

# **TRAINING FOR IMPROVED PRACTICE: Public Health and Nutrition in Emergencies**

## **Infant Feeding and Maternal Nutrition in Emergencies**

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**UNICEF Core Corporate Commitments Training In collaboration  
with:**

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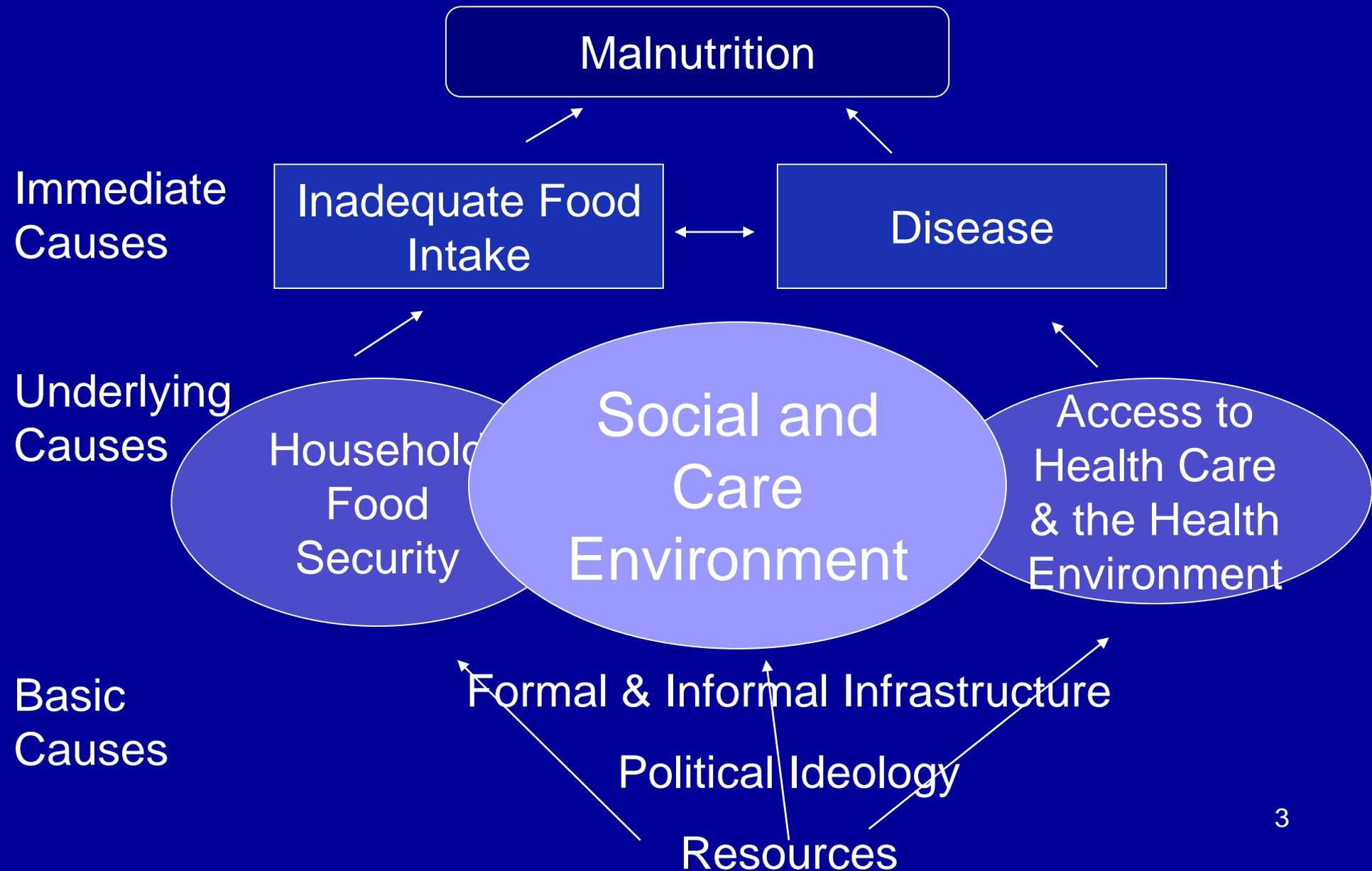
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# Overview

