e-ISSN: 2789-5661
2024: Vol 4, pp 1-16. https://doi.org/10.38140/ijss-2024.vol4.09
Interdisciplinary Journal of Sociality Studies

The Dynamics Embedded in COVID-19 Pandemic Responses in South Africa: Implications for Public Healthcare Delivery

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EDITORIAL INFORMATION
Received: 07 March 2024
Revised: 07 May 2024
Accepted: 09 May 2024
Published: 28 May 2024

DOI: 10.38140/ijss-2024.vol4.09

Abstract: South Africa recorded the highest number of COVID-19 cases and deaths in Africa despite having what seemed to be one of the best government response mechanisms on the continent. This paper explores the responses of both the government and the citizens of South Africa to the COVID-19 pandemic. Through a literature review, the study established that the government's response to the pandemic was influenced by various factors, including the responsibility to protect citizens' lives, the need to defend the state's sovereignty, and compliance with global health imperatives. This was achieved through strict and coercive government measures, which left little room for public participation in decision-making. The findings also indicate public dissent towards government directives, which may be attributed to a lack of public awareness and preparedness in public health emergencies. The social contract theory provides a useful framework for analysing and understanding the actions of the government and citizens in response to COVID-19 in South Africa. Understanding these aspects is crucial for drawing informative lessons for effective public health and socio-economic interventions in future pandemics and health-related emergencies.

Keywords: Pandemics, COVID-19, South Africa, public healthcare, social contract.

1. Introduction

The outbreak of the COVID-19 pandemic was a life-threatening event that had severe social, health, and economic consequences for countries. As a result, the government, civil society organisations, and individuals or groups of citizens responded to the pandemic in various ways. However, it is primarily the government's responsibility to respond to and manage pandemics and other life-threatening disasters in order to protect and promote the well-being of its citizens. Therefore, the response to any life-threatening situation should aim to improve people's welfare in economic, social, psychological, and physical terms. Although COVID-19 had receded at the time of writing this paper and a sense of normalcy was being restored, it is important to reflect on the actions and interventions of the government and citizens in response to the pandemic and draw lessons, particularly for social and healthcare service providers, to better handle future emergencies.

Throughout history, humanity has suffered from and endured deadly epidemics such as the 14th-century Black Death, the 2009 swine flu, the Spanish and Indian flu, HIV/AIDS, the plague, various waves of cholera, and Ebola (Piret & Boivin, 2021; Sampath et al., 2021; Centers for Disease Control and Prevention [CDCP], 2023), and most recently, the COVID-19 pandemic (World Health Organisation [WHO], 2023). The impact of these pandemics has been devastating, resulting in massive loss of life, economic downturns, and social disintegration. Before discussing the specific responses to the COVID-19 pandemic in South Africa, it is important to briefly outline how the virus became a global public health crisis. On March 11, 2020, the World Health Organisation officially declared COVID-19 a pandemic when the virus had already spread to approximately 114 countries, infecting more than 120,000 people and causing over 4,000 deaths worldwide (WHO, 2020; Okunlola et al., 2021; Olson & Nelson, 2022). This was just the beginning of the outbreak, yet its impact was

How to cite this article:
Kajiita, R. M., & Kang'ethe, S. M. (2024). The dynamics embedded in COVID-19 pandemic responses in South Africa: Implications for public healthcare delivery. *Interdisciplinary Journal of Sociality Studies*, *4*, 1-16. https://doi.org/10.38140/ijss-2024.vol4.09

rapidly escalating. The spread of the virus was likely facilitated by human travel and interactions across the globe (Nelson, 2022; CDCP, 2023; WHO, 2023). To combat the spread of the disease and mitigate its impact, scientists and governments pooled their resources (financial and expertise) to save lives. Some of the key activities included countering the spread of misinformation and disinformation, which had the potential to hinder effective public health communication and interventions globally (Olson & Nelson, 2022; WHO, 2023). Other important measures included expediting the development of vaccines and implementing welfare programmes to support individuals and families facing income losses. As of October 18, 2023, there were over 771 million confirmed COVID-19 cases and more than 6.97 million deaths worldwide, with South Africa reporting over 4.07 million cases and over 102,595 deaths (WHO, 2023).

According to Obasa et al. (2021), South Africa recorded its first case of COVID-19 on March 5, 2020, in the KwaZulu Natal Province. This case was significant because it prompted the government and healthcare practitioners to mobilise resources and skills to respond promptly and mitigate the impact on the country. In essence, this first case brought the government's intervention plans into action, both in policy and practice. For example, due to the rapid spread of infections within a week, the president declared a National State of Disaster on March 15, 2020. This was followed by the establishment of a National Command Council chaired by the president and consisting of other senior government officials, such as cabinet ministers, the National Police Commissioner, the head of the South African National Defence Force, and a secretariat (Obasa et al., 2021). Additionally, the National Department of Health established the Ministerial Advisory Committee (MAC) on the COVID-19 pandemic. However, the composition of the MAC, which was primarily focused on biomedical expertise and excluded significant others such as social scientists, legal experts, and community representatives, was questioned (Zondi, 2021).

