

Likely extra 267,000 infant deaths in 2020 prompted by COVID-19 economic downturn

Figures correspond to nearly 7% more than expected, show World Bank economist estimates

An extra 267,000 infants will likely have died in 2020 in low and middle income countries as a result of the economic downturn caused by COVID-19, finds a modelling study, published in the online journal **BMJ Open**.

This toll is 7% higher than expected for the year, say the World Bank economist authors.

The global economy is expected to have contracted almost 5% in the first year of the pandemic, increasing the numbers of people living in poverty by 120 million.

And unlike economic crises in high-income countries, these shocks in low-income countries generally increase deaths among vulnerable groups, such as young children and the elderly.

Previously published projections of the likely impact of the pandemic on indirect deaths--those not caused by COVID-19 itself--have focused on the extent of assumed disruptions to essential health services.

The authors of this study looked instead at the impact of the aggregate 'income shock' represented by the projected fall in Gross Domestic Product (GDP)--the total value of a country's annual goods and services--on the survival of children aged up to 12 months in low- and middle-income countries.

They linked data on GDP per head of the population to 5.2 million births, reported in Demographic and Health Surveys between 1985 and 2018. Most (82%) of these births were in low- and lower middle-income countries.

They then applied International Monetary Fund economic growth projections for 2019 and 2020 to predict the effect of the economic downturn in 2020 on infant deaths in 128 countries.

Their calculations indicated that an additional 267, 208 infants in low- and middle-income countries died in 2020, corresponding to just short of a 7% increase in the number of infant deaths expected for that year.

The highest numbers of estimated excess infant deaths were in South Asia (8 countries), totalling 113,141, with more than a third of the excess projected to be in India (99, 642). India has the highest number of annual births (24, 238, 000) as well as a particularly large projected economic shortfall of -17.3% for 2020.

The authors note that 28,000-50,000 excess infant deaths were estimated for Africa after the financial crisis in 2009. This compares with an estimated figure of 82,239 for 2020, reflecting the larger estimated shortfalls in GDP caused by the pandemic.

They accept several limitations to their projected figures, including that their calculations drew on retrospective data, and that they only considered the short-term impact of GDP fluctuations on infant death rates.

And the difference between October 2019 and October 2020 economic growth projections was interpreted to represent only the effects of the pandemic, even though some countries have experienced other major shocks, such as natural disasters or political crises, that may also have affected national income levels, they explain.

“Regardless of the exact number of projected deaths, the large number of excess infant deaths estimated in our analysis underscores the vulnerability of this age group to negative aggregate income shocks, such as those induced by the COVID-19 pandemic,” they write.

“Several mechanisms are likely driving this increase in mortality among children 0–1 year of age: impoverishment at the household level will lead to worse nutrition and care practices for infants and reduced ability to access health services, while the economic crisis might also affect the supply and quality of services offered by the health systems,” they explain.

While they focused on the likely impact on infant survival, other vulnerable groups are likely to have been affected, they add.

“As countries, health systems, and the wider global community continue efforts to prevent and treat COVID-19, we should also consider resources to stabilise health systems and strengthen social safety nets in order to mitigate the human, social, and economic consequences of the pandemic and related lockdown policies,” they conclude.