Work starts at 6 am and ends after midnight

This vast experience, coupled with a friendship that has spanned their professional careers, prompted Mkhize to ask Abdool Karim to lead SA’s response to the pandemic. As chair of the COVID-19 ministerial advisory committee, Abdool Karim heads a team of 50 scientists tasked with advising the government on strategies to combat the spread of the disease.

He says South Africans should regard themselves as fortunate to have an enlightened political leadership that is not afraid to confront the novel coronavirus or to prepare for the "incredible Covid peak," which he said is yet to come. "I have seen how this crisis is, in the form of a little virus that comes from a seafood market, is reaching us about what it means to an average person," he said. "We have strong, enlightened leadership." He watched the two biggest disasters - in the way this has been dealt with in the US and UK - and thinks God is in SA.

We have good leaders who know what they need to do and are not scared to do it, he said. "We are not downplaying, denying it, like the Mbeki approach," he told the Sunday Times from a safe distance in his Cape Town office on Thursday. Abdool Karim is in a towering presence, intimidating even from a distance, but humble. He is calm and has the singular ability to relate as much to an auditorium full of the best scientific minds in the world as to an ordinary person.

As global statistics of confirmed cases dipped on the wrong side of 2 million and edged towards death toll of 150,000, Abdool Karim explained that a government’s approach to science is critical in responding to a pandemic. "Mbeki changed everything. For a country that was trying to get to grips with HIV, the government was very much like how they have to work with US President Donald Trump right now," he said.

"You have somebody who does not understand science but thinks he does and thinks he is correct, and he is saying that we have to do this. In their viewpoint, it is viewed as if you are challenging authority when you are just trying to help the authority to be correct. It is not a political issue but a scientific one.

"Trying to address HIV under Mbeki and Covid-19 under President Cyril Ramaphosa is like night and day. Ramaphosa has been proactive, he is thinking ahead of the problem, he collects a lot of information and he assimilates information from many sources, and he is considering how he wants to move forward. He does not waste time," said Abdool Karim.

Time, he said, is something that has temporarily lost meaning as he and the team work night and day - analysing data, formulating solutions, pouring through research and consulting international counterparts - to advise the government on how to fight the virus.

"Many of the people on the committee are leading scientists, people that I know very well, and I thought it would be an honour to serve but I am not sure if I know how much the work would be, that I would have said yes.

"The work starts at about 6 am and finishes at about 9 am. There are things to do all the time." The work comes in the form of questions from the health ministry that need urgent answers. The scientists meet at 9 am.

He has broken the committee into small groups. "When he [Mkhize] gives us questions, we put a small team together, and they do the investigation, because so little is known about the virus. They will write a report and, based on that report, we will then have a discussion and submit the advice.

"We do high level and detailed questions. Answers have led to things like community screening, a systematic approach of filling the lockdown, but we are very clear that we are advisory. The politicians rely on us for advice but they don’t have to take it," he said.

The team’s goal and mandate is to ensure that the government is provided with the most scientifically accurate and up-to-date information available so that the minister and the president can make decisions that are informed by science.

The groups meet individually - sometimes three meetings in one day. The last meeting the committee had was with the minister and provincial health MECs was on Wednesday night and lasted about four hours. On Thursday, SA recorded its biggest rise in the number of deaths since the outbreak, to take the toll to 48. The number of confirmed cases increased by 99 to 2,605. However, Abdool Karim said he believes that the lockdown has contained the virus.

"We want those few thousand infections to be slowing to become a dead end," he said.

"Community transmissions are at a low level. The lockdown bought South Africa important time but the way forward will be determined by community transmission.

"A high number will mean a longer lockdown, a low one will mean easing of the lockdown can be considered.

"As soon as we lift the lockdown, transmission will go up, but we will be prepared," he said. Preparation for the peak period of the virus included creating space for makeshift hospitals to avoid collapsing the existing infrastructure.

"I shared a picture with the president of Central Park in New York being converted into a field hospital, because they had to keep the hospital clear. You protect the hospital because the system will collapse.

"Sites are being selected - in Durban we looked at several sites. The final choice was the international Conference Centre and the exhibition centre, to not overcrowd hospitals when we get to the peak. What we told the minister and the president is that it is inevitable that we are going to have a severe epidemic; no one else has avoided it.

"It’s a topic that is hotly debated in the Abdool Karim household. His wife, professor Quraintha Abdool Karim, one of the world’s leading AIDS researchers, is also among the team assembled by Mkhize to advise the government.

Their three children are public health lawyer Waino, medical journalist Asha, and Waino, who is studying computer science.

"My son, Waino, published a paper on the gene sequence of the virus. He did one of the first studies in January; he is a computer science student at UCT. My young daughter is a journalist at the Herald, a health publication, and she has written dozens of articles about the virus. Sometimes we do interviews 10 minutes apart on television - while my eldest daughter is a lawyer. She does health law so she is writing articles on law and Covid, and in fact she has helped me draft the affidavit on why the ban on alcohol should not be lifted."

The first thing we do, when we get a question, we look at what the Chinese have said

One of Abdool Karim’s strengths is that he can call on experts and friends such as the head of the Chinese Centre for Disease Control and Prevention (CCD), George Gao, and US infectious disease control specialist Dr Anthony Fauci to help him in the South African government’s fight against Covid-19.

He and his team regularly call Gao and his counterparts for information.

"We use a lot of their published articles, they have information that almost nobody has. The first thing we do when we get a question, we look at what the Chinese have said. I call him, I e-mail him. Whatever we want he is assisting. The minister also arranged a meeting with the CDC in China. It took four hours and we went through the questions they did right, so that we are better prepared." Abdool Karim has extensive international experience and research, the team’s advice to the government is not to lift the lockdown abruptly.

"Don’t tell people it’s ending, that everybody must go back to work tomorrow. That is trouble. That will spread the virus and undo all the work. It should be done in a systematic way and they should consider, if it is ending at the end of the month, how do they do it and how do they get to that date?"

Scientists are catching up with the virus, conducting clinical trials for vaccines and treatment, but there is still no conclusive evidence that re-infection does not lead to getting sick again.

"We know everyone, based on China, develops antibodies. What we don’t know is whether antibodies protect you from getting sick or infected," said Abdool Karim.

"Early information suggests patients who had Covid don’t get sick again. We think you have it again but it does not cause infection."

It also seems that those infected for a second time “are not infecting others, from what we can gather”, Abdool Karim is optimistic that treatment is likely to come before a vaccine, but a vaccine is more critical because it will protect everyone, while treatment is an individual approach.

For now, he urged people to stay at home when they can and be cautious when they are out. In this way, the chances of contracting the virus are slim.