Development of a Country report on the measures implemented to combat the impact of COVID-19 in South Africa

Chapter 2: Government leadership, governance, institutional arrangements and state capacity in responding to COVID-19

Interview with health sector representatives on the COVID governance response: DDG Dr Anban Pillay (National Department of Health) – acting DG for pandemic
Interviewers: Proff Babette Rabie, Mosa Moshabela, Brice Gijsbertsen
Date: 30 October 2020

The purpose of the interview was to better understand the leadership and governance approach to the COVID pandemic from the health sector perspective. The following questions were posed:

- What was the state of disaster management readiness prior to the COVID lockdown? What structures and routine processes were in place before March 2020?
- The main rationale for the level 5 lockdown was to allow the health sector time to prepare and mobilise to be able to respond when the COVID infection starts to spread more rapidly. What are the necessary components of a 'prepared health sector' for this pandemic? Were health considerations the only/main determining factor/s?
- What were the main events and activities that helped to inform the response to COVID during March (prior to lockdown), April-May (highest lockdown level), June-July (infection peak), and August to date (post first peak)?
- To what extend did the NCCC respond to information and advice provided by the health sector experts, and were there cases where the decision was not in line with the provided health advice? What or whom else informed decisions of the NCCC? What was the impact of such decisions?
- What role did the NDMC play in coordinating the national COVID response?
- What were the challenges in the South African COVID response?
- What were the strengths in the South African COVID response?
- Going forward, post COVID, what changes are needed to create a resilient system that can deal with different disasters at local, provincial or national level?
- Do you have any further comments or suggestions for this project?

State of disaster management readiness prior to the COVID lockdown in terms of existing structures and processes

The health sector had a structure in place in terms of the international health regulation and WHO guidelines on outbreak of infectious diseases, including the recommended structures that should be place. The necessary structures were in place in the CDC. Given that this is an infectious disease, these guidelines were activated.

Despite these guidelines, no one globally anticipated the scale of this disaster. While many trial runs (e.g. Ebola, listeriosis) have in some way helped to give a sense of what was required it was not close to what was required for COVID.

The NATJOINT centre was established as a coordinating structure during 2010 world cup to deal with massive projects that require intergovernmental cooperation. It and worked well during the world cup. That structure was activated as part of the intergovernmental disaster response.

The DMA required that information is collated in a particular way. The CDC becomes central. Once the Health minister declared the state of emergency, it opens up the possibility to share information and the usual protection of information is waivered.

Necessary components and considerations to determine preparedness of the health sector

Health considerations was the most influencing factor. COVID places a burden on the health sector, even in most developed countries there were significant challenges during the surge. South Africa had the benefit of seeing how the pandemic spread in Europe, and this provide some insight on what to anticipant. That anticipation was structured by a modelling team by mathematical modellers and actuaries from various universities that estimate the number of patients and time frames, and linked this to resource utilisation. This anticipated the numbers that was expected, when, and what resources are available. This was the key point of stating when these resources would be breached.

That presentation and information that was presented to the NCCC had the most significant influence on decision making at that point in time. Government responded in terms of the worst case scenario presented for hospital beds, human resources, ventilators, drugs and medicines. This scenario required time for the health sector to adapt. Globally ventilators were in short supply and with time the local companies and CSIR were able to produce a large number of ventilators. Time was also required to put hospital facilities in place, ensure available health personnel to deal with COVID, procure the necessary drugs and put a prevention strategy in place to identify infected persons early on. The lock down enabled community development workers (CDW) to go house to house in the first six weeks to try and identify the hotspots, and take the people into quarantine to prevent the spread of the disease. Lockdown bought time and shifted the peak of the curve further down the line.

The modelling team consisted internal contractors and external experts. The various models were in the same ball park, adopting assumptions of the experience in Europe. The assumptions from Europe was not a best fit for South Africa, but there was no basic data from South Africa that could inform the projections. As the pandemic spread in South Africa and more local data became available, this informed reiterations of the modelling more aligned to the local context.