- Infant feeding, disease, mortality and the emergency context
- Basic concepts quiz
- Practical support for women and infants:
  - To support and protect breastfeeding in emergencies
  - To minimize risks associated with artificial feeding
- Infant feeding challenges in emergencies
- Policies and development of infant feeding strategy

# Underlying causes of:





***Why are infant feeding issues important in emergencies?<sup>4</sup>***

## *Kurdish Refugee Crisis - Zakho Camp May 1991 (Yip et al., 1993)*

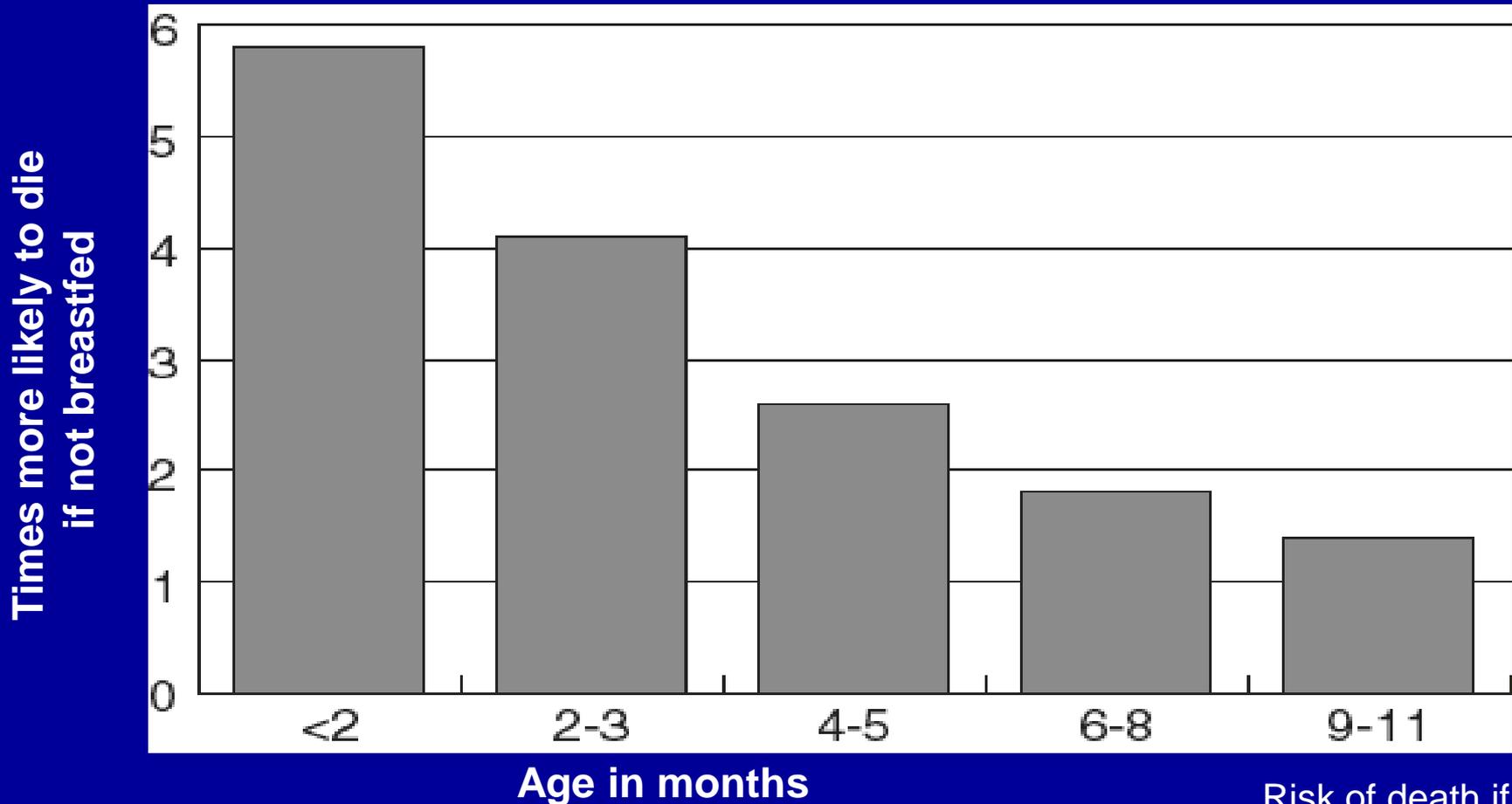
Overall prevalence of wasting (<-2.0 Z scores)	4.3% (3.6 – 5.1%)
12 – 23 months	12.3% (7 – 17%)
Diarrhoea 0 – 23 months	50%
CMR 10,000/day	5.7
U5MR 10,000/ day	10.2
Infants < 1 year/ day	22.5