Fortunately, the declaration of a National State of Disaster empowered the government to implement measures such as school closures, restrictions on group gatherings, travel bans, and a 21-day national lockdown starting on March 27, 2020 (Zondi, 2021). Subsequently, mobile test units and thousands of community healthcare workers were deployed across the country to conduct testing and track active cases in the fight against the pandemic. Based on these actions, it is evident that South Africa had a comprehensive plan to respond to the COVID-19 pandemic. This plan proved to be valuable at a time when myths and conspiracy theories about the pandemic were spreading worldwide, including in South Africa. These myths included claims that certain foods, exposure to hot weather, traditional medicine, and alcohol consumption could cure or prevent COVID-19 infections (Kebede et al., 2020). Whether these myths and conspiracies had a positive or negative impact on the response and management of the COVID-19 outbreak in South Africa requires further research.

The early days of the COVID-19 outbreak in South Africa were marked by denial, fear, confusion, and a high level of ignorance among the population regarding the causes and epidemiology of the disease (Kajiita & Kang'ethe, 2021). This was in contrast to the significant efforts made by the World Health Organisation to create public health awareness and disseminate scientific evidence about the pandemic. Therefore, this paper aims to explore the dynamics of the COVID-19 response in South Africa and its implications for public healthcare delivery. The key questions to be addressed are: (i) How did the government and the citizens respond to the COVID-19 pandemic? (ii) Why did the government and the citizens respond in the way they did? The answers to these questions are crucial for understanding the explicit and implicit interests of the government and the public during public health crises, such as the COVID-19 pandemic, and to inform future interventions.

1.1 Problem statement

Ostensibly, pandemics have multifaceted effects on human well-being. Recent pandemics in South Africa, such as Coronavirus and HIV/AIDS, have caused millions of deaths (WHO, 2023), economic losses (Ebrahim, 2020; Ozili, 2020; Ozili & Arun, 2020; Olson & Nelson, 2022; Makin & Layton, 2021),

societal disintegration, and a perfidious impact on mental health (Griffith, 2020; Halvorsen et al., 2020). The government's and citizens' responses to an outbreak of a pandemic are of paramount importance in effectively and efficiently responding to and managing the impact of the diseases. Adequate awareness and clear information dissemination on pandemics such as COVID-19 are key to countering misinformation, misconceptions, and miscommunication associated with disease outbreaks (Ullah et al., 2021; Olson & Nelson, 2022). This is instrumental in prevention and response programmes for effective service delivery and disease containment. South Africa instituted one of the longest lockdowns in the world to manage and mitigate the impact of the COVID-19 pandemic on the health of its citizens (Obasa et al., 2021). This approach by the government raised concerns about human rights, public participation, the government's sovereignty, public awareness, and global public health imperatives, to mention but a few. Consequently, these issues will culminate in behavioural paradoxes between government structures and citizens responding to the COVID-19 pandemic and other public healthcare measures in the future. For instance, public behaviour seemed to oppose the government's rules and regulations addressing the pandemic, leading to a confrontation between law enforcement machinery and the citizens. Therefore, such mismatches need to be understood for future public healthcare interventions. Against this background, this paper explores the dynamics embedded in COVID-19 responses and their implications for public healthcare delivery in South Africa.

2. Theoretical Framework

The social contract theory explains the legitimacy of political authority and the obligations of individuals within a society (McCartney & Parent, 2015; Sreedhar, 2019). The theory helps us to understand the limitations to individual rights and freedoms in relation to the state in exchange for the protection of other rights and freedoms (McCartney & Parent, 2015). However, this ideological relationship is an implicit agreement (social contract) among members of a society to abide by certain rules and norms, which are enforced by the state, to bring order and coexistence in society. Social contract theory was propounded by Thomas Hobbes, who argued that, in the absence of a sovereign authority, life would be disorderly and in a state of anarchy (Neidleman, 2012). John Locke (another proponent of the theory) argues that individuals possess certain inalienable rights, including life, liberty, and property, and they enter a social contract with a government that protects these rights. Therefore, if the government does not fulfil these obligations or violates the rights of its citizens, people begin to seek alternatives (Neidleman, 2012). This view corroborates Jean-Jacques Rousseau's view that the social contract is premised on tenets of the general will and the sovereignty of the people. This means that sometimes, individuals must surrender themselves completely to the community for the common good. The common good perspective serves as the basis for legitimate government authority, with rules and regulations focusing on the interests of the community rather than individual desires.

The application of social contract theory in a government's and citizens' response to COVID-19 depicts the balancing of the rights and interests of individuals for the collective well-being of society but with limitations on individual desires, rights, and freedoms in some contexts. The social contract theory can explain various aspects of governments' responses to the COVID-19 pandemic, such as stringent public health measures, vaccine distribution, information sharing and transparency, support for vulnerable populations, ethical considerations, and international cooperation. Like other governments across the globe, the South African government implemented lockdowns, mask mandates, and social distancing requirements to limit the spread of the virus. From a social contract perspective, these measures can be seen as temporary limitations on individual freedoms in exchange for protecting public health, life, and the country's common good. Regarding vaccine distribution, the social contract theory justifies the prioritisation of certain groups, such as frontline healthcare workers and the elderly, because they are considered to be at the highest risk. Moreover, information sharing and transparency are important ingredients for fostering trust and ensuring that citizens can

make informed decisions about their behaviour and how the government should act on their behalf during the health crisis. In the context of the theory, individuals can uphold principles of mutual consent and cooperation in making decisions that affect them most, such as restrictions and lockdowns during the COVID-19 pandemic.

