

## COVID-19: A South African Radiology Perspective in 2021



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In February 2020, news started filtering slowly through the media about a fast-spreading virus in China. Within a month it hit South Africa, and the President Cyril Ramaphosa and his team had the unenviable task to warn and educate all citizens about the impending virus. Their initial addresses to the nation was of doom and gloom and instant lockdown was summoned for four weeks. They predicted a very large number of deaths, especially because we had a large number of people with immune compromising diseases such as Tuberculosis (TB) and HIV/AIDS. In our radiology practice in Port Elizabeth, we did not see a jump in COVID-19 cases within the first two months of the pandemic. But, when the peak hit, and the hospitals were inundated with patients, we started to see a rise in x-ray and CT examinations.

Radiology does not play a role in the diagnosis of COVID-19, but rather detection and management of complications. Having said that, we did not see any TB or HIV patients with COVID complications or deaths.

According to research (Tamuzi et al. 2020), a TB patient is in a high-risk group for COVID-19 morbidity and mortality. According to Dr Mary Ann Davies (2020), Professor at the Western Cape Department of Health, a HIV patient is also in a high-risk group for COVID-19 treatment. Further research found that TB notifications dropped by 36%, TB treatment completion decreased by 60% and TB drug resistance screening was lower (Dookie et al. 2020).

This was an effect of the COVID-19 lockdowns and fear of people to go to the clinics. Looking at the statistics provided by the National Institute for Communicable Diseases (NICD), the incidence and death rate in Africa versus the rest of the world was much lower (nicd.ac.za). One could ask why this was the case. Was it because there were fewer test kits or because fewer people were tested? Could it have been the lack of testing facilities? If so, it would not explain the lower death rate (Doshi 2020).

Several theories were discussed and a number of possible factors include:

- South Africa is a relatively young country with 50% of the population below the age of 27.
- South Africa has a warmer climate.
- Possible cross-immunity or herd immunity due to prior exposure to other infections (Diop et al. 2020).

After the second wave and a year of lockdowns and social distancing, it is time to look towards the future and the new normal. How do we go forward? Many radiology practices are internet based, making it easy to work remotely. This begs the question: do we really need so many radiologists on the floor? Can we not distribute our workflow better? Can we save on rental office space by working from home? These are issues we never even considered in the past.

From an imaging point of view, we have a whole new outlook on lung CTs. Post infective fibrosis, subpleural lines, non-resolving ground glass opacification have become part and parcel of our reports after COVID pneumonia. Irreversible lung damage is rarely seen, but a real diagnosis for a small percentage of patients (Rai et al. 2020).

In a private practice, the exposure to the TB and HIV patient population is very limited compared to working in a hospital. Only time will tell if we are going to see a surge in these conditions due to the secondary effects that COVID-19 has caused, such as less testing, reduced attendance by patients to the clinics or interrupted treatment due to lower availability of medications.

For the foreseeable future, we can only build on what we have learned over the last year and adapt.

