

COVID-19 and anemia

June 25, 2020

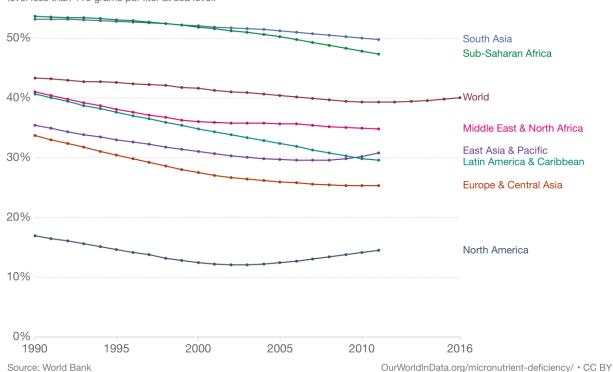
Saskia Osendarp, Micronutrient Forum

Even before COVID-19 the reductions in prevalence of anemia were not on track to meet the SDG2 target.

Prevalence of anemia in pregnant women, 1990 to 2016

Our World in Data

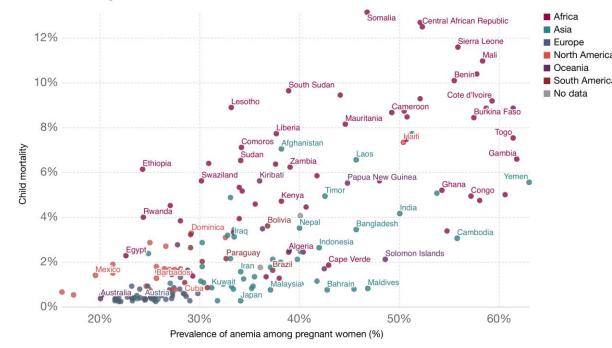
Prevalence of anemia in pregnant women, measured as the percentage of pregnant women with a hemoglobin level less than 110 grams per liter at sea level.



Child mortality vs. Prevalence of anemia among pregnant women, 2016

Our World in Data

Child mortality is the share of newborns who die before reaching the age of five. This is shown against the percentage of pregnant women with anemia – a condition that develops when your blood lacks enough healthy red blood cells or hemoglobin.



Source: UN Inter-agency Group for Child Mortality Estimation; World Bank

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Conceptual Framework on how COVID-19 impacts malnutrition

ECONOMY

Incomes
Food prices
Migration
Social Protection

FOOD SYSTEM

Retail and Markets
Food supplies
Food Demand
Premix supplies

Hunger & Food insecurity
Access to nutritious foods
Poverty & inequity
Women's empowerment

ALL FORMS
OF
MALNUTRITION

DIET

QUALITY

ILLNESS

HEALTH SYSTEM

Health and nutrition services Health and nutrition supplies Coverage of
nutrition-specific interventions
Prevention and treatment of
infections
Hygiene

Micronutrient Forum

Prevalence of anemia in women is correlated with GDP per capita while current projections predict a 10% of global GDP decline due to COVID

