C-MAMI Tool Version 2.0, 2018

Community Management of At risk Mothers and Infants under six months of age (C-MAMI)

Context of tool development

The C-MAMI Tool provides a health worker with a format to assess, identify/classify and manage at risk mothers and infants under six months of age (infants U6m) in the community (C-MAMI)[1] who are nutritionally vulnerable. The tool draws upon, complements and seeks to inform national and international guidance and protocols; the approach is modelled on the Integrated Management of Childhood Illness (IMCI) approach to facilitate integration. The exact location where a C-MAMI service takes place is not specified as this will vary by context and will be determined by existing services, needs and staff capacities. It is applicable in both humanitarian and development settings. The C-MAMI Tool may require adaptation, development of programme-specific materials and different levels of training for implementation. To help, several materials are included with the Tool (C-MAMI Package).

The C-MAMI Tool was conceptualised by Emergency Nutrition Network (ENN) and London School of Hygiene and Tropical Medicine (LSHTM). Version 1.0 was developed in 2015 in a collaborative effort as a first step to help fill a gap in programming guidance and catalyse case management. The C-MAMI Tool has since been used in different contexts; an evaluation of programme implementation by Save the Children and GOAL in Bangladesh and Ethiopia in late 2017/early 2018, collated practitioner experiences and peer review has informed Version 2.0 of the C-MAMI Tool.

Principles

Several features distinguish the management of nutritionally vulnerable infants U6m and their mothers from that of older children that are reflected in Version 2.0:

- C-MAMI uses the term 'enrolment' rather than 'admission' to outpatient care. Feeding support and social support is central to outpatient management. We wish to avoid medicalising community level support to these infants. Hence the term 'admission' is restricted to inpatient care.
- Anthropometric criteria have limited application in this age group. The direct evidence base is weak. Feeding, clinical and maternal factors are more critical to assess, to guide actions and to discharge. While recognising their value, there is therefore less importance attached to anthropometric criteria.
- The clinical status of infants and their medical management is critical; infants U6m who are sick are at higher risk of death than older children. We therefore distinguish nutritionally vulnerable infants with medical complications ('complicated' cases) versus nutritionally vulnerable infants without medical complications ('uncomplicated' cases). The terms 'severe' and 'moderate' acute malnutrition are not applied to infants U6m.
- Emerging evidence reflects that anthropometric indicators, such as weight for age (WFA) and mid upper arm circumference (MUAC), pick up infants at high mortality risk. Some of this risk may not be associated with nutrition risk, e.g. low birth weight infants are at higher risk of death. Classifying these infants as acutely malnourished carries risk as it implies a nutritional cause and may limit interventions to those centred on nutrition alone. Hence, the terms 'nutritional vulnerable' and 'at risk' are used to reflect this broader scope of risk and interventions needed.
- Nutrition support, particularly skilled breastfeeding support, is critical to case management. Non-breastfed infants need special support and follow-up.
- The wellbeing of an infant is greatly determined by that of his/her mother. The MAMI approach always considers the infant-mother pair; this is integral to case management. The presence of a sign or symptom that indicates the need for referral to inpatient care or enrolment into outpatient C-MAMI management for either infant or mother leads to the referral and management of both, together. Thus, assessment and action regarding the nutritional, physical and mental health of the mother is included in the C-MAMI Tool.

Version 2.0 of the C-MAMI Tool has been developed in a collaborative effort between practitioners and researchers across infant and maternal nutrition and health, coordinated by Emergency Nutrition Network (ENN), in close collaboration with the London School of Hygiene and Tropical Medicine (LSHTM), Save the Children and GOAL, and in consultation with experienced programmers and experts[2]. Version 2.0 development was funded by Irish Aid (ENN) and Save the Children[3].

The area of MAMI is an emerging field of practice. There is a continuing need to advocate for case management of nutritionally vulnerable infants U6m and their mothers in programmes, and to capture and share data and experiences in managing this age group. Please contact us with feedback and experiences of using the tool, and if you are interested in/planning field testing. A word version, to facilitate adaptation, is available on request. Contact: Marie McGrath, ENN, email: marie@ennonline.net

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[1] In 2017, MAMI was redefined from 'management of acute malnutrition in infants U6m' to 'management of at risk mothers and infants U6m' to reflect the profile of infant-mother pairs being identified, their associated risks, and consequently the wider scope of interventions needed to cater for/support them; these include but are not limited to nutrition.

[2] Content update was coordinated by ENN (Marie McGrath), led by Save the Children consultants (Mary Lung'aho & Maryanne Stone Jimenez (Nutrition Policy and Practice)), in close collaboration with Marko Kerac (LSHTM); Nicki Connell, Sarah Butler (Save the Children), Hatty Barthorp (GOAL) and with input from working groups formed within the MAMI Special Interest Group and expert contributors, namely: Alice Burrell, Yasir Arafat and Mostofa Sarwar (Save the Children), Alison Talbert (KEMRI-Wellcome, Kenya), Cecile Bizouerne (ACF), Elizabetta Dozio (ACF), Indi Trehan, Jay Berkley (KEMRI-Wellcome, Kenya), Karine le Roch (ACF), Katie Beck (Partners in Health), Kirrily de Polnay (MSF), Louise Day (LSHTM), Martha Mwangowe (KEMRI-Wellcome, Kenya), Natalie (MSF), Nigel Rollins (WHO), Robert Stewart (University of Edinburgh), Zita Weise Prinzo (WHO).

[3] Version 1.0 (2015) of the C-MAMI Tool was funded by OFDA (ENN), Irish Aid (ENN) and Save the Children.

Orientation to the C-MAMI package

The C-MAMI package is made up of the following materials:

i **C-MAMI TOOL V2.0**
- Section 1. Triage
- Section 2. Feeding Assessment
- Section 3. Anthropometric/Nutritional Assessment
- Section 4. Maternal Mental Health Assessment

ii **COUNSELLING and SUPPORT ACTIONS BOOKLET**
- Section A. Breastfeeding Counselling and Support Actions – Breastfeeding: 1 – 21
- Section B: Breastfeeding Counselling and Support Actions – Supplementary Suckling Support
- Section C: Non-Breastfeeding Counselling and Support Actions – Non-Breastfeeding: 1 – 4
- Section D: Counselling and Support Actions (for All) – Social Support 1 – 4

iii **COUNSELLING CARDS**

iv **C-MAMI PROGRAMME MANAGEMENT CARDS**
- C-MAMI Enrolment and Management Card
- C-MAMI Follow-Up Card

i The C-MAMI TOOL V2.0

Appropriate C-MAMI is based on the severity of the condition of the infant-mother pair. Assessment and Classification of both the infant and mother under six months (U6m) are necessary to identify the appropriate Management activities. Infant and mother are managed together, as a pair.

FORMAT and HOW to USE the C-MAMI Tool

The C-MAMI Tool is colour-coded using a modified traffic-light 3-colour scheme. The traffic-light colours (red/yellow/green) are used to indicate high risk, moderate risk and low risk.

To help distinguish assessment guidance (ask, listen, look/observe, feel) for infants from those from their mothers, the infant row is coloured grey and the mother row is white.

The triage section, with the classify and manage columns shaded in red, helps to identify infant-mother pairs at high-risk, requiring immediate referral to specialist in-patient care.

Following the triage screening, feeding assessment is conducted for both breastfed and non-breastfed infants. This is followed by anthropometric/nutritional assessment, and finally maternal mental health assessment. In this section, the yellow-coloured columns identify those at risk who would benefit from C-MAMI support; the green-coloured columns identify infants and mothers at low risk (i.e., without identified problems), but who would benefit from maternal and infant and young child feeding (MIYCF) counselling to support positive care and feeding practices now and in the future.

Each section reads from left to right. The practitioner assesses the infant or mother for the main signs or symptoms that lead to classification, identifies appropriate management, and is directed to materials that support the appropriate actions.

All cross-references are hyperlinked to the relevant material.

C-MAMI Tool Framework

TRIAGE		
ASSESS	**CLASSIFY**	**MANAGE**
Infant Ask/Listen/Look/Feel: details to guide assessment	Nutritionally Vulnerable with Medical Complications (HIGH NUTRITIONAL RISK)	URGENT REFERRAL: Management Actions
Mother Ask/Listen/Look/Feel: details to guide assessment	HIGH RISK	URGENT REFERRAL: Management Actions

OTHER ASSESSMENT SECTIONS				
ASSESS	**CLASSIFY**	**MANAGE**	**CLASSIFY**	**MANAGE**
Infant: Ask/Listen/Look/Feel: details to guide assessment	Nutritional Vulnerable without Medical Complications (MODERATE NUTRITIONAL RISK)	C-MAMI Enrolment: Management Actions	LOW RISK	Home Care: Management Actions
Mother: Ask/Listen/Look/Feel: details to guide assessment	MODERATE RISK	C-MAMI Enrolment: Management Actions	LOW RISK	Home Care: Management Actions

ii COUNSELLING AND SUPPORT ACTIONS BOOKLET

The Counselling and Support Actions Booklet is intended for use as a reference by the health care provider. It outlines the four essential criteria for good breastfeeding for infants U6m:

- Good attachment (facilitated by good positioning)
- Effective suckling
- Breastfeeding frequency
- No water, other fluids or foods

Information is provided on common problems (difficulties) that many mothers encounter, with suggested support actions for their resolution. Management Actions are described for "not enough" breastmilk; mother lacks confidence; breast conditions; thrush: infant, maternal nipple thrush; low weight infant, keeping low weight infant warm & Kangaroo Mother Care (KMC); satisfactory slow weight gain; concerns about being away from infant; breastmilk expression; cup feeding, and storage of breastmilk; relactation; other breastfeeding related concerns: maternal diet, twin delivery, adolescent mother, and HIV positive test.

Management Actions are also described for non-breastfeeding support: mother absent; use of appropriate Breast Milk Substitutes (infant formula); preparing infant formula; and cup feeding.

Mother, family and community counselling: informal support; group support; family support; partner support; and community support are included.

The Counselling and Support Actions Booklet also contains links to content-specific videos and appropriate Counselling Cards.

- Both the videos and Counselling Cards are freely available/ in the public domain.
- Because field staff may encounter challenges in downloading materials from the internet, we suggest that agencies/ organizations download and make the videos easily available for staff/workers without easy access to web services.

Format of the Counselling and Support Actions Booklet Management Section:

Image	Symptoms/signs/indicators of practice	Counselling and Support Actions
Image of the practice from Counselling Cards	Points outlining symptoms/ signs/indicators of practice	The counselling and support actions are specific to the symptoms or signs. Links to videos: embedded

iii COUNSELLING CARDS

- The Counselling Cards are intended for use by the health care provider and the mother/caregiver.
- The images of the Counselling and Support Actions Booklet (that are small in size and act as a reference for the health care provider) are the same as the Counselling Cards (larger in size for sharing with the mother/caregiver).
- The arrangement of the Counselling Cards follow the order of the Counselling and Support Actions Booklet.
- The Counselling Cards are deliberately designed so that the image has no 'messages' on back of card; the health care provider will not be tempted to read the messages but will actively converse with the mother/caregiver.
- Appropriate use of the Counselling Card involves engagement with the mother/caregiver who is asked to **observe** what she sees in the card, what she **thinks** about the different practices represented in the card, and what practice she will now **try.**
- Most Counselling Cards can be found in the UNICEF Digital Image Library: Digital Image Library, https://iycf.spring-nutrition.org/. Credit for additional Counselling Cards is provided below.

iv C-MAMI PROGRAMME CARDS

- The C-MAMI Enrolment and Management Card and C-MAMI Follow-Up Card were used by Save the Children and GOAL with the C-MAMI Tool V1.0. It has been updated to be compatible with the C-MAMI Tool V2.0.
- Infant and maternal demographic, anthropometric and clinical/physical examination details, plus classification and management upon enrolment are recorded on the first card. The second card provides space to record follow-up actions and outcomes.

Key reference material

IMCI Chart booklet, WHO, 2014: The IMCI chart booklet is for use by doctors, nurses and other health professionals who see young infants and children less than five years old. It facilitates the use of the IMCI case management process in practice and describes a series of all the case management steps in a form of IMCI charts.
www.who.int/maternal_child_adolescent/documents/IMCI_chartbooklet/en/

WHO. Guideline: Updates on the management of severe acute malnutrition in infants and children. WHO, 2013.
http://www.who.int/elena/titles/sam_infants/en/

Caring for newborns and children in the community. Caring for the sick child. WHO, 2012. These materials are designed to help lay community health workers (CHW) assess and treat sick children age 2 - 59 months. This process is also known as "Community Case Management" (CCM).
www.who.int/maternal_child_adolescent/documents/imci_community_care/en/

Module 2. Infant feeding in emergencies. For health and nutrition workers in emergency situations. Version 1.1, 2007. ENN, IBFAN-GIFA, Fondation Terre des hommes, CARE USA, Action Contre la Faim, UNICEF, UNHCR, WHO, WFP, Linkages.
http://www.ennonline.net/ifemodule2

WHO, War Trauma Foundation and World Vision International (2011). **Psychological first aid: Guide for field workers.** WHO: Geneva.
http://www.who.int/mental_health/publications/guide_field_workers/en/

Inter Agency Standing Committee (IASC) Reference Group for Mental Health and Psychosocial Support in Emergency Settings, 2010. **Mental Health and Psychosocial support in humanitarian emergencies: What should humanitarian health actors know?**
www.who.int/mental_health/emergencies/what_humanitarian_health_actors_should_know.pdf?ua=1

Inter-Agency Standing Committee (IASC), 2007. **IASC guidelines on mental health and psychological support in emergency settings.**
www.who.int/mental_health/emergencies/guidelines_iasc_mental_health_psychosocial_june_2007.pdf

Patel, V., & Hanlon, C., 2018. **Where There Is No Psychiatrist: A Mental Health Care Manual.** Cambridge: Royal College of Psychiatrists. Open access online.
www.cambridge.org/core_title/gb/522738

See **more resources**, including adapted materials for high HIV and TB settings, at:
http://www.who.int/maternal_child_adolescent/documents/imci/en/

Credits for Images

The images come from the following:

- WHO/UNICEF *Infant and Young Child Feeding Counselling: an Integrated Course* (The source for redrawn B&W images is work submitted for the revision to the 'Integrated Course').
- Laid-Back Breastfeeding or Biological Nurturing: La Leche League International.
- The 'breast problem' images and 'cup-feeding' image came originally from the WHO/UNICEF *Breastfeeding Counselling: a Training Course*, but were used also in the *'Integrated Course'* and in the UNICEF *Community IYCF Counselling Package.*
- The 'grey-scale' images (more African in appearance) come from the *UNICEF Community IYCF Counselling Package.*
- Oral thrush image: *Infant and Young Child Feeding: a Community-Focused Approach*. CARE & URC/CHS. 2007.
- Supplementary suckling image: I*nfant and young child feeding: model chapter for textbooks for medical students and allied health professionals*. World Health Organization, 2009.

Irish Aid
Department of Foreign Affairs
An Roinn Gnóthaí Eachtracha

Save the Children.

ENN

LONDON SCHOOL of HYGIENE &TROPICAL MEDICINE

GOAL

1. TRIAGE: CHECK FOR SIGNS AND SYMPTOMS FOR REFERRAL TO INPATIENT CARE

ASSESS	CLASSIFY	ACT (MANAGE)
Infant CHECK for General Danger Signs[1]	**INFANT/MOTHER: NUTRITIONALLY VULNERABLE WITH MEDICAL COMPLICATIONS - HIGH NUTRITIONAL RISK OR VERY SEVERE DISEASE**	**URGENT referral to Inpatient Care**
Ask / Listen / Look / Feel • **Ask:** Is the infant able to drink or breastfeed? • **Ask:** Does the infant vomit everything? • **Ask:** Has the infant had convulsions? • **Look:** Is the infant convulsing now? • **Look:** Is the infant lethargic or unconscious?	**If any of the following are present for Infant: General Danger Signs** ☐ Unable to feed ☐ Vomits everything ☐ Had fit (convulsions) ☐ Fitting now (convulsions) ☐ Movement only when stimulated (lethargic) ☐ No movement (unconscious)	**Pre-referral actions: Infant** ☐ Provide any appropriate pre-referral treatment ☐ Show the mother how to keep the infant warm on the way to the hospital or clinic • Provide skin-to-skin contact **OR** • Keep the infant clothed or covered as much as possible all of the time. Dress the young infant with extra clothing including hat, gloves, socks and wrap the infant in a soft dry cloth and cover with a blanket ☐ If child is very hot, ask mother to remove outer clothing and leave infant in underwear • For breastfed infant, encourage breastfeeding before transfer and on the way if infant has an appetite • For non-breastfed infant, ensure the mother has appropriate feeding supplies and encourage to feed before transfer and on the way if the infant has appetite
• **Look** and count the breaths in one minute. • **Look:** Does infant have lower chest wall in-drawing?[2]	**Difficulty breathing** ☐ Fast breathing • infant 0-1 months: ≥60 breaths/min • infant 2-5 months: ≥50 breaths/min ☐ Lower chest wall in-drawing ☐ Grunting[3]	
• **Ask:** Does the infant have diarrhoea?[4] • **Look:** Does the infant have sunken eyes? • **Ask:** Are infant's eyes recently sunken or look worse than yesterday? • Pinch the skin of the abdomen. Does it go back: Very slowly (longer than 2 seconds)	**Diarrhoea** ☐ Has diarrhoea ☐ Sunken eyes ☐ Skin pinch goes back very slowly (>2 sec.)	
• **Feel:** Does the infant have a fever (hot)?[5] Does the infant have low body temperature (feels cool)? • Measure temperature under the armpit if you have a thermometer	**Fever** ☐ Feels hot: ≥37.5○C ☐ Feels cold: <35.5○C	
Infant: Check for jaundice • **Look** for jaundice. Does the infant have yellow eyes or skin? • **Look** at the young infant's palms and soles. Are they yellow	**Jaundice** ☐ Age <24 hours: any jaundice ☐ Age >24 hours: jaundice hands & feet	

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[1] See videos as part of newborn and small baby series (Global Health Media) that include: 'Danger Signs for Health Workers' and 'Fast Breathing as a Single Sign of Illness', www.globalhealthmedia.org/videos/. Also see short videos (Medical Aid Films) at www.medicalaidfilms.org. Note that in acutely malnourished infants, usual clinical signs may be absent or reduced. It is essential to consider the full clinical picture and history in assessment.