Methods – Stratified random sampling; one household from each rosette

# Mortality and Infant Feeding: Darfur, Sudan 1984-5

- Drought and crop failures leading to famine
- Women continued to breastfeed despite limited access to food
- Mortality and malnutrition rates increased five-fold among 1-4 years
- Little or no increase in mortality among infants 0-1 years

# Protective Effects of Breastfeeding



Risk of death if breastfed is equivalent to one.

WHO Collaborative Study Team. Effects of breastfeeding on infant and child mortality due to infectious disease in less developed countries: a pooled analysis. *The Lancet* 2000;355:451-5

# UNICEF and Infant Feeding

- Core Corporate Commitments:  
*....#5: Ensure the provision of messages on health and nutrition issues, including the importance of **breastfeeding** and safe motherhood practices.*
- International Code of Marketing of Infant Formula and other Products used as breast milk substitutes
- 47<sup>th</sup> WHA: Infant and young child nutrition  
*.....” to exercise extreme caution when planning, implementing or supporting relief operations by protecting, promoting and supporting breastfeeding...”*
- UNICEF MOUs with UNHCR and WFP

# “SPOT QUIZ”

*“The Basics of Breastfeeding in  
Emergencies”*

# Exercise: Practical support for Women to protect, promote and support breastfeeding

*Look at the two case studies and identify practical ways in which these women could be supported.*

