



Impact of COVID-19 Lockdowns in the Developing World: A Humanitarian Crisis Like No Other

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Insights

- Lockdowns have been widely enforced in developed and developing countries alike with the progression of the COVID-19 pandemic.
- Lockdowns have exacerbated previous precarious circumstances in many low- and middle-income countries (LMICs), including poverty, food crisis, gender inequality, and domestic violence.
- The social and economic fallout of stay-at-home orders is having a significant impact on mental health, with increasing reports of suicides from LMICs.
- The pandemic has been reversing years of progress in Sustainable Development Goals, including significant losses in maternal and child health improvements.
- It is hypothesized that for every COVID-19 death, there will be additional deaths due to negative implications of lockdowns.
- One-size-fits all type strategies such as lockdowns are not sustainable in LMICs, the local context of developing countries must be taken into account when implementing measures to limit the spread of COVID-19.

“As we move further into the COVID-19 pandemic, it is becoming increasingly clear that many of the tools and measures deployed by high-income countries against the virus are most probably not ideal in a low- and middle-income country (LMIC) context.”

“Images from India and beyond, of workers and their families caught in the lockdown with no other option than to walk hundreds of kilometres in scorching heat, illustrate the difficult choices facing LMICs when dealing with COVID-19.”

————— Zubaida Bai & Nina Rawal, 2020 (1) —————

Unintended Consequences of Lockdowns in the Developing World

In the absence of a vaccine or treatment, countries around the world have implemented a wide range of preventative strategies based on social distancing to limit the spread of SARS-CoV-2. In the rush to control the global public health crisis, lockdowns have been enforced widely in many developed and developing countries alike. However, given the different demographic and socioeconomic contexts of these countries, using one-size-fits-all type responses to the pandemic is not appropriate nor effective. The negative impact of lockdowns is now increasingly recognized in developed countries, with loss of employment, declining mental health, and increasing domestic violence emerging as consequences of this public health measure. In low- and middle-income countries (LMICs), these consequences are not only amplified, but also a wide range of additional consequences have emerged. The primary reasons for the exacerbation of negative impact of lockdowns in LMICs include intergenerational family structures, crowded urban settings, and large proportions of the workforce working in the informal sector to earn daily wages – making it essentially impossible to self-isolate for extended periods of time (1). Inevitably, LMICs are paying and will continue to pay a greater price for COVID-19 lockdowns, which calls for long-term system capacity building changes, rather than short-term band-aid solutions that lack sustainability.

“Millions of people are being pushed towards hunger by the coronavirus pandemic, which could end up killing more people through lack of food than from the illness itself...”

“Closed borders, curfews and travel restrictions have disrupted food supplies and incomes in already fragile countries, forcing an extra million people closer to famine in Afghanistan and heightening the humanitarian disaster in Yemen, where two-thirds already live in hunger.”

“Oxfam warns that the hunger crisis worsened by the pandemic could potentially kill more people each day than the infection itself”

————— Kaamil Ahmed, 2020 (2) —————

■ Food Insecurity and Its Downstream Consequences

One of the most salient and unfortunate consequences of lockdowns in LMICs has been the growing food insecurity, with a risk of famine looming in many countries. Compounding the challenges of income loss, there are now disruptions to the agricultural and food markets, as well as interrupted flow of donations that can lead to food shortages (3). The pandemic has endangered all four pillars of food security, including (3):

1. Availability (Is there adequate supply of food?),
2. Access (Are people able to obtain the food they need?),
3. Utilization (Are people intaking enough nutrients?), and
4. Stability (Are people able to access food at all times?).

At the beginning of the pandemic, it was expected that 130 million people will be at risk of starvation, on top of the 135 million who are already at the edge of starvation (4). Back in April 2020, an analysis from the World Food Programme showed that if they can not reach the 100 million people that they typically offer life-saving assistance to, 300,000 people could starve to death daily during a three-month period (4). Recent evidence from a rural region in Bangladesh shows that after lockdown orders, the proportion of families earning less than \$1.90 per day rose from 0.2% to 47.3%, and the number of families experiencing any level of food insecurity increased by 51.7% (5).

The diverse health impacts of food insecurity are profound – given the current scale of food crisis in LMICs, millions of individuals are at risk of poor health outcomes and the resulting demands on the local healthcare systems are unparalleled. Not having access to enough food can increase the susceptibility to infectious diseases, which is already a challenge in many LMICs (6). It is now common knowledge that food insecurity negatively impacts nutrition status, physical, cognitive, and socioemotional development for children (7,8). Among adults, food insecurity has been associated with cardiovascular risk factors and premature mortality (9,10). The current food insecurity crisis in LMICs worsened by lockdowns will lead to many deaths, but among those who manage to survive, the long-term health impacts of hunger will continue to reverberate for the coming years. In the recent past, many developing countries have managed to make considerable progress in their healthcare systems – however, none of their infrastructure is strong enough to withstand the unprecedented health challenges associated with the current food shortage.