[2] **Lower chest wall in-drawing** is when the lower chest wall goes in when the child breathes in; if only the soft tissue between the ribs or above the clavicle goes in when a child breathes, this is not lower chest in drawing (it is recession). See 'Danger Signs for Health Workers' for video (footnote 1).

[3] **Grunting** is a short, hoarse sound at the end of expiration (when the child breathes out) and is a sign of moderate to severe respiratory distress in young infants and children with lower airway disease, such as pneumonia, lung collapse (atelectasis) or fluid in the lungs (pulmonary oedema). See 'Danger Signs for Health Workers' for video (footnote 1).

[4] Diarrhoea: for infants older than 1 month, 3 or more abnormally loose or watery stools per 24 hours [Note: breastfed infants up to 1 month of age can have a stool after every breastfeed].

[5] IMCI for young infant says: "if you do not have a thermometer, feel the infant's abdomen or armpit and determine if it feels hot or unusually cold".

ASSESS	CLASSIFY	ACT (MANAGE)
Infant CHECK for General Danger Signs	**INFANT/MOTHER: NUTRITIONALLY VULNERABLE WITH MEDICAL COMPLICATIONS - HIGH NUTRITIONAL RISK ORVERY SEVERE DISEASE**	**URGENT referral to Inpatient Care**
Infant: Check for severe pallor/anaemia • **Look** at infant's hands. Are the palms very pale/white?	**Severe pallor/anaemia** ☐ Very pale or white palms	
Mother: Check at for pallor/anaemia[6] • Test for Hb via Hemocue or similar • **Look** at mother's hands: Are her palms very pale/white? • **Look** at eyes: Are inside of eyelids pale?	**Mother: Anaemia** ☐ Hemocue or similar test indicates anaemia ☐ Very pale or white palms ☐ Pale inside of eyelids (conjunctiva)	
Infant: Check for complications that make **feeding difficult** (see 2nd Column)	**If Infant has any of the following that make feeding difficult** ☐ Cleft lip or palate (feel inside mouth to check palate) ☐ Tongue tie ☐ Abnormal tone or posture ☐ Excessively open/clenched jaw ☐ Unable to support head or poor trunk control ☐ When held, infant's arms and legs fall to the sides ☐ Infant's body stiff, hard to move ☐ Coughing and eye tearing while feeding (signs of unsafe swallowing)	☐ Specialist referral for more detailed assessment and treatment of any structural or disability problem that should include special feeding support
Infant: Anthropometric/Nutritional Assessment • **Look** for pitting oedema of both feet • Measure weight and length and determine weight-for-age (WFA)[7] and weight-for-length (WFL) where calculable • Record Mid Upper Arm Circumference (MUAC) for all infants (to help build evidence)[8] • **Ask & Listen:** Have you noticed your infant losing weight? For how long?	**Infant** ☐ < -2 WFA OR ☐ < -2 WFL **OR** ☐ Bilateral pitting oedema +, ++ and +++[9] **OR** ☐ Failure to respond to previous outpatient-based nutritional care (infant or mother) **AND any one of the following** ☐ Recent severe weight loss (within 1 week)[10] ☐ Prolonged (weeks) failure to gain weight ☐ Sharp drop across growth chart centile line *MUAC:_____ mm (record to help build evidence)*	

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[6] WHO cut-offs vary when pregnant and not pregnant and pregnancy defined until 6 weeks post-partum.

[7] Recent evidence has shown that WFA can help identify underweight infants who are also at higher risk to mortality. WFA is therefore used as a criterion for enrolment of nutritionally vulnerable infants under 6 months. A cut-off of WFA <-2 is used to ensure consistency with WFL cut-offs.

[8] There is recent growing evidence on the use of MUAC to identify acute malnutrition and nutrition vulnerability in infants under 6 months. However, a nutrition classification cutoff has not yet been established. Countries and programmes are encouraged to collect MUAC data for infants under 6 months to help build the evidence base for cutoffs and case management.

[9] Nutritional oedema is rare in infants and therefore infants with oedema should always be admitted to in-patient care to investigate possible underlying medical cause. (feet, legs, whole body). **Grade + Mild:** Both feet/ankles; **Grade ++ Moderate:** Both feet, plus lower legs, hands or lower arms; **Grade +++ Severe:** Generalised bilateral pitting oedema, including both feet, legs, arms and face

[10] In many settings, it can be difficult for a health worker or mother to detect acute weight loss in an infant. Where reported or detected, weight loss in infants should be interpreted alongside the general clinical condition; "lost more than 10% of previous weight".

ASSESS	CLASSIFY	ACT (MANAGE)
Infant CHECK for General Danger Signs	**INFANT/MOTHER: NUTRITIONALLY VULNERABLE WITH MEDICAL COMPLICATIONS - HIGH NUTRITIONAL RISK ORVERY SEVERE DISEASE**	**URGENT referral to Inpatient Care**
Mother: Anthropometric/ Nutritional Assessment • **Look** for pitting oedema of both feet (if mother not pregnant) • Measure MUAC (always)	**Mother** ☐ MUAC: <190 mm *MUAC:* _____ *mm (record to help build evidence)* **OR** ☐ Bilateral pitting oedema (if mother not pregnant)	

MOTHER	MOTHER: SEVERE DEPRESSION	URGENT referral to Inpatient Care
Mother: Maternal Mental Health[11] Observe the mother's responses and behaviours • **Listen & Look:** Does it appear that mother is out of touch with reality or what is happening in the assessment (e.g. not responding appropriately during the assessment)? • **Listen & Look:** Does the infant appear to be at risk from the mother's behaviour? (for example: mother shows no concern for infant, or wilful neglect of infant, such as prolonged period of no eye contact or no physical contact with infant) There are many daily tasks a mother does to care for her infant and family (for example: washing, cooking). • **Ask & Listen:** What are some of the most important things you do for your infant and family? • **Ask & Listen:** Do you ever find it difficult to do all these tasks? If Yes: Why is that? Sometimes a mother finds it difficult to do daily tasks because she is feels sad or worried. • **Ask & Listen:** In the last few weeks, have you been feeling: Sad? If Yes (listen for): little/some/much/most of the time? Worried? If Yes (listen for): little/some/much/most of the time? • **Ask & Listen:** Are there times you experience so much pain that it interferes with your ability to carry out daily tasks? • **Ask & Listen:** If Yes (listen for): Does this happen rarely/some/often/most of the time? If mother answers yes to either of questions above, then ask: • **Ask & Listen:** What are the problems that you are feeling sad or worried about? Sometimes when a person feels sad or worried she may have thoughts of harming herself or her infant. • **Ask & Listen:** Do you have any thoughts like that? Sometimes a person feels very sad or worried because her husband/partner (or someone else in the family) is hitting or beating her. • **Ask & Listen:** Is that happening to you?	**Any of the following:** ☐ Mother appears to be out of touch with reality or with what is happening in the assessment **OR** ☐ Infant appears to be at risk from the mother's behaviour. **[Mother may have a severe mental, neurological or substance use disorder]** **OR** ☐ Mother finds it difficult to carry out daily tasks necessary to care for her infant **OR** ☐ Mother feels body pain most of time **OR** ☐ Mother feels very sad or worried much of time List problems mother is feeling sad or worried about: _____ _____ **[Mother is severely anxious, depressed, traumatised, or otherwise in emotional crisis]** ☐ Mother has thoughts of harming herself or infant **OR** ☐ Mother expresses fear of physical harm to herself or infant from her partner or another person **OR** ☐ Mother or infant has experienced physical harm from her partner or another person **[Mother and/or infant are at risk of harm from mother herself or other individual]**	• Explain to supervisor that you are concerned about the mother/infant's safety and want to connect mother with the best care available • Assess safety of family situation and link with other potential caregivers for immediate care of mother and infant • Supervisors identify priority actions in partnership with Mental Health and Psychosocial Support (MHPSS) services and Child Protection services as appropriate • Follow up on referral to ensure safety and potential of enrolment in C-MAMI upon improvement of symptoms

[11] Questions are sensitive and context specific. Work with staff to decide together what works best in your particular situation.

2. FEEDING ASSESSMENT

ASSESS	CLASSIFY	ACT (MANAGE)	CLASSIFY	ACT (MANAGE)
Breastfed Infant and Mother	**Moderate Feeding Problem: C-MAMI criteria**	**C-MAMI Enrolment (Outpatient): Infant-Mother Pair**	**No Feeding Problem: C-MAMI criteria**	**Home Care**
Breastfed Infant • **Look:** Is the infant well attached? - Mouth wide open - Lower lip turned outwards - Chin touching breast - More areola above than below nipple • **Look:** Is the infant suckling effectively? • Slow deep sucks • Pausing • Audible swallowing • **Ask & Listen:** Find out how many breastfeeds in 24 hours • **Ask & Listen:** Does the infant receives plain water, other liquids or foods? • **Ask & Listen:** Does the infant refuse to breastfeed? • **Look** for thrush in infant's mouth	**Any of the following** ☐ Not well attached to the breast ☐ Not suckling effectively ☐ <8 breastfeeds in 24 hours ☐ Receives plain water, other liquids or foods ☐ Refuses to breastfeed ☐ Check for oral thrush (candida)	**Refer to Breastfeeding Counselling and Support Actions** ☐ Attachment: Section A: 1 ☐ Effectively suckling: Section A: 2 ☐ Frequency of breastfeeds: Section A3 ☐ Exclusive breastfeeding: Section A: 4 ☐ Oral thrush (candida): Section A: 11 **AND** ☐ Plot and examine growth chart to monitor progress, including birth weight, if available	**Well Attached: all the following** ☐ Mouth wide open ☐ Lower lip turned outwards ☐ Chin touching breast ☐ More areola above than below nipple **AND** Suckling well: all the following ☐ Slow deep sucks ☐ Pausing ☐ Audible swallowing **AND** ☐ ≥8 in 24 hours **AND** ☐ No plain water/ liquids/foods **AND** ☐ No thrush in infant's mouth	☐ Praise, support, reassure ☐ General advice/ counselling on: - general age appropriate feeding and nutrition recommendations - routine healthcare services e.g. vaccinations, growth monitoring ☐ Advise to return if new problem develops
Mother • **Listen:** Find out if the mother thinks she hasn't enough breast milk • **Listen:** Find out if the mother lacks confidence about feeding **Breast Condition: identify any of the following** • **Ask & Look:** Engorgement • **Ask & Look:** Sore & cracked nipples • **Ask & Look:** Plugged ducts • **Ask & Look:** Mastitis • **Ask & Look:** Flat, inverted, large or long nipples • **Ask & Look:** Itching of nipples or breasts (thrush)	**Mother: either of the following** ☐ Perception of not having enough breast milk ☐ Lack of confidence about feeding **OR** **Breast Condition: any of the following** ☐ Engorgement ☐ Sore & cracked nipples ☐ Plugged ducts ☐ Mastitis ☐ Flat, inverted, large or long nipples ☐ Itching of nipples or breasts (thrush)	**Mother** ☐ Perception of not having enough breast milk: Section A: 5 ☐ Lack of confidence about feeding: Section A: 6 **Breast Condition** ☐ Engorgement: Section A: 7 ☐ Sore & cracked nipples: Section A: 8 ☐ Plugged ducts: Section A: 9 ☐ Mastitis: Section A: 9 ☐ Flat, inverted, large or long nipples: Section A: 10 ☐ Thrush: Section A: 12	**Mother** ☐ Confident about infant condition, and breastfeeding ☐ Reports no breastfeeding problem and no concern	☐ Praise, support, reassure ☐ General advice/ counselling on: - general age appropriate feeding and nutrition recommendations - routine healthcare services e.g. vaccinations, growth monitoring ☐ Advise to return if new problem develops

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Other concerns: any of the following • **Ask & Listen:** Do you think your infant was born too early? or too small? • **Ask & Listen:** How do you feel about your infant's weight gain/growth? • **Ask & Listen:** Are you working away from infant or separated from him/her? • **Ask & Listen:** Do you have concerns about your own diet? • **Ask & Listen:** Other (dealing with different feeding practices of mother-in-law, father, family)? • **Ask & Listen:** Any other problem or concern?	**OR** **Other concerns: any of the following** ☐ Preterm or low birth weight ☐ Lack of confidence about infant weight gain/growth ☐ Working away or separated from infant ☐ Concerns about own diet ☐ Other (dealing with different feeding practices of mother-in-law, father, family) ☐ Note problem/concern: _____	**Other concerns** ☐ Preterm or low birth weight: Section A: 13 ☐ Lack of confidence about infant weight gain/growth: Section A: 14 ☐ Working away from her infant: Section A: 15-16 ☐ Concerns about her diet: Section A: 18		
Non-breastfed Infant-Mother/ Caregiver	**Moderate Feeding Problem: C-MAMI criteria**	**C-MAMI Enrolment (Outpatient): Infant-Mother Pair**	**No Feeding Problem: C-MAMI criteria**	**Home Care**
• **Ask & Listen:** Is mother the main caregiver for infant? • **Ask & Listen:** Did mother ever breastfed? When did she stop and why? • **Ask & Listen:** Is mother interested in relactating? • **Ask & Listen:** Is caregiver interested in wet nursing? • **Ask & Listen:** What is the type/source of breast milk substitute (BMS) used? • **Ask & Listen:** How do you prepare the BMS used? • **Ask & Listen:** How much BMS is consumed per 24 hours? • **Ask & Listen:** Is infant refusing feeds? • **Ask & Listen:** Does infant receive other drinks or foods in addition to BMS? • **Ask & Listen:** What feeding utensils does infant use? • **Ask & Listen:** Any problems or concerns? • **Ask & Listen:** Do you have the fuel/ equipment available to clean and sterilize?	**In non-breastfed infant: any of the following** ☐ If appropriate note why the mother stopped breastfeeding ☐ Mother present and interested in relactating ☐ Mother absent but caregiver interested in relactation or wet nursing ☐ Inappropriate BMS being used ☐ Consumes less than 500ml of BMS per 24 hours ☐ Refusing feeds ☐ Receives other drinks or foods in addition to BMS ☐ Feeding bottle used ☐ Does not practice good hygiene in feed preparation ☐ Note problem/concern: _____	**In non-breastfed infant** ☐ Non-breastfeeding counselling and support actions: Section C: 1-4 ☐ Interest in relactating: Section C: 1-4 ☐ Supplementary suckling support: Section B ☐ Preparing infant formula: Section C: 3-4	**In non-breastfed infant:** ☐ Mother relactating **OR** ☐ Infant fed by wet nurse **OR:** all the following for infant fed with BMS ☐ Appropriate BMS being used being used **AND** ☐ Consumes at least 500ml of BMS per 24 hours **AND** ☐ Feeds well **AND** ☐ Receives only BMS **AND** ☐ Practices good hygiene **Mother/Caregiver** ☐ Confident about infant condition, feeding and home management ☐ Reports no feeding problem and no concern	☐ Praise, support, reassure ☐ General advice/ counselling on: - general age appropriate feeding and nutrition recommendations - routine healthcare services e.g. vaccinations, growth monitoring ☐ Advise to return if new problem develops

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Underlying clinical problems or issues that may affect feeding • Is this infant a twin? • What is mother's age? • Has the mother or prospective wet nurse or infant had an HIV test? • If tested HIV positive and breastfeeding: is the mother and infant on anti-retroviral treatment (ART)?	**Infant: any of the following** ☐ Twin birth ☐ Adolescent mother (<19 years) ☐ Tested HIV positive ☐ On ART **Mother or prospective wet nurse: any of the following** ☐ Tested HIV positive ☐ On ART ☐ Note problem/concern: _____	**Infant** ☐ Twin birth: Section A: 19 ☐ Adolescent mother (<19 years): Section A: 20 ☐ Tested HIV positive: investigate and treat as per national / local guidelines: Section A: 21 **Mother/Wet-nurse** ☐ Tested HIV positive: investigate and treat as per national/local guidelines ☐ Ensure mother/wet-nurse is referred for or receiving appropriate treatment (antiretroviral drugs for HIV) ☐ Emphasise importance of adherence to ART for mother/wet-nurse's health and to reduce HIV transmission risk to infant		☐ Praise, support, reassure ☐ General advice/ counselling on: - general age appropriate feeding and nutrition recommendations - routine healthcare services e.g. vaccinations, growth monitoring ☐ Advise to return if new problem develops

