



POLICY BRIEF

The economy-linked impact of COVID-19 on mortality and health

Early learnings for South Africa's coronavirus-linked recession

Anja Smith - University of Stellenbosch

Rose Tuyeni Peter - Percept Actuaries and Consultants

Shivani Ranchhod - University of Cape Town

Dave Strugnell - University of Cape Town

Jodi Wishnia - University of Witwatersrand

15 July 2020

The policy brief draws from the full paper:

Smith., Peter., Ranchhod, Strugnell., Wishnia. (2020) The economy-linked impact of COVID-19 on mortality and health.

The COVID-affected economy and health

- **15.1% of NIDS-CRAM Wave 1 respondents reported that children went hungry** at least once in the preceding week in their households, relative to 22.3% for adults. 17% of Black respondents reported children in their households went hungry, compared to 3.6% of White respondents. Nutrition has clear links to health status.
 - **26.3% of those who were using chronic medication also reported hunger in their household.** For those with non-communicable diseases (NCDs), and infectious diseases such as TB and HIV, adequate nutrition is an important part of maintaining one's health.
 - **Provide funding for healthcare innovations that allow for community-oriented primary care:** Many provinces have started experimenting with services being delivered within communities rather than in facilities, where there is a higher risk of exposure. Funding to allow health departments to innovate within this space could assist in reducing particularly child and maternal health-related impacts.
-

1. Ill health and mortality in South Africa before COVID-19

South Africa was already in technical recession prior to COVID-19, and its health budget is reflective of the austerity measures put in place to control public expenditure. Official mortality data is only available up until 2016, making it difficult to measure the status quo prior to the pandemic. Unicef data from 2018 places neonatal and child mortality at 33.8/1,000 live births. UNAIDS data shows that 62% of South Africans living with HIV were on ART treatment in 2019. A reduction in treatment coverage, both through the budget and through individual-level factors such as reduced health seeking because of the increased relative costs of healthcare, will have implications for HIV incidence and HIV-related mortality, other infectious disease mortality such as TB, as well as non-communicable diseases.

2. Risks to health and mortality post COVID-19

In a sample of Sub-Saharan countries, a 1% reduction in per capita GDP (linked to the 2008/9 financial crisis) was associated with a clear increase in infant mortality of between 0.34 per 1,000 to 0.48 per 1,000 (Friedman, Jed; Schady 2013). Given the contraction in employment, there is a possibility that we will see an increase in infant mortality during and post the pandemic.

NiDS-CRAM survey data shows that 15.1% of children and 22.3% adults reported going hungry in the week preceding the survey. The relationship between child health and nutrition is strong, and therefore we expect to see medium-long term effects of the COVID-19 related loss of income on child health.

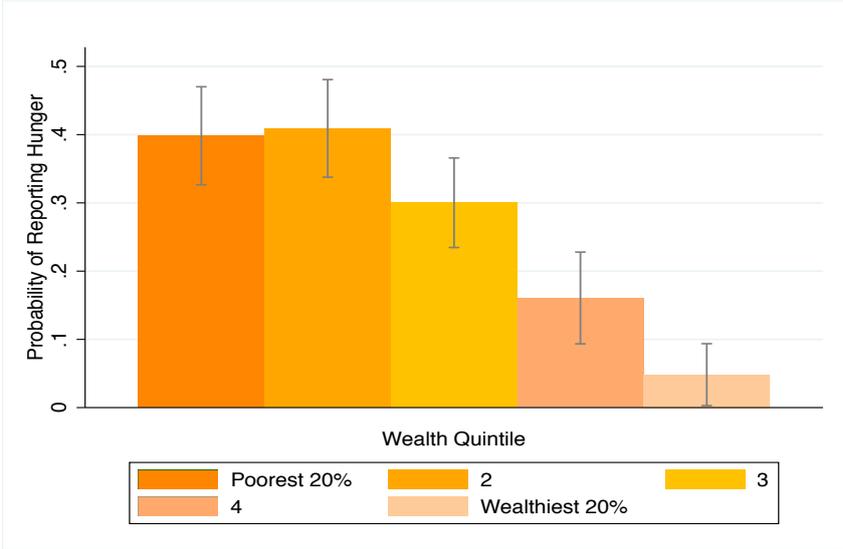
“The relationship between child health and nutrition is strong, and therefore we expect to see medium-long term effects of the COVID-19 related loss of income on child health.”

