

Integrating management of Severe Acute Malnutrition in IMCI – Lessons from a field trial in Ethiopia

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Current generic IMCI Chart booklet – Malnutrition section

| THEN CHECK FOR MALNUTRITION AND ANAEMIA | | | | |
|---|---|--|---|---|
| <p>LOOK AND FEEL:</p> <ul style="list-style-type: none"> • LOOK FOR VISIBLE SEVERE WASTING. • LOOK FOR PALMAR PALLOR. IS IT: SEVERE PALMAR PALLOR? SOME PALMAR PALLOR? • LOOK FOR OEDEMA OF BOTH FEET. • DETERMINE WEIGHT FOR AGE. | <p>Classify NUTRITIONAL STATUS</p> | <ul style="list-style-type: none"> • VISIBLE SEVERE WASTING OR • SEVERE PALMAR PALLOR OR • OEDEMA OF BOTH FEET. | <p>SEVERE MALNUTRITION OR SEVERE ANAEMIA</p> | <ul style="list-style-type: none"> > Give Vitamin A. > Refer URGENTLY to hospital. |
| | | <ul style="list-style-type: none"> • SOME PALMAR PALLOR OR • VERY LOW WEIGHT FOR AGE. | <p>ANAEMIA OR VERY LOW WEIGHT</p> | <ul style="list-style-type: none"> > Assess the child's feeding and counsel the mother on feeding according to the FOOD box on the COUNSEL THE MOTHER chart. - If feeding problem, follow-up in 5 days. > If pallor: <ul style="list-style-type: none"> - Give iron. - Give oral antimalarial if high malaria risk. - Give mebendazole if child is 2 years or older and has not had a dose in the previous 6 months. > Advise mother when to return immediately. > If pallor, follow-up in 14 days. if very low weight for age, follow-up in 30 days. |
| | | <ul style="list-style-type: none"> • NOT VERY LOW WEIGHT FOR AGE AND NO OTHER SIGNS OF MALNUTRITION. | <p>NO ANAEMIA AND NOT VERY LOW WEIGHT</p> | <ul style="list-style-type: none"> > IF CHILD IS LESS THAN 2 YEARS OLD, ASSESS THE CHILD'S FEEDING AND COUNSEL THE MOTHER ON FEEDING ACCORDING TO THE FOOD BOX ON THE COUNSEL THE MOTHER CHART. - IF FEEDING PROBLEM, FOLLOW-UP IN 5 DAYS. > ADVISE MOTHER WHEN TO RETURN IMMEDIATELY. |

downloaded from CAH website, April 2008

Current IMCI generic chart booklet not consistent with WHO UNICEF WFP Joint statement (June 2007)

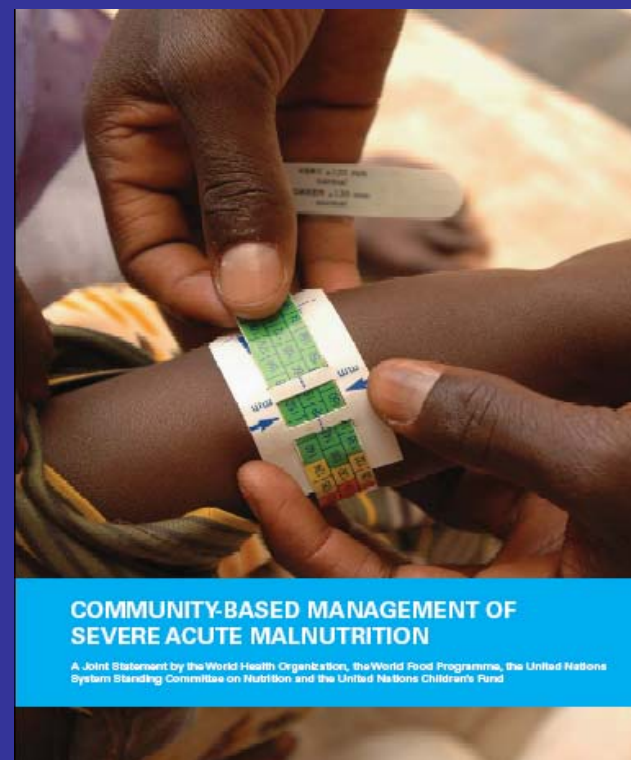
Identify SAM with MUAC (< 110 mm)

Treat uncomplicated forms of SAM at home with RUTF

Refer to a inpatient health facility only complicated cases

Need to update IMCI chart

Need for a field test



Field trial - Why Ethiopia ?