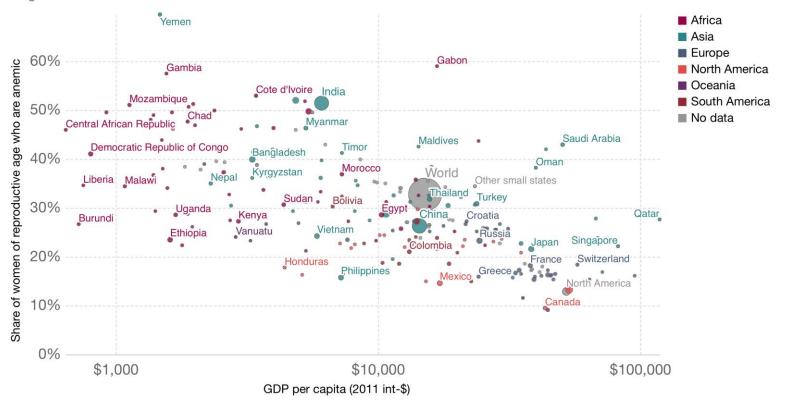
ECONOMY

Incomes
Food prices
Migration
Social Protectic

Prevalence of anemia in women of reproductive age vs. GDP per capita, 2016

Our World in Data

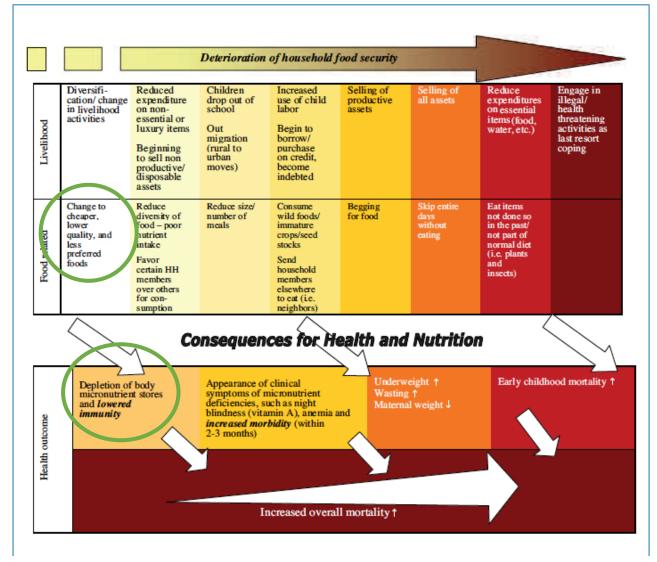
The share of women of reproductive age (aged 15-49) who are defined as anemic, versus gross domestic product (GDP) per capita, measured in 2011 international-\$. Prevalence of anemia among women of reproductive age refers to the combined prevalence of both non-pregnant with haemoglobin levels below 12 g/dL and pregnant women with haemoglobin levels below 11 g/dL.



Source: World Bank, Population (Gapminder, HYDE(2016) & UN (2019))

OurWorldInData.org/micronutrient-deficiency/ • CC BY

During an economic crisis an increase in micronutrient malnutrition is expected before weight loss as households sacrifice dietary diversity



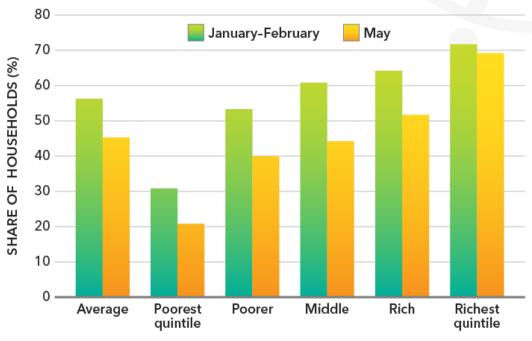
The availability of nutritious foods in particular is affected by COVID19 measures

FOOD SYSTEM

Retail and Markets
Food supplies
Premix supplies
Cash transfers

- What are nutritious foods:
 - Animal source products
 - Fruits and vegetables
- Production of these foods is labour intensive and therefore more impacted by social distancing
- These foods are more susceptible to perishing and food waste when markets are disrupted
- These foods are more expensive and the first to be dropped from the household menu when incomes fall