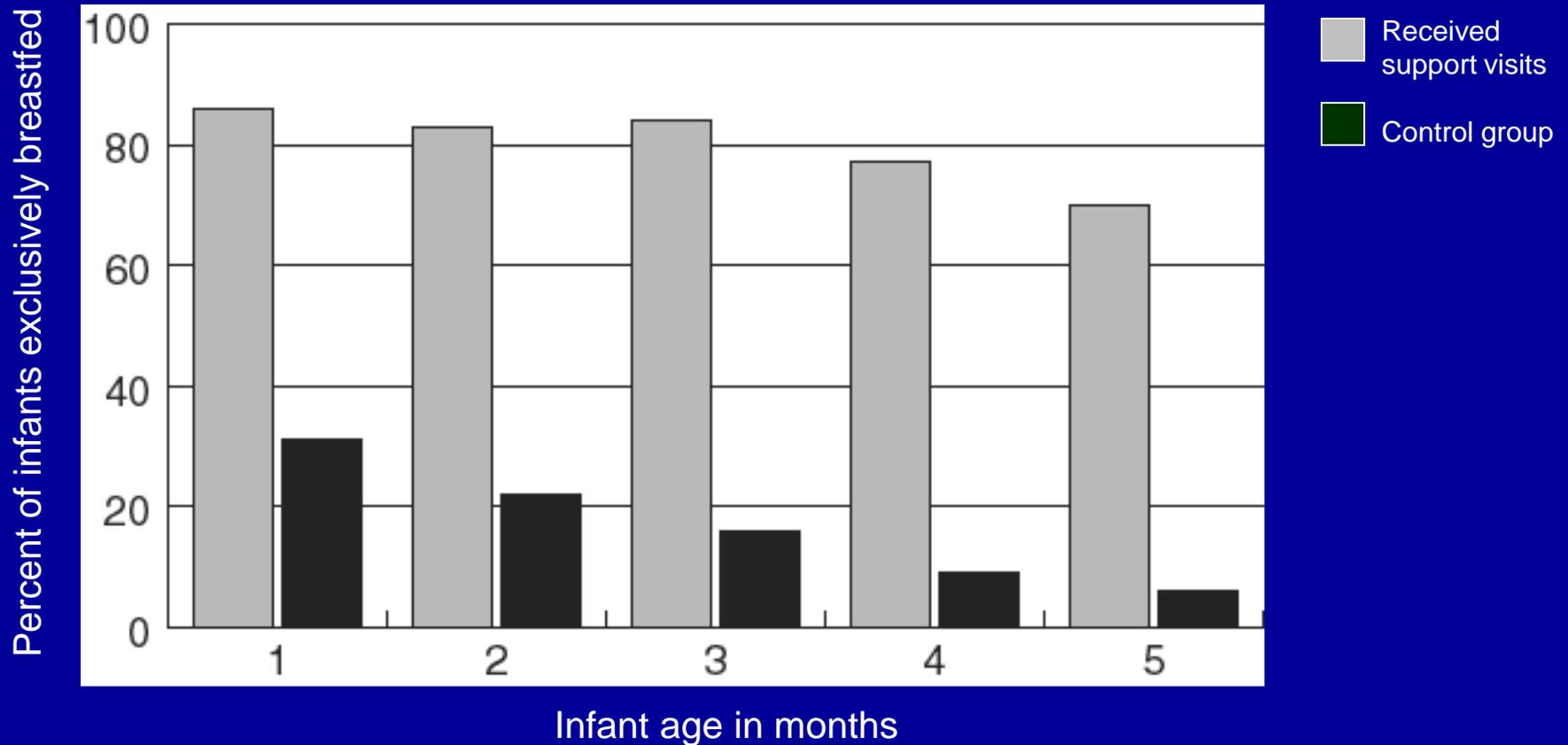
# Practical Support to Women

- Individual counselling and support
- If artificial feeding is required, support safe preparations and sufficient quantities for six months
- Facilitate and encourage family and community support
- Increase and improve nutritional intakes
- Increase fluid intakes



# Impact of Local Support for Breastfeeding

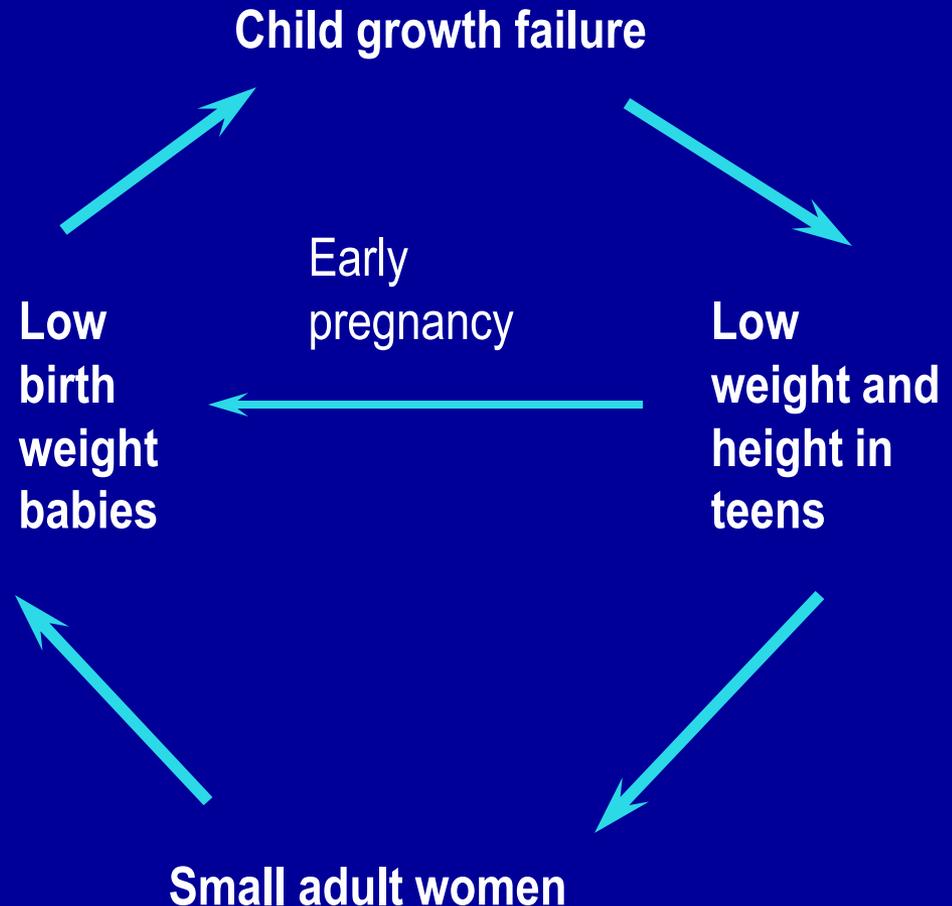
Effect of breastfeeding support during household visits by trained local mothers



