

**GUIDELINES FOR COMMUNITY BASED  
NUTRITION REHABILITATION**

**TANZANIA FOOD AND NUTRITION CENTRE**

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## ABBREVIATIONS

ARI	-	Acute Respiratory Infections
CBNR	-	Community Based Nutrition Rehabilitation
CHMT	-	Council Health Management Team
CORPs	-	Community Owned Resource Persons
HC	-	Health Committee
HCP	-	Health Care Personnel
KAP	-	Knowledge, Attitude and Practice
MCH	-	Maternal and Child Health
NURU	-	Nutrition Rehabilitation Unit
OPD	-	Out Patient Department
PEM	-	Protein-Energy Malnutrition
SD	-	Standard Deviation
TFNC	-	Tanzania Food and Nutrition Centre
TRCHS	-	Tanzania Reproductive and Child Health Survey
UNICEF	-	United Nations Children’s Fund

VHC	-	Village Health Committee
VHW	-	Village Health Worker
WHO	-	World Health Organization

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## **PREFACE**

Protein-Energy Malnutrition (PEM) is a major nutritional problem in Tanzania affecting all population groups, majority of whom are children under the age of five years. Its severe forms have a detrimental effect on the health and survival of pre-school children. For example, severe underweight children are more than 8 times likely to die than their well-nourished counterparts. Children are mostly affected as a result of inadequate food intake, increased physiological needs due to rapid growth and their high susceptibility to diseases.

As part of a strategy for ensuring survival of severely malnourished children, Community Based Nutrition Rehabilitation (CBNR) was established in 1980s. The approach stresses rehabilitation of the malnourished child in the same environment (home, village) that precipitated the condition using resources and infrastructures available in the community.

In 1987, CBNR guidelines were prepared by TFNC to facilitate the implementation of this approach.

At national level, there have been major reforms in the health sector and the local government establishment that may affect implementation of this approach. TFNC, therefore, felt the need to revise the guidelines aiming at realising successful implementation of nutrition rehabilitation at community level hence addressing the PEM problem more effectively.

These guidelines will be implemented through the Primary Health Care (PHC) structure, which has a laid down mechanism stretching from the grass-root to the national level. The guidelines are targeted to health care providers in hospitals, health centres and dispensaries; village health workers and extension workers from community development, education, agriculture and other sectors. The guidelines will also be used by village governments, decision and policy makers and other leaders at ward, division, district and regional levels, the aim being to facilitate establishment of CBNR and to ensure sustainability of the system in their catchments.

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## **1.0 INTRODUCTION**

### **1.1 Protein Energy Malnutrition**

Protein- Energy Malnutrition (PEM) is one of the major nutritional problems in Tanzania. It is a condition arising from inadequate energy and protein intake, which is usually aggravated by episodes of diarrhoea and other infections. The most vulnerable groups are children below the age of five years and pre-school children.

The victim of PEM starts by not eating enough to cover needs. As a result the child ends up in growth failure and under nourishment.

As regards manifestation, clinical and anthropometric features of PEM are distinguished. Clinically PEM manifests as underweight (moderate form of PEM) and marasmus, kwashiorkor and marasmic-kwashiorkor (severe forms).

. Underweight: is moderate form of PEM. The child looks thinner and smaller than other children of the same age but has no oedema. Underweight makes up the highest proportion of the

problem but it is the most ignored form, probably owing to the absence of striking features of illness.

. Marasmus: the child displays a remarkable failure of growth- what can be looked at as the deterioration of the underweight condition. He has very severe muscle wasting with flaccid, wrinkled skin and bony prominence. The child looks awake and hungry and displays what is referred to as “old person’s face”. Oedema is absent.

. Kwashiorkor: the child shows failure of growth but is not as severely wasted as in marasmus. The child shows hair changes (which becomes brown, straight and soft) and skin rashes (called flaky paint dermatitis”). The abdomen is swollen (liver enlargement due to fatty infiltration). He is inactive, apathetic, irritable and is difficult to feed. The child has oedema of lower limbs and other parts of the body.

. Marasmic-kwashiorkor: combines the main feature of marasmus (severe wasting) and of kwashiorkor (oedema). The child displays other clinical features characteristic of marasmus and kwashiorkor.

