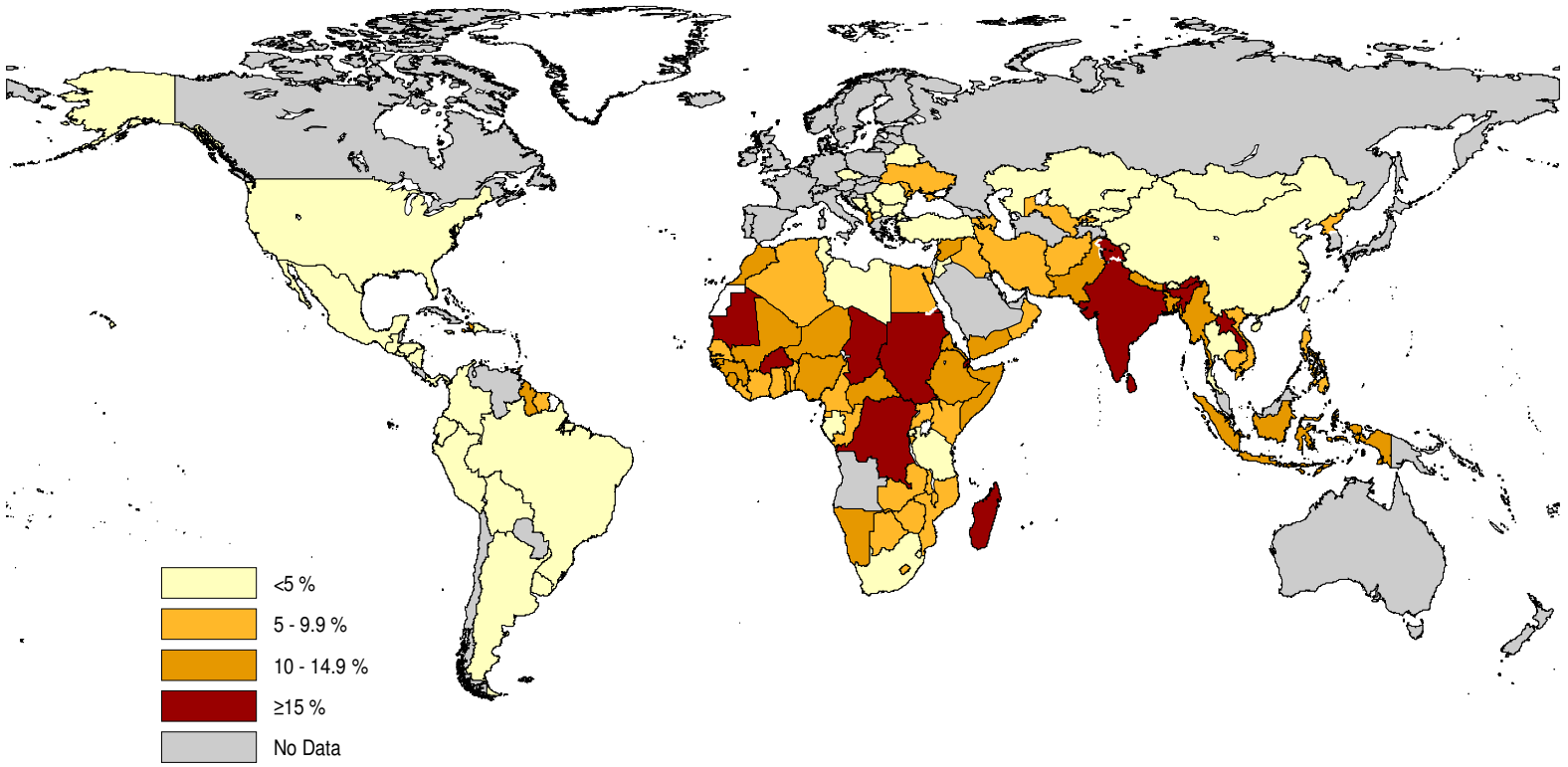
Integrating inpatient and outpatient care in the management of severe acute malnutrition

