on establishing procedures, which ensured that information in Field Exchange was corroborated and correctly attributed. She effectively became the 'political editor' in that she ensured that poten-

tially sensitive pieces were thoroughly verified and opportunities given for others to present their views. The fact that we have never been involved in litigation (so far) is largely due to Fiona's developed 'political antennae'.

Fiona has also been enormously influential in the area of infant feeding in emergencies, where ENN has been an active member of a core group of agencies involved in developing training material for field workers. Fiona's ever practical and pragmatic approach, and insight into field reality has greatly contributed to field-friendly guidance. No doubt Fiona will remain engaged with this work in the future, however her contribution so far is marked by some words from the core group members below.

The ENN owes Fiona a considerable debt of gratitude. We wish her every happiness and success in her future career.

Jeremy Shoham
(editor)

A personal word from the core group members

Fiona has had a long-standing involvement and commitment to the issue of infant and young child feeding. She brought to the group her varied experience with emergency issues, was a source of energy and ideas and was passionate about what she believed – sparks sometimes flew before we reached an agreement! But this was tempered by a willingness to listen and

learn – to participate in the discussion, debate and challenge.

Ultimately, Fiona gets things done, does not beat about the bush and goes straight to the point, no matter how challenging, difficult or sensitive it may be. A breath of fresh air, we look forward to her continued involvement – there is no escape!



Kornelius Elstner has been a central and invaluable member of the ENN team over the past five years. Kornelius has been responsible

for the design and layout of Field Exchange as well as the design and maintenance of the ENN website. But Kornelius's input did not stop there as well as sorting out all things to do with computers and IT, 'K's perfectionist tendencies and linguistic excellence meant that he often found himself picking up errors in Field Exchange content and correcting the editors grammar! Having recently completed his computer science degree Kornelius is embarking on a career in the IT business. We wish him every success in the future.

Field Exchange

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Marie McGrath
Fiona O'Reilly
Jeremy Shoham

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Orna O'Reilly/
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Kornelius Elstner

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to protect health in war

Mijnzaken

Buitelandse Zaken

TRICAIRE



Royal Danish Ministry
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The Emergency Nutrition Network (ENN) grew out of a series of interagency meetings focusing on food and nutritional aspects of emergencies. The meetings were hosted by UNHCR and attended by a number of UN agencies, NGOs, donors and academics. The Network is the result of a shared commitment to improve knowledge, stimulate learning and provide vital support and encouragement to food and nutrition workers involved in emergencies. The ENN officially began operations in November 1996 and has widespread support from UN agencies, NGOs, and donor governments. The network aims to improve emergency food and nutrition programme effectiveness by:

- providing a forum for the exchange of field level experiences
- strengthening humanitarian agency institutional memory
- keeping field staff up to date with current research and evaluation findings
- helping to identify subjects in the emergency food and nutrition sector which need more research

The main output of the ENN is a quarterly newsletter, Field Exchange, which is devoted primarily to publishing field level articles and current research and evaluation findings relevant to the emergency food and nutrition sector.

The main target audience of the Newsletter are food and nutrition workers involved in emergencies and those researching this area. The reporting and exchange of field level experiences is central to ENN activities.



The Team

Fiona O'Reilly (Field Exchange production editor) and Jeremy Shoham (Field Exchange technical editor) are both ENN directors



Marie McGrath is a qualified paediatric dietician/nutritionist, working previously with Merlin and carrying out research with SC UK.



Deirdre Connell is currently the ENN part time administrator.

The ENN is a company limited by guarantee and not having a share capital.
Company registration number: 342426

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Fiona O'Reilly, Jeremy Shoham, Dr. Shane Allwright



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