The social contract theory also elucidates ethical considerations in the government's response to the COVID-19 pandemic, particularly regarding the balance between individual rights and public health imperatives. The government needed to navigate ethical dilemmas such as privacy concerns related to contact tracing and surveillance, as well as mandatory vaccination for frontline workers while upholding the principles of fairness, transparency, human rights, and accountability. In the context of the COVID-19 pandemic, the social contract theory extends beyond local boundaries to include considerations of international cooperation and solidarity. This explains why governments expressed a mutual obligation to share resources, knowledge, expertise, and regulatory frameworks to combat the spread of the virus and mitigate its impact on a global scale. This also explains the international border closures during the peak days of the pandemic. Therefore, the social contract theory emphasises the reciprocal relationship between individuals and the state, where governments have a responsibility to protect the health and welfare of their citizens while respecting their rights and freedoms, and citizens explicitly or implicitly surrender some of their rights to allow the government to protect them. By upholding the principles of consent, reciprocity, and collective action, governments can navigate the complexities of health emergencies effectively and efficiently.

3. Methodology

To understand the various dimensions and impact of the COVID-19 pandemic on economic, social, health, political, religious, and technological aspects of life, different research approaches can be used, such as quantitative, qualitative, and mixed methods (Creswell, 2014; Denscombe, 2014; Patton, 2015). This paper adopts a literature review design, a sub-method of qualitative research, to explore how and why the citizens and government responded to the COVID-19 pandemic in South Africa. The literature search lacks publications that examine why the citizens and government responded the way they did during the outbreak and throughout the disease period. Therefore, this paper aims to address that gap. However, there is an abundance of literature on COVID-19 that provides sufficient information to conduct a literature analysis.

The literature analysis follows the six steps of conducting a review analysis outlined by Templier and Paré (2015). First, clear research questions or objectives are formulated to ensure a credible and reliable review. The two questions in this paper are: (i) How did the government and citizens respond to the COVID-19 pandemic? (ii) Why did the government and citizens respond the way they did to the COVID-19 pandemic? Second, the search for relevant literature from reputable sources is conducted. This paper utilises journal articles and reports from credible organisations such as the World Health Organization, Centres for Disease Control, and government departments. These reports provide up-to-date statistics and policy directions on the subject matter. The search for appropriate materials involves using a combination of keywords and phrases such as COVID-19, myths about COVID-19, COVID-19 vaccines, treatment and management of COVID-19, public response to COVID-19, South Africa and COVID-19, among others. Various databases, including ProQuest, ScienceDirect, CABINET, EBSCOhost, Scopus, and Google Scholar, are searched to generate articles.

The third step involves screening the materials for inclusion in the analysis. The articles are assessed for appropriateness based on the following criteria: articles published in the English language, focusing on the South African COVID-19 pandemic responses, published between the years 2020 and 2024, and adopting quantitative, qualitative, or mixed methods. South Africa was chosen because it is one of the African countries that implemented one of the longest structured lockdowns in the world to manage the impact of COVID-19. The inclusion of articles utilising multiple methods

ensures that the analysis is based on rich, verifiable, and reliable information. This process leads to the fourth stage of assessing the quality of the studies to be included in the review. The fifth and sixth steps involve extracting and analysing the data. As this is a narrative review, the analysis focuses on interpreting prior findings without seeking generalisation (Sylvester et al., 2013). Themes are developed from the collected and summarised findings related to the responses to the COVID-19 pandemic and are further discussed. The findings are presented thematically, illustrating how and why the government of South Africa and its citizens responded to and managed the COVID-19 pandemic. Uncovering the responses of citizens and the government to the COVID-19 pandemic is crucial in drawing insightful and informative lessons for future interventions and the management of public health crises.

4. Discussion of Findings

In this section, we present and discuss the key themes synthesised from the literature, which shed light on how and why both the government and citizens responded to the COVID-19 pandemic. These themes illustrate various factors that influenced the citizens' resistance to certain government regulations, such as perception of rights infringement and lack of awareness and consultation in decision-making. Conversely, the government implemented regulations to restrict movement and provide medical provisions like vaccines as part of their responsibility to protect citizens and address the global imperative of curbing the pandemic. By examining the explicit and implicit activities related to the COVID-19 pandemic response in South Africa and their potential impact on public healthcare delivery, we can gain valuable insights for designing future health emergency interventions.