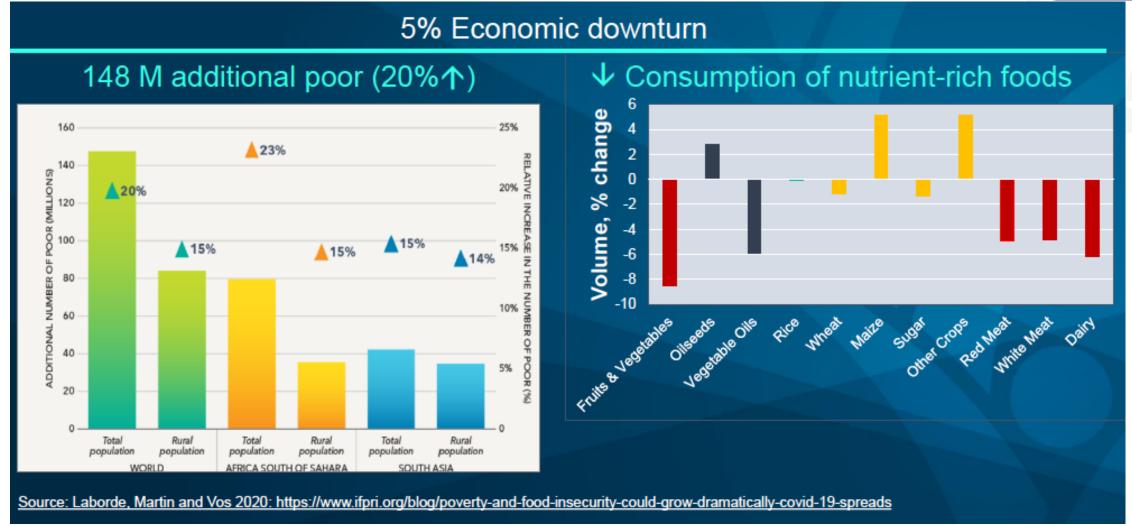


Source: Wolle et al. (2020); Hirvonen et al. (2020)

Projected changes in consumption of nutrient-rich foods show significant declines in red meat and fruits and vegetables.

FOOD SYSTEM

Retail and Markets
Food supplies
Premix supplies
Cash transfers



In addition, micronutrient intervention programs are affected during COVID19:

HEALTH SYSTEM

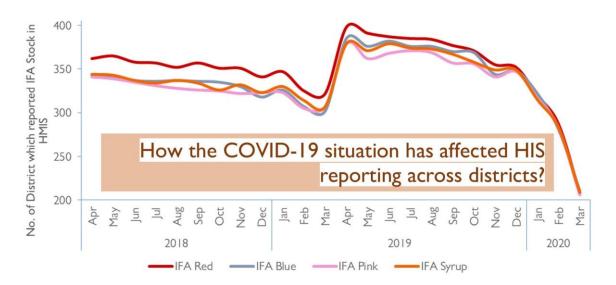
Health and nutrition services
Health and nutrition supplies

- Disruptions of up to 75% were reported in Antenatal Care Programs selected countries during the first months of the lock-down.
- In addition stock-outs of IFA/MMS may occur with supply chains disrupted and programs no longer reporting stock info.

Reported reductions in nutrition service coverage in first month of COVID19 pandemic in selected countries.¹

	Breastfeeding counseling	ANC	Vitamin A supplementation	School feeding
Bolivia	25-50%	25-50%	25-50%	75-100%
Cameroon	10-25%	25-50%	25-50%	75-100%
Dominican	25-50%	10-25%	25-50%	25-50%
Republic				
Ecuador	25-50%	25-50%	25-50%	25-50%
Ghana	<10%	<10%	10-25%	75-100%
Guatamala	25-50%	50-75%	25-50%	NA
Kenya	25-50%	50-75%	50-75%	75-100%
Pakistan	50-75%	25-50%	75-100%	NA
Zimbabwe	10-25%	25-50%	25-50%	75-100%

^{1.} UNICEF. Situation tracking for COVID-10 Socioeconomic Impacts. Updated as of 6 May 2020.