3. ANTHROPOMETRIC / NUTRITIONAL ASSESSMENT

ASSESS	CLASSIFY	ACT (MANAGE)	CLASSIFY	ACT (MANAGE)
Infant/Mother	**INFANT: NUTRITIONALLY VULNERABLE INFANTS WITHOUT MEDICAL COMPLICATIONS (MODERATE NUTRITIONAL RISK) OR MOTHER: MODERATE NUTRITIONAL RISK**	**C-MAMI outpatient enrolment: Infant-Mother Pair**	**INFANT AND MOTHER LOW NUTRITIONAL RISK**	**No C-MAMI enrolment for Infant-Mother Pair**
Infant • Obtain infant age (in completed months). Measure weight and length and determine weight-for-age z-score (WFA)[12] and weight-for-length z-score (WFL) where calculable. • NOTE: clinical assessment for visible wasting is not a reliable substitute for anthropometry and will result in cases being missed. It should only be done where length is <45cm and WFL cannot be calculated. • Record Mid Upper Arm Circumference (MUAC) for all infants (to help build evidence)[13]	**Infant:** **Both** ☐ Clinically well ☐ Alert **AND** **One of the following** ☐ **< -2 WFA OR** ☐ **< -2 WFL** **OR: any of the following** ☐ Moderate weight loss (within a few days) ☐ Recent (days-weeks) failure to gain weight ☐ Moderate drop across growth chart centile lines ***MUAC:*** _____ *mm (record to help build evidence)*	☐ Assess underlying cause(s) of malnutrition and discuss action(s) to address these ☐ Plot & examine growth chart to monitor progress including - Birth weight if available - Gestation age at birth if available - Growth trend if previous data available ☐ Provide age- and status-appropriate nutrition/feeding advice ☐ Provide course of broad-spectrum oral antibiotic, such as amoxicillin (for infant) – check local guidelines **Follow-up** • Provide follow-up in 1 week to monitor for change in nutritional status	**Infant** **Both** ☐ Clinically well ☐ Alert **AND** ☐ **≥-2 WFA OR** ☐ **≥-2 WFL** **AND** ☐ Infant gaining weight ***MUAC:*** _____ *mm (record to help build evidence)*	☐ Praise, support, reassure ☐ General advice/ counselling on: - general age appropriate feeding and nutrition recommendations - routine healthcare services e.g. vaccinations, growth monitoring ☐ Advise to return if new problem develops

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[12] Recent evidence has shown that WFA can help identify underweight infants who are also at higher risk to mortality. WFA is therefore used as a criterion for enrolment of nutritionally vulnerable infants under 6 months. A cut-off of WFA <-2 is used to ensure consistency with WFL cut-offs.

[13] There is recent growing evidence on the use of MUAC to identify acute malnutrition and nutrition vulnerability in infants under 6 months. However, a nutrition classification cutoff has not yet been established. Countries and programmes are encouraged to collect MUAC data for infants under 6 months to help build the evidence base for cutoffs and case management.

Mother • Measure MUAC (always)	**Mother** **Anthropometry assessment** ☐ MUAC ≥ 190mm and <230 mm ***MUAC:*** _____ *mm (record to help build evidence)*	☐ Provide follow-up in 1 week	**AND** **Mother** Anthropometry assessment ☐ MUAC ≥230 mm ***MUAC:*** _____ *mm (record to help build evidence)*	**No C-MAMI enrolment for Infant-Mother Pair** ☐ Praise, support, reassure ☐ General advice / counselling on: • age- and status-appropriate feeding and nutrition recommendations • routine healthcare services ☐ Advise to return if new problem develops

4. MATERNAL MENTAL HEALTH ASSESSSMENT

ASSESS	CLASSIFY	ACT (MANAGE)	CLASSIFY	ACT (MANAGE)
Mother	**MOTHER: MODERATE MATERNAL MENTAL DEPRESSION/ ANXIETY/ DISTRESS**	**C-MAMI outpatient enrolment: Infant-Mother Pair**	**MOTHER: NO MATERNAL MENTAL DEPRESSION/ ANXIETY/ DISTRESS**	**No C-MAMI enrolment for Infant-Mother Pair**
On some or most days in the last 2 weeks: • **Ask & Listen:** Have you felt unable to stop worrying or thinking too much? • **Ask & Listen:** Have you been sad or worried?	If mother answers yes to 1-2 of the questions, then enrol in C-MAMI ☐ Mother felt unable to stop worrying or thinking too much ☐ Mother has been sad or worried **(Mother has symptoms of anxiety, depression, or stress that impacts daily functions)**	☐ Ask mothers about their concerns ☐ Listen to mothers and help them feel calm ☐ Help mothers to find solutions and link to resources to address basic needs ☐ Help connect mothers to information / help to prevent further harm	☐ Mother has limited / no symptoms of anxiety, depression, or stress that impacts daily functions	☐ Praise, support, reassure ☐ General advice / counselling on: • care and nutrition recommendations during pregnancy, lactation and adolescence • routine healthcare services ☐ Advise to return if new problem develops
Social support • **Ask & Listen:** Do you have enough food to feed your family daily?[14] If No: Are you registered in any food-related services: general food distribution (GFD), supplementary feeding programme (SFP), targeted cash/voucher schemes, social protection schemes, etc.? • **Ask & Listen:** Have you attended health services when you felt you needed to or have been referred? • **Ask & Listen:** Do you attend health education sessions, support groups in your community or facility or receive education through community outreach workers?	**Lack of care and social support** ☐ Not enough food to feed family ☐ Not registered in any food-related services: GFD, SFP, targeted cash/voucher schemes, social protection schemes, etc. **OR** ☐ Does not attend the health services when needed or referred **OR** ☐ Does not attend health education sessions, support groups in community or facility or receive education through community outreach workers	☐ Link and refer with appropriate institutional care / services (e.g. Health facility, Mental Health of Psychosocial support programme, Protection programmes / Gender based violence / GBV response programmes) ☐ If not attending health services or education sessions refer to Support during breastfeeding or for non-breastfeeding mother: Section C: 1-4 / caregiver: Section D: 1-4 ☐ Organise meetings at which caregivers can discuss their lives, share problem-solving and support one another in caring effectively for their infants ☐ Group support: Section D: 1-2 ☐ Family/partner support: Section D: 3 ☐ Community support: Section D: 4 ☐ Identify local human resources (e.g. community leaders, elders, health workers, teachers, women's group) ☐ In follow up visits, attempt to meet with people who have been named and ask if they can help ☐ When local support systems are weak, consider establishing support groups linking MAMI mothers ("current" and "graduated")	**Adequate care and social support** ☐ Existing social support / cohesion / belonging ☐ Registered in food-related services: GFD, SFP, targeted cash/voucher schemes, social protection schemes, etc. ☐ Attends the health services when needed or referred ☐ Attends health education sessions or support groups in community or facility	

[14] This is context specific. Local adaptation may be needed depending on food security issues in the community and availability of programmes to refer to.

ii COUNSELLING and SUPPORT ACTIONS BOOKLET

The Counselling and Support Actions Booklet includes 4 Sections:

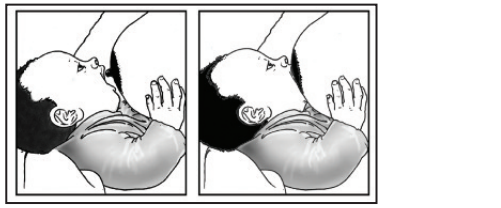
Section A: Breastfeeding Counselling and Support Actions – Breastfeeding 1 – 21
Section B: Breastfeeding Counselling and Support Actions – Supplementary Suckling Support
Section C: Non-breasstfeeding Counselling and Support Actions – Non-breastfeeding 1 – 4
Section D: Counselling and Support Actions (for All) – Social Support 1 – 4

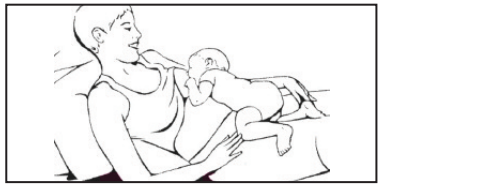
Section A: Breastfeeding Counselling and Support Actions – Breastfeeding 1 – 21

Image	Symptoms/signs/ indicators of practice	Counselling and Support Actions

1. Good Attachment

Observe breastfeeding:





Attachment

1. Infant's mouth wide open
2. Lower lip turned outwards
3. Chin touching breast
4. More darker skin (areola) visible above than below the mouth

Positioning

1. Infant's body should be **straight**, not bent or twisted
2. Infant's body should be **facing the breast**
3. Infant should be held **close to mother**
4. Mother should **support** the infant's whole body, not just neck and shoulders (for tummy down or reclining position: assisted by gravity, with baby's full weight resting on mother's body during the period the infant is learning to breastfeed; works with cesarean sections)

Note on Natural Breastfeeding

Every newborn has a series of responses designed by Mother Nature to make infant an active breastfeeding partner.

- ☐ When newborn lies tummy down on mother, anchored by gravity, the baby's innate reflexes kick in. This position helps the baby move toward the breast, resulting in attachment and suckling.
- ☐ If infant not alert/doesn't open mouth, hand express drops of milk and apply on infant's
- ☐ lips to stimulate mouth opening
  Good attachment helps to ensure that your baby suckles well and helps you to produce a good supply of breast milk
- ☐ Good attachment helps to prevent sore and cracked nipples

See videos:

- http://breastfeedingtoday-llli.org/position-to-breastfeed/
- Breastfeeding attachment: https://globalhealthmedia.org/portfolio-items/attaching-your-baby-at-the-breast/?portfolioID=10861

Note: there is no ONE right position for all mothers. No matter the position (from cradle to tummy down), there are commonalities that assist a deep latch.

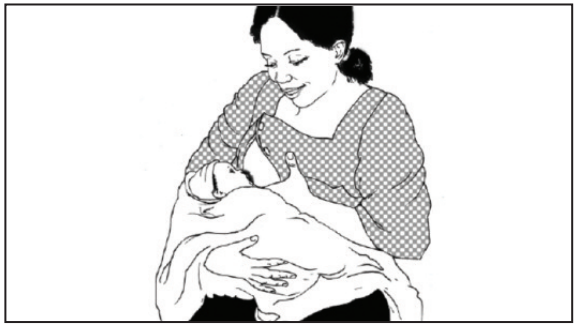
See videos:

- Breastfeeding positions: https://globalhealthmedia.org/portfolio-items/positions-for-breastfeeding/?portfolioID=10861
- Breastfeeding in the first hours after birth: https://globalhealthmedia.org/portfolio-items/breastfeeding-in-the-first-hours-after-birth/?portfolioID=10861

Image	Symptoms/signs/ indicators of practice	Counselling and Support Actions

2. Effective Suckling

Ask about and observe:



1. Slow deep suckles, sometimes pausing
2. Audible or visible swallowing
3. Infant's jaw will drop distinctly as he or she swallows
4. Infant's cheeks are rounded and not dimpled or indrawn
5. Mother responds with satisfaction and self-confidence.

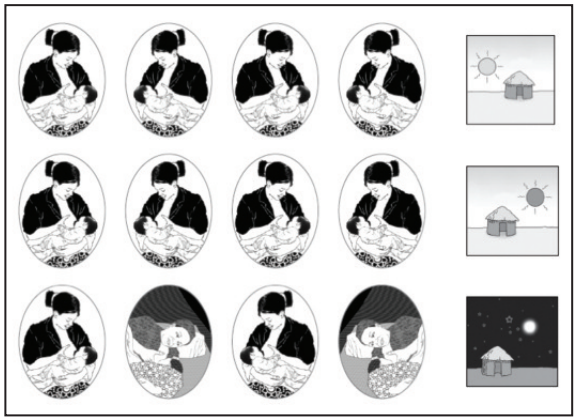
- ☐ Counsel on the same actions as above for good attachment
- ☐ If infant is not suckling, hand express drops of milk into infant's mouth to encourage suckling

See video:

- Effective suckling and breastfeeding frequency: https://globalhealthmedia.org/portfolio-items/is-your-baby-getting-enough-milk/?portfolioID=10861

3. Frequency of breastfeeds

Ask how many times the infant breastfeeds in 24 hours



Breastfeeding pattern

- On demand (on cue) breastfeeding, day and night
- Infant releases one breast before switching to the other
- Infant breastfeeds 8 – 12 times in 24 hours

If < 8 breastfeeds in 24 hours

- ☐ Increase frequency of breastfeeds by alerting and stimulating infant to breastfeed
- ☐ Breastfeed as often and as long as the infant wants, day and night
- ☐ Let infant release one breast before offering the other

If > 12 breastfeeds in 24 hours

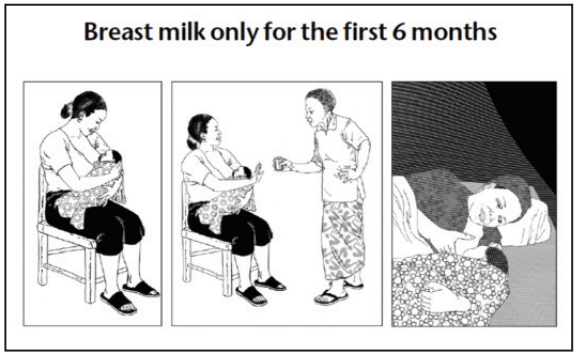
- ☐ Assess length of each breastfeed
- ☐ Assess if infant is getting milk at each feed: refer 'Not enough breastmilk' Section A: 5
- ☐ Check attachment and effective suckling

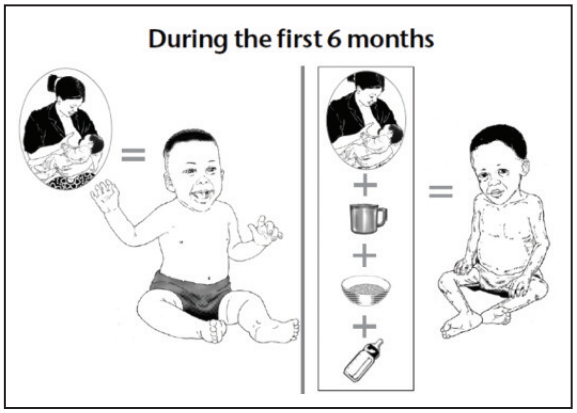
Note: Infants <2 months sometimes breastfeed every 2 hours because they have very small stomachs. Breastfeeding more frequently helps to establish breastfeeding/breast milk flow.

Image	Symptoms/signs/ indicators of practice	Counselling and Support Actions

4. Receives other liquids or foods

Ask if infant receives water, other liquids, semi-solids, or solids





Exclusive breastfeeding from 0 up to 6 months (no water, liquids, semi-solids or solids)

- ☐ Counsel mother on the importance of exclusive breastfeeding
- ☐ Address reason(s) for giving water, other drinks or foods including mother's absence for work (see Breast milk expression, Section A: 16)
- ☐ Counsel to increase breastfeeding frequency; and reduce other drinks and foods
- ☐ Assess the feeding realities and choices the mother is making and work with her to reduce the risk (e.g. from care and WASH practices)

Image	Symptoms/signs/ indicators of practice	Counselling and Support Actions

5. "Not enough" breastmilk

Real "Not enough" breastmilk production

- Infant is still passing black stools on Day-4 (after birth)
- Less than 6 "wets" or urine/day after the first week
- Infant is not taking good deep suckles followed by a visible or audible swallow
- Infant not satisfied after breastfeeding
- Infant cries often after feeds
- Very frequent and long breastfeeds
- Infant refuses to breastfeed
- Infant has hard, dry, or green stools
- Infant has infrequent small stools
- Infant is not gaining weight: trend line on growth chart for infant less than 6 months is flat or slopes downward – weight gain less than 500 g/month

- ☐ Look for good attachment
- ☐ Look for effective suckling
- ☐ Ask about frequency of breastfeeds: 8 – 12 times in 24 hours
- ☐ Stop any supplements: infant should receive no water, other drinks or foods
- ☐ Look for illness or physical abnormality in the infant or mother
- ☐ Look for bonding or rejection
- ☐ Explain to mother that she and infant will be seen daily until infant begins gaining weight, and it may take 3-7 days for the infant to gain weight.
- ☐ Build mother's confidence – reassure her that she can produce enough milk
- ☐ Explain what the difficulty may be – growth spurts (around 3 weeks, 6 weeks, 3 months) or cluster feeds (feeds are bunched closely together during certain times of the day)
- ☐ Explain: 'The more an infant suckles and removes milk from the breast, the more milk the mother produces'
  Let infant come off the first breast by him/herself before mother offers the 2nd breast
- ☐ Avoid separation, and keep mother and infant skin-to-skin as much as possible
- ☐ Ensure mother gets enough to eat and drink

Note; If no improvement in weight gain after 7 days, refer mother and infant for supplementary suckling to in-patient care (See Supplementary Feeding Support: Section B)

See videos:

- Perception of 'not enough' breastmilk: https://globalhealthmedia.org/portfolio-items/increasing-your-milk-supply/?portfolioID=10861
- Is your baby getting enough milk: https://globalhealthmedia.org/portfolio-items/is-your-baby-getting-enough-milk/?portfolioID=10861

Mother thinks she has "not enough" breastmilk production but not "real"

Mother thinks she has "not enough" breastmilk production but not "real"