4.1 Public dissent versus government regulations

The COVID-19 pandemic highlighted various paradoxes, particularly in relation to how citizens responded to government regulations. South Africa is known for having one of the most progressive constitutions in the world. However, the pandemic tested the "progressive nature" of the constitution when it came to providing essential services and respecting fundamental human rights (Zondi, 2021). An analysis of diverse literature indicates that the public disagreed with the government's rules and regulations to protect lives. The literature suggests that the government's inability or reluctance to provide essential goods and services, both before and during the pandemic, led to citizens being hesitant to follow guidelines such as regular handwashing, social distancing, and wearing face masks (Kajiita & Kang'ethe, 2021; Zondi, 2021). For example, South Africa, being a country with water scarcity (Department of Water and Sanitation, 2023), meant that residents in rural areas and informal settlements couldn't afford water for basic domestic use and regular handwashing as recommended. Therefore, for the government to effectively implement these guidelines, it is crucial to establish structures and systems that support accessibility and implementation in the most vulnerable communities. This finding suggests that when government service delivery structures are ineffective, the situation worsens during times of disaster. However, despite these weaknesses and gaps in service delivery, the government's responsibility was to minimise the spread and impact of the disease through health, social, and economic recovery (Ullah et al., 2021). Ultimately, both individual and collective public support for these efforts is essential.

According to Ngangue et al. (2021), public responses to government regulations and interventions, such as vaccination, can be categorised into three attitudes: acceptance, reluctance, and refusal. In the South African context, for instance, acceptance of vaccination was driven by personal experiences of relatives being diagnosed with or dying from COVID-19, as well as the government's consistent communication about the importance of vaccination. However, reluctance and refusal were rooted in fears that the vaccines were developed too quickly, had insufficient clinical trials, and carried potential side effects (Ngangue et al., 2021). These findings highlight the contradictory behaviour of

citizens and their failure to comply with government directives in addressing the COVID-19 pandemic.

4.2 Defending the government sovereignty versus global health imperatives

The analysis revealed that the government's response to COVID-19 manifested some power dynamics in two-fold. First, the regulations and policies ratified and implemented by the South African government were designed to defend its sovereignty and showcase to the citizens that they were in control and able to protect them (Munzhedzi, 2021; Moodley, 2021). This was evidenced by border restrictions that were implemented to regulate both air and land travel in and out of South Africa (Kajiita & Kang'ethe, 2021; Zondi, 2021). This implies that whatever decisions were taken were informed by the state's power to do so, without external forces. However, the government implemented some regulations to fulfil global health imperatives mandated by the World Health Organisation (WHO, 2023). The World Health Organisation required countries across the globe to adopt a comprehensive response to the COVID-19 pandemic. The comprehensive response focused on containment and management measures at the national, regional, and global levels under the mantra 'not leaving anyone behind'. This implies that a country, a region, or individual citizens should be carried along with the interventions implemented. This global mandate aimed at reducing the vulnerability of communities to future pandemics, building resilience to future shocks, and overcoming systematic inequalities that exposed many people to the pandemic (Ebrahim, 2020). To achieve these imperatives, countries, including South Africa, were expected to undertake large-scale coordinated and comprehensive health response measures and policies that addressed the socioeconomic, humanitarian, and health aspects of human rights (Ebrahim, 2020). Therefore, individually and collectively, countries had to combine response measures to save lives, protect communities, and expedite a quicker recovery. Thus, despite the state having its powers, it was expected to act according to the global trends and requirements to arrest the spread of the pandemic, although this was not overly welcomed by the citizens.

Nonetheless, the concern is how this information is passed from the government structures to the citizens and whether they understand the government's actions in such contexts. For instance, there was a public uproar when the South African government implemented strict travel and movement regulations during the lockdowns (De Villiers et al., 2020). South Africa was one of the countries that implemented structured lockdowns soon after the first case of the COVID-19 pandemic was reported. However, while the speedy implementation of the lockdown was perceived as an excellent example of good governance and decisive action by a group of policy commentators, others were of contrary opinion (De Villiers et al., 2020). Literature reveals that the South African government had to quickly implement lockdowns to slow the rate of infections because the healthcare system could not cope with a high number of infections, having witnessed the wealthier countries in Europe, America, and Asia being overwhelmed (Zondi, 2021).

To defend what we would call 'South African health sovereignty', the government instituted travel bans and revoked visas to countries considered high-risk, such as Italy, the USA, the UK, Germany, and China, to mention but a few (Ramaphosa, 2020a). These hardline measures were a result of the president's pronouncement that the COVID-19 pandemic required an extraordinary response, and there could be no half-measures (Ramaphosa, 2020c). These utterances indicated the need to defend the 'health sovereignty' and well-being of South Africans at whatever cost. Henceforth, the president emphasised that the health of South Africans was the government's priority, hence asserting the state's authority in the activities that followed. This priority was then effectuated through multisectoral planning and preparation, primary detection of cases, lockdowns at various levels, and enhanced surveillance (Ryan, 2020). Interestingly, the South African response strategy was hailed at the international level and considered as a benchmark for other countries (Ryan, 2020).

As the pandemic progressed, the government began relaxing and adjusting the hardline guidelines to match the needs and severity of the pandemic. For instance, with the introduction of the COVID-19 vaccine, the vaccination certificate became a requirement for international travel (Zondi, 2021), similar to the yellow fever vaccination certificate which was a mandatory entry requirement for many countries (WHO, 2023b). The International Health Regulations (2005) provide an "overarching legal framework that defines countries' rights and obligations in handling public health events and emergencies that have the potential to cross borders" (WHO, 2023b). These regulations allow governments to require proof of vaccination or other prophylaxis, legitimising vaccine mandates in the context of international travel. Consequently, vaccine mandates for airline travel to South Africa were required for several months until the COVID-19 pandemic was no longer regarded as a public health threat.