Haider R, Ashworth A, Kabir I et al.. Effect of community-based peer counsellors on exclusive breastfeeding practices in Dhaka, Bangladesh: a randomised, controlled trial. *The Lancet* 2000;356:1643-1647

# Maternal Nutrition

- **Adolescence (10-19 years)**
  - Increased nutritional demands
  - Greater iron needs
  - Early pregnancies
- **Pregnancy and lactation**
  - Higher nutritional requirements, 285kcal in pregnancy and 500kcal during lactation
  - Increased micronutrient needs
  - Closely-spaced reproductive cycles



# Maternal Nutrition

- Increase in nutritional intake, include in Supplementary Feeding:
  - Blanket (last trimester, lactating women)
  - Targeted e.g. MUAC between 21cm and 23cm
- Iron and folic supplements during last two trimesters and lactation
- Vitamin A supplement (200,000 IU) post-partum
  - Also increases vitamin A concentration in breastmilk
- Appropriate nutrition education using foods that are available

# Support for Provision for Safe Artificial Feeding

- Where no alternative are possible:
  - expressed breastmilk
  - wet-nursing
  - Generic-formula
  - Cow's milk

*1994 Resolution (WHA 47.50), "there should be no free or subsidised breastmilk substitutes or other products covered by the Code in any part of the health care system".*
- Individual assessment of need by trained health worker
- One agency responsible for procurement, control and monitoring use of BMS
- Meets Code standards e.g. generic labeling, with clear instructions
- Training of health workers
- Provide six months supply
- Follow-up: household visits and regular weighing, support, encourage to breastfeed next baby

