MODULE 12

Management of moderate acute malnutrition

PART 1: FACT SHEET

The fact sheet is the first of four parts contained in this module. It provides an overview of the management of *moderate acute malnutrition* (MAM) in emergencies, with a focus on supplementary feeding programmes. Detailed technical information is covered in Part 2. Words in *italics* are defined in the glossary.

Introduction

Emergency *supplementary feeding programmes* (SFPs) aim to rehabilitate individuals with MAM or to prevent individuals with MAM from developing *severe acute malnutrition* (SAM) by meeting their additional needs, focusing particularly (but not exclusively) on children 6-59 months, pregnant women and breastfeeding mothers. Recently, greater emphasis has been placed on prevention of MAM as well as refinement of current approaches for treatment of MAM.

There are two types of SFPs. **Blanket SFPs** target a food supplement to *all* members of a specified at risk group, regardless of whether they have MAM. **Targeted SFPs** provide nutritional support to individuals with MAM. To be effective, targeted SFPs should always be implemented when there is sufficient food supply or an adequate general ration, while blanket SFPs are often implemented when *general food distribution* (GFD) for the household has yet to be established or is inadequate for the level of food security in the population. The supplementary ration is meant to be additional to, and not a substitute for, the general ration.

The **objectives of blanket SFPs** are primarily **preventative**, aiming:

- To prevent deterioration in the nutritional status of at risk groups in a population.
- To reduce the prevalence of MAM in children under five thereby reducing the mortality and *morbidity* (illness) risk.

The **objectives of targeted SFPs** are primarily **curative** aiming:

- To rehabilitate children, adolescents, adults and older people with MAM.
- To prevent individuals with MAM from developing SAM by providing a food supplement to the general ration.
- To reduce mortality and morbidity risk in children under five years.
- To prevent malnutrition in selected pregnant and breastfeeding mothers and other individuals at risk.
- To provide follow-up/rehabilitate referrals from treatment of SAM.

When to start programmes

The decision to open a blanket or targeted SFP should be based on a thorough analysis of the situation, including past and current rates of malnutrition, underlying causes of malnutrition, public health priorities, and available human, material and financial resources. Current recommendations are to consider overall trends in *global acute malnutrition* (GAM) and SAM and context rather than waiting until a certain threshold has been reached, by which it could be too late to implement an effective response.

- Blanket SFPs are often set up at the onset of an emergency when the GFD systems is being established and/or rates of acute malnutrition are high (e.g., more than 15 per cent), or an increase in rates of malnutrition is anticipated due to seasonally induced epidemics, or in case of *micronutrient deficiency disease* outbreaks.
- Targeted SFPs should be implemented when there are large numbers of malnourished individuals (e.g., *prevalence* of GAM 10 to 14 per cent and/or when GAM is between 5 to 9 per cent with aggravating factors such as high rates of disease). Targeted SFPs should ideally be run in conjunction with a GFD.

Who are the target groups?

There must be flexibility in defining and prioritizing groups depending on the context, however generally:

- Blanket SFPs target all children aged 6-59 months (or 6-24 months if resources are constrained), pregnant and lactating women, adults showing signs of malnutrition and other at-risk groups (e.g., sick and older people).
- Targeted SFPs target children 6-60 months with MAM, children 6-60 months discharged from therapeutic feeding programmes, older children with MAM, then selected pre-gnant and breastfeeding women, and, finally, individuals with social and medical problems such as twins, orphans, the disabled and elderly people.
- Infants under 6 months may be part of the SFP but it is the mother who receives the food ration and exclusive breastfeeding is encouraged.

When to admit and discharge from SFPs?

Admission and discharge criteria for **blanket SFPs** do not rely on anthropometric indicators. Once the targeted groups have been defined, individuals who meet those criteria are admitted and after a specific time period or when the blanket SFP is closed all individuals are effectively "discharged".

Admission and discharge criteria for **targeted SFPs** rely on anthropometric definition of MAM and/or indicators of vulnerability. Cut-off points used to define MAM should be in agreement with national policies and guidelines, taking into consideration capacity and resources for running the programme.

When to close programmes

- Blanket SFPs are closed when the GFD is adequate and prevalence of GAM is below 15 per cent without aggravating factors. Duration depends on the scale and severity of the disaster, as well as the effectiveness of the initial response.
- For targeted SFPs, it is a typical practice to close down a programme when there are less than 30 patients. New cases should then be referred to health centres or hospitals.

Food commodities for SFPs

Supplementary food can be distributed as on-site feeding (wet rations) through daily distribution of cooked food at feeding centres or as take-home (dry rations) through the regular (weekly or fortnightly) distribution of food.

- Take-home rations should always be considered first as these programmes require fewer resources and there is no evidence to demonstrate that on-site SFPs are more effective. Dry ration feeding carries less risk of cross-infection in overcrowded feeding centres and lower demands on mothers and caregiver time.
- On-site feeding may be justified when food supply in the household is extremely limited, firewood and cooking utensils are in short supply, and when carrying the take home ration might put beneficiaries at risk due to insecurity.

Take-home rations should be provided in the form of a premix which provides from 1000 to 1200 kcals per person per day, and 35 to 45 grams of protein in order to account for sharing at home. Women need an additional 350 kcals/day from the third month of pregnancy and 550 kcals per day for breastfeeding.

On-site feeding should provide from 500 to 700 kcals (500 kcals recommended but up to 700 kcals to account for sharing with siblings at the centre) of energy per person per day, including 15 to 25 grams of protein. Two meals are needed for children given their small stomach size. Food is also needed for caregivers.