Notably, Zondi (2021) alludes to the sovereignty of countries during the COVID-19 pandemic. He highlights that following the WHO guidelines on the COVID-19 pandemic, the state was placed at the centre and coordinated with other stakeholders, such as the private sector and civil society, to respond effectively. The sovereignty of the state became important because these international guidelines required a responsible, reasonable, transparent, capable, and caring government to independently implement the global health imperatives (WHO, 2023). Furthermore, Bol et al. (2021) noted that state sovereignty has had a positive spillover effect on support for democracy and its institutions. Perhaps this is due to the realisation that the government can make hard decisions to prioritise the health of vulnerable individuals over economic interests (Bol et al., 2021). Thus, from a political point of view, the pandemic offered the political parties, especially the ruling party, the opportunity to showcase their dedication to the healthcare of the country and the lives of its citizens.

4.3 Enforcing compliance through coercive government machinery

The spread of the COVID-19 pandemic was sporadic, requiring governments to undertake both ad hoc and systematic response measures. However, some of these measures became unpopular with the citizenry for several reasons. For example, the South African government enforced various regulations, including social distancing measures, movement restrictions, and personal and community measures to reduce transmission of the disease (Zondi, 2021). As a result, a national lockdown was implemented, which led to the closure of schools, changes in working schedules, a ban on the sale of alcohol and cigarettes, and the requirement to wear masks in public places (Ramaphosa, 2020c). While these measures were important to prevent healthcare systems from being overwhelmed and protect the already fragile economy, the public response indicates that the government may have used more authoritative approaches (Yu, 2023). However, what may have been seen as coercive was ultimately in the best interest of preventing the spread of the virus and reducing the number of deaths associated with the pandemic.

The public outcry against the government's coercive enforcement approaches aligned with the World Health Organization's caution against the harsh implementation of containment measures due to their social and economic impacts. The WHO advocated for greater public participation in decision-making (Zondi, 2021). Literature suggests that governments utilised emergency laws to respond to what appeared to be an existential threat to humanity and the projected impact on livelihoods and economies (Upadhaya et al., 2020). Therefore, the declaration of a state of disaster in South Africa was not only justified, but necessary, and it involved the use of all government machinery. This declaration enabled the government to access funds reserved for dealing with disasters and emergencies, allowing for the purchase of health-protective equipment and other social relief activities (Ramaphosa, 2020 a,b,c), which facilitated the delivery of public healthcare services in the country (Republic of South Africa, 2022).

Further, the analysis revealed that South Africans had mixed reactions regarding the rollout and requirements of the COVID-19 vaccine (Cooper et al., 2021). This may be due to the myths

surrounding the disease or concerns about the potential consequences of the vaccines. The hesitancy and refusal of the vaccine led the government to implement coercive measures, particularly for public servants and frontline workers. These measures included restricted access to public institutions for work or services (Cooper et al., 2021). As a result, those who had not received the vaccine faced stigmatisation and were considered the 'enemy of the people'. However, it is important to note that these coercive approaches to vaccination have unintended consequences, such as the erosion of civil liberties, disunity in global health governance, exclusion from work and social life, and a compromise of key principles of public health ethics (Cooper et al., 2021).

Like other countries around the world, South Africa utilised the police and military to enforce lockdowns and social distancing in public spaces (Greyling et al., 2021). The use of force by the police and military raised questions about the legitimacy of such actions in relation to public healthcare regulations. This enforcement resulted in arrests, imprisonment, and hefty fines for individuals who were found guilty of violating COVID-19 regulations (Zondi, 2021). Similarly, Boateng, Kusi, and Ametepey (2022) note that Ghanaians experienced police violence and extrajudicial sanctions under the pretext of indiscipline and violations of restrictions. Critics argue that the government employed excessive force and extensive measures without considering the structural constraints that made compliance with COVID-19 restrictions difficult for many people (Boateng et al., 2022).

The citizens' defiance of COVID-19 pandemic restrictions reflects the shortcomings of broader policy processes, practices, and governance dynamics in the country. For example, South Africa implemented the longest and most structured lockdowns in the world, with five levels of differing regulations. Alert Level 5 was the most stringent, while Alert Level 1 was the most relaxed (Zondi, 2021). The rationale behind the five alert levels was to allow healthcare systems the time and space needed to prepare and manage scarce resources in combating the virus (Makin & Layton, 2021). However, the unintended consequences were significant. The initial lockdown, implemented on March 27 2020, was particularly challenging and confusing. South Africans faced curfews and restrictions on movements, limiting travel to essential purposes and service delivery (Greyling et al., 2021).

