Auditing SA's public health response to Covid-19 - here's how we did

Covid-19 - here's how we did news24 Kyle Cowan



Estimated Covid-19 deaths are said to have topped 36 500.

- Secrecy and doubts around the robustness of reported Covid-19 data has led to doubts over claims that lockdown worked.
- Failure to properly implement contact tracing and testing on a large scale led to the epidemic growing despite damaging restrictions.

• Modelling, while not an exact science, gave the country a clear road map.

In May this year, Covid-19 projections showed that 40 000 people could die from the novel coronavirus, while thousands more would be hospitalised.

It was the first time the models had been made public and the numbers were staggering, putting the harsh lockdown measures implemented in March into stark context.

But at the time they were released, the model was already three weeks old.

The model, although repeatedly labelled uncertain, gave government a rough outline of the number of hospital and ICU beds it needed, and what interventions were required to continue attempts at limiting the spread of Covid-19.

The projections also provided an outline against which the public health response could be measured and examined key claims by government over the measures it implemented.

Lockdown and travel ban - key early measures

On 18 March, President Cyril Ramaphosa announced key early measures to combat the spread of Covid-19 - including a travel ban, limiting public gatherings to 50 people or less and that a nationwide lockdown would commence on 27 March.

It was one of the earliest and harshest lockdowns in the world, and was squarely aimed at delaying the peak of the virus - the point in time when the virus was being transmitted at its highest rate – to buy crucial time for hospital beds and staffing to be bolstered.

This was to avoid a situation where hospitals were overwhelmed by a surge of Covid-19 patients.

Based on reported data, the impact of the travel ban (the initial case increase was largely down to imported cases of Covid-19 from European countries) was immediately visible.

But the virus soon continued to spread and health experts confirmed that community spread was ongoing.

There have been no definitive studies to determine whether lockdown achieved its ultimate goal, but hospitals, for the most part, were not overwhelmed according to government, despite the number of cases growing throughout all levels of lockdown.

This was seen as a key achievement. But, on 22 July the Ministerial Advisory Committee in Covid-19 - a group of more than 40 scientists assembled to advise government on the health response to the coronavirus - said lockdown had failed to achieve the desired reduction in the transmission rate or R rate of the virus.

"This can be attributed to multiple factors that include the lack of an integrated ecosystem approach to the Covid outbreak from initiating community screening to tracking Covid-19 disease outcomes; the inability to scale-up community testing, the concomitant long turn-around times and inadequate contact tracing that could lead to the timeous isolation of cases and close contacts," the advisory read.

Deaths

According to the Health Department, 15 705 people had died as of 16 September - which translated to a mortality rate of roughly 275 deaths per million people.

This was, comparatively, one of the lowest death rates by population size in the world and resulted in one of the lowest case fatality rates in the world.

However, News24 previously reported that the official death toll had been underreported by the Health Department.

Research by scientists from the South African Medical Research Council and the University of Cape Town's Centre for Actuarial Research showed that by 8 September, 44 400 excess natural deaths had occurred in the country.

The timing and location of these excess natural deaths, which closely followed trends seen in Covid-19 case surges in the various provinces, suggested that a large number of these excess natural deaths could be Covid-19-related or linked to Covid-19.

The department dismissed this assertion, saying a study was required to determine the causes of deaths definitively.

Hospital beds, ICU beds

A key requirement for the treatment of severely ill Covid-19 patients was ICU beds, and for those with less severe illness, a general hospital bed with oxygen availability.

The national model, released on 19 May, predicted (with a high degree of uncertainty) that by mid-August optimistically 25 000 ICU beds would be required, and pessimistically 35 000 ICU beds would be needed.

News24 also previously reported that it was unclear if any ICU beds were added to the existing capacity, which, according to parliamentary presentations by Health Minister Zweli Mkhize in April, was just over 2 300 in the public and private sector.

According to data collected by the National Institute for Communicable Diseases (NICD), cumulatively 5 902 people were admitted to ICU since March this year.

This was well below the estimations made public in May - but represents ICU admissions in only 50% of public hospitals and 100% of private hospitals. It was believed there were roughly 400 public healthcare facilities in the country.

The size of the discrepancy caused by the lack of reporting by all public facilities was clear - on 14 September, the NICD reported that 1 464 people were admitted to private and public health facilities in Gauteng as a result of Covid-19.

For the same date, the Gauteng health department reported that 2 113 people were hospitalised in private and public facilities.

The historical hospital and ICU admissions for the country would need to be revisited once more data became available to the public.

Testing and Contact Tracing

On 22 July, the MAC on Covid-19, submitted an advisory that stated: "Contact tracing was never achieved at scales required to contain the epidemic despite having one of the largest testing programmes in Africa."

