



COVID-19: Two sides to the story

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SPECIAL EDITION

Abstract

Since the report of the first COVID-19 infected person in South Africa, COVID-19 moved from being a distant threat to a new reality overnight. Though the lockdown was necessary to prepare health facilities for when the country reached its peak, it had a significant negative impact on the economy. In other areas such as the environment, work and education, and the personal lives of South Africans, the consequences have been varied. This article will highlight the positive and negative impact of the past 18 months of lockdown from a South African perspective.

Keywords

COVID-19, health, South Africa, opinion

Introduction

In South Africa, the first case of COVID-19 was reported on 5 March 2020 and early action was taken when the government declared a national state of disaster on 15 March 2020 [3]. A nationwide lockdown was enforced on 26 March 2020 and people were only allowed to leave their homes to purchase groceries, seek medical care, or provide essential services during this time. The lockdown was initially planned to last for three weeks but was later extended by an additional two weeks. The premise for the extension was that lifting the lockdown too quickly could lead to a rapid and uncontrollable spread of the virus that would overwhelm the healthcare system, leading to potentially higher mortality rates. On 23 April 2020 the President announced a gradual and phased exit from the lockdown. This involved the implementation of a risk adjusted strategy through which deliberate and cautious action was taken to ease the lockdown restrictions [3]. Presently, the country is in its third wave on an adjusted level 3 of lockdown, which allows most individuals to return to work given that workplaces adhere to various regulations. Individuals are encouraged to wash and sanitise hands frequently, wear masks when in public places and maintain social distancing. This is our new normal. While acknowledging that the lockdown was necessary, its negative impact on the economy has been unquestionably brutal. The environment, work and education sector, as well as the personal lives of many South Africans have been changed so dramatically, that a life pre-COVID-19 will likely remain a world we will never experience again.

Economy

The socioeconomic consequences of the lockdown have severely impacted individuals and businesses in most sectors. The largest initial impacts were on mining, service sectors and non-essential industries, which indirectly impacted on all industries, including large and small businesses. Many large businesses were unable to trade at full capacity which resulted in decreased turnover. A significant percentage of companies had to either reduce working hours or lay off staff for a period [4]. An astonishing 42.7% of SMMEs had to close their doors during the first few months of lockdown due to debt, no access to relief funds and the inability to operate during lockdown to name a few [4-5]. The unemployment rate in South Africa was 29.1% at the end of 2019 which increased to 30.1% during the first quarter of 2020 and increased further to 34.4% as a result of subsequent restrictions [6-8]. More than two million people to date have lost their jobs [9] and the time it will take to recover these losses is nearly impossible to predict.

Several relief strategies have been put in place by government, which includes providing food parcels and a COVID-19 Social Relief of Distress grant of R350 for unemployed individuals [10]. Despite this effort from government, many individuals have either not received food parcels [11-12] or do not qualify for the grant [13-14].

This economic burn has highlighted the resourcefulness of South Africans. Election Xitsakiso Baloyi, a twenty-eight year old from Mankweng in Limpopo, has made a success of selling pizzas during lockdown as people were unable to eat at restaurants. Rabbit's Pizza, which started off as a one-man business now employs nine young individuals and future plans include opening new outlets in nearby areas and employing more individuals [15]. New businesses have been established to meet the increasing demand in manufacturing personal protective equipment, face-masks, visors and face-shields [15], since wearing facemasks is still compulsory in South Africa when in public [16]. Ponani Shikweni, a resident of Alexandra township repurposed her linen manufacturing business and is producing over 1000 facial masks per day and employs over 30 young individuals under the age of 25. She has already distributed over 20 000 cloth masks free of charge to individuals in Alexandra [15]. People are doing what they must to survive but COVID-19 has highlighted vulnerabilities in the economic system that would need to be made more resilient to such risks in the upcoming months and years to ensure economic growth. Economists and epidemiologists are working together to devise COVID-19 responses to balance health and economy.

