Modeling COVID-19 nutrition impacts in LMIC to support global & national advocacy

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The state of global nutrition

Progress towards the global nutrition targets is too slow and deeply unfair. Global patterns hide significant inequalities between and within countries.

Maternal, infant and young child nutrition targets

**Anaemia**
In 2016, anaemia affected 613.2 million women of reproductive age, 35.3 million of whom were pregnant.

**Exclusive breastfeeding**
In 2018, 42.2% of infants 0–5 months were exclusively breastfed.

**Low birth weight**
The latest estimate (2015) is that there are around 20.5 million children with low birth weight.

**Childhood stunting**
In 2018, 149.0 million children were stunted.

**Childhood wasting**
In 2018, 7.3% of children were wasted, equivalent to 49.5 million children.

**Childhood overweight**
In 2018, 5.9% of children were overweight, equivalent to 40.1 million children.
April 2020: origins of Standing Together for Nutrition Consortium

“We are facing an unprecedented crisis of global hunger and malnutrition due to COVID19. Failure to act now will result devastating long-term consequences. Nutrition, health and food systems experts from around the world have joined forces in Standing Together for Nutrition to prevent this from happening.”

DR. SASKIA OSENDARP
Micronutrient Forum

& 600+ signatories
OVERALL ST4N GOAL
Increase funding for COVID-19 related nutrition and increase effectiveness of COVID-19 response and recovery programming and policy.

ADVOCACY OBJECTIVES
For ST4N to be a credible, trusted voice, and source on the impact of COVID-19 on malnutrition and actions required

ST4N evidence, aligned with other data and projections, leads to action from multiple stakeholders
July 2020: Call to Action signed by 4 UN Agency Heads

Lancet July 2020

Child malnutrition and COVID-19: the time to act is now

The COVID-19 pandemic is undermining nutrition across the world, particularly in low-income and middle-income countries (LMICs). The worst consequences are borne by young children. Some of the strategies to respond to COVID-19—including physical distancing, school closures, trade restrictions, and country lockdowns—are impacting food systems by disrupting the production, transportation, and sale of nutritious, fresh, and affordable foods, forcing millions of families to rely on nutrient-poor alternatives. Strained health systems and interruptions in humanitarian response are eroding access to essential and often life-saving nutrition services. Social protection systems in many LMICs are overloaded as vulnerable families struggle to access the food and services they need in the context of an economic downturn.

Malnutrition could exacerbate the effects of COVID-19 in mothers and children. At the same time, more children are becoming malnourished due to the deteriorating quality of their diets, interruptions in nutrition and other essential services, and the socioeconomic shocks created by the pandemic in LMICs. New estimates by Derek Headey and colleagues in an accompanying Comment in The Lancet suggest that without timely action, the global prevalence of child wasting could rise by a shocking 14.3%. With an estimated 47 million children younger than 5 years affected by wasting globally before the COVID-19 pandemic, this would translate to an estimated additional 6.7 million children with wasting during the first 12 months of the pandemic—80% of them in sub-Saharan Africa and south Asia—and more than 10,000 additional child deaths per month during this same period.

With services for the prevention and treatment of wasting to a large extent up-ended in LMICs, millions of children are at risk of not receiving the care they need to survive and thrive. UNICEF reports from the early months of the COVID-19 pandemic suggest a 30% reduction in the coverage of essential nutrition services in LMICs and declines of 75–100% under lockdown contexts. Our agencies estimate that a minimum of US$2.4 billion is needed immediately to protect these children, prevent and treat malnutrition, and avoid this costly tragedy. The US$2.4 billion estimate includes an estimated $2 billion for four life-saving interventions: prevent infection in children at risk; treatment for severe acute malnutriton; vitamin A supplementation for 35 million wasted children; and biannual vitamin A supplementation for 120 million moderately wasted children aged 6–59 months (90% communicate for the protection of malnourished children). Support of breastfeeding that focuses on families of children aged 0–23 months.
First, the MIRAGRODEP projections suggest that even fairly short lockdown measures, combined with severe mobility disruptions and comparatively moderate food systems disruptions, result in most LMICs having an estimated average 7·9% (SD 2·4%) decrease in GNI per capita relative to pre-COVID-19 projections.4