The national Health Department had not published details over the number of contacts traced for some months, after initially doing so daily.

A key part of containing the spread of Covid-19 was contact tracing - effectively finding all or 90% of the persons a Covid-19 positive case were in contact with, or potentially in

contact with, so that those persons could be placed in isolation until such a time as a Covid-19 test could be done.

Contact tracing efforts were, however, hampered by delays in testing - among other unknown factors.

In late May, News24 reported that the testing backlog in public laboratories was roughly 100 000 tests and turnaround times consequently rose to a peak of roughly 10 days.

This prompted advice by the MAC to government to abandon its community screening programmes, which were largely responsible for creating the backlogs and long turnaround times.

Testing delayed by 10 days made it impossible for even hospital staff to know for certainty whether all admitted patients had coronavirus or not.

It also resulted in a prioritised testing strategy, as recommended by the MAC, to alleviate the burden on the National Health Laboratory Service (NHLS).

NHLS CEO Kamy Chetty said in April the NHLS hoped to <u>ramp up its testing capacity to 30 000 a day</u> - but according to the reported testing data, they never achieved this lofty goal.

This was blamed on a lack of testing and extraction kits - a global supply problem.

Public laboratories, however, continued testing despite these global shortages and as of 14 September, the private sector accounted for 57% of all coronavirus tests done - 2 28 647 out of 3 928 614.

As an example of the contact tracing deficit - Gauteng reported on 14 September that 134 017 contacts had been traced, out of a confirmed 215 307 cases.

This effectively meant that every confirmed Covid-19 case in Gauteng was only in contact with 1.6 other people - a highly unlikely scenario, even during lockdown.

The national number for contacts traced remain unknown.

Ventilators

A key treatment requirement of Covid-19 patients, based on the experience of other countries, was ventilators.

South Africa's National Ventilator Project had been slow to get off the mark, however, according to Mkhize, as of 14 September, 5 444 ventilators were procured or received through donations and a further 2 848 ventilators were due to be delivered.

All told, the NVP would see 20 000 ventilators produced locally, however, it remained unclear whether there would still be a requirement for these ventilators.

Mkhize did not provide a timeline and the figures provided by him around ventilators on Monday were in <u>stark contrast to findings of the Auditor-General</u>, Kimi Makwetu.

The AG's first special report on the financial management of government's Covid-19 initiatives published last week, was a broad, near real-time audit of financial expenditure by government.

Makwetu found: "The R410-million pledged by the United States government for South Africa's health response has not been received yet and of the 1 000 ventilators pledged, only 150 had been received by 6 July 2020. The availability of ventilators in the market remains a problem - 1 144 ventilators were ordered for the health sector and by 31 July only 58 could be delivered," the report read.

It also remained unclear whether any health facilities experienced ventilator shortages that impacted on patient care.

Information lockdown and data deficiencies

As reported by News24, it had become clear with the emergence of evidence around excess natural deaths, that the true Covid-19 toll was being underreported by the Health Department.

There also existed high levels of uncertainty around the robustness of other data and the manner in which it was reported by the government.

For example, deaths were not reported by the date of actual death. Infections were also not reported by sample collection date (the date on which the patient was tested) and due to the delays between the sample being collected, tested and reported, official data was likely delayed by a maximum of 10 days by the time it was made public.

News24 reported on 18 May that tension was brewing between scientists and the Health Department over the apparent lack of access to data.

Coupled with the high number of public hospitals that had not reported Covid-19 admissions to the NICD, it was clear that the full picture of the impact of the coronavirus on the healthcare system remained elusive.

Despite consistent claims by government that it was being transparent and open with Covid-19 data, only two provinces ever reported Covid-19 infections by district or sub-district.

Similarly, backlogs in testing were only confirmed publicly by the department <u>after</u> Western Cape Premier Alan Winde revealed during a press briefing in late May that the backlog was roughly 100 000 tests, although the Bhekisisa Centre for Health Journalism reported on 8 May that backlogs existed and Western Cape healthcare workers were concerned over the 10 day turnaround times observed in public laboratories.

On 16 July, News24 filed two Promotion of Access to Information Act (PAIA) requests seeking access to more than 70 advisories authored by the MAC on Covid-19.

After this request was deemed to have been refused due to a lack of timeous response to the application, the Health Department published 45 of these advisories last month.

The second PAIA application sought access to more detailed Covid-19 data, including hospitalisation data, testing data and contact tracing data.

An internal appeal was filed on 19 August after the department was deemed to have refused the request due to a lack of response.

No response was received after the filing of the appeal.