Environment

During this unprecedented time, it is important to be aware of some of the healing effects that this pandemic has had on the environment. Globally, lockdown restrictions led to an initial reduction in air pollution which is likely due to restricted movement as people are encouraged to work from home [17]. As life started to resume, so did pollution; however the positive impact of reduced air pollution has resulted in renewed global efforts to improve air quality which will ultimately lead to improve health [18-19].

Emotional, physiological and social well-being

In the northern hemisphere, most countries saw an increase in domestic violence as people spent more time at home with their abusers, and South Africa was not immune to this phenomenon. Since the country moved to lockdown, violence against women and children and violence in general have increased dramatically [20-21]. As alcohol is often the culprit in violent incidents, bans on alcohol have been persistently introduced during waves of infections to free-up hospital beds occupied by those suffering from alcohol-related trauma.

The lockdown period and enhanced restrictions during subsequent waves had opposing effects. Although it created a unique opportunity for families to spend quality time together, reuniting relationships with loved ones that may have been lost due to busy schedules, others have been increasingly isolated leading to mental health problems.

Suicide prevention lines are on high alert during this time. The medical fraternity who witness the impact of the pandemic directly, are not spared either. What has come of this is the need to serve each other better and to allow for an improved work-life balance. It has also confirmed that human beings are social creatures who need interaction with one another in order for their mental and emotional health to be maintained. On the other end of the pandemic, we may have many broken hearts as a result of COVID-19-related losses, but with it hopefully also a world that is able to help repair those broken hearts, rather than compound their agony.

Work and education

Schools were closed during lockdown with gradual opening in early June 2020 and with multiple closures since. The closing of schools during lockdown was particularly difficult for parents performing essential services. Being thrust into home-schooling, many parents were ill-prepared and may have new-found respect for the teaching profession. Controversies over school-fees were experienced as some schools reduced school fees while others remained the same. Importantly, children from poor communities who relied on school feeding schemes were the most severely affected, bringing lockdowns for children into disrepute, especially since the risk of death from COVID-19 in children stands at 0.001%. This was compounded by many parents losing their jobs and being unable to feed their children. This is likely to have contributed to the malnutrition that was observed in hospitals.

In better resourced schools and in institutions of higher learning, digitised education is now the norm. This digital era has extended to the employment industry where many companies have encouraged employees to work remotely over the past 18 months. Physical offices may therefore no longer be necessary. In future, we might see that geographical location might be considered less of an obstacle for companies when hiring talents. Numerous companies have already vacated office buildings which might be turned into residential complexes in future. This decreased need for buildings might result in a decline in larger investments.

Science and technology

As scientists at the Institute for Cellular and Molecular Medicine (ICMM), University of Pretoria, we were forced to halt experiments and sample collection during lockdown level five. Our research group embraced technology using Zoom video conferencing and online meeting platforms to stay in touch. Students and staff at the ICMM are still mostly working remotely unless they are performing experiments. We have easily fallen in line with the



government mandated mask-wearing while life has returned to a new normal. Sample collections have resumed and we have had several in person meetings when COVID-19 numbers are at a low in the country. Working remotely has resulted in a culture where employees and students trust each other to do what is required and resulted in a more structured working environment relying on booking and calendars for most activities.

Despite the downsides of this pandemic for research across the country and globe, it has also led to new research opportunities, with thousands of publications on SARS-CoV-2 and COVID-19 that keep increasing as new information becomes available [22-23]. Global initiatives in science are currently ongoing to better understand the virus, how the body responds to it and in finding new ways to treat severe disease, either through existing or new drugs [24–27]. Science and health communities came together during this time to work towards finding new ways to deal with a virus that is affecting everyone equally.