By use of anthropometric measurements (weight and height) three manifestations of PEM are distinguished: stunting, underweight, wasting.

- i. Stunting which is low height for the child's age (height for age below  $-2SD$  or 85-89% of Havard standard). This is a chronic under nutrition in children in which there is a failure to gain height.
- ii. Underweight, which is low weight for the child's age (weight for age is below  $-2SD$  or 60-80% of the Havard standard). This could be either acute or chronic under nutrition. In order to determine the actual cause serial weighing is needed.
- iii. Wasting, which is low weight for the child's height (weight for height below  $-2SD$ ). This is acute under nutrition, following inadequate dietary intake or an acute infection within recent weeks.

## **1.2 The situation of PEM in Tanzania**

The distribution of PEM in Tanzania varies from one region to another and within the same region. At national level it is estimated that 44% of children below the age of five years are stunted, with 17% of them being severely stunted. Underweight affects about

29% of underfives, 4% of them being in the severe form. Wasting is estimated to affect about 5% of the underfive children (TRCHS, 1999).

In the period of ten years between 1990 and 1999 the trend of PEM in Tanzania had remained relatively constant. Stunting and underweight stabilized at 43 – 44% and 29 – 31%, respectively. This pointed out to the fact that not enough efforts had been made to address the problem of PEM in Tanzania.

In underfives the rate of being malnourished varies with age. Studies show that the rate of being stunted or underweight increases progressively from the age of 6 months to 24 months. At the age of 24 months, 50% and more than 40% of the children are already stunted and underweight, respectively.

Beyond the age of 24 months the prevalence of stunting and underweight tend to stabilise.

## **1.3 Causes of PEM**

The causes of PEM are diverse and interrelated such that it requires multiple approaches to address the problem. The causes are a combination of individual, household, community, national and even international factors which influence the nutritional well being of an individual.

In identifying the causes of malnutrition the model referred to as “conceptual framework” is applied. The conceptual framework states the causes of malnutrition, showing how they interlink and how they are placed in relation to the problem (malnutrition). In deed this is the model that takes the maximum holistic approach in identifying the causes of malnutrition.

On the basis of the framework the causes of malnutrition are categorised as immediate, underlying and basic causes as summarised in fig. 1.

**Immediate causes** of PEM are inadequate dietary intake and childhood diseases such as malaria, diarrhoea, ARI, measles, worm infestation and others. Furthermore, inadequate food intake and diseases interact synergistically to cause PEM. For example malaria may cause loss of appetite and reduced food intake. On the other hand inadequate food intake may impair the immune system thereby leading to infection and increased severity of illness.

**Underlying causes** are barriers in the household, which precipitate malnutrition.

These factors, which are usually interlinked, are insufficient food security, inadequate child care, and inadequate basic services particularly those related to health, water and sanitation.

Insufficient household food security may be due to inadequate access to land, and or to food markets, inadequate food production and low household income. Similarly, inadequate health services, water and sanitation lead to increased incidences of diseases. Furthermore, families and communities do not give adequate time and resources to take care of their children in terms of feeding and health needs. Poor caring practices include failure to feed children appropriately and to utilise health care facilities for the special needs of children such as immunisation, growth monitoring and treatment of diseases. The underlying factors are also highly influenced by low education levels and poor community awareness on nutrition.