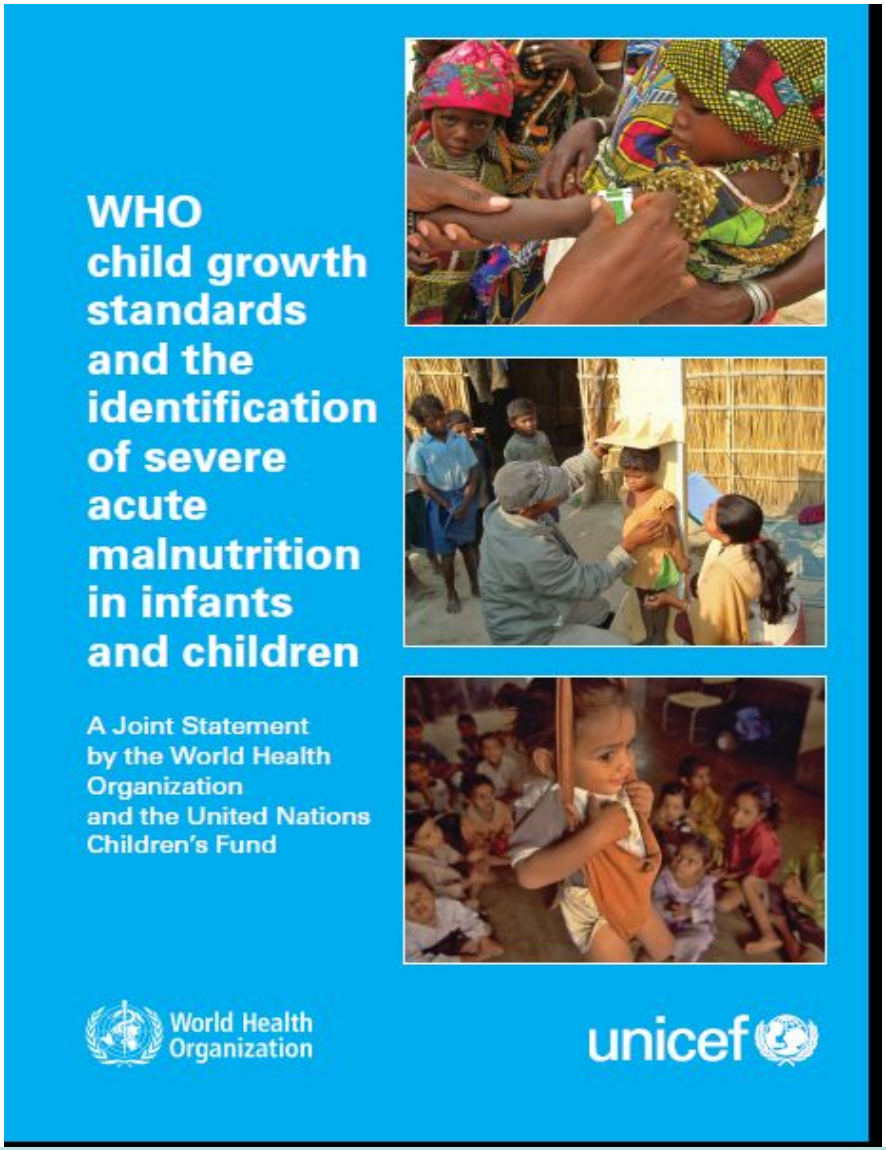
Z. Weise-Prinzo
Department of Nutrition for Health and Development
WHO, Geneva