The first South African SARS-CoV-2 genome was sequenced in March 2020 in a collaborative effort between the South African National Bioinformatics Institute (SANBI) and the National Institute for Communicable Diseases (NICD). Since then, many additional SARS-CoV-2 genomes have been sequenced by the KwaZulu-Natal Research Innovation and Sequencing Platform (KRISP) [28]. The sequencing of these genomes has shed light on the variants circulating in South Africa and whether current vaccines being rolled out remain effective against these variants. As the number of cases in South Africa increases with different rates of growth in different regions of the country, genomic information will provide scientists with a better understanding of the mutation and transmission rates of new variants. South Africa participated in several COVID-19 vaccine trials and several vaccines have received emergency approval of use or full FDA approval to aid in curbing the spread of the virus. The J&J vaccine was the first vaccine to be rolled out in this country and Pfizer followed a few weeks later. At the end of August 2021, more than 12 million people in South Africa have received at least one vaccination [29]. Although there is still considerable vaccine hesitancy in South Africa, the hope is that we will be able to vaccinate enough people to reach population immunity to prevent future waves of infection.

Conclusion

COVID-19 was a distant threat that soon became a reality when the first case was reported in South Africa. Subsequently, a nationwide lockdown was implemented that resulted in confusion and uncertainty for many South Africans. As waves of infection have resulted in successive rounds of restrictions, government and citizens have needed to cooperatively take responsibility and work together to fight COVID-19 and the negative effects that this pandemic and lockdown have had on both the South African economy and individual lives. The negative impact that COVID-19 has had in South Africa is undeniable, however, 'every dark cloud has a silver lining', and several positives have also come from this. This pandemic has brought the world to its knees – but amidst the many negatives, we should also try and see the positives and hold onto these in the months to come.



References

1. Virtual Press Conference on COVID-19 - 11 March 2020. 2020.

https://www.who.int/docs/default-source/coronaviruse/transcripts/who-audioemergencies-coronavirus-press-conference-full-and-final-11mar2020.pdf?sfvrsn=cb432bb3_2.

2. Worldometers.info. Worldometers coronavirus. https://www.worldometers.info/ coronavirus/. Accessed June 1, 2020.

3. President Cyril Ramaphosa: Measures to combat Coronavirus COVID-19 epidemic. https://www.gov.za/speeches/statement-president-cyril-ramaphosa-measures-combat-covid-19-epidemic-15-mar-2020-0000.

4. Statistics South Africa. *Business Impact Survey of the COVID-19 Pandemic in South Africa.* 2020. http://www.statssa.gov.za/publications/Report-00-80-01/Report-00-80-01April2020.pdf.

5. Lockdown forced nearly half of small businesses in South Africa to close: study. *BusinessTech.* https://businesstech.co.za/news/business/455100/lockdown-forced-nearly-half-of-smallbusinesses-in-south-africa-to-close-study/. Published December 7, 2020.

6. South Africa's unemployment rate hits record high. *Aljazeera*. https://www.aljazeera.com/ajimpact/south-africa-unemployment-rate-hits-record-high-200623154110111.html. Published June 23, 2020.

7. South Africa's unemployment rate could hit 50%: report. *BusinessTech*. https://businesstech.co.za/news/business/394654/south-africas-unemployment-rate-could-hit-50-report/. Published 2020.

8. SA's unemployment rate hits record 34.4%. *News24*. https://www.news24.com/fin24/ economy/sas-unemployment-rate-hits-record-344-20210824. Published August 24, 2021.

9. Covid kills a decade of employment growth in SA. *Mail & Guardian*. https://mg.co.za/ business/2021-05-08-covid-kills-a-decade-of-employment-growth-in-sa/. Published May 8, 2021.

10. President Cyril Ramaphosa: Additional Coronavirus COVID-19 economic and social relief measures. https://www.gov.za/speeches/president-cyril-ramaphosa-additional-coronavirus-covid-19-economic-and-social-relief.

11. Karrim A. PICS | Protest over food parcels erupts in Johannesburg. *News24*. https://www.news24.com/news24/southafrica/news/pics-protest-over-food-parcels-erupts-injohannesburg-20200428. Published April 28, 2020.

12. Pikoli Z. Hunger crisis: Getting food to the needy. *Daily Maverick*. https://www.dailymaverick.co.za/article/2020-05-14-hunger-crisis-getting-food-to-theneedy/ #gsc.tab=0. Published May 14, 2020.