- Mother thinks she does not have enough milk
- (Infant restless or unsatisfied)

First decide if the infant is getting enough breastmilk or not (weight, urine and stool output): see above

- ☐ Listen to mother's concerns and why she thinks she does not have enough milk
- ☐ Check infant's weight and urine and stool output (if poor weight gain, refer)
- ☐ Apply same counselling/actions as for real "not enough" breastmilk (above)

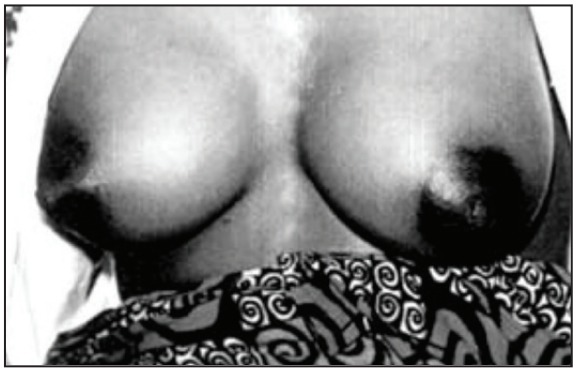
Image	Symptoms/signs/ indicators of practice	Counselling and Support Actions

6. Mother lacks confidence to breastfeed

Mother thinks she may be unable to breastfeed the infant

- ☐ Listen to mother's concerns. If mother expresses concern about her diet/nutrition, refer to Section A: 18 in Counselling and Support Booklet
- ☐ Assess mother for any problem she thinks she may have; if appropriate, help mother address the issue
- ☐ Encourage her to enjoy skin-to-skin contact and to play with her infant face-to-face
- ☐ Build her confidence:
  - Recognize and praise what she is doing right – including signs of milk flow
  - Give relevant information in an encouraging way and correct misconceptions
- ☐ Provide mother with hands-on help to attach infant to breast and get breastfeeding established
- ☐ Help her to breastfeed near trusted companions, which helps relaxation

7. Breast condition: Breast Engorgement



- Occurs on both breasts
- Swelling
- Hard
- Tenderness
- Warmth
- Slight redness
- Pain
- Skin shiny, tight and nipple flattened and difficult to attach
- Can often occur on 3rd to 5th day after birth (when milk production increases dramatically and suckling not established)

- ☐ Look for good attachment
- ☐ Look for effective suckling
- ☐ Ask about frequency of breastfeeds: 8 – 12 times in 24 hours
- ☐ Stop any supplements: infant should receive no water, other drinks or foods
- ☐ Keep mother and infant together after birth
- ☐ Put infant skin-to-skin with mother
- ☐ Gently stroke breasts to help stimulate milk flow
- ☐ Press around areola to reduce swelling, to help infant to attach
- ☐ Offer both breasts
- ☐ Express milk to relieve pressure until infant can suckle
- ☐ Apply cold compresses to breasts to reduce swelling
- ☐ Apply warm compresses to help the milk flow before breastfeeding or expressing

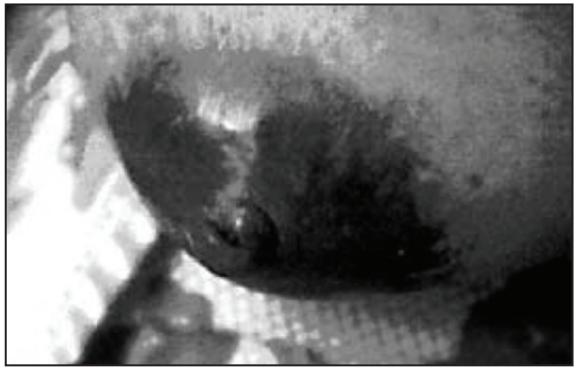
Note: on the first day or two infants may only feed 2 to 3 times

See video:

- ☐ Breast engorgement: https://globalhealthmedia.org/portfolio-items/breast-engorgement/?portfolioID=10861

Image	Symptoms/signs/ indicators of practice	Counselling and Support Actions

8. Breast condition: Sore or Cracked Nipples



- Breast/nipple pain
- Cracks across top of nipple or around base
- Occasional bleeding
- May become infected

- ☐ Look for good attachment
- ☐ Look for effective suckling
- ☐ Ask about frequency of breastfeeds: 8 – 12 times in 24 hours
- ☐ Stop any supplements: infant should receive no water, other drinks or foods
- ☐ Do not stop breastfeeding
- ☐ Begin to breastfeed on the side that hurts less
- ☐ Change breastfeeding positions
- ☐ Let infant come off breast by him/herself
- ☐ Hand express to start the flow of milk before putting infant to breast
- ☐ Apply drops of breastmilk to nipples
- ☐ Do not use soap or cream on nipples
- ☐ Do not wait until the breast is full to breastfeed
- ☐ Do not use feeding bottles
- ☐ If sore is large and infected after applying these measures, refer to facility
- ☐ If mother is HIV positive she should not breastfeed from the breast with a cracked or bleeding nipple; she can express milk from damaged breast and discard until nipple heals, or heat-treat expressed breast milk

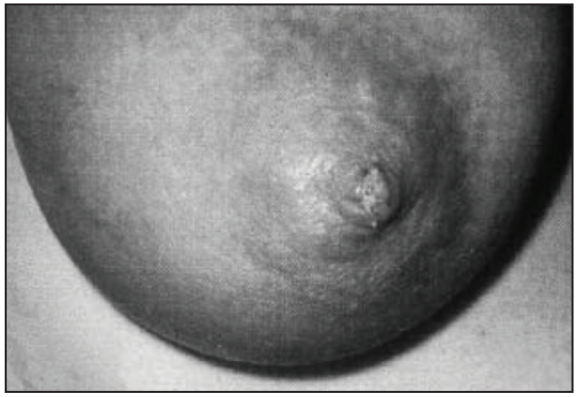
Note: If baby is known to be living with HIV, a mother with cracked nipples and mastitis still needs to heat-treat expressed breast milk to prevent re-infection.

See video:

☐ Nipple pain: https://globalhealthmedia.org/portfolio-items/what-to-do-about-nipple-pain/?portfolioID=10861

Image	Symptoms/signs/ indicators of practice	Counselling and Support Actions

9. Breast condition: Plugged Ducts and Mastitis



Plugged Ducts:

- Lump, tender, localized redness, feels well, no fever

Mastitis:

- Hard swelling
- Severe pain
- Redness in one area
- Generally, not feeling well
- Fever
- Sometimes, an infant refuses to feed as milk tastes more salty

- ☐ Look for good attachment
- ☐ Look for effective suckling
- ☐ Ask about frequency of breastfeeds: 8 – 12 times in 24 hours
- ☐ Stop any supplements: infant should receive no water, other drinks or foods
- ☐ Do not stop breastfeeding (if milk is not removed, risk of abscess increases; let infant feed as often as he or she wants)
- ☐ Apply warmth (water, hot towel)
- ☐ Hold infant in different positions, so that the infant's tongue/chin is close to the site of the plugged duct/mastitis (the reddish area). The tongue/chin will massage the breast and release the milk from that part of the breast.
- ☐ Get support from the family to perform non-infant care chores
- ☐ Breastfeed on demand, and let infant finish/come off breast by him/herself
- ☐ Avoid holding the breast in scissors hold
- ☐ Avoid tight clothing
- ☐ For plugged ducts: apply gentle pressure to breast with flat of hand, rolling fingers towards nipple; then express milk or let infant feed every 2-3 hours day and night
- ☐ Rest (mother)
- ☐ Drink more liquids (mother)
- ☐ If no improvement in 24 hours, refer
- ☐ If mastitis: express if too painful to suckle; expressed breastmilk may be given to infant; If mastitis, seek treatment (mother may need antibiotics)
- ☐ If there is pus, discard by expressing and continue breastfeeding

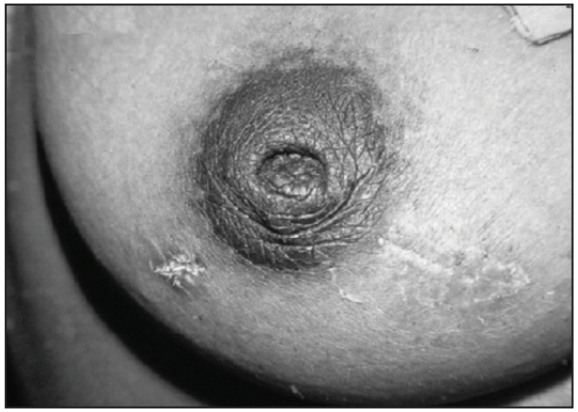
See video:

- Breast pain: https://globalhealthmedia.org/portfolio-items/what-to-do-about-breast-pain/?portfolioID=10861

Image	Symptoms/signs/ indicators of practice	Counselling and Support Actions

10. Breast condition: Flat, inverted, large or long nipples

Inverted Nipple



Observe nipple appearance

Flat, inverted, large or long nipples are managed using the same techniques:

- ☐ Listen to the mother's concerns
- ☐ Give extra help with attachment; make certain that as the mother is putting the infant on her breast she:
  - gently touches the infant's lips to encourage him/her to open widely and take a big mouthful of breast
  - aims the infant's lower lip well below her nipple, so that the nipple goes to the top of the infant's mouth and the infant's chin touches her breast (see additional information under 'Good Attachment' Section A: 1)
  - for long nipples, place infant in a semi-sitting position to breastfeed
- ☐ Encourage mother to give the infant plenty of skin-to-skin contact near the breast, with frequent opportunities to find his or her own way of taking the breast into his/her mouth (mother should not force infant to take the breast, or force infant's mouth open)
- ☐ Encourage mother to try different breastfeeding positions (e.g., lying down, holding infant in underarm position, or lying or leaning forward so that her breast falls towards the infant's mouth
- ☐ Teach mother to express her milk at least 8 times a day and to feed the expressed milk to the infant with a cup (see 'Breast Milk Expression, Cup Feeding, and storage of breastmilk')
- ☐ Keep on trying. Most babies want to suckle, and they will find out how to open their mouths wide enough to take the nipple eventually. It may take a week or two.
- ☐ For an inverted nipple: If it is possible to get a 20 ml plastic syringe, it can be used to pull out an inverted nipple in the following way:
  - Cut off the adaptor end, and put the plunger in backwards
  - Put the smooth (uncut) end of the syringe over the nipple and draw out the plunger. This will stretch out the nipple
  - Do this for half a minute to make the nipple stand out just before each breastfeed.

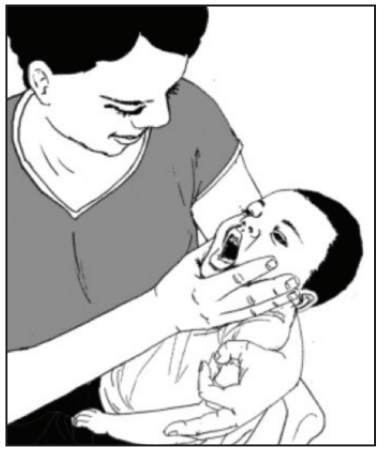
See video:

- Large breasted mothers: https://www.youtube.com/watch?v=584nv1oNxvw

Image	Symptoms/signs/ indicators of practice	Counselling and Support Actions

11. Oral thrush: Infant

Inverted Nipple



- Infant's symptoms:
  - white patches inside check or on tongue
  - maybe rash on baby's bottom
  - baby repeatedly pulls off the breast or refuses to breastfeed

- ☐ Both counsellor and mother wash hands
- ☐ Teach the mother to identify and treat thrush at home:
  - Show mother how to look for ulcers or white patches in the mouth of infant
  - Explain to mother: it is necessary to carry out the treatment four times daily for 5 days after the thrush has cleared
  - Explain to mother that the ulcers/white patches are the thrush, and teach her how to treat the thrush at home
- ☐ Give the mother an antifungal liquid (nystatin)
- ☐ Demonstrate to mother how to paint (part of the infant's) mouth with nystatin using a soft cloth wrapped around the fingers
- ☐ Continue four times a day until five days after the thrush has cleared.
- ☐ Ask her if she has any questions, and have her show you how to paint the other part of the child's mouth
- ☐ Ask mother to return after 2 days

Follow-up care:

After 2 days:

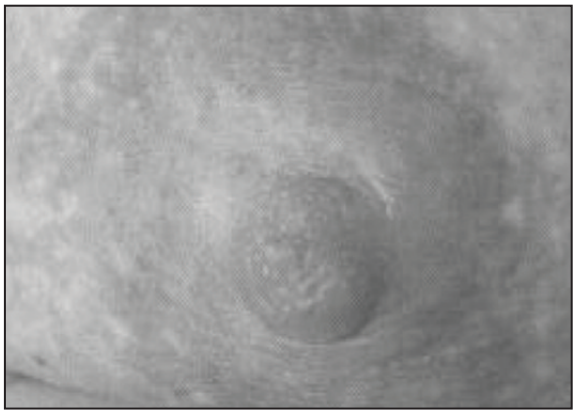
- ☐ Look for ulcers or white patches in the mouth. If thrush is worse, check that treatment is being given correctly
- ☐ Reassess infant's feeding
- ☐ If infant has problems with attachment or suckling, refer to facility

See video:

- Thrush: https://globalhealthmedia.org/portfolio-items/thrush/?portfolioID=5638

Image	Symptoms/signs/ indicators of practice	Counselling and Support Actions

12. Maternal Nipple Thrush



- Mother's symptoms:
  - sore nipples with pain continuing between feeds, pain like sharp needles going deep into the breast, which is not relieved by improved attachment
  - there may be a red or flaky rash on the areola, with itching and de-pigmentation

- ☐ Examine the infant's mouth for white spots, and the infant's bottom for a spotty red rash. These are signs that the infant may have thrush, which is also affecting the mother's nipples.
- ☐ Treat infant as explained above
- ☐ Treat mother: apply nystatin cream on mother's nipples
- ☐ The mother can continue breastfeeding during the treatment; the medicine on her nipples will not harm the infant; do not use pacifiers or feeding bottles
- ☐ Discourage use of soap or ointments on the nipples. Use ordinary washing as for the rest of the body.

13. Low Weight Infant

- Low weight for length
- Low weight for age

For ALL breastfeeding mothers with low weight infants:

- ☐ If not well attached or not suckling effectively, demonstrate and assist mother to correctly position and attach infant (specify cross-arm/cross-cradle hold), and identify signs of effective suckling
- ☐ If not able to attach well immediately, demonstrate breastmilk expression and feeding by a cup: Section A: 16
- ☐ If attached but not suckling, hand-express drops of milk into infant's mouth to stimulate suckling
- ☐ If breastfeeding less than 8 times in 24 hours, counsel to increase frequency of breastfeeding
- ☐ Counsel the mother to breastfeed as often and as long as the infant wants, day and night
- ☐ Counsel mother on establishing exclusive breastfeeding
- ☐ If infant is receiving water, other drinks or foods, counsel the mother about breastfeeding more, reducing water, other drinks or foods, and using a cup rather than a bottle if infant has been bottle-fed
- ☐ Low weight infants fatigue easily and may fall asleep after few minutes; try again after a break.
- ☐ Help mother to increase her breastmilk supply; see "Not enough" breastmilk Section A: 5
- ☐ Counsel mother to wait until the infant releases one breast before switching to the other breast

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Image	Symptoms/signs/ indicators of practice	Counselling and Support Actions

- ☐ Mother may need to spend more time feeding, perhaps at times with a cup using only expressed breastmilk
- ☐ Mother may need to share some of her other household duties with others for a month or two
- ☐ For the mother who has breastfed in the past and is interested in re-establishing breastfeeding: see Relactation Section A:17
- ☐ Show mother how to provide stimulation and play to make her infant more alert.
- ☐ Weigh each infant weekly until weight gain is established (at least 125 g/week, 500 g/month) and appetite improves.
- ☐ Give mother frequent reassurance, praise and help, to build her confidence

See video:

- Cup Feeding Your Small Baby: https://globalhealthmedia.org/portfolio-items/cup-feeding-your-small-baby/?portfolioID=13325

Kangaroo Mother Care improves breastfeeding

- ☐ Provide skin to skin contact as much as possible, day and night. For skin to skin contact, demonstrate Kangaroo Mother Care:
  - Dress the infant in a warm shirt open at the front, a nappy, hat and socks.
  - Place the infant in skin to skin contact on the mother's chest between her breasts. Keep the infant's head turned to one side.
  - Cover the infant with mother's clothes (and an additional warm blanket in cold weather).
- ☐ When not in skin to skin contact, always keep the young infant clothed or covered. Dress the young infant with extra clothing including hat and socks, loosely wrap the young infant in a soft dry cloth and cover with a blanket.
- ☐ Keep the room warm (at least 25°C) with home heating device (if available) and make sure there is no draught of cold air
- ☐ Close windows/cover window spaces at night
- ☐ Avoid bathing the low weight infant. When washing or bathing, do it in a very warm room/at a warm time of the day with warm water, dry immediately and thoroughly after bathing and clothe the young infant immediately.
- ☐ Change clothes (e.g. nappies) whenever they are wet.
- ☐ Check frequently if the hands and feet are warm. If cold, re-warm the infant using skin to skin contact.
- ☐ Breastfeed the infant frequently (or give expressed breastmilk by cup).
- ☐ Give a hot drink to the adult providing Kangaroo Mother Care for relaxation and production of more body heat.