Large experience in community management of severe acute malnutrition

RUTF large scale production already in place

Updated IMCI algorithm already developed

Preparation of the field test:

drafting an adapted revised IMCI malnutrition algorithm

| | | |
|---|--|--|
| <ul style="list-style-type: none">• If age up to 6 months:<ul style="list-style-type: none">- and visible severe wasting- or oedema of both feet <p>If age 6 months and above and:</p> <ul style="list-style-type: none">- MUAC less than 110 mm or oedema of both feet or visible severe wasting- AND poor appetite or pneumonia or persistent diarrhea or dysentery | SEVERE COMPLICATED MALNUTRITION | <ul style="list-style-type: none">➤ Treat the child to prevent low sugar➤ Refer URGENTLY to hospital |
| <ul style="list-style-type: none">• If age 6 months or above and<ul style="list-style-type: none">- MUAC less than 110 mm or oedema of both feet- AND satisfactory appetite | SEVERE UNCOMPLICATED MALNUTRITION | <ul style="list-style-type: none">➤ Counsel the mother on how to feed a child with RUTF, if available, or else refer to hospital➤ Give oral antibiotic➤ Give mebendazole (if child aged 1 year or above),➤ Check for HIV infection➤ Advise mother when to return immediately➤ Follow-up in 7 days |

September 2007

Field testing, step 1: Discussion of the revised IMCI chart with local experts

Feedback obtained from practicing pediatricians, pediatricians from the MoH, WHO, UNICEF and NGO country nutritionists in Jimma hospital

Visible severe wasting after 6 months: remove

- a) time consuming;**
- b) need for a transparent criteria that the mother should be able to understand to decide who should get RUTF**

Field testing, step 1: Discussion of the revised IMCI chart with local experts (continued)

Visible severe wasting before 6 months: keep

a) No better simple alternative

b) Need to have adapted picture of visible severe wasting in children less than 6 months



Field testing, step 1: Discussion of the revised IMCI chart with local experts (continued)

Assessment of appetite

- a) should be based on the measure of spontaneous RUTF intake; the child should not be forced to eat**
- b) this measure is time consuming; no need to test appetite in children with associated complications**

The semi-quantitative assessment of appetite could be based on current practice in Ethiopia

Suggested appetite test

| Weight of the child | Number of sachets the child should consume willingly during the test (500 Kcal sachets, or 92 g)* | |
|---------------------|---|---------|
| | Minimum | Maximum |
| < 4 Kg | 1/8 | 1/4 |
| 4 up to 9.9 Kg | 1/4 | 1/2 |
| 10 up to 14.9 Kg | 1/2 | 3/4 |
| 15 Kg and above | 3/4 | 1 |

* Note: quantities should be adjusted if RUTF is available in containers or in packaging with different weights.

Suggested duration of the test: 30 mn.

Most children with good appetite will eat the required amount in less than 15 mn. 30 mn leaves enough time to avoid unnecessary referrals

Field testing, step 1: Discussion of the revised IMCI chart with local experts (continued)

Assessment of oedema

- a) discussion to include grading of oedema from + to +++ (feet, feet + lower leg, generalized oedema)
- b) training of health workers to grade oedema takes 2 hours; incompatible with current IMIC training in Ethiopia (1/2 day for malnutrition)
- c) decision to include in IMCI only presence of oedema, no grading

Field testing, step 1: Discussion of the revised IMCI chart with local experts (continued)