“With the number of under-five deaths at an all-time recorded low of 5.2 million in 2019, disruptions in child and maternal health services due to the COVID-19 pandemic are putting millions of additional lives at stake”

————— World Health Organization (WHO), 2020 (11) —————

“More than 117 million children will miss out on measles vaccinations in the coming weeks as the coronavirus forces dozens of countries to cancel immunisation campaigns for the preventable disease”

Irwin Loy, 2020 (12)

Reversing Many Years of Progress

Over the last few decades, there has been significant global commitment to improve health outcomes of those living in LMICs. With considerable investment in a wide range of health services to prevent or treat causes of child death such as preterm birth, low birthweight, complications during birth, neonatal sepsis, pneumonia, diarrhea and malaria, as well as vaccination, millions of lives have been saved in developing countries (11). However, since the progression of the pandemic and implementation of lockdowns, there have been widespread disruptions in many child and maternal health services, such as health checkups, vaccinations and prenatal and postnatal care (11).

The Sustainable Development Goals Report 2020 highlighted that although the journey to achieving the 17 Sustainable Development Goals (SDGs) was uneven and inefficient, there has been some progress made, such as improvement in maternal and child health (13). Yet, the most recent data and estimates on progress across the 17 SDGs shows that the pandemic has taken the greatest toll on the most marginalized and vulnerable populations and widening pre-existing inequalities (13). Lockdowns and the subsequent social and economic fallout have been reversing decades of progress on poverty, healthcare and education (Exhibit 1).

Exhibit 1: Sustainable Development Goals Impacted by COVID-19 Pandemic (13)

Poverty	<ul style="list-style-type: none">71 million people are expected to reach extreme poverty – this is the first rise in global poverty since 1998Loss of income and lack of social support can lead those who were previously financially secure into poverty
Employment	<ul style="list-style-type: none">1.6 billion people working in the informal economy can face underemployment or unemploymentEstimates indicate these workers' income fell by 60% since the first month of the pandemic
Women And Child Health	<ul style="list-style-type: none">Hundreds of thousands of additional under-5 deaths and tens of thousands of additional maternal deaths are expected by the end of 2020 due to disruptions health, vaccination, diet, and nutrition servicesDomestic violence against women and children have soared
Education	<ul style="list-style-type: none">School closures kept 1.57 billion children out of school and led over 370 million children to miss school nutrition programs, which they depend on for daily mealsRemote learning is not an option with many not having access to internet and computers
Child Exploitation	<ul style="list-style-type: none">Poverty is expected to push children to child labour, child marriage, and child traffickingGlobal improvement in reducing child labour is expected to be reversed for the first time in 20 years

*This exhibit summarizes key findings from the Sustainable Development Goals Report 2020

“India now leads the world in new daily reported coronavirus cases and has the second-highest number of cases globally [as of September 8, 2020], surpassing Brazil on Monday. In Punjab [in India], where cases have surged, lockdowns have been imposed all over again. The measures, economists say, are forcing millions of households into poverty and contributing to a long-running tragedy: farmer suicides.”

————— Karan Deep Singh, 2020 (14) —————

“A woman and mother of five children (aged 35 years) from Cox's Bazar [in Bangladesh] attempted suicide by hanging, although one of her sons rescued her by getting help from her neighbors. Her husband lost his job because of the lockdown and they were also ineligible to receive relief goods from the local government authorities. The mother could not bear to see her starving children's faces and thought that by killing herself she could provide more food for her starving children.”

————— Bhuiyan et al., 2020 (15) —————

Clarer Look at Mental Health Crisis

Even before the pandemic, life circumstances have been precarious for millions of people living in LMICs. With the enforcement of lockdowns and quarantine measures, previous life challenges have now risen to unbearable new heights which no one is prepared to cope with. With large scale loss of income and life security, as well as the resulting food and shelter crisis, the mental health wellbeing of those living in developing countries is at great risk. For instance, a study from Ethiopia from April 2020 shows that 33% of the population is experiencing depressive symptoms, representing a 3-fold increase from pre-pandemic rates (16). There are also increasing reports of suicides induced by lockdown related economic hardships from countries such as Bangladesh, India, and Pakistan (14,15,17). If the primary breadwinner of a family commits these suicides, the true magnitude of the impact of these events become apparent as the lives of those who financially depend on them also become endangered.