# Challenges: Household in camp near Goma, Congo

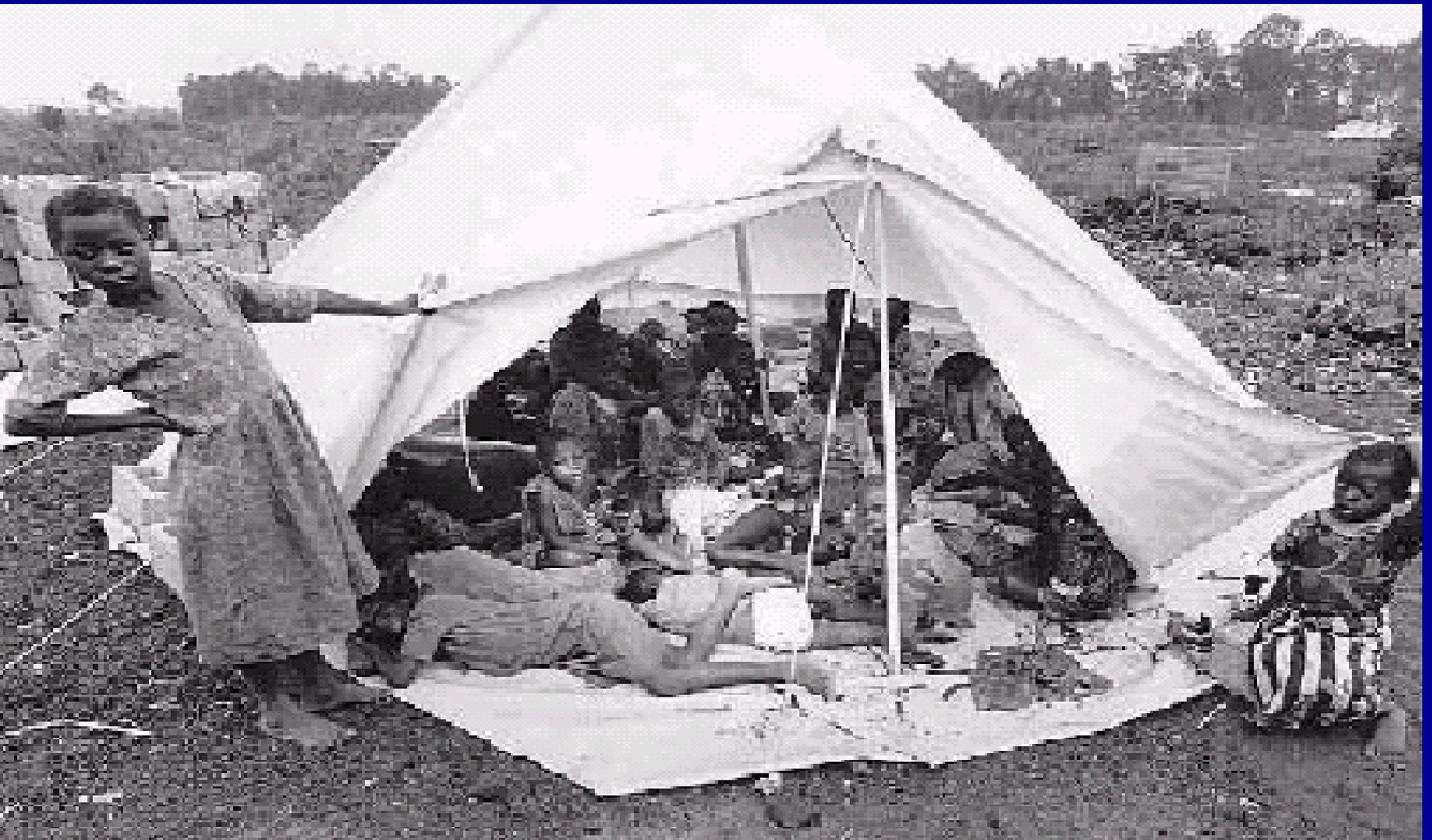


# Challenges: Problems for Artificial Feeding

- Lack of clean water
- Inadequate cooking utensils
- Shortage of fuel
- Lack of time for mothers
- Irregular or inadequate BMS supplies
- High costs