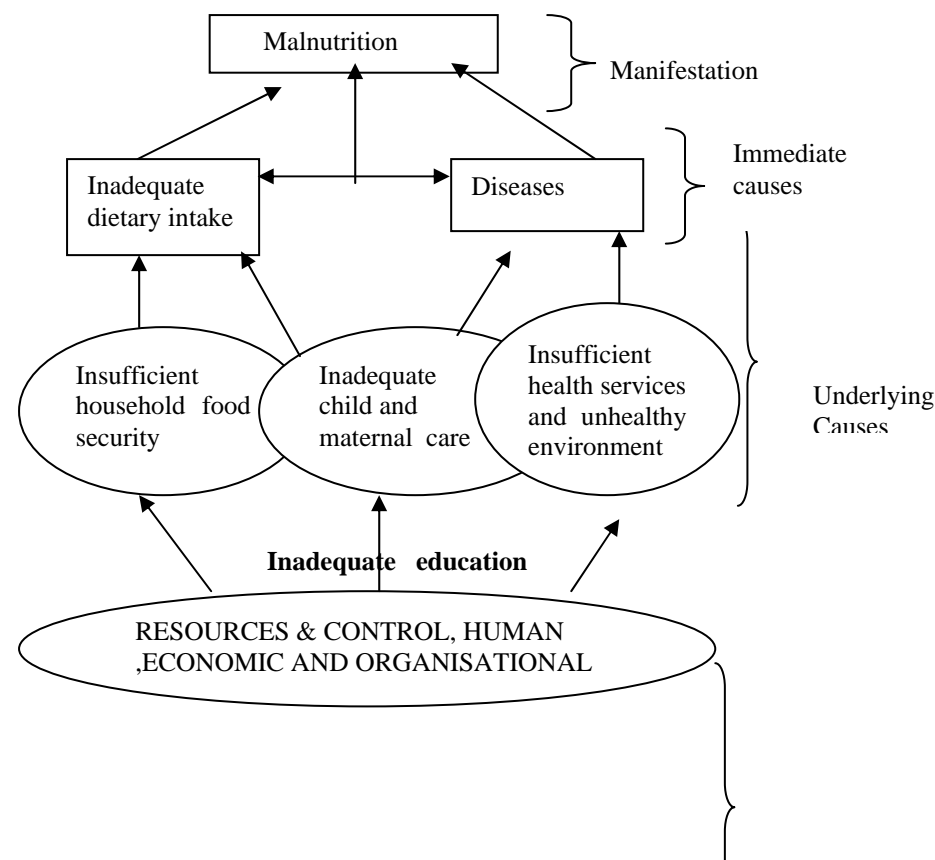
**Basic causes** of malnutrition include factors such as human, economic and organisational resources. Other factors are political, social and cultural factors. The basic causes are a result of structures and relationships in the society.

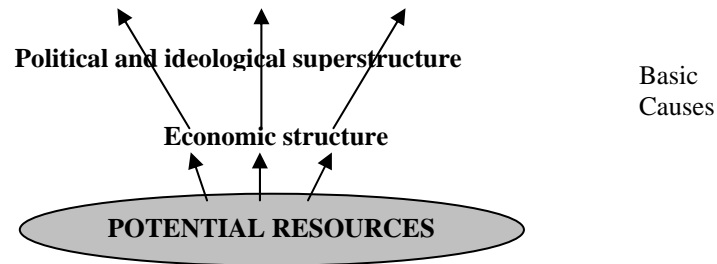
Every society has a potential for food production and provision of basic services to the people. But in most cases food production and provision of basic services are inadequate this is influenced by;

- Technical factors (poor farming knowledge and technology, poor availability of farm implements, seeds, fertilizer, pesticides etc.) leading to low food production and household food insecurity.
- Political factors (unfavourable policies on food and nutrition, agriculture, health, income, commodity prices etc.), leading to household and community vulnerability to malnutrition.
- Ideological factors (food taboos, wrong cultural beliefs) may lead to inadequate accessibility of food to the most at risk groups (women and children).
- Social factors especially with regard to property relations. In many societies there is extreme poverty living side by side with unbelievable material wealth. There are mechanisms (legal and illegal) that operate in the societies and between nations so that some people get much less than others.

- Disasters (environmental and social calamities) such as drought, floods, wars and civil unrest often jeopardise food production and provision of social services.
- Inadequate and inappropriate utilization of resources (material, financial and human resources) leads to food insecurity and inadequate provision of basic services.

**Fig. 1: Conceptual framework for causes of malnutrition**





Source: Adopted from UNICEF, 1992

#### 1.4 Effects and impact of PEM

Protein-Energy malnutrition has detrimental effects on the health and well being of children and the society.

##### At individual level

PEM at conception and during pregnancy can adversely affect intrauterine growth of the foetus. Intrauterine growth retardation leads to low birth weight thereby reducing the child's chances of survival.

Underweight increases the chances of infant and child mortality. It has been found, for example, that severely underweight children are eight times more likely to die than well-nourished children.

Moderately underweight children are five times more likely to die (WHO, 1999).

Children with PEM have impaired growth and lowered immune competence, which increase the risk of infections.