Rations for blanket SFPs are more variable compared to the standardized ration for targeted SFPs. A number of factors are reviewed in setting the ration for the blanket SFP, namely level of household food insecurity and availability of the GFD, as well as availability of cooking facilities.

Supplementary foods must be energy-dense and rich in micronutrients, culturally appropriate, easily digestible and palatable. There are a wide range of commodities currently in use to treat MAM. They generally fall into two categories: dry rations/premixes (such as *fortified blended foods* (FBF) or *ready to use foods* (RUF). Dry rations/premixes require some additional preparation in the home, while RUFs can be eaten directly from the package. Currently, there is no clear evidence whether RUFs have more impact than FBFs or are more cost effective. Shortfalls in FBF in terms of nutrient content are being addressed through new formulations. RUFs are increasingly being used in the field to treat MAM.

Medical treatment

Routine medical care is generally not provided through blanket SFPs. In cases where the context requires and resources are available, blanket SFP distributions can be used for screening/referral for malnutrition and medical issues, and micronutrient supplementation.

Targeted SFPs, in contrast, provide routine treatment. Most beneficiaries referred from a therapeutic feeding programme will already have received routine treatment. Recommendations should be reviewed in light of national guidelines for which drugs and dosages to use. Routine treatment includes:

- Medical assessment and referral as needed
- Supplementation with vitamin A on admission for children 6-60 months, and 6 weeks postpartum for women
- Treatment of all children for worm infections
- Measles vaccination for all children between 9 months and 15 years of age
- Supplementation of iron and folic acid on admission and then administered weekly

Monitoring and evaluation

Programme effectiveness can be assessed in two main ways:

1. Periodic nutrition surveys of the population, although an improvement in nutritional status may not necessarily be due to the SFP.
2. Monitoring of programme *performance statistics*, e.g. the percentage of children recovered, deaths and defaulters expressed in relation to total number of children leaving the programme each month (applicable to targeted SFPs only). Target levels for these indicators are outlined in Sphere, although in some circumstances programme objectives may need to be redefined and targets adjusted accordingly.

Coverage is a critical indicator that is often overlooked. If programme performance in terms of *recovery, mortality* (death) and default rates are good, but coverage is low then there will be little programme impact at the population level. Sphere recommends coverage targets of greater than 50 per cent coverage in rural areas, greater than 70 per cent in urban areas and greater than 90 per cent in a camp situation. Coverage can be assessed through nutrition surveys, though other methods are being explored.

SFP as a component of CMAM

Where *community-based management treatment of acute malnutrition* (CMAM) is established, SFPs have a slightly modified role and approach. The supplementary feeding component of a CMAM programme aims to support moderately or acutely malnourished children without complications and others with special nutrient requirements.

Challenging areas

Flexible programming

There are many situations where targeted SFPs are implemented in the absence of an adequate GFD. When this happens the effectiveness of the SFP is bound to decrease as rations will probably be shared with other family members and the programme may be overwhelmed with a combination of re-admissions and new cases. In this context the objective of the programme is about preventing large-scale loss of life and getting as much food out into the community as possible. Every emergency presents a unique combination of factors and circumstances and, at times, decisions may conflict with current guidelines.

Need to combine SFPs with other interventions

In chronic emergencies, levels of acute malnutrition may remain unacceptably high for long periods of time. When this occurs, SFPs may remain open without any obvious exit strategy. Unless other programmes that address the underlying causes of malnutrition are implemented as well as the SFP, the SFP effectively becomes a form of welfare. Alternative approaches, including expanded GFDs or cash transfers with wider coverage may be more effective.

Conflict situations

In conflict situations, beneficiaries may periodically be prevented from attending feeding centres while implement-ing agencies may be unable to deliver food stocks. Staff may also be unable to attend on some days, which leads to weak programme management and monitoring. Agencies may be forced to make a number of adaptations, e.g., decentralized feeding centres so beneficiaries have better access, employing defaulter tracers, and strengthening communication with communities, local leaders and authorities who in turn take greater responsibility for screening and sensitization. In these contexts it is possible that Sphere performance targets cannot be met.

Key messages

1. In emergencies, moderate malnutrition can be addressed through blanket or targeted supplementary feeding programmes.
2. Blanket supplementary feeding is generally used as a preventive measure among a specific target group for a specific period of time in order to prevent moderate malnutrition in the population.
3. Targeted SFPs are generally used for treatment of MAM within individuals based on anthropometric admission criteria.
4. Programmes involving take home supplementary rations (dry feeding) are preferable in most situations to on-site (wet feeding) SFPs.
5. Although children under five and pregnant and breastfeeding women are the usual priority target groups, targets groups should be based on nutritional vulnerability.
6. SFP rations are meant to be additional to regular intake. Where household food insecurity and/or general food distributions (GFDs) are inadequate, programme objectives may need to be modified and implementing agencies must advocate for improved GFDs.
7. Rations should always be energy dense, micronutrient rich and culturally appropriate.
8. Targeted SFPs should always include a set of routine medical treatments. Blanket SFPs are an opportunity for nutrition screening and referral, and where needed additional medical care/supplementation, but this is not standard practice.
9. A number of programme indicators should always be monitored and analysed in relation to Sphere standards. Meeting these standards may be challenging in some circumstances due to constraints outside the control of implementing agencies.
10. SFP programming should be done in as integrated manner as possible, with linkages to infant and young child feeding support, livelihoods and health programming where feasible and appropriate.
11. Methods to manage MAM continue to evolve. Key areas include the types of food commodity used, and methods to improve overall performance and impact at individual and population level.