Furthermore, the government banned the sale of alcohol and tobacco, closed public places for exercise and recreation, and instructed citizens to work from home whenever possible (Ramaphosa 2020a). To enforce compliance, the police and the army were deployed, particularly in cities like Cape Town (Greyling et al., 2021). The South African government even issued arrests for those who failed to adhere to self-isolation and quarantine requirements after testing positive for the virus (Obasa et al., 2021). Regrettably, the use of force and brutality by law enforcement on citizens was unjustified and contributed to the stigmatisation of people infected with COVID-19. The literature emphasises the need for a collective effort from the government, civil society, and key stakeholders to address the excessive use of force during a pandemic (Obasa et al., 2021).

In addition to preventing the spread of the virus, the restrictions also had a secondary purpose: to prevent other emergencies associated with road accidents and alcohol-related hazards. These emergencies had the potential to burden the healthcare system in South Africa. Research by Obasa et al. (2021) shows that the lockdown and temporary ban on alcohol sales successfully reduced road accidents, trauma cases, and non-COVID-19 hospital admissions.

To highlight the significance of the alcohol ban, it's worth noting that when the ban was lifted during Alert Level 3 lockdown, hospital wards in Western Cape and Gauteng Provinces immediately experienced an increase in alcohol-related trauma, gender-based violence, and accidents. As a result, the alcohol ban was reinstated within a week (Obasa et al., 2021). These situations provide both positive and negative examples of the impact of enforcing regulations during a public health crisis. Similarly, Angaw (2021) observed that although the policy responses could have been better

supported by appropriate institutional implementation platforms, they played a crucial role in mitigating the socio-economic and health crises caused by the pandemic.

4.4 Government versus citizen participation in decision-making

The interventions implemented by governments during the COVID-19 pandemic have raised human rights concerns and questions about the inclusion of citizens in decision-making processes. For example, when discussing mandatory vaccination in South Africa, Moodley (2021) noted that the legitimacy of mandatory vaccine policies is based on a public health ethics framework that considers limited autonomy, social justice, and the common good. Ideally, vaccine uptake should occur voluntarily as an act of solidarity to ensure that everyone is protected from the disease. However, due to the fast spread of the virus and people's reluctance to take the vaccine due to a lack of awareness or belief in myths surrounding its production (Ackah et al., 2022; Cooper, Rooyen & Wiysonge, 2021; Hoque et al., 2021), and potential impact (Moodley, 2021), the government overlooked the rights of individuals, especially frontline workers. The government saw vaccination as an important response to protect health systems and the entire population.

From the perspectives of public and personal health rights, Bardosh et al. (2022) observed a significant shift in policies during the COVID-19 pandemic, including population-wide vaccine mandates, domestic vaccine passports, and restrictions on work and travel based on vaccination status. These policy changes have sparked not only human rights debates but also ethical and scientific questions. Arguably, if a large percentage of the population becomes sceptical about the infringement of their rights, these policies are likely to be counterproductive and unpopular among citizens. This is why Bardosh et al. (2022) argue that although COVID-19 vaccines have had a significant impact on reducing COVID-19-related morbidity and mortality, mandatory vaccine policies are questionable and are likely to cause more harm than good. The harm in this context includes restrictions on work, education, public transport, and social life based on vaccination status. This has led to stigma and social polarisation, adversely affecting people's health and well-being (Bardosh et al., 2022). It has also damaged trust between citizens, the government, and public healthcare institutions and may reduce the uptake of future public health measures, such as routine immunisations.

Arguably, South Africa has been hit harder by the virus than any other African country, and the restrictions on individual rights imposed through vaccination could be seen as a legitimate objective. This is especially important for a country with a high number of people living with HIV/AIDS (WHO, 2023c). This observation aligns with the South African Bill of Rights (section 36), which states that any limitation of rights must be "reasonable and justifiable in an open and democratic society based on human dignity, equality, and freedom" and that the restriction must be proportional to the purpose of the limitation (Republic of South Africa, 1996). However, such restrictions must be based on scientific evidence and should not be discriminatory or unreasonable. Moodley (2021) asserts that a public health ethics approach supports the limitation of individual rights for the greater good and the promotion of solidarity. Unfortunately, the public lacks this understanding of the law, which is why there has been an uproar during the COVID-19 vaccination drive and other restrictions in the country. The figure below illustrates the unfolding of events in South Africa's response to the COVID-19 pandemic, showing that there were minimal opportunities for public consultation and participation.