It has been estimated that 45 percent of all deaths beyond infancy are triggered by PEM, making this the single greatest cause of child mortality. Death of a child is loss of the resources invested in the nurturing of the child and is a traumatic experience to the parents and the family.

Children who are stunted in the first two years of life have lower cognitive test score, delayed enrolment to school and higher absenteeism than non-stunted children. This in turn, results in missed learning opportunities and therefore wastage in education investment.

Girls who are undernourished may be stunted and may continue to be undernourished when they are women. Their children are at risk of low birth weight and under-nutrition in childhood. Also, the mother may be unable to breastfeed because of lack of milk.

Pregnancy at young age interferes with girl's growth. She and the baby compete for the same food. As a result she is likely to have a smaller baby.

A pregnant woman who is undernourished cannot build up stores of fat and other nutrients. Therefore she uses her own muscles and other tissues to provide the nutrients needed for the baby's growth. Owing to this she may not gain weight hence the risk of delivering low weight baby.

#### **At society level**

Families with malnourished children spend more time and money on caring for them. For severely malnourished children and those with infections the costs of caring for them are even higher.

PEM has significant effect on the economy. Stunted children grow to become stunted adults. One of the most significant impact of stunting on adults is reduced physical activity and productivity. Studies show that productivity of physical labour decreases by 1.4 % for every 1% reduction in adult height. Another study (Alderman et al, 2003) demonstrated that stunting could reduce the height of an

adolescent by 4.6 cm; schooling by 0.7 grades and loss of 7 to 12 percent of lifetime earnings.

#### **1.5 Interventions on PEM**

Interventions on PEM target more on infants and pre-school children because of their greater vulnerability and hence highest prevalence of malnutrition compared to other population groups.

A long-term solution to PEM can be achieved by addressing the basic causes of malnutrition, which implies adoption of positive policies to the national development. Interventions that improves provision of basic services such as health, education, water and sanitation and those that address household food security significantly contribute to improved nutritional status. However, experience shows that most interventions on PEM address underlying and immediate causes because they are easier to deal with and show outcome in relatively short time

#### **Improve maternal health and nutrition**

This is important for the prevention of low birth weight. Importance of good maternal state starts right from the pre-pregnancy stage. At conception a woman should be in good nutritional status and free of

diseases. During pregnancy food intake is increased both in quantity and quality. The woman is supplemented with iron and folic acid throughout the pregnancy period to prevent anaemia. Other measures include malaria prevention and prophylaxis, deworming and treatment of STIs. Also the woman is exempted from heavy physical duties to enable her minimise her energy expenditure.

### **Improve child feeding.**

The best and safest way to feed a baby up to the age of 6 months is exclusive breastfeeding. Breastfeeding is initiated soon after delivery and the baby is kept near its mother and breastfed on demand. By the age of 6 months most babies need more energy and nutrients than breast milk can provide. They are thus given other foods in addition. This is referred to as complementary feeding. At the same time the child continues to breastfeed up to 24 months or beyond. During illness the child is encouraged to eat even if it does not want to.

When the child becomes older (24 months or above) feeding frequency should be increased to five times a day, and meal sizes should be adequate. Including into the meals fruits, vegetables, and protein foods diversifies the child's diet. Active feeding is continued

during and after illness. Also good hygiene and proper food handling is practiced.

### **1.6 Rehabilitation of malnourished children**

Despite all measures to prevent PEM, there are few children who become malnourished. These need to be rehabilitated. Nutrition rehabilitation, therefore, aims at improving the nutritional status of severely undernourished children.

#### **History of nutrition rehabilitation in Tanzania**

Nutrition rehabilitation activities in Tanzania started in the late 1960s. The first Nutrition Rehabilitation Unit (NURU) was started at Mvumi, Dodoma in 1967. By 1978, NURUs had been established in 14 places in the country by individual efforts of paediatricians and various governmental and non-governmental organizations. The main functions of NURU were to cure children with severe PEM through proper child feeding and appropriate nutrition education to the mothers. It was assumed that inadequate knowledge among mothers on proper child feeding and care were the key determinants of malnutrition. Therefore, it was anticipated that provision of nutrition education was the solution.