Image	Symptoms/signs/ indicators of practice	Counselling and Support Actions

14. Satisfactory Slow Weight Gain

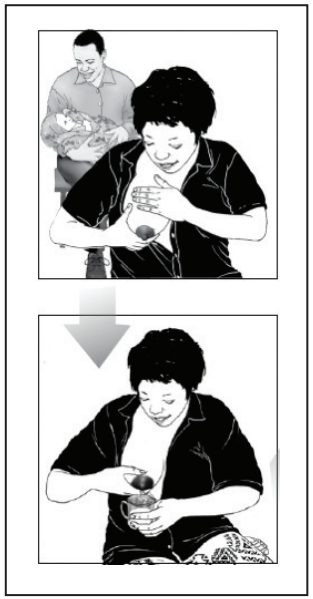
	• Gain in weight and length consistent and continuous although below growth chart lines • Satisfactory slow weight gain has the following characteristics: - Frequent feeds - Active suckling and swallowing - Mother experiences regular let-downs - Pale urine: 6 or more diapers soaked daily - Seedy or soft stools, frequency within normal ranges - Infant is alert and active - Appropriate developmental milestones met - Good muscle tone and skin turgor	☐ Check attachment and breastfeeding positions ☐ Listen for deep suckles and audible swallowing ☐ Counsel mother to breastfeed frequently ☐ Encourage mother to continue to exclusively breastfeed ☐ Praise and reassure mother, build her confidence

15. Mother expresses concerns about working or being away from her infant and her ability to breastfeed her infant

	Mother is concerned about being away from her infant and her ability to feed her infant exclusively on breastmilk	☐ Listen to mother's concerns ☐ Explain to mother: if she must be separated from her infant, she can express her breastmilk and leave it to be fed to her infant while she is absent ☐ Help mother to express her breastmilk and store it safely to feed the infant while she is away (see 'Breast milk expression, cup feeding and storage of breastmilk': Section A:16) ☐ Mother should allow infant to feed frequently at night and whenever she is at home. ☐ Mother who can keep her infant with her at the work site or go home to feed the infant should be encouraged to do so and to feed her infant frequently. ☐ Reassure mother that any amount of breastmilk will contribute to the infant's health and development, even if she cannot practice exclusive breastfeeding.

Image	Symptoms/signs/ indicators of practice	Counselling and Support Actions

16. Breast milk expression, cup feeding and storage of breastmilk



If infant not able to attach immediately, demonstrate breastmilk expression, cup feeding and storage of breastmilk

Ask the mother to:

- ☐ Wash her hands thoroughly
- ☐ Make herself comfortable
- ☐ Hold a wide necked clean container under her nipple and areola
- ☐ Stimulate breast with light stroking or gentle circular motion around whole breast
- ☐ Place her thumb on top of her breast and the first 2 fingers on the underside of her breast so that they are opposite each other
- ☐ With thumb and fingers press back to chest wall, press and hold together (compress) and release
- ☐ Repeat the action: press back to chest wall, press and hold together and release. Note: this should not hurt
- ☐ Compress and release all the way around the breast, with thumb and fingers the same distance from the nipple. Be careful not to squeeze the nipple or to rub the skin or move thumb or finger on the skin
- ☐ Express one breast until the flow of milk is very slow; express the other breast
- ☐ Alternate between breasts 5 or 6 times, for at least 20 to 30 minutes

See video:

- How to express breastmilk: https://globalhealthmedia.org/portfolio-items/how-to-express-breastmilk/?portfolioID=10861

Cup Feeding

Assess readiness for cup feeding: rest the cup against the infant's lips, with milk touching infant's top lip. Wait and watch for infant response. If no response, try at next feed. If no response after 2-3 trials, then refer to a facility where infant can be 'supported' to suckle.

Ask the mother or caregiver to:

- ☐ Put a cloth on the infant's front to protect his/her clothes as some milk can spill
- ☐ Hold the infant upright or semi-upright on the lap
- ☐ Put a measured amount of milk in the cup or pour only amount to be used at one feeding into the cup
- ☐ Hold the cup resting on the lower lip and tip the cup so that the milk touches the infant's upper lip
- ☐ Wait for the infant to draw in or suckle in the milk
- ☐ Allow the infant to take the milk himself. DO NOT pour the milk into the infant's mouth
- ☐ Caregiver should pause and let infant rest after every few suckles
- ☐ Caregiver should pay attention to infant, look into infant's eyes and be responsive to infant's cues for feeding
- ☐ Do not reuse any milk the infant does not drink for another feeding

See video:

- Cup feeding: https://globalhealthmedia.org/portfolio-items/cup-feeding/?portfolioID=13325

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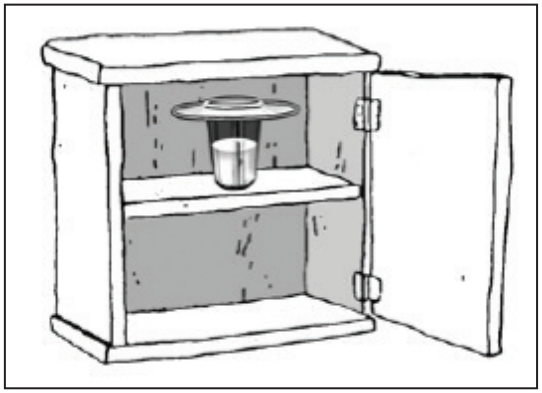
Image	Symptoms/signs/ indicators of practice	Counselling and Support Actions
		**Storage of breastmilk** Ask the mother to: ☐ Use a clean and covered glass or plastic container ☐ Store only enough for one feeding in each container ☐ Each container should be labelled with date and time ☐ Store breastmilk in the coolest possible place; breastmilk can be left in a room at room temperature (<26 °C, in the shade) for 6 to 8 hours. ☐ Store in refrigerator at back of lowest shelf for 5 days (if milk remains consistently cold) ☐ Store frozen for 2 weeks ☐ Use oldest milk first ☐ To warm the milk, put the container of milk in a bowl of warm water; don't heat on the stove Use a cup to feed the infant expressed breastmilk See video: • Storing breastmilk safely: https://globalhealthmedia.org/portfolio-items/storing-breastmilk-safely/?portfolioID=10861

17. Relactation

Mother/ wet nurse interested in re-establishing breastfeeding	Relactation: Mother/caregiver expresses interest in re-establishing breastfeeding after she has stopped, whether in the recent or distant past.	**Note:** Relactation can be started at home if there is no supplemental feeding involved. **Reassure the mother/wet nurse:** ☐ Most women can re-establish breastfeeding. It will be easier if the mother/wet nurse has stopped breastfeeding recently and her infant still suckles occasionally, but relactation can still be accomplished, even by older and postmenopausal women who stopped breastfeeding a long time ago. **Prepare the mother/wet nurse:** ☐ Discuss how her infant will be fed while she re-establishes her breastmilk production (expressed breastmilk or infant formula given by cup) ☐ To relactate, mother/wet nurse must be motivated and believe that relactation is possible ☐ Mother/wet nurse's breasts must be stimulated frequently – ideally, by the infant's suckling, and/or by hand-expressing breastmilk. Reassure her that she will receive the support that she needs from skilled helpers.

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Image	Symptoms/signs/ indicators of practice	Counselling and Support Actions
		☐ Inform the mother/wet nurse how long it may take, and discuss the need for her to be patient and persistent - If an infant has stopped breastfeeding, it may take 1 to 2 weeks or more before much breastmilk comes. - It is easier for a mother/wet nurse to relactate if an infant is very young (less than 2 months) than if s/he is older. However, it is possible at any age. ☐ Discuss the importance of avoiding any practices that can interfere with breastfeeding: - Periods of separation from the infant - Feeding at fixed times, or using a pacifier or bottle (explain the need to feed on demand) - Medicines that can reduce breastmilk production (e.g., oestrogen-containing contraception: provide a non-oestrogen method, if appropriate) ☐ If possible, introduce her to other women who have relactated and can encourage her ☐ Explain to the woman's family and friends that she needs practical help and relief from other duties for a few weeks so that she can breastfeed often and take care of her infant: hold the infant close to her, sleep with the infant, and give skin-to-skin contact as often as possible. ☐ Ensure mother/wet-nurse gets enough to eat and drink ☐ Explain to the mother that resting can help her to breastfeed frequently **Starting relactation** Encourage the mother/wet nurse to: ☐ Stimulate her breasts with gentle breast massage ☐ Put the infant to the breast frequently, as often as s/he is willing (every 1-2 hours if possible, and at least 8-12 times every 24 hrs) ☐ Sleep with the infant so s/he can breastfeed at night ☐ Let the infant suckle on both breasts, and for as long as possible at each feed – at least 10-15 minutes on each breast ☐ Offer each breast more than once if the infant is willing to continue suckling ☐ Make sure that the infant is well attached to the breast

Image	Symptoms/signs/ indicators of practice	Counselling and Support Actions

18. Mother expresses concerns about her diet

Mother/ wet nurse interested in re-establishing breastfeeding

- Mother thinks her diet affects her ability to produce enough good quality breastmilk
- Enrolled in Supplementary Feeding Programme (SFP) and/or similar food-related/social protection services if appropriate

- ☐ Listen to mother's concerns about her diet and her ability to breastfeed
- ☐ Remind mother that breastmilk production is not affected by her diet:
  - No one special food or diet is required to provide adequate quantity or quality of breastmilk
  - No foods are forbidden
  - Mother should limit alcohol and avoid smoking
- ☐ Encourage mother to eat more food to maintain her own health:
  - Eat two extra small meals or 'snacks' each day
  - Continue eating a variety of foods
  - Use iodized salt
  - 'Drink to satisfy thirst'
  - Consume local dietary sources of vitamin A
  - Attend nutrition education (family, child; cooking demonstrations)
- ☐ In some communities, certain drinks are said to help 'make milk'; these drinks usually have a relaxing effect on the mother and can be taken (but are not necessary)
- ☐ **Link pregnant and lactating women with registration for other service such as general food distribution (GFD), SFP, targeted cash/voucher schemes, social protection schemes, etc.**
  - The additional rations distributed to breastfeeding women contribute to mother's own nutrition while she continues to breastfeed

19. Twin delivery

A mother can exclusively breastfeed both infants

- ☐ The more an infant suckles and removes milk from the breast, the more milk the mother produces
- ☐ Mothers of twins produce enough milk to feed both infants if the infants breastfeed frequently and are well attached
- ☐ The twins need to start breastfeeding as soon as possible after birth – if they cannot suckle immediately, help the mother to express and cup feed. Build up the milk supply from very early to ensure that breasts make enough for two infants
- ☐ Explain different positions – cross cradle, one under arm, one across, feed one by one etc. Help mother to find what suits her

Responsive Feeding and Care Practices

- ☐ Pay attention to infant(s): look at infant(s); look into infant's eyes; respond to infant

Image	Symptoms/signs/ indicators of practice	Counselling and Support Actions

20. Adolescent mother

	Extra care, more food and more rest than an older mother	☐ Adolescent mothers need extra care, more food and more rest than an older mother ☐ Adolescent mothers need to nourish their own bodies, which are still growing, as well as their growing infant's ☐ Adolescent mothers need calcium. **Note:** as calcium is not present in the multiple micronutrient (MMN) supplement, **1g of Calcium/day** should be added to the **1 tablet MMN/day** (or IFA), needed to promote continuation of growth (especially pelvis bones) during pregnancy ☐ All pregnant and lactating **adolescents *(< 19 years)*** should receive food supplements regardless of their anthropometry for better foetal and maternal outcomes

21. Mother tested positive for HIV

	A mother can exclusively breastfeed both infants	☐ Mother and infant should be counselled & treated according to national guidelines anti-retroviral drugs (ARVs) ***Mother who tests negative or mother of unknown status:*** ☐ Exclusively breastfeed for up to 6 months, add complementary foods at 6 months and continue breastfeeding for 2 years and beyond with periodic re-testing (test & re-test & re-test & re-test for as long as a mother's results are negative and she is breastfeeding) ***Mother living with HIV whose infant tests HIV negative or is of unknown HIV status:*** ☐ Exclusively breastfeed from birth up to 6 months together with anti-retroviral drugs (ARVs) for the mother (the infant will receive ARVs regardless of feeding method); add complementary foods at 6 months and continue breastfeeding for 2 years ☐ Breastfeeding and ART should continue until 12 months and may continue up to 24 months or longer (similar to the general population) ***Mother living with HIV whose infant is tested and also found to be living with HIV:*** ☐ Treatment for the infant should be initiated immediately ☐ Exclusively breastfeed for up to 6 months, add complementary foods at 6 months and continue breastfeeding for 2 years and beyond

Image	Symptoms/signs/ indicators of practice	Counselling and Support Actions

Supplementary Suckling to help mother relactate (inpatient care only, this is not a C-MAMI intervention)

Observe breastfeeding:

A breastfeeding supplementer consists of a tube which leads from a cup of supplement (expressed breastmilk or formula) to the breast, and which goes along the nipple and into the infant's mouth.

- Avoids using feeding bottles or pacifiers
- For infants who are not willing to suckle at the breast, mother uses the supplementary suckling technique
- Whenever the infant wants to suckle, he or she does so from the breast

While encouraging the infant to resume breastfeeding, ask the mother to:

- ☐ Go to the health facility for supervision of practice.
- ☐ Explain that the infant suckles and stimulates the breast at the same time drawing the supplement (expressed breastmilk or formula) through the tube and is thereby nourished and satisfied. A fine nasogastric tube (gauge 8) or other fine plastic tubing should be used.
- ☐ The mother can express her breastmilk into the infant's mouth, touching the infant's lips to simulate the rooting reflex and encourage the infant to open his or her mouth wider.
- ☐ Mother controls the flow by raising or lowering the cup so that the infant suckles for about 30 minutes at each feed.
- ☐ If the tube is wide, a knot can be tied in it, or it can be pinched.
- ☐ The cup and tube should be cleaned and sterilized each time mother uses them.
- ☐ Encourage the mother to let the infant suckle on the breast at any time that he or she is willing – not just when she is giving the supplement.

Image	Symptoms/signs/ indicators of practice	Counselling and Support Actions
1. Mother absent		
	• Designated carer for infant • Wet nurse identified OR • Established supply of appropriate BMS where wet nurse is not available	Establish the reasons for an absent mother: ☐ Temporary (at work, minding other children, minor illness) ☐ Permanent (seriously ill, maternal death) ☐ Identify and support a wet nurse: this is especially a priority for young infants (e.g. <2 months of age) ☐ Relactation: Section A: 17 support if necessary ☐ Where a wet nurse is not available, provide the necessary supports for using an appropriate breastmilk substitute (see below)
2. Use infant formula as breastmilk substitute (BMS)		
	• Designated carer for infant • Wet nurse identified OR • Established supply of appropriate BMS where wet nurse is not available	Establish the reasons for an absent mother: ☐ Temporary (at work, minding other children, minor illness) ☐ Permanent (seriously ill, maternal death) ☐ Identify and support a wet nurse: this is especially a priority for young infants (e.g. <2 months of age) ☐ Relactation: Section A: 17 support if necessary ☐ Where a wet nurse is not available, provide the necessary supports for using an appropriate breastmilk substitute (see below)

Image	Symptoms/signs/ indicators of practice	Counselling and Support Actions

3. Preparing infant formula

- Designated carer for infant
- Wet nurse identified OR
- Established supply of appropriate BMS where wet nurse is not available

Ask the mother or caregiver to:

- ☐ Wash hands with soap and water before preparing formula and feeding infant.
- ☐ Wash the utensils with clean water and soap, and then boil them to kill the remaining germs.
- ☐ Discuss cost/availability with mother of infant formula: an infant needs about 40 tins of 500g in formula for the first 6 months**
- ☐ Always read and follow the instructions that are printed on the tin very carefully. Ask for more explanation if she does not understand.
- ☐ Use clean water to mix with the infant formula. If possible, prepare the water that is needed for the whole day. Bring the water to a rolling boil for at least 2 minutes and then pour into a flask or clean covered container specially reserved for boiled water.
- ☐ Keep or carry boiled water and infant formula powder separately to mix for the next feeds, if the mother is working away from home and infant accompanies her, or for night feeds.
- ☐ Use only a clean cup to feed the infant. Even a newborn infant learns quickly how to drink from a cup. Avoid using bottles, teats or spouted cups as they are much more difficult to clean.
- ☐ Store the formula tin in a safe clean place.
- ☐ Only prepare enough infant formula for one feed at a time and use the formula within one hour of preparation.
- ☐ Refer to health facility if infant has diarrhoea or other illness or mother has difficulty obtaining sufficient formula.

4. Cup-feeding

- Mother/caregiver feeds infant with cup, and does not use bottles, teats, or spouted cups*

Assess readiness for cup feeding: rest the cup against the infant's lips, with milk touching infant's top lip. Wait and watch for infant response. If no response, try at next feed. If no response after 2-3 trials, then refer to a facility where infant can be 'supported' to suckle.

Ask the mother or caregiver to:

- ☐ Put a cloth on the infant's front to protect his clothes as some milk can spill.
- ☐ Hold the infant upright or semi-upright on the lap.
- ☐ Put a measured amount of milk in the cup.
- ☐ Hold the cup resting on the lower lip and tip the cup so that the milk touches the infant's upper lip.
- ☐ Wait for the infant to draw in or suck in the milk.
- ☐ Allow the infant to take the milk himself. DO NOT pour the milk into the infant's mouth.
- ☐ Caregiver should pause and let infant rest after every few sucks.
- ☐ Caregiver should pay attention to infant, look into infant's eyes and be responsive to infant's cues for feeding.
- ☐ Do not reuse any milk the infant does not drink for another feeding.