Associated complications

- a) the list of associated complications that should lead to inpatient treatment was discussed
- b) most will be associated with anorexia and failed appetite test, or other conditions requiring referral and did not need to be identified
- c) suggested list: pneumonia, persistent diarrhea, dysentery, measles and malaria

Field testing, step 1: Discussion of the revised IMCI chart with local experts (continued)

Treatment of SAM complicated cases

- a) refer to inpatient treatment facility
- b) concerns about repeated high doses of vitamin A; increased mortality reported from a randomized trial with high doses of vitamin A in oedematous children
- c) decision: no dose of vitamin A before referral to inpatient facility

Field testing, step 1: Discussion of the revised IMCI chart with local experts (continued)

Treatment of SAM uncomplicated cases

- a) Training a health worker to treat a child with uncomplicated SAM takes about 2 days; this cannot be achieved within IMCI**
- b) Decision: refer to specific programme: Outpatient Therapeutic Programmes; role of IMCI trained worker: identify SAM and differentiate complicated and uncomplicated forms**
- c) If OTP not available, inform health workers about treatment with RUTF, if available**

Field testing, step 2: Revision of the draft IMCI malnutrition chart

| | | |
|--|---|---|
| <ul style="list-style-type: none"> • If age up to 6 months: <ul style="list-style-type: none"> - and visible severe wasting - or oedema of both feet • If age 6 months and above and: <ul style="list-style-type: none"> - MUAC less than 11 cm or oedema of both feet - AND pneumonia or persistent diarrhea or dysentery or measles or malaria or appetite test failed | <p style="text-align: center;">SEVERE COMPLICATED MALNUTRITION</p> | <ul style="list-style-type: none"> ➤ Treat the child to prevent low sugar ➤ Refer URGENTLY to hospital |
| <ul style="list-style-type: none"> • If age 6 months or above and <ul style="list-style-type: none"> - MUAC less than 11 cm or oedema of both feet - AND appetite test passed | <p style="text-align: center;">SEVERE UNCOMPLICATED MALNUTRITION</p> | <ul style="list-style-type: none"> ➤ Refer to the Outpatient Treatment Programme. <p>When referral to OTP is not possible:</p> <ul style="list-style-type: none"> ➤ Counsel the mother on how to feed a child with RUTF, if available, or else refer to hospital ➤ Give oral antibiotic ➤ Give mebendazole (if child aged 1 year or above), ➤ Check for HIV infection ➤ Advise mother when to return immediately ➤ Follow-up in 7 days |

Field testing, step 3: Training of health workers

9 health workers, previously trained in IMCI were trained in one afternoon session on the revised malnutrition algorithm

A revised "Assess and Classify" module was given to them for reading during the training. Points requiring clarification were noted

Field testing, step 4: implementing the revised malnutrition box

28 children examined

15 appetite tests performed

Time needed for the revised box:

Same or less as previous box, as MUAC measurement faster than assessment of visible severe wasting

Treatment of uncomplicated SAM when referral is not possible:

Seems acceptable as the number of patients involved is small; health workers motivated to implement outpatient treatment

Field testing, step 5: integration of SAM management in IMCI in Ethiopia – discussion with participants

Diagnostic:

Possible if current IMCI chart booklet revised and training of health workers adapted

Treatment:

Management of uncomplicated SAM under current programmes requires a 2-day training - Not possible within current IMCI

Debriefing Geneva:

Integration can work if:

RUTF available

AND

OTP available

Or

IMCI workers get additional training (> 2 hours)

Conditions rarely met

Too early to change IMCI generic chart booklet now, but...

Towards the integration of CMAM in ICMI...

Situation rapidly evolving:

UNICEF promoting RUTF production. RUTF likely to become more available soon in many countries

WHO ready to adapt existing OTP training material for separate training modules of IMCI workers, if feasible.

Information about ongoing attempts to integrate CMAM and IMCI wanted +++

Adaptation of existing CMAM training manuals for additional modules for IMCI workers possible