An evaluation of the NURUs carried out by TFNC in 1978/79 and Dr. Z. C. Rauya in 1980 revealed weaknesses in the NURU approach.

Firstly, since identification of malnourished children was based on clinical features the only children taken to NURU for rehabilitation were those with the severe clinical forms of PEM (marasmus, kwashiorkor, marasmic-kwashiorkor). The approach therefore excluded the moderately malnourished children.

Secondly, siblings and other children back home did not benefit from the rehabilitation activities taking place at NURU.

The foods used for the rehabilitation of the child at NURU were most probably not available back home; hence there was a high possibility of PEM recurring. Since the rehabilitation activities were being done at the hospital, it was regarded as health worker's responsibility. The community did not know what was being done and in what way. Thus, the community missed the opportunity of learning and owning the process of nutrition rehabilitation.

On the other hand, caring the malnourished child at the hospital created a situation that separated both mother and child from the siblings left back at home. In other words, those left at home missed the care of their mother.

At the NURU parents of malnourished children were exposed to the often-harsh treatment of health workers. The hapless parents were looked at as irresponsible who had let their children become malnourished. This intimidation of parents is a factor that could have discouraged parents from bringing forth their malnourished children for rehabilitation.

In 1986, a national workshop on nutrition rehabilitation was held in Dar-es-Salaam whose objective was to review the problem of PEM and the prevailing nutrition rehabilitation care in order to recommend a better approach to nutrition rehabilitation. The workshop recommended "Community Based Nutrition Rehabilitation. This approach sees to it that malnourished children are rehabilitated in the same environment (village, home) that precipitated the condition using resources and infrastructures available in the community. Subsequently guidelines on CBNR were developed for use nationwide.

## **2.0 COMMUNITY BASED NUTRITION REHABILITATION (CBNR)**

This is a community-based system of managing children who develop PEM. Usually it is the severe forms of PEM that are given priority.

### **2.1 The Goal of CBNR**

The goal of CBNR is to restore to near normal the nutritional status of the undernourished child and to have a sustained improved physical and mental growth performance of the child, siblings and other children in the household.

### **2.2 Objectives of CBNR**

#### **Short-term objectives**

- To facilitate early diagnosis and treatment of children suffering from PEM in order to prevent death and other medical complications.
- To prevent recurrence of PEM in the rehabilitated child
- To prevent occurrence of PEM in the siblings and other children in the household.

### **Long term objectives**

To reduce PEM among children in the community to a level whereby it is no longer a problem of public health significance.

### **2.3 Target group**

The target group is pre-school children. These are the most at risk and they form the bulk of the malnutrition problem.

### **2.4 Strategies**

In order to have an effective system of CBNR the following strategies are employed:

- (i) Advocacy of CBNR to leaders from district down to community level so that they facilitate establishment of CBNR and ensure sustainability of the system in their catchment areas.
- (ii) Equipping health care providers and community health workers with knowledge and skills on CBNR.
- (iii) Ensuring availability of necessary equipment and supplies (weighing scales, tape measures, growth monitoring forms) for identification and categorization of malnutrition.
- (iv) Sensitising and raising awareness of parents, care takers and community leaders on home rehabilitation of malnourished children.

## 2.5 Implementation of CBNR

CBNR is implemented in the following steps:

- Identification of malnourished children
- Categorization of malnourished children basing on the severity of the condition and disease complications.
- Prescription and action depending on the severity of the condition and accompanying complications.
- Follow up of children undergoing home rehabilitation

### 2.5.1 Identification of malnourished children

- Place/forum where malnourished children can be identified.

Place/Forum	By whom?
Children attending MCH clinic/ Out Patient Department (OPD)	Health care providers
Children identified during village health days and specific health campaigns	. Health care providers . Village health workers, . Community Owned Resource Persons (CORPs).
Children identified during health check ups in nursery schools	. Health care providers . Village health workers . Teachers
Children identified during home visits	. Village Health workers . Village health committees . Parents/care givers . Health care providers

Early diagnosis of malnutrition is important as it facilitates early intervention. In order to do this the health worker/community health worker must be able to identify “at risk children and households” that are likely to develop malnutrition problems.

