Double Duty Actions to Stomp Out Anaemia

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Our challenge

- Are anaemia prevention programmes doing enough to improve women's health?
- How can we develop stronger integrated programmes to address anaemia?
- Is there a space for double duty actions?
Malnutrition in all its forms is universal and massive

Globally, one person in three is malnourished today and one in two could be malnourished by 2030 if nothing is done.

- **821 million** of the world’s population are undernourished
- **149 million** children under five years of age are stunted
- **49.5 million** children under five years of age are wasted
- **40 million** children under five years of age are overweight
- **2.1 billion** adults are overweight or obese

88% of countries face overlapping burdens

Double and triple burdens for women

Rates of anemia and underweight in women have barely improved

Global prevalence of anemia, overweight (including obesity) and underweight in women, 2000–2016

Double-duty actions for nutrition

Addressing contrasting and confounding forms of malnutrition need not be a zero-sum game.

Double-duty actions have the potential to improve nutrition outcomes across the spectrum of malnutrition, through integrated initiatives, policies and programmes.

The global burden of malnutrition:
- 462 million adults worldwide continue to be underweight (6).
- 1.9 billion are overweight or obese (6).
- 264 million women of reproductive age around the world are affected by non-deficiency-related anaemia (3).
- 155 million children under the age of 5 years worldwide are underweight (1).
- 16 million children under the age of 5 years worldwide are stunted (2).

In 2014, approximately 462 million adults worldwide were overweight, while 1.9 billion were overweight or obese, and 264 million women of reproductive age were affected by iron-deficiency-related anaemia (3, 4). In 2016, an estimated 41 million children under the age of 5 years were underweight or stunted, while 165 million suffering from stunting (low height-for-age associated with chronic or recurrent undernutrition) (5). Nutrition-related factors contribute to approximately 45% of deaths in children aged under 5 years, while most low- and middle-income countries are now experiencing simultaneous rise in childhood overweight and obesity (4, 5).

1. SHARED DRIVERS OF MALNUTRITION
   - Biological
   - Socioeconomic
   - Environmental

2. DOUBLE BURDEN OF MALNUTRITION
   - Biological factors
   - Socioeconomic factors
   - Environmental factors

3. SHARED PLATFORMS FOR ACTION
   - National dietary guidelines
   - Health systems
   - Humanitarian aid and emergency nutrition programmes

4. POTENTIAL CANDIDATES FOR ACHIEVING DOUBLE DUTY
   - Protection and promotion of exclusive breastfeeding
   - Actions to optimize early nutrition
   - Maternal nutrition and antenatal care programmes
   - School food policies and programmes
   - Marketing regulations

5. SHARED OUTCOMES
   - Reduced rates of:
     - Overweight, obesity and NCDs
     - Micronutrient deficiencies
     - Undernutrition including wasting and stunting
The Global Syndemic of Obesity, Undernutrition, and Climate Change: The Lancet Commission report

One way to look at it: Tackling one burden of malnutrition (anaemia) with double or triple actions
The multi-causal pathway for anaemia calls for multiple actions


Adapted from the Biomarkers Reflecting Inflammation Nutritional Deficiencies (BRINDA) Project.
Pastoralist women: A perfect storm

Practice geophagy
Low dietary diversity
High intake of tea with phytates
Female genital mutilation
High fertility rates
High risk birth outcomes
The sectors to address anaemia call for integration

The plethora of interventions call for $2x$, $3x$, $4x$ actions

- **Disease Control**
  - Case management of malaria
  - Deworming for schistosomiasis
  - Deworming for soil-transmitted helminths
  - Indoor residual spraying
  - IPTp during pregnancy
  - LLINs.

- **Nutrition**
  - Dietary diversification
  - Dietary modification
  - High-dose vitamin A supplementation for children
  - Industrial food fortification
  - IFA supplementation in women of reproductive age
  - MIYCN
  - Routine micronutrient interventions for children.

- **Water, Sanitation, and Hygiene**
  - Clean play spaces
  - Handwashing
  - Use of basic and safely managed sanitation facilities
  - Use of safely managed drinking water services
  - Water treatment.

- **Reproductive Health**
  - Delayed cord clamping
  - Family planning.

- **Agriculture**
  - Biofortification
  - Increased production of nutrient-rich foods
  - Promotion of food safety.

- **Genetics**
  - Counseling and management of genetic blood disorders.

1. **Shared Drivers of Malnutrition**
   - Biological
   - Socioeconomic
   - Environmental

2. **Double Burden of Malnutrition**
   - Food security
   - Health systems
   - Urban food policies
   - Social policies

3. **Shared Platforms for Action**
   - National dietary guidelines
   - Health systems
   - Humanitarian aid and emergency nutrition programmes

4. **Potential Candidates for Achieving Double Duty**
   - Maternal nutrition and antenatal care programmes
   - School food policies and programmes
   - Marketing regulations

5. **Shared Outcomes**
   - Reduced rates of
     - Overweight, obesity and NCDs
     - Micronutrient deficiencies
     - Undernutrition including wasting and stunting
A second way to look at it:

Tackling *two malnutrition burdens* among women with *one intervention*
Double duty actions for double burden

Anaemia

Obesity

Dietary diversity, modification and counseling

Food and health systems

Community engagement and SBCC

Handwashing, sanitation and safe drinking water

Health and water systems

Community engagement and SBCC

Fecal pathogens can enter the human body in multiple ways, causing intestinal infections, inflammation of the gut, or micronutrient deficiencies through reduced micronutrient absorption.

Undernutrition issues include low BMI, iron deficiency, or anemia and low serum retinol.

In countries undergoing the nutrition transition - the defining factor is diet quality, as the odds of anemia have been found to be similar across body mass index groups in women.

Obesity-linked inflammation impairs iron absorption, through its stimulation of the synthesis of hepcidin, which regulates iron absorption.
The woman in women’s nutrition:
Delivery platforms for DD actions across the life course

Doing no harm

• Some social protection programs have shown improvements in one duty, but not another.

• Upcoming Lancet paper by Hawkes and Ruel will highlight double duty actions and where there harm may arise if care is not taken.

• How to reconcile?
One caveat: Disparities in anaemia diagnosis

• Geographic and other differences exist in the types of diagnostic equipment and methods used to diagnose anemia, potentially leading to differential classification of anemia across individuals and populations.

• A diagnosis of anemia also requires follow-up to understand etiology and appropriate treatment. However, this is not done consistently, in clinical care or in population-based surveys.

• To better understand the problem and track countries’ progress, a need exists for disaggregated, longitudinal quantitative and qualitative data on disparities related to anemia.

• Moving forward, it will be important for countries to improve equitable access to high-quality health services, particularly primary health care services, and to address barriers to the ability of individuals or communities to effectively enjoy the right to health.

• Especially given that those most vulnerable to anemia are also those most likely to be marginalized in the health system, we argue that these ethics and human rights considerations are essential to any discussion of anemia diagnosis.

Source: Sheela Sinharoy and Jess Fanzo. Ethical and human rights considerations related to access to anemia diagnosis: Annals of NY Academy of Sciences. Under review
Questions for you

• What are some of the most effective delivery platforms in your experience which tackle anaemia and underweight or overweight among women? What are some challenges in delivering preventative interventions within these delivery platforms?

• Are there certain populations who are prioritized and others who are neglected? For example, are non-pregnant women and adolescent girls de-prioritized and how to ensure they get equal care and treatment for double duty actions?

• How could double duty be delivered to ensure no harm for women?
Thank you!

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