Anemia Mukt Bahrat, India: https://twitter.com/AMB_IEG/status/1273825658649538565?s=20

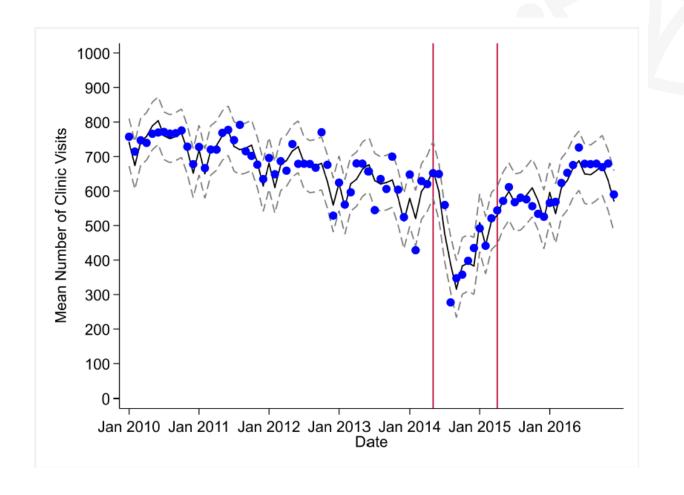
UNICEF situation tracking for COVID-19 socio-economic impacts draws on periodic country office (CO) reporting against an evolving questionnaire, updated June 8 2020; CO responses draw from varying sources and in some cases estimates combining best available sources; figures may not accurately represent the full national response to the COVID-19 pandemic

Experience from previous pandemics show that recovery of health care services may be slow.

HEALTH SYSTEM

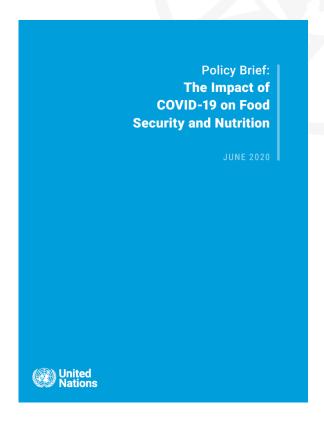
Health and nutrition services Health and nutrition supplies

During the first 4 months of the Ebola pandemic in Liberia, a 32.5% decrease in output of ANC services were observed. It took more than a year to recover to pre-outbreak levels.



Recommendations to build back better:

- Scale-up cost-effective programs and interventions that we know work while ensure adequate protection of health care staff:
 - Promotion of healthy diverse diets
 - Promotion of breastfeeding
 - Multiple Micronutrient Supplementation during pregnancy
- Invest in integrated, innovative food systems approaches that address all forms of malnutrition and include:
 - Policy actions to increase the availability, accessibility and consumption of nutritious foods
 - Large-scale food fortification
 - Biofortification
- Invest in inclusive, nutrition-sensitive social protection programs:
 - Cash vouchers
 - Eggs for children
- Monitor the impact of interventions to further build the evidence base



Standing Together for Nutrition

NUTRITION AND FOOD SYSTEMS COMMUNITY RESPONSE TO COVID-19



Standing Together For Nutrition is an inclusive partnership of nutrition, food systems, and health experts to assess the scale of the COVID19 crisis impact on all forms of malnutrition together with the best evidence-based advice on how to address those impacts: www.standingfornutrition.org

This consortium is bringing together nutrition, health and food systems researchers to:

- Estimate the combined impact of shocks in food systems, economy and health systems on nutritional outcomes using IFPRI and LIST modeling tools, and
- Develop a joint set of costed recommendations to help mitigate the impact.

Progress to date:

- Call to Action (CTA) on Nutrition and COVID finalized, signed by the 4 ED's of the UN organisations (FAO, UNICEF, WHO, WFP). Submission to Lancet this week.
- Technical commentary with estimates on the impact of COVID on wasting and related child mortality finalized. Submission to Lancet this week.
- Full analyses on all forms of malnutrition, including maternal anemia, currently in progress for submission end of July 2020.

Key messages:

- Even before the COVID19 crisis, the world was not on track to deliver on the SDG3 target for reduction of anemia, and the current crisis makes things worse.
- The COVID19 crisis will result in an increase in micronutrient malnutrition, including anemia due to the disruption of health services and food systems on top of an economic crisis.
- It is our collective responsibility to join forces and prevent this from happening, so that we continue to make progress on eliminating all forms of malnutrition by 2030.

