Delivering an Effective Response: The importance of protecting the nutritional Status of mothers and children in crisis

Panama, December 2012

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1. Types of Malnutrition
2. Stunting: Overview
3. Causes of child malnutrition
4. Effective nutrition interventions
5. Investing in maternal and child nutrition during the 1000 days
1. TYPES OF MALNUTRITION

• **Stunting**: a child is too short for their age – a result of chronic malnutrition

• **Wasting**: a child’s weight is too low for their height – a result of acute malnutrition

• **Micronutrient deficiency**: a lack of one or more essential vitamins and minerals, such as vitamin A, iron or zinc.
2. STUNTING
One in four of the world’s children are stunted. In developing countries this figure is as high as one in three.

That means their body and brain has failed to develop properly because of malnutrition.

80% of stunted children live in just 20 countries.
STUNTING – THE FACTS

2.6 million die

Malnutrition is an underlying cause of the death of 2.6 million children each year – one-third of the global total of children’s deaths.

Slow progress 0.6%

Global progress on stunting has been extremely slow. The proportion of children who are stunted fell from 40% in 1990 to 27% in 2010 – an average of just 0.6 percentage points per year.
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<th>20% less $</th>
<th>Inequities</th>
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<td>Adults who were malnourished as children earn at least 20% less on average than those who weren’t.</td>
<td>In the poorest countries, the poorest children are two times more likely to be chronically malnourished than their richest counterparts. (particular issue in Latin America)</td>
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INEQUALITIES AND MALNUTRITION
Fig. 2. Changes in the gap between the poorest and the richest quintiles in the height-for-age distribution of children aged less than 5 years according to four surveys,\(^a\) Brazil, 1975–2007

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• 7.2 million children under 5 years of age are chronically malnourished.

• 38 million women and 22.5 million young children have anemia.

• National averages hide disparities social, economic, ethnic, cultural and geographic
Crises and Emergencies in Latin America and the Caribbean

- Devastating natural disasters.
- Economic shocks.
- Recurrent social upheavals.
- Recurrent shocks and crises.
- Food-price fluctuations.
- Political instability.
- Food insecurity.
- Rapid urbanization.

Poor households
- aggravate vulnerability.
- undermine the nutritional status of mothers and young children. (double burden of malnutrition).
- coping mechanisms affecting human capital.
2. CAUSES OF CHILD MALNUTRITION
Malnutrition and death

Inadequate dietary intake
  - Inadequate access to food

Inadequate care for mothers and children

Disease
  - Insufficient health services and unhealthy environment

Basic causes
  - Political and ideological superstructure
    - Economic structure
      - Political resources
    - Formal and non-formal institutions
      - Inadequate education

Immediate causes
  - Outcomes
Causes and consequences of stunting

Stunting

Inadequate dietary intake → Disease → Insufficient health services and unhealthy environment

Inadequate access to food → Inadequate care for mothers & children

Underlying social, economic and political factors

Impaired brain and cognitive development

Poor school performance

Impaired productivity and earnings

UNICEF Conceptual Framework (modified)
Consequences of Stunting - in early life

- Increased risk of dying from infectious diseases.
- Stunting is associated with reduced school performance equivalent to 2-3 yrs of schooling.
- Stunting associated with reduced income earning capacity (22% average).
- Increased risk of non-communicable diseases in adult life.
- Stunted girl is more likely to give birth to undernourished baby.
- Reduced GDP by 2-3%.
Stunting and brain development

**Normal**
- Typical brain cells
- Extensive branching

**Stunted**
- Impaired brain cells
- Limited branching
- Abnormal, shorter branches

Source: Cordero E et al, 1993
3. EFFECTIVE NUTRITION RESPONSE
Window of opportunity: pregnancy to 2 years

Mean anthropometric z-scores by age for all 54 studies, relative to the WHO standard

Priority nutrition intervention related to the protection and promotion of nutritional status during the first 1,000 days

1. Assuring maternal, infant, and young child nutrition
2. Promoting healthy growth
3. Preventing and treating micronutrient deficiencies.
4. Preventing and treating infectious diseases.
5. Promoting healthy motherhood.
6. Ensuring food security
4. INVESTING IN MATERNAL AND CHILD NUTRITION DURING THE 1000 DAYS
Long terms effects of a nutrition intervention carried out in Guatemala in 1969-77

Improved nutrition in the first 1000 days but not later increased wages in men by 46% and annual incomes by $914.

Hoddinott, Maluccio, Behrman, Flores and Martorell. Effect of a nutrition intervention during early childhood on economic productivity in Guatemalan adults (The Lancet, 2008).
Slide : R. Martorrel
What do we achieve by improving nutrition in the first 1000 days?

- We gain human capital
- We contribute to reduce the burden of chronic diseases
- We save lives of children
Protecting and promoting nutrition during the first 1000 days in will also improve long-term human capital.
Protecting and promoting the nutritional status of mother and children in crisis situation
A wise and timely investment

The critical 1000 day period for ensuring adequate child nutrition is short ...

... yet this window presents immense, long-term opportunities for poverty alleviation, human capital formation and sustainable development.
THANK YOU!