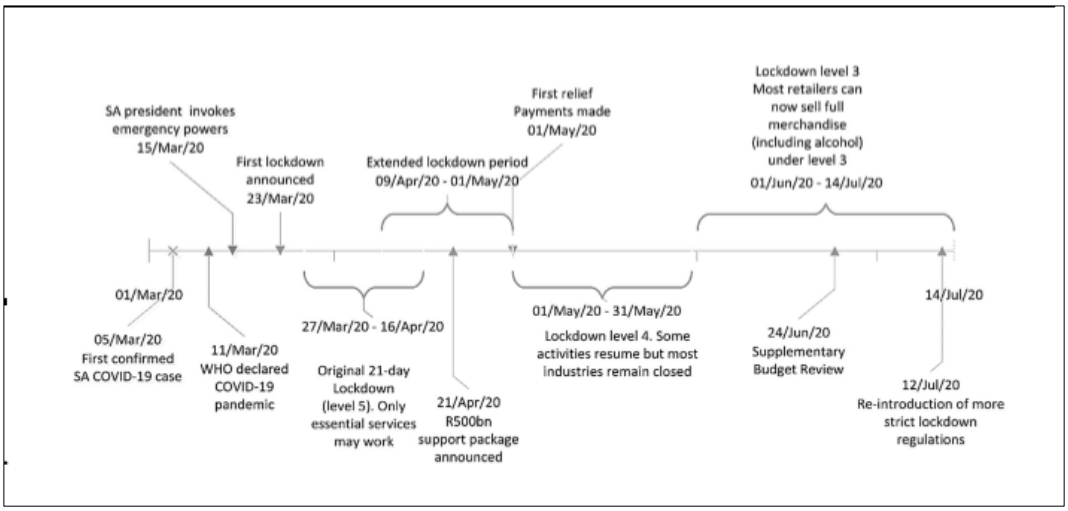

Figure 1: *Illustrations of Key events in South Africa's response to the COVID-19 pandemic*
Source: De Villiers et. al. (2020).

A study by Bhusal (2020) reveals that the COVID-19 pandemic significantly limited the democratic right of ordinary people to participate in local decision-making, potentially resulting in flaws in government and municipal budgeting and programme implementation. However, despite the government's reliance on emergency and disaster-related provisions of the law, citizens, through collective voices such as trade unions, demanded that their interests and voices be heard. For example, the South African Democratic Teachers Union and other stakeholders objected to the reopening of schools due to concerns about the safety of teachers and students. They demanded assurances regarding safety measures and protective equipment such as masks, gloves, and sanitisers (Munzhedzi, 2021). This highlights the crucial role of collective voices in delivering public healthcare services during health emergencies.

The analysis indicates that the lack of public deliberation and community engagement in developing ad hoc regulations during the COVID-19 pandemic was a major point of contention. For instance, the criminalisation of non-compliance with these ad hoc public health measures undermines the fundamental principles of the Bill of Rights as enshrined in the Constitution (Staunton et al., 2020). The principle of transparency dictates that the public should be informed of all relevant decisions and the processes leading to those decisions. Sections 195, 215, and 217 of the 1996 Constitution also stipulate that public decisions and processes must be transparent, especially to those directly and indirectly affected by them (Republic of South Africa, 1996). These provisions emphasise the importance of public access to information. According to Obasa et al. (2021), public health measures have been associated with serious violations of individual rights due to abuses of power and gaps in the implementation of well-intentioned policies. They further argue that while individuals complied with lockdown and other regulations that may have infringed upon their rights for the greater good of the country, navigating the concept of sacrificing individualism for the "collective good" during a pandemic is challenging (Obasa et al., 2021). Therefore, respecting human rights is essential for the effective implementation of public health policies and interventions, even during health emergencies and pandemics.

4.5 Public awareness

Irrefutably, public awareness plays a crucial role in the way citizens respond to pandemics and other public health directives. When the COVID-19 pandemic broke out, many South Africans were already aware of the havoc it was causing in Europe, China, and America. The media had been

highlighting crowded health facilities and numerous deaths before the first case was reported in South Africa (Zondi, 2021). To some extent, South Africa benefited from social media and mainstream mass media, which provided warnings and information about the impending danger of the COVID-19 pandemic (Zondi, 2021). Additionally, the South African Department of Health issued a notice about the disease outbreak in China on January 23, 2020, and assured the public that they had plans in place to respond effectively. A week later, the Minister of Health reinforced this information through a media briefing, outlining the country's strategies for managing the COVID-19 pandemic once cases were reported in the country. These strategies included screening at ports of entry, organising outbreak response teams, distributing information to healthcare workers, and establishing a hotline for related inquiries (Department of Health, 2020a). From a public health perspective, one could argue that the government created some awareness about the disease and its response plans. However, the role of the citizens in this awareness stage seemed undefined.

Nevertheless, the ban on alcohol and cigarettes to prevent the spread of infections was unprecedented. The citizens perhaps did not understand how these substances could contribute to the disease, leading to public protests and crimes such as break-ins to access them (De Villiers et al., 2020). This suggests that the public information provided about these temporary restrictions and how alcohol and cigarettes could be potential transmitters of the infections was not adequately clear. Furthermore, research indicates that the outbreak of the COVID-19 pandemic did not allow for public participation in government programmes through avenues such as imbizos (Munzhedzi, 2021), which are essential for creating public awareness about various health and non-health issues. On the contrary, people were required to avoid large gatherings in churches, funerals, and traditional events, which deprived those without access to mainstream media of the opportunity to learn about the disease and its impact on their lives through community and social gatherings.

Additionally, according to Cooper, Rooyen, and Wiysonge (2021), vaccine hesitancy in South Africa can be attributed, to some extent, to a lack of adequate public awareness. Literature suggests that the uptake and perceptions of the COVID-19 vaccine varied based on factors such as age, race, education, political affiliation, geographical location, and employment status (Ackah et al., 2022; Cooper et al., 2021; Hoque et al., 2021). These findings are crucial for designing effective public awareness interventions to improve healthcare service delivery. However, COVID-19 vaccine hesitancy may arise from myths, such as the belief that people in hot areas are safer than those in cold places, younger people are safer than older ones, and that healthcare practitioners and frequent travellers are more vulnerable. These misconceptions lead people to believe that the vaccine is intended for certain groups, raising concerns about potential side effects (Ackah et al., 2022; Hoque et al., 2021; Yang et al., 2022). Therefore, before administering any vaccine, it is essential to provide tailored information that informs and builds trust with the public. Principles of transparency, participation, and consultation are instrumental in facilitating the effective consumption of public health information and services (Munzhedzi, 2021).