# Challenges: unaccompanied children

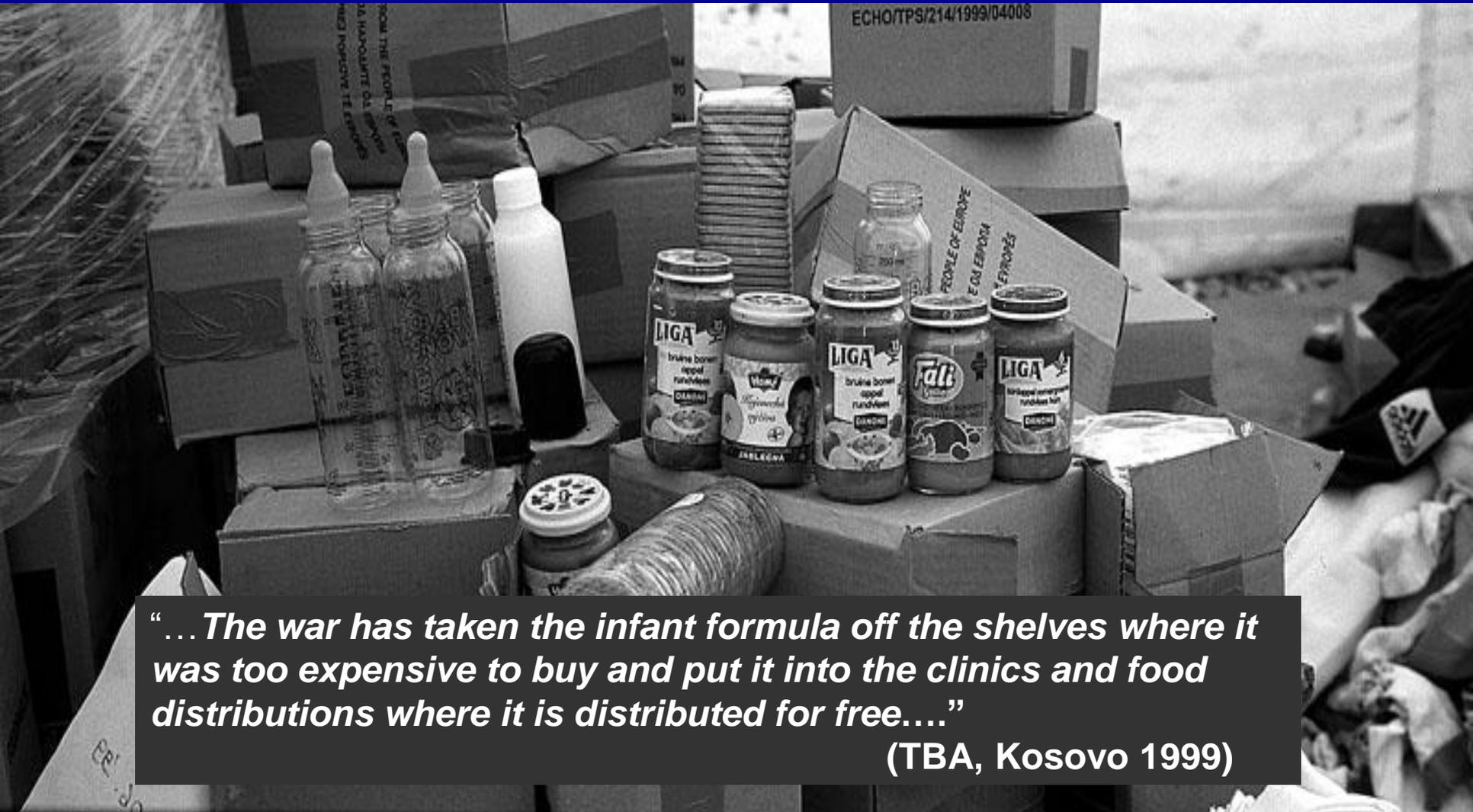


# Challenges: Emergency Relief Staff

- Staff inadequately trained
- Food aid, logistics and distribution separate from health agencies
- View artificial milks as a 'food commodity'
- Benefits of breastfeeding insufficiently understood
- Expertise not available in emergencies
- Lack of awareness of agency policies



# Challenges: Unsolicited donations



***“...The war has taken the infant formula off the shelves where it was too expensive to buy and put it into the clinics and food distributions where it is distributed for free....”***

***(TBA, Kosovo 1999)***

# Challenges: Complementary Feeding

- Food Basket:
  - Lack of fortified blended food
  - Indigestibility of unmilled cereals
  - Ration deficient in micronutrients
  - Lack of; cooking fuel/ firewood, clean water, household items
- Supply of commercial products distributed without monitoring and follow-up

# Challenges: Severely Malnourished Infants

## Option 1:

- Recommendation by WHO (1998) is re-lactation, but this doesn't allow the child to catch achieve rapid catch-up growth.

## Option 2:

- Supplement the child with special diets (F100 diluted) but this usually depresses milk production and, even further, the child loses the protection it had before admission.

# Challenges: Severely Malnourished Infants



“Suckling  
supplementer”  
technique

# Malnutrition and breastfeeding: “Supplementer Suckling Technique”

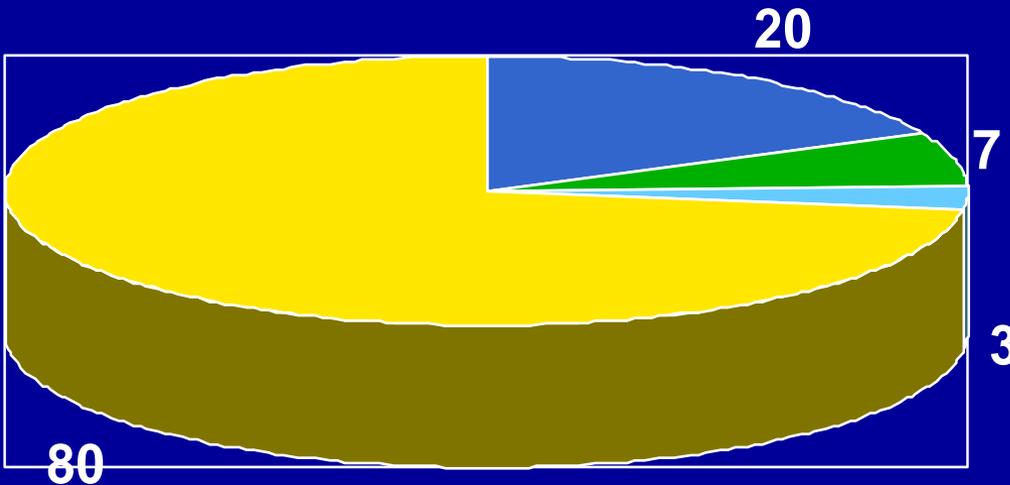
## Breastfeeding:

- Breastfeeding every 3 hours or more
- Nutritional support and fluids for mother
- Breastfeeding continued and increased

## Supplement:

- F100 diluted
- Given through nasogastric tube while breastfeeding
- Volume gradually decreased
- Medical treatment

# Challenges: HIV and Breastfeeding



Of 100 women in a community with 20% HIV prevalence among mothers

- 80 mothers not infected by HIV
- 20 mothers HIV-positive (13 of these will not pass the virus to their infants).
- 7 mothers transmit the virus to their infants, 4 out of 7 during pregnancy or delivery
- *3 out of the 7 mothers will transmit the virus through breastfeeding.*

UNICEF estimates that in the past 20 years, up to **1.7 million** children have contracted HIV through BF. During the same period of time **30 million** children have died because they were not breastfed



# Infant Feeding and Mother-to-Child Transmission of HIV

(Technical Guidance Note, July 2002)

Advocates:

- *Exclusive breastfeeding for 6 mo for mothers who are HIV-negative or do not know their HIV status*
- *For HIV-positive women, ‘when replacement feeding is acceptable, feasible, affordable, sustainable and safe, avoidance of all breastfeeding’ is recommended. Otherwise exclusive breastfeeding is recommended.*

Revised Sphere Nutrition Standards 2003  
recommend that

*“if voluntary and confidential testing for HIV/AIDS is not possible, all mothers should breastfeed”.*

# Policies: WHA

1994 Resolution 47.5 specifically states...

*“.....in emergency relief operations, breastfeeding should be protected supported and promoted. Any donated supplies of breastmilk substitutes (or other products covered by the Code) may be given only under strict conditions (and only if the infant has to be fed with breastmilk substitute); the supply is continued for as long as the infant concerned need; and the supply is not used as a sale inducement.....”*

# Policies and Guidelines

- UNHCR “Policy for Acceptance, distribution and use of milk products in refugee feeding” (1989)
- WFP “Guidelines for the use of Dried Milk Products in Refugee Settings” (1990)
- WHO “Guiding Principles for Feeding Infants and Young Children during Emergencies” (1999)
- **UNICEF, WHO, WFP and UNHCR Joint Statement (1999) Policy on Infant Feeding in the Balkan Region**
- Sphere, agency guidelines e.g. Oxfam, ACF, MSF
- **Inter-Agency Working Group Operational Guidance for Emergency Relief Staff and Programme Managers Technical Notes pages**

# Exercise: Practical Steps for Implementation of Infant Feeding Policy

In your groups role play members of an inter-agency Working Group who have to respond to recent unsolicited donations of milk powder which have been distributed in the general ration.

Identify and plan the implementation of necessary steps to ensure policy is put into practice.

# From Policy to Practice

- Define roles and responsibilities of agencies
- Ensure policy is widely disseminated and understood
- Training and expertise support
- Integration into existing interventions
- Involve food aid agencies, donors, peacekeepers
- Assessment and information
- Context specific guidelines with MoH support
- Monitoring of warehouses
- Corrective action
- Access/plan funding to support good practice
- Co-ordination

# Review

- Importance of breastfeeding in reducing risk of death in emergencies
- Practical ways to support maternal and infant feeding require attention, resources and time
- The diversity of challenges and significant needs require a clear strategy and adequate resources
- Attention to ensure that context-specific policies are translated into practice