In March there was limited data on the effective management of COVID in the international context, eg whether wearing masks help was not yet proven. Based on the limited

understanding of the pandemic within the local context, the projections in the initial phase was very high (100000), following the trends in Europe. These figures came down to about 45 000, though this is still questionable in terms of accurate recording of local COVID cases.

In retrospect, South Africa did not need the number of hospital beds that was put in place. However, in defence, if government in March ignored the model in terms of required beds and this resulted in mass deaths in the population, the impact would have been worse than erring on the side of caution. It is easy to criticise in hindsight, but need to consider the information that was available at the time, but in the interest of saving lives, it was more appropriate to err on the side of caution. The models were based on best available evidence at the time, and no contrary models informed by better assumptions were put forward at the time. Even now, there is still a lot unknown about the virus, and in the future we may again reflect and know that another route would have been appropriate

The political fall-out around the establishment of field hospitals, one should consider the evidence available in March. At that point in time, it was advocated as the best route to provide access to additional hospital beds, should the modelling data turn out, to ensure sufficient beds. The experience from Europe and the advice from the WHO was to put field hospitals in place. While some questions are posed on why local facilitates were not expanded, this question need to be answered at the local level, through the identification of areas where perhaps under-utilised facilities could be used or not. For example, Mpumalanga had low occupation in existing facilities and no field hospitals were put in place. In other areas, even if existing bed were converted, it still would not have met the requirement in the projections.

The same apply to ventilators. The usual companies that supplied South Africa was not able to provide as these companies were already providing ventilators to other countries. South Africa started to build local ventilators, in retrospect more than what is needed, but supply needs to run ahead of the curve. The additional ventilators are not wasted, can still be used or sold to other countries.

The other factor that was not well anticipated was the significant decline in non-COVID patients at hospital facilities as a result of other initiatives. This may be the attributed to the following factors:

- The spread of the infection has been fairly systematic. Started in WC, then to EC, Gauteng, KZN. The pandemic was dealt with in different regions in sequence, not in parallel. This means support can be provided to one province, and lessons learned from that context can be applied in the next province.
- Government's testing, quarantine, mask wearing, social distancing and communication initiatives played a significant role to reduce the infection rate. Significant differences are emerging between countries that wear marks and those who do no.
- There is some research being done on possible genetic differences that may have resulted in a different trend here (research is still in process).
- The mortality rate was low in comparison to other countries; our public sector health workers did reasonably well to treat patients that were very sick.
- Also large percentage of non-symptomatic patients that contributed to the development of herd immunity.

An electronic information portal provided information from health staff through e-mails and excel sheets. This informed how many health personnel was needed, and provinces were requested to hire staff where the need for additional capacity was identified. Guidance document from national level on managing trauma and challenges to provide psychological support to health care workers at the provincial level. Additional capacity was sourced in from the private and academic sector to provide this support.

The informal sector was perceived to be the most vulnerable groups. In initial phase in March there were extensive plans to screen and test in the informal settlements to identify hotspots in these areas, as the infection would spread quickly there. But to our surprise, studies have no shown that although there are high cases of infection in these areas, persons are asymptomatic. People living in the informal settlements, that could not observe health practices, were exposed but without symptoms.

The MRC raised concerns on the accuracy of reported mortality rates in research that referred to excess deaths. This research plots the number of natural and non-natural deaths using statistics from the Department of Home Affairs to create plots and expected death rates versus actual death rates. The MRC found a difference between the predicted and actual number of deaths over the COVID period, with the actual deaths exceeding the expected deaths. This was reported as excess deaths, possibly due to COVID. Actual reported COVID deaths are known COVID patients that pass on due to COVID-related consequences. There are patients that do not come to the health facilities, who may pass on due to COVID, but this is an estimation as data is not available, and may therefore be excess COVID related deaths. However, these deaths may also be non-COVID related and attributable to other health reasons. During the lockdown period, many persons opted to avoid seeking health care or visiting health care facilities because of the fear of contracting COVID. It cannot be stated that the excess deaths are COVID related or is the result of insufficient treatment facilities for COVID patients. Although under strain, during the entire lockdown period there were always beds available for COVID patients in contracted private hospitals, or in the field hospitals. To increase the accuracy of statistics, the DoH has requested clinicians who visit homes to also test those who passed on at home for COVID. To date the numbers have not been significant.