¹ <https://data.unicef.org/country/zaf/>

² <https://www.avert.org/professionals/hiv-around-world/sub-saharan-africa/south-africa>

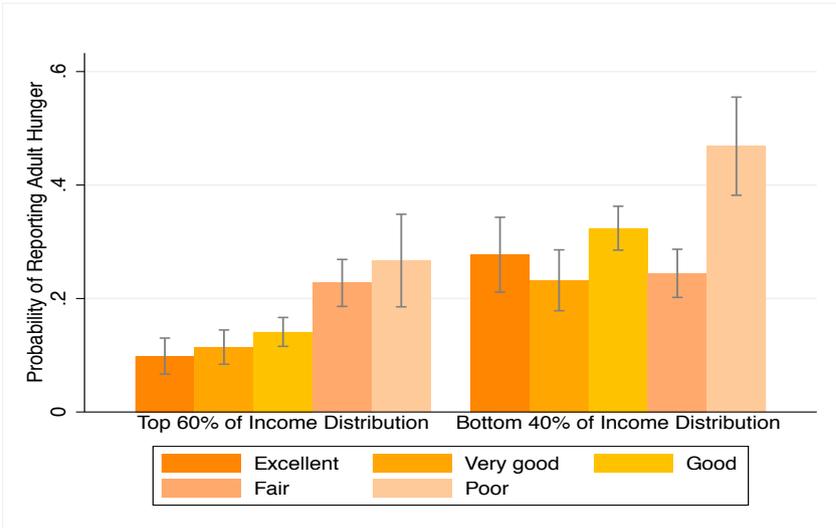
There is also a strong relationship between adherence to medication and nutrition. Many medications need to be taken with food to protect the stomach lining and some even to improve absorption of the medication. Therefore, food insecurity is a threat to chronic disease management. *Figure 1* shows that the bottom two wealth quintiles show the highest probability for hunger during the pandemic. Chronic diseases, including HIV, also closely mirror poverty patterns, which magnifies the impact of hunger on morbidity within these quintiles.

Figure 1: Adult respondents who reported hunger and having a chronic illness, relative to per capita income quintile



The interaction between hunger, health and income becomes clearer when we consider reported adult hunger relative to self-assessed health status. In *Figure 2* we compare the percentage of respondents who reported hunger relative to self-assessed health status for, respectively, the top 60% of the income distribution and the bottom 40% of the income distribution. There are two clear patterns. First, a higher percentage of adults in the bottom 40% of the income distribution report going hungry relative to all categories of all self-assessed health. Second, a much higher percentage of respondents in the bottom 40% with poor health status report hunger. We are not able to identify the direction of causality. The interaction between hunger and health here is likely to be complex.

Figure 2: Percentage of adult respondents reporting hunger relative to self-assessed health for the top 60% and bottom 40% of the income distribution (per capita income)