World Health Organization

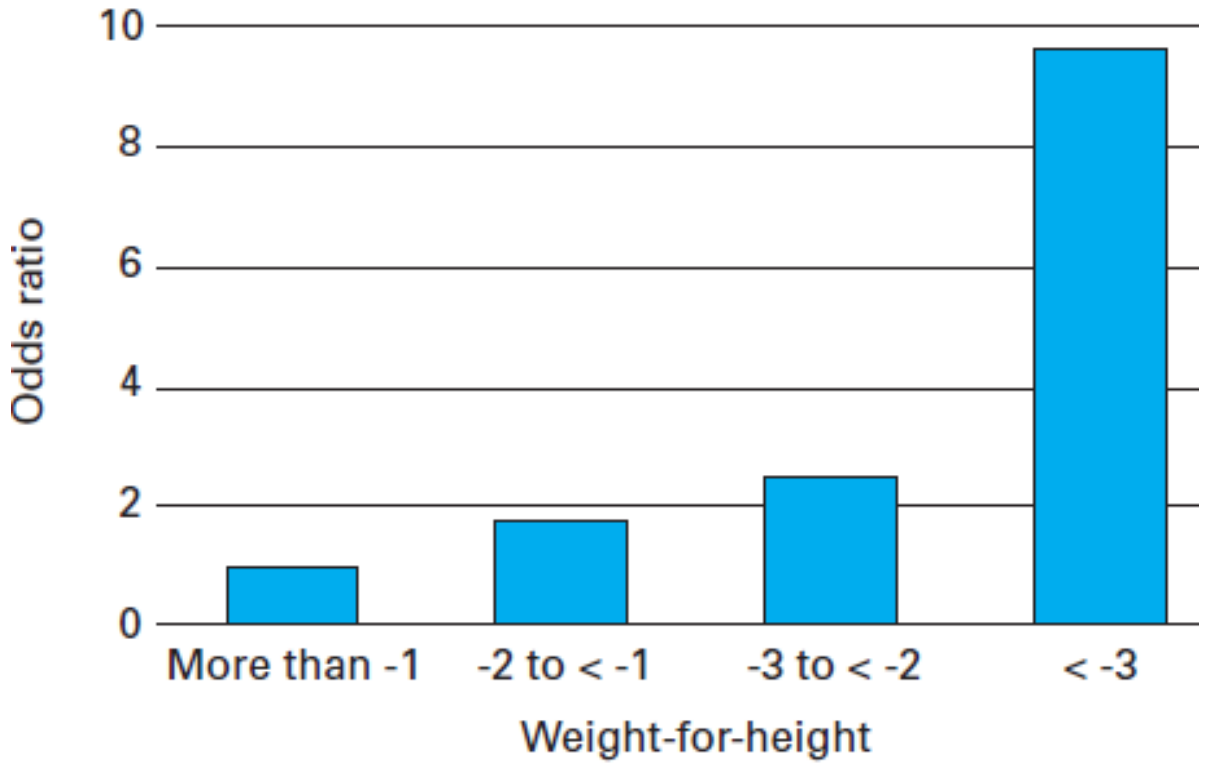
Global situation: wasting



World Health Organization


WHO
child growth
standards
and the
identification
of severe
acute
malnutrition
in infants
and children
A Joint Statement
by the World Health
Organization
and the United Nations
Children's Fund
World Health
Organization
unicef

Odds ratio for mortality by weight-for-height.



Note: reference category: children with a weight-for-height > -1 SD.

Black RE,et al; Maternal and Child Undernutrition Study Group. Maternal and child undernutrition: global and regional exposures and health consequences. *Lancet*, 2008, 371:243–60

Severe malnutrition is defined as:

- Severe wasting:

Weight-for-height <-3 SD

and/or

MUAC < 115 mm

and/or

- Presence of bipedal oedema (kwashiorkor)

Recommended strategy for management of severe malnutrition

- Community-based (outpatient) component
- Facility-based (inpatient) component

Criteria of selection for inpatient management of severe malnutrition

Children with severe malnutrition **and** complications:

- MUAC<115 mm or weight/height <-3 SD

or oedema +++ on both feet

- Anorexia
- Clinically unwell

Criteria of selection for outpatient management of severe malnutrition

Children with severe malnutrition and no medical complications:

- MUAC<115 mm or weight/height <-3 SD alert
- not severely oedematus
- good appetite
- clinically well
- reasonable home care circumstances.

BOX 2. SAM MANAGEMENT

Independent additional criteria	• No appetite • Medical complications		• Appetite • No medical complications
	↓		↓
Type of therapeutic feeding	**Facility-based**		**Community-based**
Intervention	F75→ F100/RUTF And 24 hour medical care		RUTF, basic medical care
Discharge criteria (Transition criteria from facility to community-based care)	Reduced oedema Good appetite (with acceptable[a] intake of RUTF)		15 to 20% weight gain

[a] Child eats at least 75% of their calculated RUTF ration for the day

Inpatient management of severe acute malnutrition

Care provided at hospital level and include:

* 24 hour care and monitoring of the child
* Treatment of medical complication
* Therapeutic feeding

Referral should be done to outpatient care when the child's appetite returns and oedema are reduced.

Inpatient management of severe acute malnutrition - effectiveness

Effective in reducing case fatality rates, but:

- Problem of access to health facility
- Late detection and late referral increasing the risk of child mortality soon after admission
- Inpatient care requires that care takers stay in the health facility for several weeks

Outpatient management of severe acute malnutrition

World Health Organization

Outpatient management of severe acute malnutrition

Community mobilisation and referral system at community level

Therapeutic feeding and basic medical care at primary health facility level

Health care providers should be trained on how to recognize medical complications & should be able to refer to inpatient care if needed.

Transfer from community to health facility and viceversa

- For children treated as inpatients, management should be continued in the community, after complications have been treated and the child has appetite
- Children who deteriorate at home (have medical complications and lack of appetite) should be referred for inpatient care

Management of severe acute malnutrition

- Inpatient/ outpatient care possible only if:

*Health care providers trained and regularly monitored

*Medical supplies and therapeutic foods supplies (F75, F100, RUTF) available continuously in all health facilities where cases of SAM cases are being referred.

Nutrition education

The rehabilitation phase of the management of children with severe acute malnutrition needs to include support for breastfeeding and appropriate infant and young child feeding practices.

Monitoring programmes

Effectiveness of treatment should be based on:

- Weight gain of at least 5g/kg/day for severely wasted children
- Low case fatality, defaulting and treatment failures
- Length of stay

What is WHO doing in collaboration with UNICEF and support from the IASC Nutrition Cluster?

- **Develop norms and standards in the integrated management of SAM**:
  - Joint statements on community-based management of SAM (WHO/UNICEF/WFP); Use of WHO Growth Standards & identification of children with SAM (WHO/UNICEF)
  - Updating guidance on inpatient management of SAM (e.g. management of infants less than 6 months of age; treatment of dehydration and shock; management of HIV and SAM; admission and discharge criteria)

- **Support countries on policy/programme development on management of SAM**:
  - Guidelines on integrated management of SAM for policy makers & programme managers being finalized
  - Support given to countries on development of national protocols on the management of SAM

- **Improve national capacity for managing cases of SAM**:
  - Support countries on training and monitoring of health care providers at hospital and community levels (inpatient and outpatient care)