Main events and activities during lockdown stages

Lockdown level 5 was unprecedented and a large learning experience, with many mistakes. In the initial phase the very hard lockdown prevented many activities and the purchasing of goods. These restrictions were not sustainable. But in hindsight this period was needed to instil a change in mind-set and behaviour in society, which may not have been effected with softer restrictions. The hard lockdown forced people to take note of the pandemic, and adopt the requested behaviour changes that was needed. With the easing of lockdown the change in expected behaviour remained (mask waring, sanitizing).

During this time the DoH reported on the number of cases, number of hospitalisations, mortalities cases and test conducted to the NCCC. The NCCC received a report from the NATJOINTS that collated information from health and other departments. The MEC for Health

also provided a stand-alone health report in addition to the NATJOINTS report, that were more detailed on certain aspects. Reports from other departments focused on food support, transport considerations. The reports highlighted where needed the need for additional regulations, or reported on the side effect of regulations.

Response of the NCCC respond to information and advice provided by the health sector experts, other considerations and the impact of decisions.

There are many examples where the NCCC did not take advice from NDoH or ministerial advice committee.

The NCCC had the opportunity to engage with the ministerial advice committee comprising selected scientists. In some cases, the advice provided by the advice committee was not backed up by evidence, as the evidence was not yet available. In such cases advice was based on personal viewpoints rather than evidence. Where there was scientific evidence available that informed the recommendations, the NCCC did take note.

Some exceptions do occur, for examples the reopening of the taxi industry. From first principles for communicable diseases, persons in a closed environment are at greatest risk to contract COVID. There are some inconsistencies in how the ministerial advice committee addressed the issue. The risk is similar to the airline industry, who also indicated that they can only fly if on full occupancy. If economic consideration informed a decision to allow the airline industry to resume maximum occupancy with the implementation of certain protocols, the same should be applied in the taxi industry. There was also no specific research that proved that persons commuting in taxis contract COVID during the commute. The advice to leave windows open with window jammers was responded to.

Another exception relates to the restricting of sales of certain goods. This was not well debated at the NCCC. The NCCC focused on how to reduce the number of people that go to supermarket to but essential goods and to discourage people from spending more time than needed in the supermarkets. There were no scientific studies that informed the restriction of goods for sale. It was informed considerations of consumer behaviour, and goods that will have people spend more time in stores.

Role of the NDMC to coordinate the national COVID response

NDMC unit was largely assimilated into the NATJOINTS structure. The NDMC personnel took over the coordinating role in the working groups in the NATJOINTS.

Challenges in the South African COVID response

The following challenges are identified:

- COVID was an unknown disease and little was known on how it would spread. South Africa's response in some cases were not as appropriate in retrospect some decisions and responses was an overkill.

- There was a challenge to obtain the necessary human resources in the health sector. While ventilators could be produced quickly, it is more difficult to quickly obtain the nurses and doctors that should operate the ventilators. Although there was an advertisement for primary care providers, many private sector practitioners did not respond. Fear of contracting COVID by working in the public health care facilities.
- It was a challenge to get the public to understand how to protect themselves challenges with behavioural changes.

Strengths in the South African COVID response

South Africa adopted a very structured response to the pandemic. There was strong political commitment. At the NCCC it was clear that all ministers were taking the matter very seriously. The very strong response, perhaps in some cases more than what was needed, enabled us to focus on the disease across sections and pulled us through.

There was strong public support to adopt the prescribed measures. There was not the type of debates as elsewhere in the world.

South African had good prior experience on managing outbreaks, e.g with listeriosis. The CDC played an important role to guide the nature of the outbreak, and the ministerial committee.

NATJOINTS is a good structure for natural disasters. The structure in its composition is largely biased towards a law and order (polices and military are key coordinators of the NATJOINTS). The tools are ones more comfortable to that sector than this sector, but may not be as appropriate in outbreaks which require a strong social response. It may have been more ideal to have the DoH lead the response with support from other departments. Currently discussions are on the way to amend the health regulations to allow the DoH to manage the response post the state of disaster period. Further COVID outbreaks will then be managed through the national health act and not the disaster management act.