See also A: 16 for guidance on cup feeding that can be applied to non-breastfed infants

*Note: If bottle feeding is practised, provide specific advice and support on hygiene and feeding practice. See Infant Feeding in Emergencies (IFE) Module 2, Chapter 9, When infants are not breastfed (see Key Additional Material, p3). www.ennonline.net//ifemodule2

**Note: Amount of milk calculated - 150ml/kg body weight/day

Image	Counselling and Support Actions

1. Health Education/information and Social Support

- ☐ Health education sessions (beyond infant feeding)
- ☐ Nutrition education (family, infant, child; cooking demonstrations)
- ☐ Mother's own health: basic information about sexually transmitted diseases STDs and HIV, reproductive health
- ☐ Early childhood development: including importance of play and psychosocial stimulation to child development)
- ☐ Effects of poor hygiene and pollution
- ☐ What to do when child becomes ill

2. Group Support (or organised support)

- ☐ The group is facilitated by an experienced and trained facilitator/mother who listens and guides the discussion
- ☐ A safe environment of respect, attention, trust, sincerity, and empathy is created
- ☐ Group participants share their experiences, information and provide mutual support
- ☐ 'Confidentiality' is a key principle of a Support Group: "what is said in the group stays in the group".
- ☐ The facilitator guides the discussion, but the discussion is not directed only to the facilitator, but among the participants ("cross-talk")
- ☐ The sitting arrangement allows all participants to have eye-to-eye contact
- ☐ The group size varies from 3 to 12
- ☐ The facilitator and the participants decide the length and frequency of the meetings (number per month)

Image	Counselling and Support Actions

3. Family/Partner Support

During pregnancy:

- ☐ Accompany expectant mother to antenatal clinics (ANC)
- ☐ Remind her to take her iron/folate tablets
- ☐ Provide extra food during pregnancy and lactation

During labour and delivery:

- ☐ Make sure there is a trained birth attendant
- ☐ Make arrangements for safe transportation to facility for birth
- ☐ Encourage breastfeeding immediately after birth and skin-to-skin contact

After birth:

- ☐ Help with non-infant household chores, and caring for other children
- ☐ Make sure the infant exclusively breastfeeds for the first 6 months
- ☐ Support the mother so that she has time to breastfeed
- ☐ Pay attention to infant: look at infant; look into infant's eyes; respond to infant's responses; asks: what is infant thinking?
- ☐ Pay attention to/observe the signs/cues of hunger and learn to respond to the infant/young child: smile, go to infant, talk to infant to encourage infant to communicate his/her wishes, show infant that you/mother are preparing to feed
- ☐ Discuss child spacing with wife/partner
- ☐ Accompany wife/partner to the health facility when infant/child is sick, for infant/child's Growth Monitoring Promotion (GMP) and immunisations
- ☐ Provide bed-nets for family in endemic malaria areas

An adolescent pregnant woman/lactating mother: needs extra care, more food and more rest than an older mother. The adolescent pregnant woman/lactating mother needs to nourish her own body, which is still growing, as well as her growing infant's.

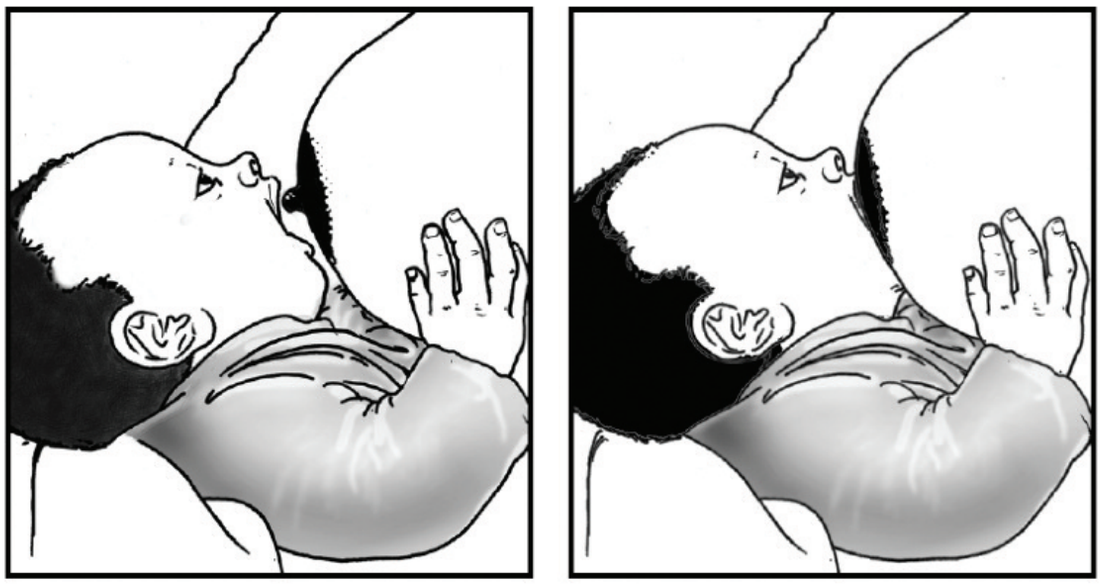
Image	Counselling

4. Community Support

Mothers of acutely malnourished infants can receive support from the following community institutions/programmes:

- ☐ Trained Birth Attendants: at every contact with a pregnant woman in the community, and at delivery
- ☐ During postpartum and/or family planning sessions in the community
- ☐ At immunisation sessions (immunisation during health days in the community)
- ☐ During well baby community sessions (Community Growth Monitoring Promotion – GMP)
- ☐ At every contact with mothers or caregivers of a sick infant/child
- ☐ Therapeutic feeding centres (TFCs)
- ☐ Supplementary feeding programmes (SFPs)
- ☐ Agriculture: food diversification, food security, women's farmers clubs
- ☐ Micro-Credits
- ☐ Community Nutrition
- ☐ Sanitation
- ☐ During general ration distribution (GRD) or general food distribution (GFD)
- ☐ Churches/mosques; government offices
- ☐ Schools