*Checklist for at risk children and households:*

- *Insufficient household food security*
- *Childbirth weight below 2.5kg (low birth weight).*
- *Weight loss or no weight increase for three consecutive months*
- *Household with history of a malnourished child*
- *Deaths of three or more under-five children in the same household*
- *More than five small children in the household (lack of child spacing)*
- *Childhood orphanage.*
- *Single parent household (has no support from spouse)*
- *Drunkard-ness in the family; family quarrels and separation*

- Methods used to identify children with PEM
  - ☞ Anthropometric measurements, using the following indices:
    - . Weight for age, weight for height and height for age,
    - . Mid upper arm circumference for age
    - . Skin-fold thickness.

. Others

☞ Clinical signs such as:

Wasting, swelling of feet (oedema), swelling of abdomen, skin changes, hair changes, psychomotor changes, misery, apathy, irritability.

### 2.5.2 Categorization of PEM

The most commonly used method is a combination of:

Weight for age and presence or absence of oedema of both feet. The interpretation is done using MCH card No. 1 (Road to health card) as follows:

- Child's weight for age between 60 and 80% of the Harvard standard (in grey zone of the card); has no oedema but looks thinner and smaller than other children of the same age. This is *underweight (moderate form of PEM)*.
- Child's weight for age is between 60 and 80% of the Harvard standard (in grey zone of the card); has visible muscle wasting with symmetrical oedema of both feet. The child has moon face,

protuberant abdomen and skin rash. The hair is brown, soft, straight. The child is miserable and irritable. This is *kwashiorkor (severe form of PEM)*.

- Child's weight for age below 60% of the Harvard standard (red zone of the card); has no oedema but has severe muscle wasting. The child has old person's look and shows hunger signs. This is *marasmus (severe form of PEM)*.
- Child's weight for age is below 60% of the Harvard standard (red zone of the card); has severe muscle wasting and has oedema of both feet. The child is irritable and miserable. This is *marasmic-kwashiorkor (severe form of PEM)*.

In Summary:

Weight for age as % of reference standard	Oedema present	Diagnosis
60 – 80	No	Underweight
60-80	Yes	Kwashiorkor
Below 60	No	Marasmus
Below 60	Yes	Marasmic-Kwashiorkor

PEM rarely occurs alone. Most often the severe forms of PEM are accompanied by micronutrient deficiencies such as iron and vitamins. Complications that commonly accompany PEM include infections, septicaemia and septic shock, hypothermia, hypoglycaemia, diarrhoea (leading to dehydration and electrolyte imbalance), severe anaemia and heart failure.

### 2.5.3 Prescription and Action

Action taken after identification and categorization of PEM depends on the severity of the condition and complications. Children who are only moderately undernourished and have no disease complications are started on home rehabilitation. The severely undernourished with or without disease complications and those moderately undernourished with disease complications are first admitted to health facility for resuscitation. Thereafter, they are discharged to be started on home rehabilitation. The principles of resuscitation are as follows:

- To treat or prevent hypoglycaemia and hypothermia
- To treat or prevent dehydration and restore electrolyte balance
- To treat suspected or developed septicaemia or septic shock
- To treat infections

- To feed the child
- To identify and treat other problems including vitamin deficiencies, severe anaemia and heart failure.

When the complications are cleared the child is discharged for home rehabilitation.

#### *Criteria for discharge:*

- *Child is eating well*
- *Is active (sits, crawls, stands, walks).*
- *Smiles, responds to stimuli and is interested in surroundings*
- *Has normal body temperature (36.5 to 37.5<sup>0</sup>C)*
- *Is not vomiting and has no diarrhoea*
- *Has no oedema*
- *Is gaining weight of 5g/kg body weight/day or more for three consecutive days.*

#### 2.5.4 Home Rehabilitation

This is done to children who are moderately malnourished and have no complications and those children coming back from resuscitation in health unit.

The following are the principles for home rehabilitation:

- The health care provider or village health worker informs the parents about the diagnosis and decision to enter the child into rehabilitation programme.
- The child's name and particulars are entered into the special register book for rehabilitation programme.
- The village leadership is informed and specifically asked to make home follow-up for the child being rehabilitated.
- The actual rehabilitation of the child involves appropriate child feeding practices, growth monitoring, hygiene and environmental sanitation.
- Home visiting is arranged for by first developing a checklist for that purpose. Frequency depends on how serious the problem is, compliance of the parents and their ability to learn. The child is seen after one week, two weeks, one month, three months and six months.