13. Mvumvu Z. Tens of thousands who do not qualify apply for R350 unemployment grant. *Sunday Times*. https://www.timeslive.co.za/politics/2020-05-11-tens-of-thousands-who-do-not-qualifyapply-for-r350-unemployment-grant/. Published May 11, 2020.

14. Evans J. Govt to pay R350 Covid-19 distress grant from mid-May: Here is who can apply. *News24*. https://www.news24.com/news24/southafrica/news/govt-to-pay-r350-covid-19-distressgrant-from-mid-may-here-is-who-can-apply-20200429. Published April 29, 2020.

15. Jordaan N. President pleased youth have seized opportunity provided by Covid-19 pandemic to create own incomes. *Times Live*. https://www.timeslive.co.za/politics/2020-07-20-presidentpleased-youth-have-seized-opportunity-provided-by-covid-19-pandemic-to-create-own-incomes/. Published July 20, 2020.

16. Not wearing a mask is now a criminal offence in South Africa: minister. *BusinessTech*. https://businesstech.co.za/news/lifestyle/415971/not-wearing-a-mask-is-now-a-criminal-offence-in-south-africa-minister/. Published July 14, 2020.

17. Blue skies, reduced emissions only temporary, won't benefit environment in long run: Experts. *The Economic Times*. https://economictimes.indiatimes.com/news/environment/pollution/blueskies-

reduced-emissions-only-temporary-wont-benefit-environment-in-long-runexperts/ articleshow/75061943.cms. Published April 9, 2020.

18. Business for Clean Air: New initiative to help corporates tackle air pollution as lockdown lifts. *Edie Newsroom*. https://www.edie.net/news/7/Business-for-Clean-Air-New-initiative-to-helpcorporates-tackle-air-pollution-as-lockdown-lifts/. Published June 24, 2020.

19. City air pollution dropped by 28% in Bengaluru, India, during Covid-19 lockdown, new analysis reveals. *Health and Environment Alliance*. https://www.env-health.org/city-air-pollution-droppedby-28-in-bengaluru-during-covid-19-lockdown-new-analysis-reveals/. Published June 22, 2020.

20. McCain N. "Surge" in gender-based violence during lockdown Level 3, says Ramaphosa. *News24*. https://www.news24.com/news24/SouthAfrica/News/surge-in-gender-based-voilence-duringlockdown-level-3-says-ramaphosa-20200613. Published June 13, 2020.

21. Big jump in murders in South Africa since the start of level 3 lockdown. *BusinessTech*. https://businesstech.co.za/news/lifestyle/406325/big-jump-in-murders-in-south-africa-since-thestart-of-level-3-lockdown/. Published June 10, 2020.

22. COVID-19: Global literature on coronavirus disease. World Health Organization. https://search.bvsalud.org/global-literature-on-novel-coronavirus-2019-ncov/. Accessed July 2, 2020.

23. NCBI SARS-CoV-2 Resources. National Centre for Biotechnology Information. https://www.ncbi.nlm.nih.gov/sars-cov-2/. Accessed July 2, 2020.

24. Nextstrain: Genomic epidemiology of novel coronavirus. https://nextstrain.org/ncov/global. Published 2020. Accessed July 2, 2020.

25.The COVID-19 Host Genetics Initiative. https://www.covid19hg.org/. Accessed July 2, 2020.

26. WHO Launches Global Megatrial of the Four Most Promising Coronavirus Treatments. *Trial Site News*. https://www.trialsitenews.com/who-launches-global-megatrial-of-the-four-most-promisingcoronavirus-treatments/. Published March 23, 2020.

27. Ledford H. Coronavirus breakthrough: dexamethasone is first drug shown to save lives. *Nature*. 2020; 582(7813):469-469. doi:10.1038/d41586-020-01824-5

28. Giandhari J, Pillay S, Wilkinson E, et al. Early transmission of SARS-CoV-2 in South Africa: An-epidemiological and phylogenetic report. *medRxiv Prepr Serv Heal Sci.* May 2020. doi:10.1101/2020.05.29.20116376

29. COVID-19 South African Coronavirus News And Information. https:// sacoronavirus.co.za/latestvaccine-statistics/. Accessed August 30, 2021.