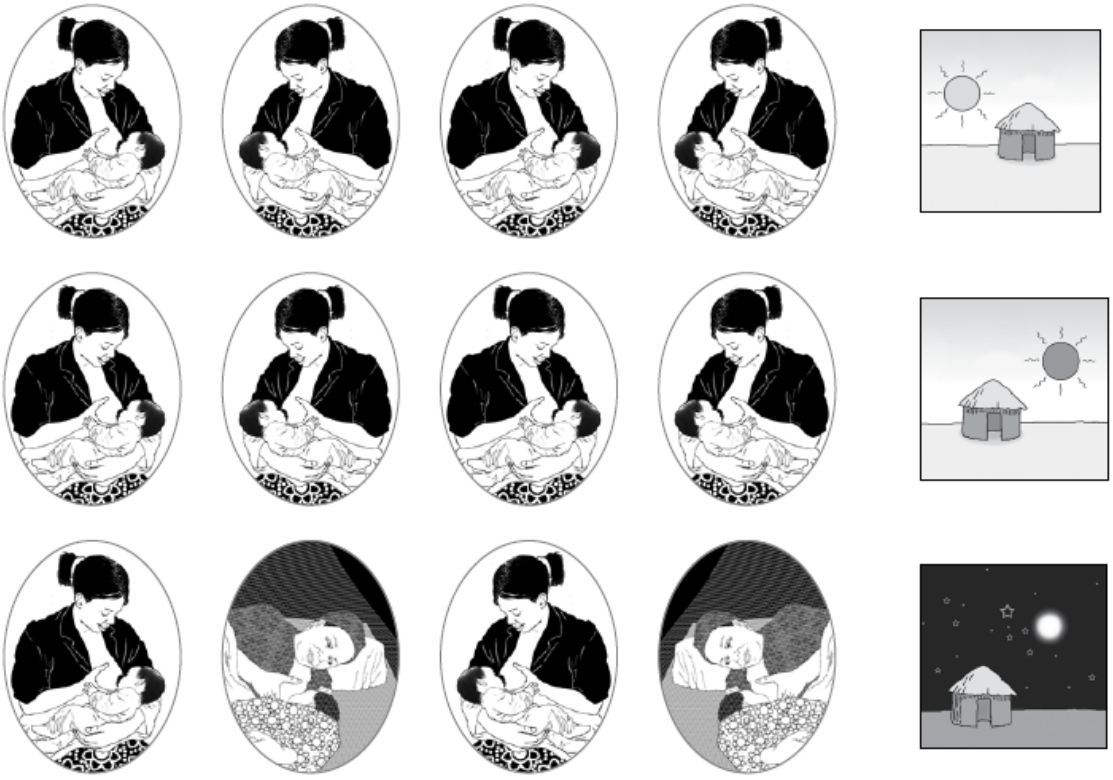
1. **Attachment**



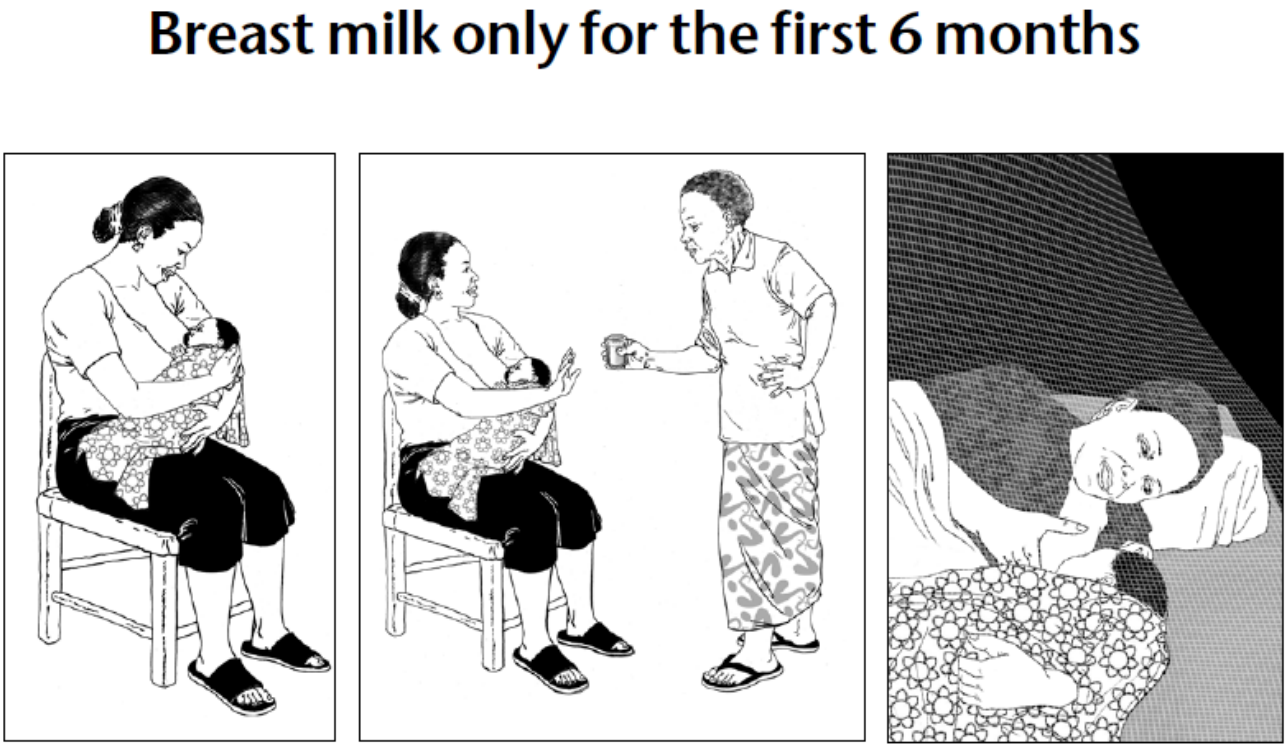
Positions

2. Effective Suckling

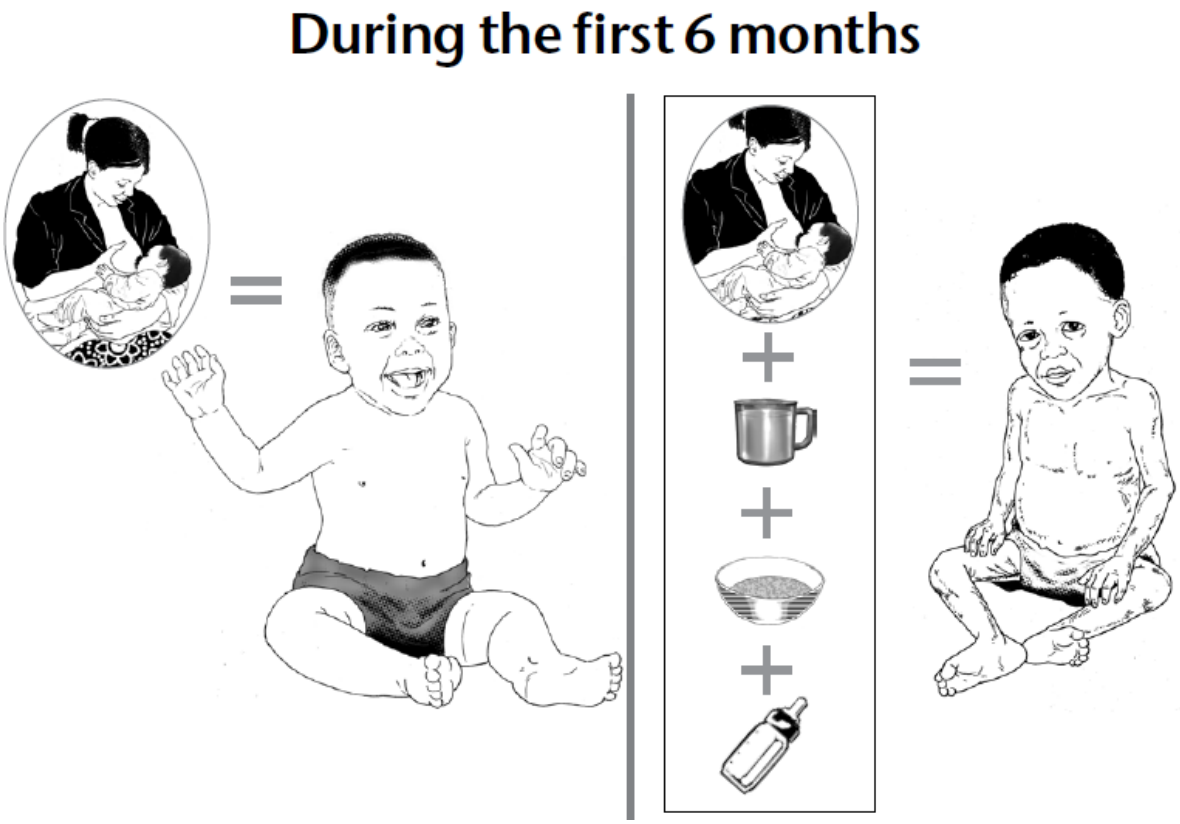
3. Frequency of breastfeeds



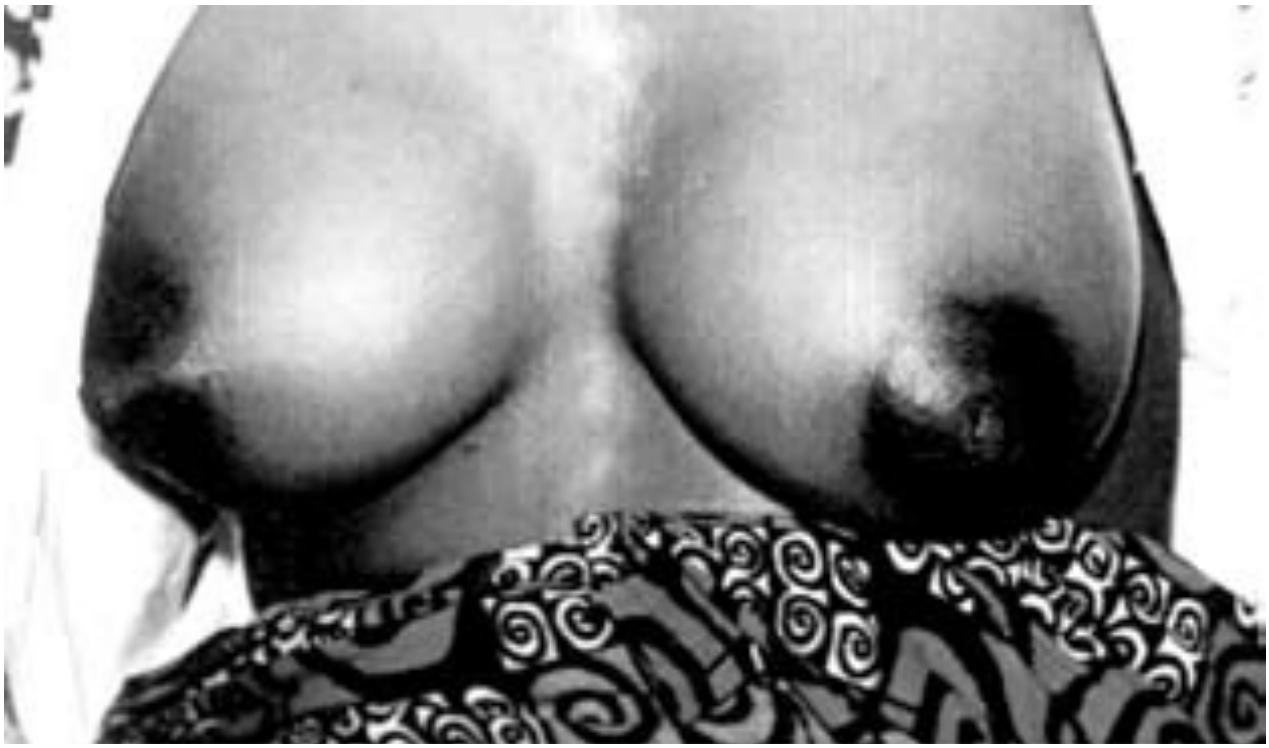
4. Exclusive breastfeeding



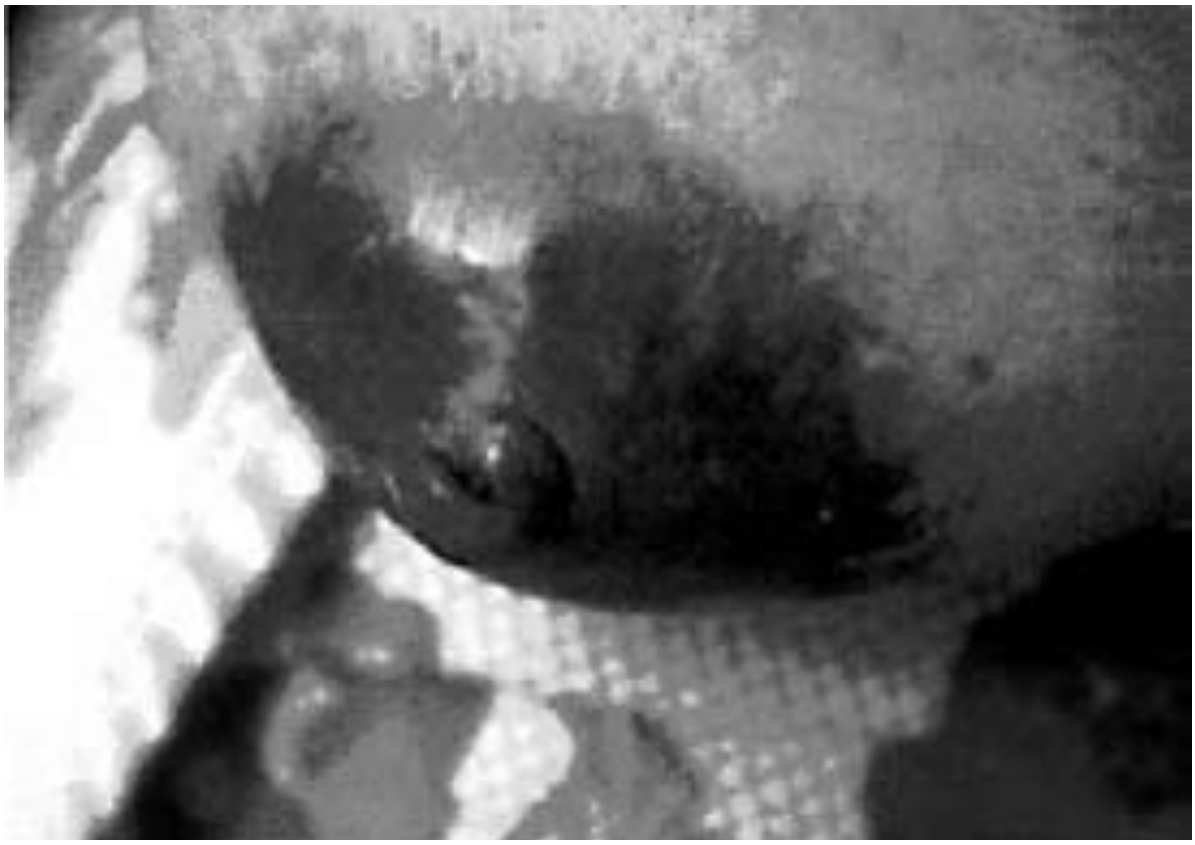
Exclusive breastfeeding



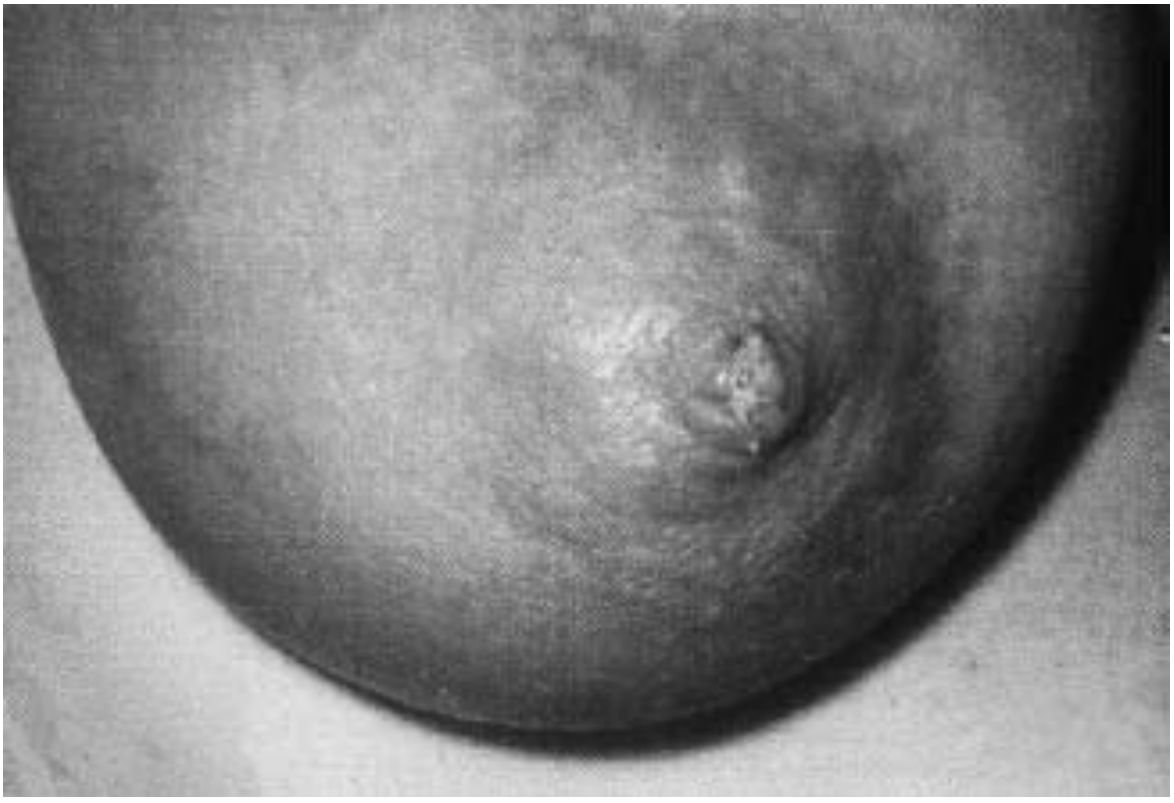
7. Breast Engorgement



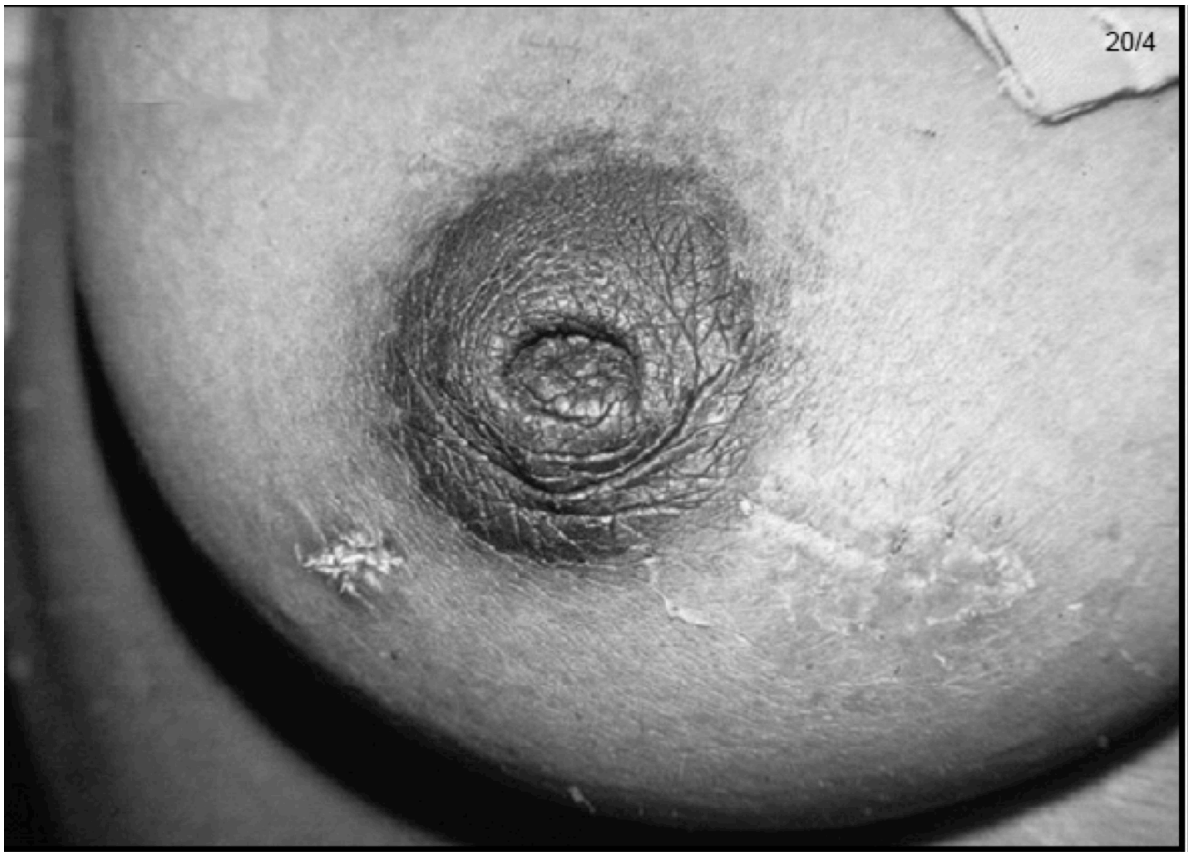
8. Sore or Cracked Nipples



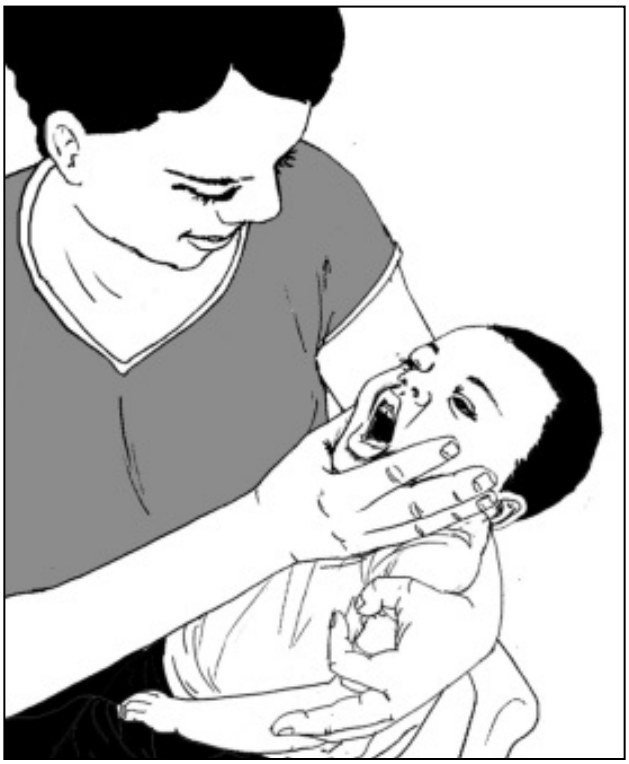
9. Plugged Ducts and Mastitis



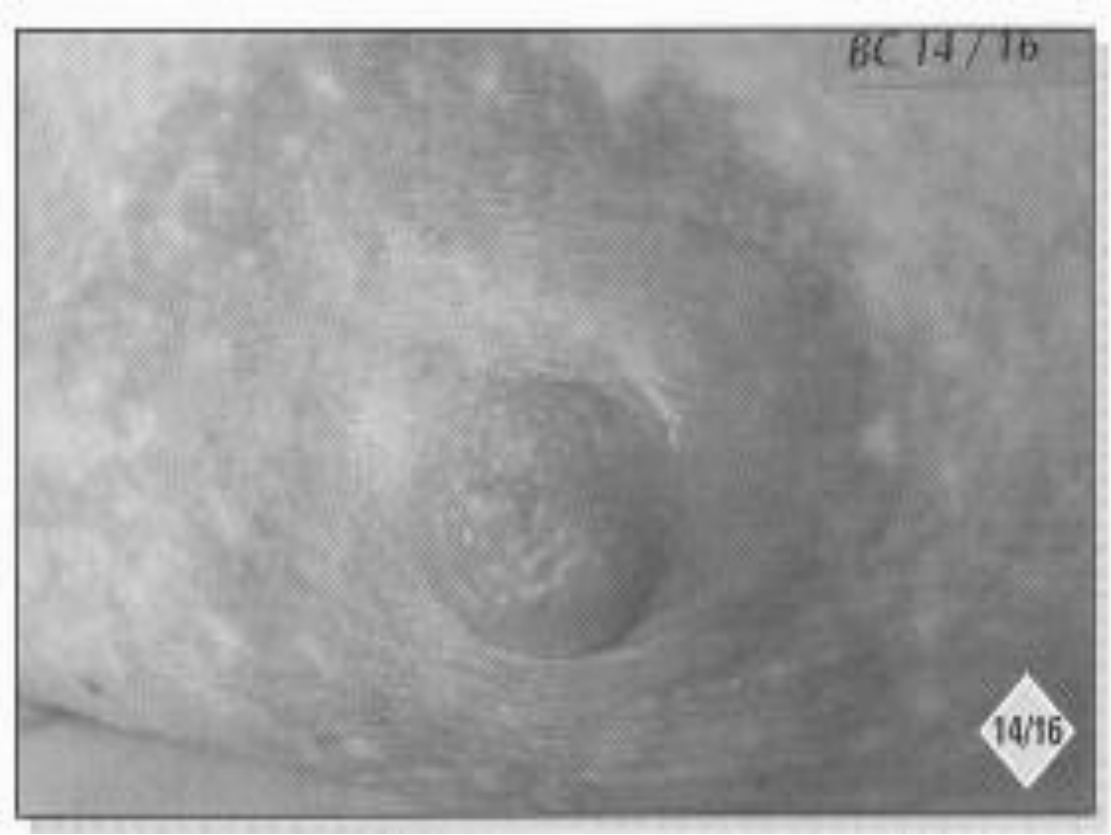
10. Flat, inverted, large or long nipples