- Records of the rehabilitation activities are kept at the health facility and at the village government's office.

#### **In home rehabilitation emphasis is on:**

##### ☞ **Child feeding**

- Appropriate breastfeeding practices
- Appropriate and timely complementation
- Increased nutrient density by adding other food ingredients: sugar, milk, cooking oil, groundnuts, mashed beans, "daga" etc
- Use of germinated cereal flour
- Use of fermented foods
- Increased feeding frequency (minimum 5 times a day)
- Active feeding of the child (fed by an adult)

##### ☞ **Growth promotion activities**

- Growth monitoring (weighing, plotting and appropriate action)
- Immunization
- Diarrhoea control and management
- Treatment of other emerging disease conditions

##### ☞ **Hygiene**

- Clean child care surroundings
- Environmental sanitation.

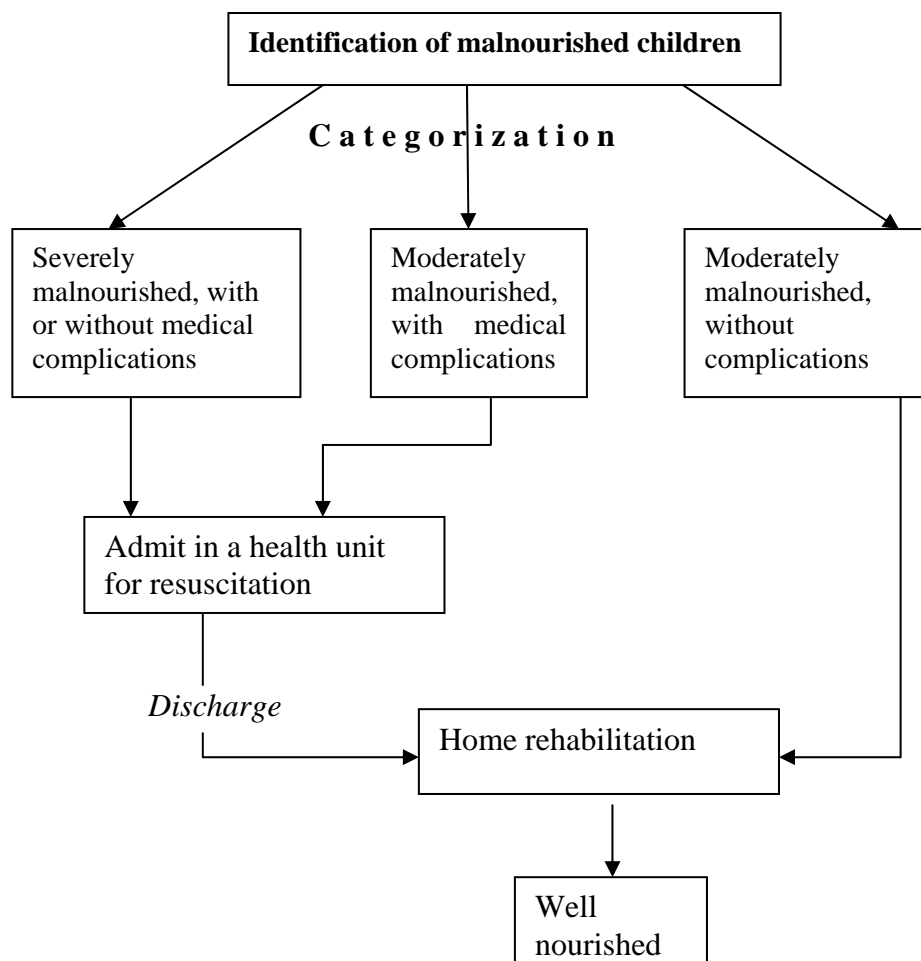
##### ☞ **Nutrition education**

- To parents/care takers

***Checklist for child improvement at home***

- *The striking features of PEM are subsiding*
- *Child is eating well, (no vomiting)*
- *Child is active (playing)*
- *Child is gaining weight*
- *Mental status is good (smiles and responds to stimuli)*

**Summary of Screening and Management procedure for CBNR**



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### 4.0 APPENDICES

#### Appendix 1: Distribution and dissemination of the guidelines

The guidelines have to be distributed and disseminated to:

- Health care providers at national and sub-national levels
- Field workers attending workshops on CBNR
- Institutional libraries e.g. training centres for public health, nutrition training institutions, reproductive and child health, medical schools, nursing schools etc.
- Village, ward, division and regional libraries
- Individuals/professionals in the field of child health
- To the public through TFNC's web site.

