Training in the management of severe malnutrition

Malnutrition contributes to an estimated 60% of deaths in under-five children.

Typically, the median case fatality rate for severe malnutrition\(^1\) ranges from 30–50%. This has remained unchanged in most settings for the past five decades.

However, it is possible to reduce mortality rates substantially by modifying treatment to take account of the physiological and metabolic changes that occur in cases of severe malnutrition. Case fatality rates have decreased to below 5% in treatment centres applying an appropriate management scheme recommended in WHO guidelines.\(^2\)

\(^{1}\) Defined as <70% weight-for-height, or <-3SD and/or oedema.


PARTNERSHIPS
- National governments
- WHO regional offices
- WHO country offices
- WHO collaborating centres
- Academic institutions
- International agencies and NGOs

COURSE SCHEDULE
- A three-day orientation for instructors
- A six-day programme for participants (physicians, nurses and other senior health workers)

COMPONENTS

Instructor guides
- Course director guide
- Facilitator guide
- Clinical instructor guide

Participant guide
- Seven modules
- Support materials

TARGET GROUPS
- Physicians
- Nurses
- Other senior health workers

OBJECTIVES
- Reduce case fatality rate to less than 5% among severely malnourished children
- Improve rate of recovery of severely malnourished children

This TRAINING COURSE on hospital-based care of severely malnourished children responds to the urgent need to reduce paediatric deaths related to severe malnutrition in many developing countries.
The seven-module guide for participants

1. INTRODUCTION
- Importance of severe malnutrition as a health problem
- Purpose of training course
- Course methods and materials
- Learning objectives for modules
- Objectives for clinical practice sessions
- Equipment and supplies needed for a severe-malnutrition ward

2. PRINCIPLES OF CARE
- Identifying children with severe malnutrition
- Recognizing effects of the physiology of severe malnutrition
- Selecting essential components of care
- Preparing recipes for special feeding formulas (F-75 and F-100)
- Identifying important things not to do and why
- Formulating recommended admission and discharge policies for a severe-malnutrition ward

3. INITIAL MANAGEMENT
- Identifying and managing severely malnourished child with:
  - hypoglycaemia
  - hypothermia
  - shock
  - dehydration
  - severe anaemia
- Preparing ReSoMal
- Selecting appropriate antibiotics and calculating dosages
- Keeping a written record of initial findings and treatments: Critical Care Pathway (CCP) forms

4. FEEDING
- Preparing F-75 and F-100 feeding formulas
- Planning feeding for a 24-hour period
- Measuring and giving feeds to children
- Recording intake and output
- Planning feeding for a ward

5. DAILY CARE
- Providing appropriate care for severely malnourished children
- Monitoring pulse, respiration and temperature, and watching for danger signs
- Completing and interpreting the Daily Care page, Monitoring Record, Weight Chart, and the CCP
- Preparing and maintaining a weight chart (graph)
- Giving antibiotics and other medicaments and supplements
- Caring for the eyes
- Bathing severely malnourished children

6. MONITORING AND PROBLEM SOLVING
- Identifying problems through monitoring progress
- Investigating causes of problems
- Determining appropriate solutions
- Conducting a problem-solving session with a group

7. INVOLVING MOTHERS IN CARE
- Encouraging involvement of mothers in hospital care
- Preparing mothers to continue care at home, including proper feeding and stimulation using play
- Giving complete discharge instructions

SUPPORT MATERIALS
- Course exercises and answer sheets
- 4 laminated reference cards
- Sample discharge card
- Management of severe malnutrition: a manual for physicians and other senior health workers
- Photo booklet
- Video