Children from LMICs are in exceptional risk of experiencing prolonged mental health challenges as a result of imposed lockdowns. With loss of nutrition and overall protection, they can experience significant levels of stress which may negatively impact their long-term development (18). India, one of the middle-income countries hit hardest by the lockdown, has the largest child population in the world with 472 million children – with the lockdown leaving a tremendous negative impact on the lives of 40 million children from poor families (18). With increased exposure to unfavourable economic, social, and environmental circumstances, these children are at greater risk of mental health issues (18).

The unfortunate reality is that the growing mental health challenges in LMICs as a result of lockdowns will be impossible to manage – as mental health services are already chronically underfunded and largely ignored by policymakers in LMICs, with 90% of individuals with mental health conditions typically not receiving treatment (19).

“UNHCR, the United Nations' refugee agency, notes that even before the Covid-19 pandemic, an estimated one in three women had experienced physical or sexual abuse. Confinement, lockdowns, and quarantines coupled with deteriorating socioeconomic conditions have now created a perfect storm.”

“These factors significantly increase the risks of intimate partner violence, with refugees, internally displaced and stateless persons among the most vulnerable.”

———— Nick Turse, 2020 (20) ————

Women and Children Bearing Heavy Burdens

Women and children are among individuals enduring the heaviest impact of the pandemic (13). Women from LMICs are now at greater risk of not being able to plan their families based on their life circumstances, as well as losing their ability to protect their bodies and health (21). It has been predicted that if the lockdown lasts three months and causes disruption to major services, 44 million women in 114 LMICs may lose access to contraception, which can lead to 1 million unintended pregnancies (21). If lockdown related restrictions last for six months, the number of unintended pregnancies will rise to 7 million (21). Increasing poverty can also lead families to marry their daughters off early, which may jeopardize their chances at pursuing their own education and livelihood in the future (21).

Given confinement and stay-at-home orders, women from poor and underprivileged families are now at greater risk of experiencing violence and abuse in their own homes. Many women have been trapped with abusive partners during lockdown and reports of domestic abuse have been soaring in LMICs. For example, in Brazil, it is estimated that there has been a 40% to 50% rise in domestic abuse cases – with a 20% increase in calls to domestic abuse helpline within the first few days of lockdown (22). Evidence from a rural region in Bangladesh shows that after lockdown orders, women experienced greater levels of emotional, physical, and sexual violence from their husbands (5).

Parents' and caregivers' frustration and feelings of helplessness as a result of loss of income may also manifest as violence towards children. Indeed, after the lockdown began in India, there was a 50 percent increase in the calls received on the helpline for children provided by 'CHILDLINE 1098' India (23). Hostility towards children induced by lockdowns can make children more vulnerable to depression, anxiety, and suicide (18). Due to school closures, not only are many children losing out on education given lack of resources needed to access distance learning, but there is also further widening of pre-existing gender inequalities. Compared to boys, girls are more likely to fall behind on their education as they are less likely to have access to electronic technologies in impoverished settings – it is expected that school closures will have a greater impact on girls than boys (18).

“Right now, statistics on excess deaths are helping to chart the path of the outbreak in different places. In the future, with full cause-of-death data, researchers will be able to analyse the impacts of lockdowns and other interventions by looking at the levels of direct and indirect deaths from country to country. But it's risky to do that now...while the pandemic rages on and the final toll is unknown.”

“We just don't have much perspective yet, because we're still in the rising tide...it's like trying to predict rainfall totals in the middle of a hurricane.”

— Dr. Andrew Noymer —

Associate Professor, Population Health and Disease Prevention Public Health,
University of California, Irvine (24)

“Even after the storm, these analyses [of direct and indirect deaths from COVID-19] will be possible only in high-income countries with robust systems that register births and deaths — known as civil registration and vital statistics (CRVS). In low- and middle-income countries, counting deaths is much less straightforward”

“Across the world, about 50% of the deaths occurring in a given year are registered, the other 50% do not exist at all.
They are invisible.”

————— **Irina Dincu** —————

Senior Programme Specialist, Centre for Excellence
or Civil Registration and Vital Statistics (24)

Death by COVID-19 and Death by Lockdown

While deaths due to COVID-19 have received much media attention, deaths as a result of the lockdown have been largely underreported. It is hypothesized that for every COVID-19 death, there are several additional deaths due to the negative socioeconomic implications of the lockdown. The lack of population level data infrastructure to collect cause of death routinely in LMICs limits our ability to ascertain the true numbers of COVID-19 and lockdown related deaths. To our knowledge, there are no comprehensive country-based models making projections of total death toll as a result of lockdown, while factoring in deaths due to food insecurity, mental health crisis, domestic violence, substance abuse, as well as disruptions in crucial healthcare services – to name some of the key negative consequences of lockdown in LMICs.