11. Thrush: Infant



12. Maternal Nipple Thrush



13. Low Weight Infant

Cross-arm/cross-cradle

Low Birth Weight

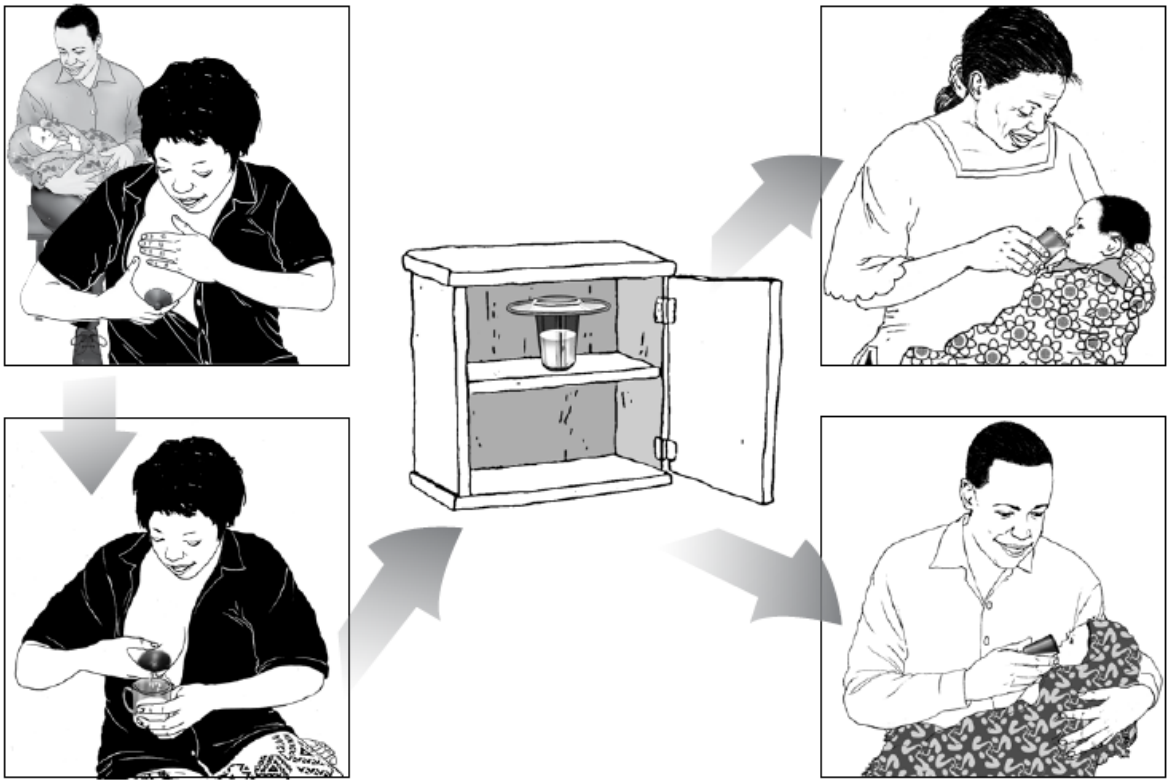
Under-arm

15. Keeping Low Weight Infant Warm at Home

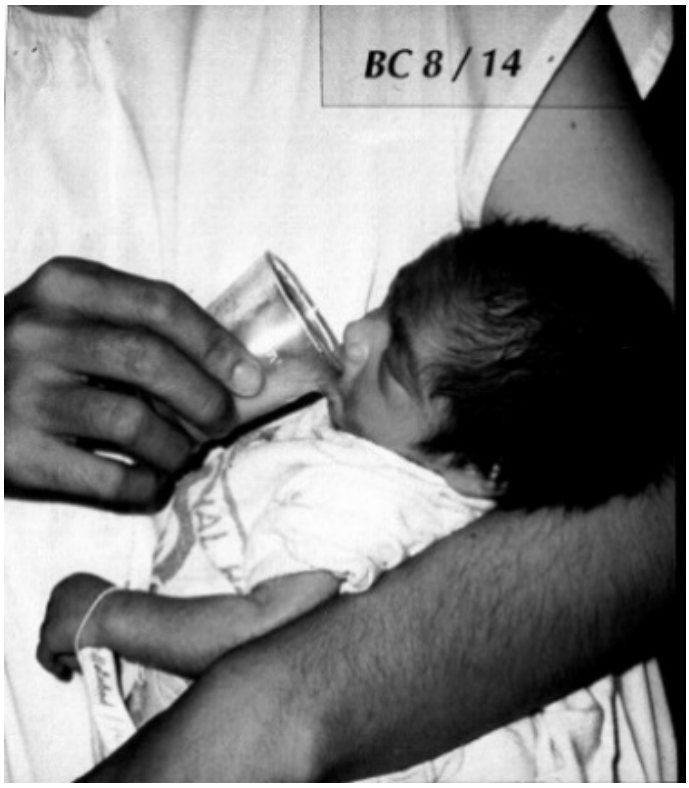
Kangaroo Mother Care

16. Mother away from Infant

17. Breast milk expression, cup feeding and storage of breastmilk



Cup feeding



19. Mother expresses concerns about her diet

20. Twin Delivery

Group Support (or organised support)

25/22

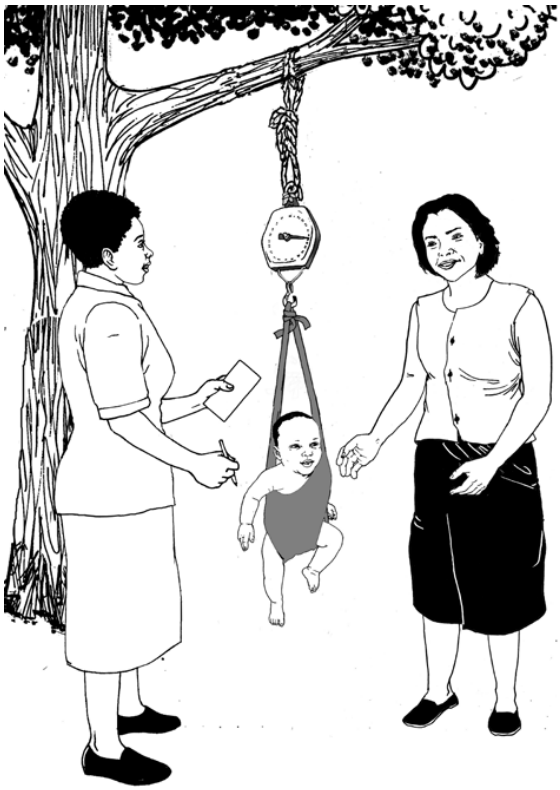
Group Support (or organised support)

Family Support

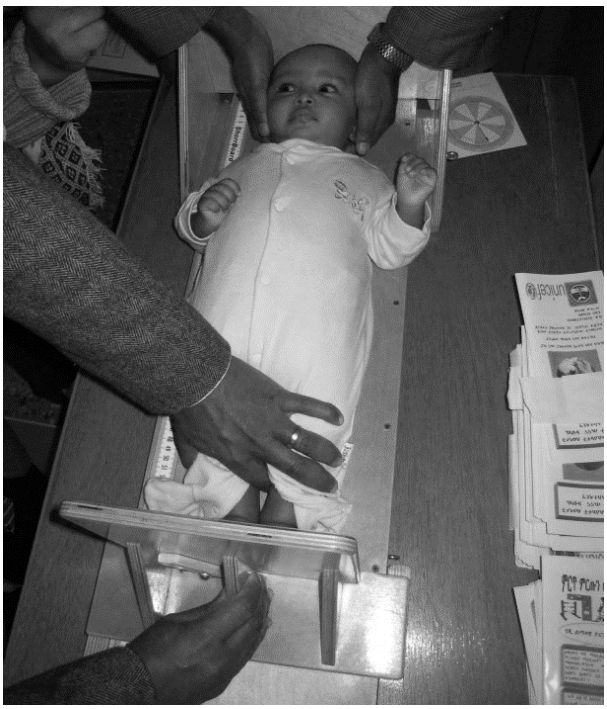
Partner Support

Community Support

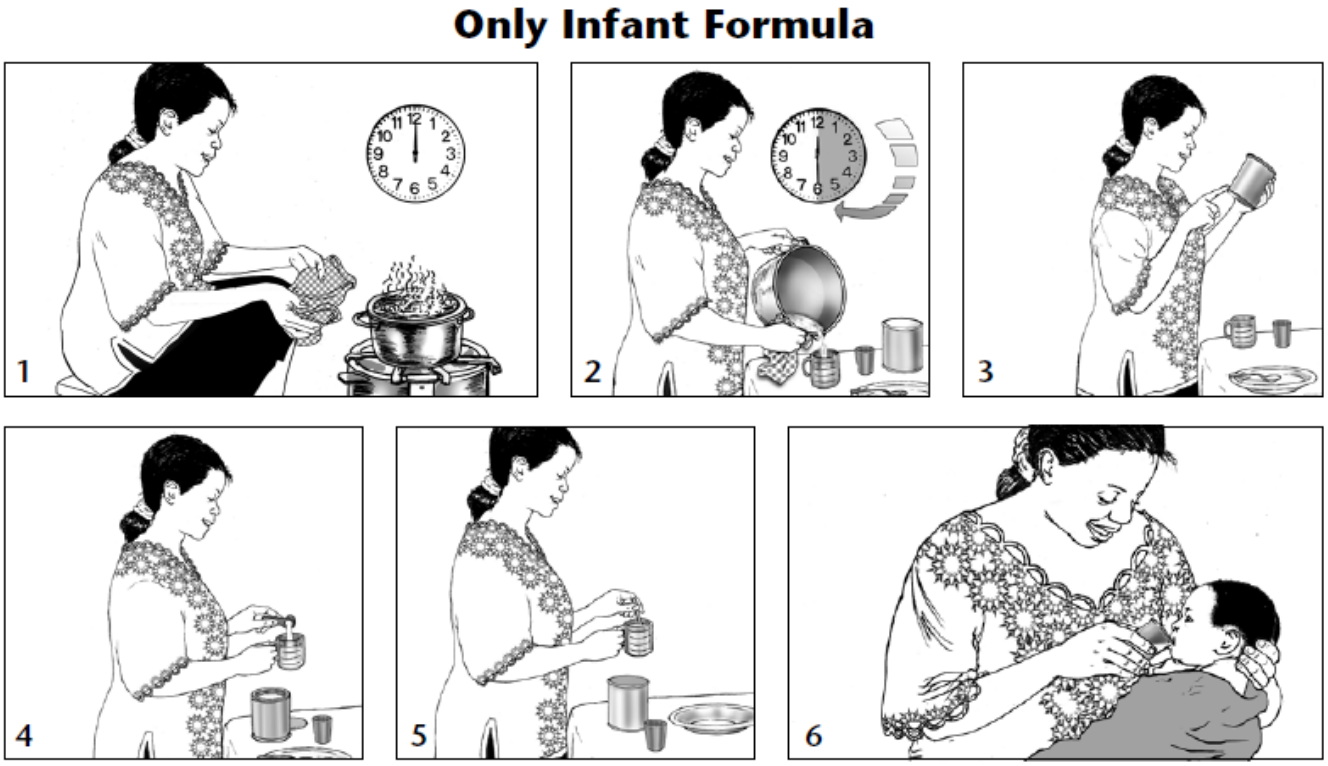
Community Support



Community Support



Non-breastfeeding Counselling and Support



C-MAMI Enrolment and Management Card

ADMISSION/ENROLMENT DETAILS: Community based Management of At-risk Mothers and Infants under 6 Months (C-MAMI)																				
Name (first, last/family)								**Reg. No**												
Age (completed months)		**Sex**	M	F	**Date of Birth (DOB)**			**Date of Admission**												
Administrative Unit								**Time to Travel to Site**												
Community								**Father Alive**	Yes	No	**Mother Alive**	Yes	No							
House Details/ Landmarks											**Mother's Age**									
Caregiver (first, last/family)								**Total Number in household**												
Contact phone #1								**Contact phone #2**												
Admission (Circle)	**Self-Referral**	**Outreach Referral**	**Inpatient Care Referral**	**Inpatient Care Refusal**	**Health Facility Referral**	**Readmission/ Relapse**	Yes	No	**If Yes, when?**											
Twin/multiple birth	Yes	No	**Infant's Birth Weight (kg)**	__.__ __ kg	**Premature**	Yes	No	**Orphan/Mother absent**	Yes	No	**Mother sick**	Yes	No							
Additional information																				

Enrolment Anthropometry (Infant)									
Weight	__.__ __ kg	**Length**	___ ___ . ___ cm	**Weight-for-Length: WFL z-score**	_____	**Weight-for-Age: WFA z-score**	_____	***MUAC** (mm) data*	_____
Bilateral pitting oedema	0	+	++	+++					

Admission Anthropometry (Mother)									
Bilateral pitting oedema	0	+	++	+++	***MUAC** data*	___ ___ . ___ mm	***Height** data*	___ ___ ___ . ___ cm	

History (Infant)									
Unable to drink/breastfeed	Yes	No		**Symptoms**	**Respiration Rate** (#min)	<30	30 – 39	40 - 49	50+
Vomits everything	Yes	No			**Chest In-drawing**		Yes		No
Any Convulsions	Yes	No			**Cough**		Yes		No
Lethargic/ Unconscious	Yes	No			**Abnormally loose/ watery stools in infant > 1mo.** (Diarrhoea)		Yes		No
					Stools / Day		<3	3-5	>5
					Temperature (^{0}C)		__ __ . ___ ^{0}C		

Physical Examination (Infant)								
Eyes	Normal	Sunken	Discharge		**Dehydration Mouth**	**Conjunctiva**	Normal	Pale
Ears	Normal	Discharge				None	Moderate	Severe
Lymph Nodes	None	Neck	Axilla	Groin		Normal	Sores	Candida
Skin Problems	None	Scabies	Peeling	Ulcers/Abscesses		**Disability**	Yes	No

Feeding Assessment									
Breastfeeding	Yes	No	Non-Breastfeeding If Yes, describe:	Yes	No	Receiving appropriate Breast Milk Substitute (BMS)		Yes	No
Any plain water, other liquids or foods	Yes	No					**Passing urine**		
Breastfeeding Frequency (Total times/24 hours)			If not breastfeeding, how long since you stopped?						
			If not breastfeeding, why did you stop?						

Cont'd next page

<table>
<tr><th colspan="4">Recommendations for Management (Circle)</th></tr>
<tr><td rowspan="2">Infant/ Mother</td><td rowspan="2">Yellow</td><td>Breastfeeding counselling</td><td>Refer to C-MAMI counselling and support actions: Good attachment; effective suckling; frequency of breastfeeds; receives other liquids/foods; "not enough" breastmilk; mother lacks confidence; breast conditions; thrush: infant, maternal nipple thrush; low weight infant, keeping low weight infant warm & Kangaroo Mother Care (KMC); satisfactory slow weight gain; concerns about being away from infant; breastmilk expression; cup feeding, and storage of breastmilk; re-lactation; other breastfeeding related concerns: maternal diet concerns, twin delivery, adolescent mother, HIV-infected or exposed.

Mother, family and community counselling: Informal support; group support; family support; partner support; community supportRefer to C-MAMI counselling and support actions: Good attachment; effective suckling; frequency of breastfeeds; receives other liquids/foods; "not enough" breastmilk; mother lacks confidence; breast conditions; thrush: infant, maternal nipple thrush; low weight infant, keeping low weight infant warm & Kangaroo Mother Care (KMC); satisfactory slow weight gain; concerns about being away from infant; breastmilk expression; cup feeding, and storage of breastmilk; re-lactation; other breastfeeding related concerns: maternal diet concerns, twin delivery, adolescent mother, HIV-infected or exposed.

Mother, family and community counselling: Informal support; group support; family support; partner support; community support</td></tr>
<tr><td>Non-breastfeeding support</td><td>Non-breastfeeding support: Mother absent; use of appropriate BMS (e.g. infant formula); preparing infant formula; cup feeding

Mother, Family and Community Counselling: Informal support; group support; family support; partner support; community support</td></tr>
<tr><td colspan="4">INFANT in YELLOW: NUTRITIONALLY VULNERABLE WITHOUT MEDICAL COMPLICATIONS

WFA <-2 z score OR WFL < -2 z-score [MUAC: record measure to help build evidence] OR any of the following: Moderate weight loss (within a few days), Recent (days-weeks) failure to gain weight, Moderate drop across growth chart centile lines, Moderate feeding problem with with possible underlying causes (see below) AND: Clinically well and alert OR Referred from inpatient care.

BREASTFED INFANT: Not well attached to the breast OR Not suckling effectively OR Less than 8 breastfeeds in 24 hours OR Receives other foods or drinks

NON-BREASTFED INFANT: Inappropriate BMS being used OR Consuming less than 500 ml of BMS per 24 hrs OR Refusing feedings OR Receives other foods or drinks in addition to BMS OR Mother absent</td></tr>
<tr><td colspan="4">MOTHER in ORANGE: MODERATE RISK
MUAC 190 to <230 mm (record actual measure to help build evidence) AND Lack of social support</td></tr>
<tr><td colspan="4">INFANT in RED: NUTRITIONALLY VULNERABLE WITH MEDICAL COMPLICATIONS
MOTHER in RED: HIGH RISK</td></tr>
</table>

C-MAMI Follow-Up Card

Follow-up: C-MAMI													
Name				**Date of Birth**					**Reg. N°**				
Visit (weeks)	Adm (0)	1	2	3	4	5	6	7	8	9	10	11	12
Date													
Anthropometry: *Infant*													
Bilateral pitting Oedema													
MUAC (mm)													
Weight (kg)													
Weight gain? (Y/N)													
WFA (z-score)													
Length (cm)													
WFL (z-score)													
*WEIGHT CHANGES: If below admission weight on week 3, refer for home visit; if no weight gain by week 6 refer to inpatient care													
Bilateral pitting oedema													
MUAC (mm)													
Physical Examination Infant													
Temperature (C°)													
Respiratory rate (#/min)													
Dehydrated (Y/N)													
Anaemia (Y/N)													
Episode of sickness (Y/N)													
Monitoring Feeding													
Breastfeeding (Y/N)													
Well attached? (Y/N)													
Suckling effectively (Y/N)													
At least 8 breastfeeds in 24 hrs. (Y/N)													
Consume any of the following: water, other liquids or foods (Y/N)													
Clinically well and alert (Y/N)													
Mother is confident with infant condition & breastfeeding (Y/N)													
If non-breastfed: receives appropriate breast milk substitutes (Y/N)													
Counselling and Support													
Breastfeeding Counselling													
Non-Breastfeeding Support													
Mother, Family and Community Counselling													
Name of Examiner													
Visit Outcome													

Before discharged Cured, check to make sure the Breastfed or Non-Breastfed Infant meets the following criteria:

Breastfed Infant:

- ☐ Breastfeeding=Yes
- ☐ Consumes any water, other liquids or foods =No
- ☐ Clinically well and alert =Yes
- ☐ Mother confident with infant condition and breastfeeding=Yes

Non-Breastfed Infant:

- ☐ Breastfeeding =No
- ☐ Receives appropriate quantity of breast milk substitutes=Yes
- ☐ Consumes any water, other liquids or foods =No
- ☐ Clinically well and alert=Yes
- ☐ Mother confident with infant condition and feeding=Yes

Follow-up Actions												
Date	**Actions agreed upon during follow-up visits**					**Date**	**Actions agreed upon during follow-up visits**					
Name of Outreach Worker												