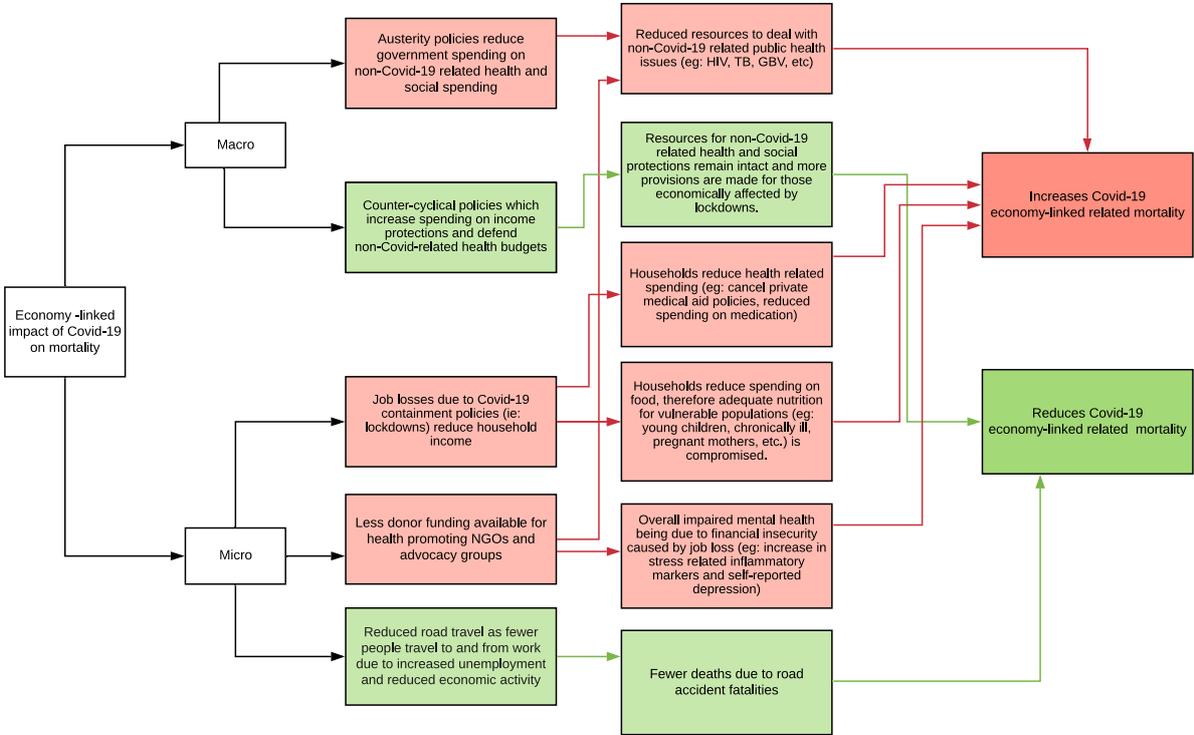


Given South Africa’s weak public health system, recessionary effects may be magnified closer to the trends seen in lower-middle-income countries. Data shows that the effects are also closely linked with deprivation and socio-economic status. Given South Africa’s history, there is a large proportion of the population who are at greater risk for the ill health and mortality related impacts from economic downturns.

3. Channels for economy-related mortality

Channels of influence: Figure 3 shows the channels of influence for economy-linked mortality changes. Based on desktop literature, the relationship can be pro-, a- or counter-cyclical between recessions and mortality. Child health show the strongest counter-cyclical relationship with recessions, i.e. child mortality increases. In so far as a recession prevents people from adhering to treatment, it can also pose a risk for a surge in infectious diseases or increased ill health (morbidity) and mortality from poorly controlled health conditions.

Figure 3: Economy linked impact of Covid-19 on mortality



4. Policy options: What can policymakers do about this?

- **Policy options for the next 1-3 months (July-Sept 2020)**
 - a. **Immediate scale-up of COVID-19 relief grant:** counter act effects of reduced income by allowing for enrolment onto relief grant for all those who meet the criteria. Also put in place social support for the vulnerable not currently targeted.
 - b. **Allocate new, ringfenced provincial department of health funding:** make funding available to departments of health to encourage community-oriented primary care related innovations to ensure continuation of services over the intense COVID-19 period.

- **Policy options for the next 3-6 months (July-Sept 2020)**
 - a. **Protect health budgets from austerity measures:** protect provincial departments of health from cuts, particularly those related to human resources.
 - b. **Urgently monitor and collect mortality data:** Publish and interrogate mortality and disease data, by cause, for rapid targeted response to problematic trends.

For further information please see cramsurvey.org