In **March** there was little evidence on where the infection was. At the time of moving to level 4 there was good data on where the infections are, the spread and escalation, where the infection will move to next. This helped to develop differentiated models that enabled customization to district level.

The NCCC also played an important role to also monitor the economic considerations and inform recalibration of the risk adjustment strategy. The initial recommendation for a differentiate approach in **April** to the NCCC was quite different from the level 4 as implemented. This recommendation considered the economic implication. On the five levels there was a differentiated model of lockdown, down to the district area. This model stated that if a particular infection is found in a district, with high infection and bed occupancy, this area will be stricter lock down, but other areas with lower infection was allowed more freedom. Sadly, this was not implemented. This reason is now perhaps coming in. The differentiated model of lockdown better balance health and economic considerations. These have challenges as people move around between areas, but we should have managed those issues instead of the blunt lockdown.

South Africa did well to flatten the curve. Modellers calculated the height and length of the curve at the beginning of lockdown with the assumption that no measures would be implemented. These interventions 'flattened' the curve, but also may have lengthened it. It is always relative to something else.

There was good engagement with the private sector: Each government department had their own independent engagements with the private sector. In the health sector, prior to COVID, there was a conflictual arrangement with many players in the private sector, especially private hospitals. During the discussions on the COVID response the private sector was surprisingly amenable towards the proposed reimbursement rate if there were an overflow of public patients to private institutions. They agreed to accept the calculated rate on what it cost to care for a COVID patient in a public facility.

Availability of PPEs: Private sector has applied PPEs before COVID. COVID dramatically raised the demand for PPEs in comparison to what was needed before. In the initial phase there was a dramatic shortage of PPEs to meet the demand. The private sector set up structures that obtained PPEs from overseas from various companies, and import the PPEs directly (largely through Business for South Africa (BSA)). BSA put in place a good system to manage prices and quality. The public sector did not have the systems and rules that allowed them to directly import. Local suppliers objected to being ignored as BSA was only importing from international suppliers. National Treasury made the biggest mistake by stating that provinces are allowed to buy PPEs by themselves, and could buy local, but need to stick to price and quality. The provincial department of health do not have the capacity to assess supply capacity, nor the quality of goods. Provincial departments entered into agreements with suppliers that were not appropriately registered. Some suppliers were also middle men and also important from China. A better alternative by National Treasury would have been to preapprove suppliers at a national level and to allow all provinces to buy from any of the approved suppliers. The necessary support was not given to the provinces, and they do not have the capacity to do so (putting corrupt interest aside).

Changes needed for a resilient DM system

The following may benefit a stronger DM system:

- We need to have stronger legislation and governance structures in place from a health perspective
- Line departments should have structures in place to deal with disasters relevant to that sector
- For health disasters, a strong legislated approach is needed. The legislation and regulations are needed to deal with a health disaster, to restrict and coordinate behaviours, and is appropriate for the management of health sector disasters.
- The health act should be amended to allow the health department to manage future pandemics and outbreaks as these are health related matters. Funding for disaster can still come from the disaster management authority, but the structures needed to respond to the disaster must be created in the sector that is best placed to manage the response.

- Health information is critical, but many of these systems were not in place and needed to be put in place to deal with COVID. This shows the weakness of not having robust information systems. Ideally this should be situated in STATSSA, but one should also reconsider the structure of STATSSA. It is important as coordinator of statistics to direct links to health and can coordinate and share information, and also to develop indicators regarded as relevant to the sector for monitoring and reporting purposes.
- The level of behaviour change achieved with COVID demonstrates that other behaviour related diseases can also be cured. There is a need to better understand and appreciate the lessons learned on implementing effective behaviour change on a societal level.
- Those in leadership need to recognise that you cannot just focus on patient, while ignoring the health care worker. Over time this will probably develop and progress. There is a need for closer relationships with organised labour.