#### *Monitoring the use of the guidelines*

Whenever possible rapid assessment on the use of the guidelines should be carried out, in form of KAP studies to actors at various levels in order to ascertain:

- Performance of village health workers, health care providers, and community in the identification, categorization and home rehabilitation of children with PEM
- Proper data recording and utilization (how data on children with PEM are managed in the village/community)
- Proper functioning of the referral system of children with severe PEM (from village/community to health units, and from the health units to the village or home rehabilitation).
- Positive roles of the districts, division and ward levels in sensitising, implementing, monitoring, evaluating and sustaining CBNR in their catchments.

**Appendix 2: The roles of the different players in implementing CBNR**

Activity	Actors	Where/To whom
1. Advocacy	. TFNC and partners . District level staff . District level staff & health facility staff	- District level staff - Sub-district levels  - Community
2. Training of trainers	TFNC/Partners	District level staff
3. Training HCP/VHW	District level staff	HCP/VHW
4. Provision of necessary equipment and supplies	CHMTs	- Health facilities - Village health posts
5. Sensitisation and awareness raising	District level staff, HCP, VHWs.	Parents, caretakers, Community leaders
6. Identification and categorisation of malnourished children		
. MCH/OPD	HCP	. Pre-school children
. Village health days/health campaigns	HCP, VHW, CORPs HCP, VHW, teachers	. Pre-school children . Pre-school children
. Nursery schools	VHW, VHC, HCP,	. Pre-school children
. Home	Parents/caretakers	. Pre-school children
7. Referral	HCP, VHW, VHC	. Pre-school children

8. Resuscitation (at health facility)	HCP (in collaboration with mother or caretaker)	. Severely malnourished child . Moderately malnourished, with complications.
9. Home Rehabilitation and follow-up visits	VHW, HCP, Parents/caretakers, Community leaders.	- Moderate malnourished without complication. - Malnourished child discharged from health facility
10. Monitoring of implementation	TFNC, District level staff, village government	At all levels
11. Evaluation	TFNC, District level village government	At all levels
12. Dissemination of guidelines	TFNC, district level staff	All earmarked groups, individuals and institutions

**Appendix 3: Form No. 1: Referring malnourished child to health facility (to be filled in duplicate)**

Name of dispensary/health centre/hospital .....

**Location and child**

District ..... Ward ..... Village..... Hamlet.....

Name of head of household .....

Name of child ..... Date of birth .....

Birth weight .....

Name of father of the child .....

Name of mother/care giver of the child .....

Age of mother/care giver ..... years.....

Education of mother/care giver .....

This child has:

. Severe PEM with complications [ ]

. Severe PEM without complications [ ]

. Moderate PEM with complication [ ]

. Others (specify) .....

. Complications present (state) .....

The weight of the child is .....kg.....

Which falls in the .....zone of the MCH CARD No. 1

He/she is referred to you for cure and management.

Please at his/her discharge fill in the section below and give the original form to the mother/care giver and retain copy.

Name of person referring .....

Signature ..... Designation ..... Date .....

**Form No. 2: Referring malnourished child to Village Health Committee**

Name of health unit:.....

This child has been treated for the following severe malnutrition/acute complications: .....

since (date) .....

He/she has improved and can continue with home rehabilitation.

Weight on discharge day ..... kg.

Name of person discharging the child .....

Signature .....Designation .....Date.....

Remarks (if any).....

**Appendix 4: Form No. 3: Follow up of malnourished child at home**

*To be filled in by VHW, health facility worker, other health care provider.*

Name of the child .....

Name of head of household .....

Name of the father .....

Name of the mother/care giver .....

Name of village/ hamlet leader .....

*On each visit made enter all activities and advice given to parents.*

Date	Activities	Comments on condition of the child	Next visit (date)