Earlier in the pandemic, Robertson et al (2020) published a study estimating the additional maternal and under-5 child deaths resulting from the potential disruption of healthcare systems and decreased access to food. They modelled three different scenarios that varied in terms of severity, where the coverage of essential maternal and child health interventions was reduced by 9.8–51.9% and the prevalence of wasting was increased by 10–50%. The ranges of service coverage reductions for scenario 1, 2, and 3 were 9.8%-18.5%, 18.8%-26.9%, and 39.3%-51.9%, respectively. The proportion of children with wasting was 10%, 20%, and 50%, in scenario 1, 2, and 3, respectively. Under these assumptions, they estimated the additional deaths that will occur at 3, 6, and 12 months in 118 LMICs, on top of the baseline deaths that already occur (Exhibit 2). It is important to note that this is just the tip of the iceberg in terms of the lockdown related deaths in LMICs. For example, similar models can be created to predict adult mortality as a result of underemployment and unemployment at 3, 6, and 12 months by varying the level of loss of income. This highlights an unfortunate reality that is often overlooked – the number of lives lost due to the indirect effects of COVID-19 is much greater than the disease itself, especially in the context of LMICs.

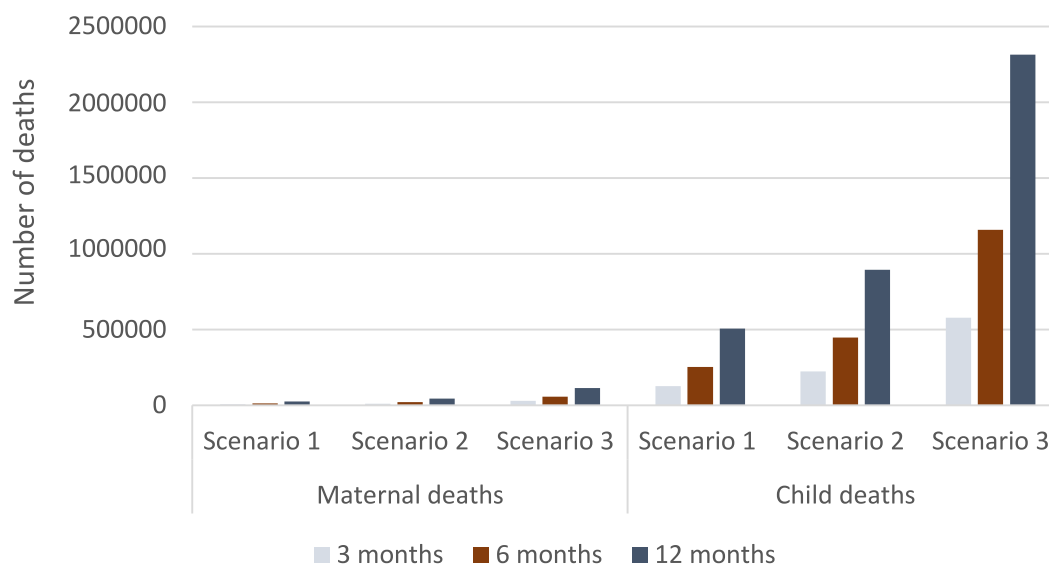


Exhibit 2: Estimates Of Maternal And Child Deaths In LMICS As A Result Of Health Service Disruptions And Decreased Access To Food

“The major conflict now is the health benefits weighed up against the deleterious social and economic consequences of prolonged lockdown i.e. life versus livelihood.”

— Mukherjee et al., 2020 (26) —

“The truth is, we do not have time on our side, so let's act wisely – and let's act fast. It is critical we come together as one united global community to defeat this disease.”

— David Beasley —

World Food Programme Executive Director

Developing Countries Need Different Mitigating Strategies

With the progression of the pandemic, it has become increasingly clear that COVID-19 prevention strategies enforced in high-income countries will not be appropriate in the context of LMICs (1). Investing in resilient and equitable healthcare systems have been recommended as the best defence against any virus outbreaks – particularly in LMICs where the healthcare systems are typically fragile and unable to withstand the challenges of a large-scale public health crisis. At a broader level, the appropriateness of lockdowns in LMICs should be carefully evaluated as the priorities and trade-offs in these countries are very different than developed countries (27). The importance of responsible social distancing measures to limit the spread of SARS-CoV-2 can be not underestimated, however, strict shutdowns come at a much higher price in LMICs (27). Extensive guidelines from the WHO detail best practices for healthcare systems and clinical care – yet, there is no discussion of what must be done differently in LMICs to prevent a complete decimation of already fragile economies (27). Policy makers around the world are rushing to limit the immediate fatalities of COVID-19 by focusing on short-term solutions without necessarily factoring in the long-term impact of these solutions. Yet, in the war against the pandemic that leaves no one behind, limited socioeconomic infrastructure, shortage of resources, and different levels of baseline health in LMICs must be considered to avoid the biggest humanitarian crisis of our time.

Contributors



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