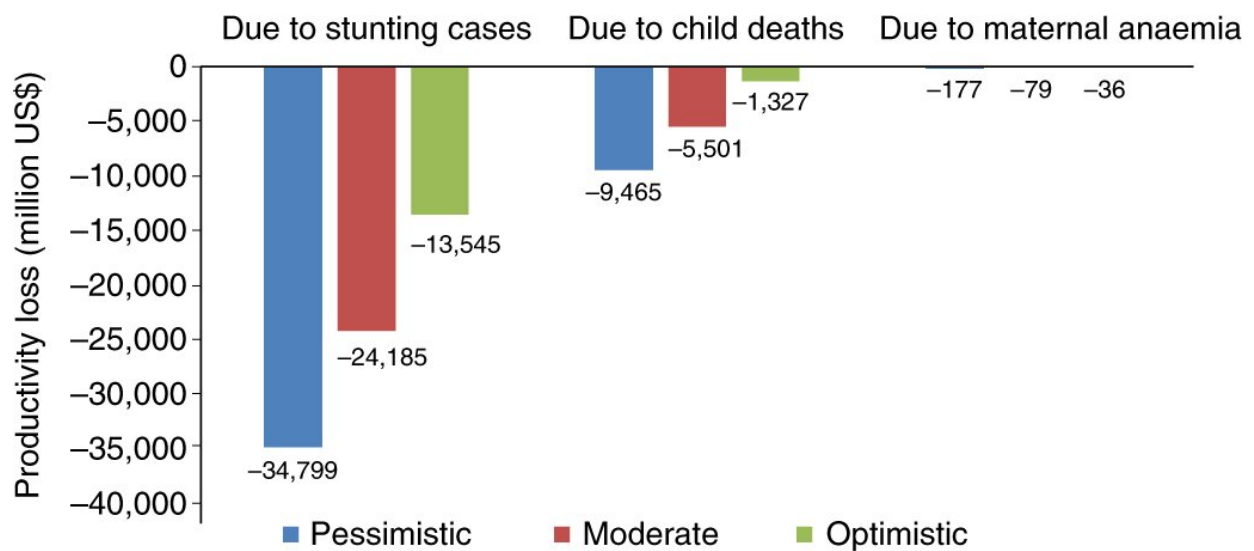


# Models suggest pandemic could increase world's maternal and child undernutrition rate by billions

July 20 2021, by Bob Yirka



To estimate lost productivity from nutrition-related impacts, the human capital approach was used. This involved calculating the present value of future productivity based on potential wages and potential time in the workforce, as outlined in the Methods. Credit: DOI: 10.1038/s43016-021-00319-4

An international team of researchers has found via modeling that the COVID-19 pandemic is impacting food distribution networks to the point that billions of mothers and their children living in at-risk places face undernutrition. In their paper published in the journal *Nature Food*,

the group describes using economic indicators and early insights into food and health system disruptions to create their models and what they indicated.

In addition to the immediate health crises posed by COVID-19, the [pandemic](#) has also damaged [food](#) production systems. From farmers and packagers to sellers and restauraners, the pandemic has disrupted many of the processes involved in providing food to the people of the world. And while this damage has been reflected in rising prices at [grocery stores](#) in well-to-do countries, people living in the [developing world](#) who are bearing the brunt of the problem. In this new effort, the researchers sought to put the food crises into perspective by creating models that show how many people (mothers and their children) in such countries will move, or have moved from being able to obtain enough food for themselves to becoming undernourished.

To create their [model](#), the researchers used [economic data](#) from countries around the world, such as GDP and poverty rate changes that have occurred prior to and during the pandemic. They also added data gathered over the past year regarding increases in undernutrition and health care statistics. After adding all their data, they used the model to represent undernutrition rates around the globe for the years 2020 to 2022.

The model indicated that the pandemic is having a profound impact on a large number of people around the world. They found, for example, that approximately 3 billion people could find themselves unable to obtain enough food to meet their nutritional needs. They also found that more than 9 million children could become underweight and that as many as 168,000 of them could die. They also found that over 2 million mothers of children could become anemic and could also experience abnormal body weight. The model also estimated productivity losses due to stunting and other health issues of children experiencing undernutrition,

at nearly \$30 billion.

The researchers conclude by noting that the suffering and loss being experienced by people around the world could be greatly reduced if those with the wherewithal to provide assistance choose to do so.

**More information:** Saskia Osendarp et al, The COVID-19 crisis will exacerbate maternal and child undernutrition and child mortality in low- and middle-income countries, *Nature Food* (2021). [DOI: 10.1038/s43016-021-00319-4](https://doi.org/10.1038/s43016-021-00319-4)

© 2021 Science X Network

Citation: Models suggest pandemic could increase world's maternal and child undernutrition rate by billions (2021, July 20) retrieved 28 April 2024 from <https://medicalxpress.com/news/2021-07-pandemic-world-maternal-child-undernutrition.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.