

Find out more about UCT's approach
to COVID-19 on the UCT website



9 June 2022

Study finds triple excess natural deaths than COVID-19 deaths tally in SA

New findings led by researchers at the University of Cape Town (UCT) and the South African Medical Research Council (SAMRC) show that there were about three times the number of excess deaths from natural causes during 2020 and 2021 than reported COVID-19 deaths.

"Although the cause of deaths remain unknown, the strong temporal correlation between excess deaths and reported COVID-19 deaths within each province indicates that the majority of excess deaths were associated with COVID-19," said Tom Moultrie, co-author of the study and professor of demography at UCT.

"Many countries have found it difficult to estimate excess deaths, or to identify and report COVID-19 deaths accurately, demonstrating the value of near-real time monitoring of mortality through the use and demographic analysis of data obtained from the country's National Population Register."

The study found considerable provincial differences in the impact of COVID-19, likely associated with differences in population age structure and density, patterns of social mixing, and differences in the prevalence of known comorbidities such as diabetes, hypertension, and obesity.

As the waves unfolded, said Moultrie, levels of natural immunity together with vaccination began to reduce levels of mortality. Mortality rates during the second (Beta) wave were much higher than mortality in the third (Delta) wave, which were higher than in either the first or the fourth (Omicron) waves.

This study, published in the [South African Journal of Science](#), is built off the weekly data collected, analysed and prepared by the SAMRC-UCT collaboration, that has allowed the near-to-real time tracking of excess mortality in South Africa throughout the pandemic; with South Africa being one of the few developing countries to have built and instituted that system.

Moultrie said, "This study allows us to reflect at greater depth on matters that we do not usually have time for in the preparation of the weekly reports: here we consider

the differential mortality impacts of different waves of the pandemic and the age-related burden of mortality that has become apparent.”

According to Moultrie, hard lockdowns and alcohol bans certainly affected unnatural deaths. “The hard lockdowns also materially reduced natural deaths of children under the age of 5,” he said.

“We do note however, that despite the considerable provincial variations in the timing of waves and excess mortality, the various interventions escalating the disaster lockdown levels under the national regulations was applied almost exclusively at a national level and were largely ill-timed relative to the timing of the excess deaths.”

Moultrie said the study demonstrates the importance and utility of a near-real time monitoring system.

“We urge changes to the system whereby deaths are certified and reported, and note the potential to expand this system to assist in future responses to disease outbreaks. We also note the significant disparities in the quality of officially reported data, and the importance of adequate and appropriate provincial data systems,” he added.

ENDS

Issued by: UCT Communication and Marketing Department

Ridovhona Mbulaheni

Media Liaison Assistant
Communication and Marketing Department
University of Cape Town
Rondebosch
Tel: (021) 650 2333
Cell: (064) 905 3807
Email: ridovhona.mbulaheni@uct.ac.za
Website: www.uct.ac.za