Second, the microeconomic model projections indicate that decreases in GNI per capita are associated with large increases in child wasting.9 Our own analyses, based on these estimates applied to 118 LMICs, suggest there could be a 14·3% increase in the prevalence of moderate or severe wasting among children younger than 5 years due to COVID-19-related predicted country-specific losses in GNI per capita. We estimate this would translate to an additional estimated 6·7 million children with wasting in 2020 compared with projections for 2020 without COVID-19; an estimated 57·6% of these children are in south Asia and an estimated 21·8% in sub-Saharan Africa.
Nearly 7 million more children could suffer from acute malnutrition due to Covid-19 pandemic, analysis says

From CNN's Gisela Crespo

Nearly 7 million more children worldwide could suffer from acute malnutrition due to the impact of the Covid-19 pandemic, according to an analysis published Monday in the Lancet medical journal.

Disruptions in mobility and food systems caused by even relatively short lockdowns will result in a decrease of nearly 8% of gross national income (GNI) per capita compared to pre-pandemic projections.

Coronavirus leads to mass hunger, killing 10,000 children a month, UN warns

UNICEF: 'The repercussions of the pandemic are causing more harm to children than the disease'
Guiding conceptual framework

- Rooted in UNICEF Malnutrition Framework
- Modeling efforts are unique in bringing together three areas:
  - Food System
    - Health System
    - Economy

Observed changes as a result of covid-19:
- Reduced access to nutritious foods
- Increased poverty and inequity
- Reduced coverage of health and nutrition services
- Reduced coverage of nutrition-specific interventions
- Reduced prevention and treatment of infections

ALL FORMS OF MALNUTRITION

DIET QUALITY

ILLNESS
StFN Consortium continued efforts

- **Oct – Dec 2020: second round of modeling**
  - 3-year time horizon x 3 scenarios (O,M,P)
  - Looked at multiple nutrition outcomes (wasting, stunting, maternal anemia & low BMI)
  - Looked at economic losses due to human capital impacts
  - Complementary analysis on impacts on cost of a healthy diet
  - Estimate investment cost required to regain losses
  - Still limited by lack of “real time” data on coverage & nutrition outcomes

- **Early 2021: StFN received grant from Government of Canada**
  - Applying “gender lens” to how women & girls might be disproportionately impacted
  - Use “real” data coming out of countries - Mexico & India
  - Expand advocacy
WE CAN REVERSE THE CRISIS

The pandemic’s continued disruption will have more impact than anticipated.

INVEST TO SAVE LIVES

MODERATE
- 9.3M wasted children
- 2.6M stunted children
- 168K child deaths
- 2.1M maternal anemia

OPTIMISTIC
- 6.4M wasted children
- 1.5M stunted children
- 47K child deaths
- 1.0M maternal anemia

PESSIMISTIC
- 13.6M wasted children
- 3.6M stunted children
- 283K child deaths
- 4.8M maternal anemia

THE PANDEMIC’S ADDITIONAL IMPACT ON NUTRITION OUTCOMES

MAKE NUTRITION CENTRAL TO COVID-19 RECOVERY

#InvestInNutrition
Standing Together for Nutrition

WE CAN REVERSE THE CRISIS

The pandemic's continued disruption will have more impact than anticipated. We stand to lose a decade or more in nutrition progress and associated economic and social costs.

GOOD NUTRITION underpins life-saving efforts in COVID-19 recovery and response.

Potential additional impacts of the COVID-19 pandemic on global levels of malnutrition by 2022:

- 283,000 child deaths
- 3.6 million children stunted
- 13.6 million children wasted

3 crises in 1:
- Nutrition crisis
- Economic crisis
- Health crisis
- Food crisis

The estimated pandemic related increases in child stunting and child mortality may result in future productivity losses of 44.3 billion.

258 additional children dying per day

An estimated additional $1.7 billion USD will be required on top of the $7 billion USD per annum needed to reach global targets.

We need to stand together and act now.

StandingTogetherForNutrition.org

#Stand4Nutrition
Advocacy: Amplification & Influencing

Nutrition Year of Action

2021

United Nations Food Systems Summit 2021

IDA International Development Association

World Bank Group

World Health Organization

2022

G20 Italia 2021

Tokyo Nutrition for Growth Summit 2021

Standing Together for Nutrition
STFN Country-specific analysis using COVID-19 era data