Arguably, the government and other public health institutions can reduce vaccine hesitancy in hard-to-reach locations (Kollamparambil & Oyenubi, 2021). Literature suggests that the most aware segments of the population regarding disease prevention are the wealthy and the educated individuals (Kollamparambil & Oyenubi, 2021). Consequently, they are more likely to adhere to regulations on social distancing by staying at home, wearing face masks, using hand sanitisers, and being more open to vaccine uptake. Adequate public awareness is crucial for effectively managing future pandemics through prevention, early detection of infections, reduction of transmission routes, and protection of vulnerable populations (Yang et al., 2022). Therefore, public awareness plays a vital role in shaping how citizens respond to government interventions during public health emergencies.

5. Implications for Public Healthcare

Generally, pandemics are sporadic, and each disease is unique. Due to the unpredictability of outbreaks, governments and international health organisations should adopt proactive and reactive approaches to provide community-tailored interventions. The government, through public health structures, should focus on creating awareness about vaccinations, personal hygiene, and government operations during health emergencies. These activities can address the confusion that arises at the beginning of a pandemic when there are no clear methods of prevention, vaccination, and treatment plans. Such steps would minimise the politicisation of pandemics, as witnessed during the global COVID-19 pandemic, such as those by the late Tanzanian President Magufuli and former US President Donald Trump. While the late Tanzanian President Magufuli denied the existence of COVID-19 and its devastating effects, insinuating that it was laboratory-produced, Donald Trump criticised lockdowns and restrictions as violations of human rights, downplaying the seriousness of the pandemic. Political statements like these can lead citizens to believe that public health measures impede their freedoms and rights, which can hinder the efforts of healthcare practitioners and others in combating the pandemic. Clearly, understanding and having high knowledge about various aspects of diseases are vital in dispelling myths and beliefs that hinder effective public health interventions. Research indicates that individuals with a clear understanding of the scientific truths surrounding COVID-19 transmission rejected myths and misinformation associated with them. Therefore, public awareness plays a crucial role in preparing communities for future health disasters. Social and healthcare practitioners should have knowledge and skills in the biomedical aspects of disease outbreaks, as well as the social, economic, political, religious, and geographical dynamics of the population, in order to deliver effective and efficient healthcare services.

The analysis has revealed some conflicts between the government and citizens in response to the COVID-19 pandemic. The social contract theory provides insightful ideas that justify the government's actions against citizens' expectations. As explained in the theoretical framework section, the theory justifies why the government overlooks individual rights and why citizens must surrender some rights for the common good. In the context of this study, the government had to use its authority to protect the lives of its citizens through lockdowns, vaccinations, bans on alcohol and tobacco products, and other measures without seeking approval from the citizens. This was not only beneficial for the country but also for neighbouring countries and the global community in solidarity to mitigate the impact of the COVID-19 pandemic. Public health practitioners must continually create awareness of health emergencies and educate the public about the limitations of their rights to facilitate smooth service delivery during health crises.

6. Conclusion

The impact of the COVID-19 pandemic in South Africa has resulted in varying degrees of loss of human life, economic setbacks, and social disruptions. Of particular interest are the lessons we can learn from such a pandemic to better prepare for the future. It is crucial to move away from a false sense of normalcy regarding diseases, which hinders the potential for future interventions. The findings indicate that the government's response to the pandemic was influenced by several factors, including the duty to protect citizens' lives, the need to safeguard the state's sovereignty, and compliance with global health imperatives. This was achieved through the implementation of stringent government measures and limited opportunities for public participation in decision-making. The findings also reveal public dissent towards government directives, which could be attributed to a lack of awareness and preparedness for health emergencies among the general population. The analysis revealed some paradoxes in the sense that, despite the government's actions being in the best interest of the citizens, certain aspects of human rights were compromised during the pandemic, such as the right to public participation and consultation, freedom of movement, and the freedom to choose treatment. The COVID-19 pandemic encompassed various dimensions, as it

was not simply a health crisis but also had socioeconomic, humanitarian, political, security, and human rights implications. Therefore, government responses to such pandemics in the future should be strategic and systematic, allowing the structures of the state and society to collaborate for the greater good. When government interventions and practices are not clearly communicated to the public, they are likely to generate opposition towards public health interventions and undermine the well-intentioned efforts to manage and mitigate the impact of health crises. The paper recommends that the government ensure access to up-to-date health information and allocate resources (financial and human) for the management of public health crises. Consequently, there is a need to enhance public awareness and preparedness for healthcare disasters among communities in the country to prevent excessive strain on healthcare systems and oppose healthcare emergency responses in the future. Furthermore, future studies should focus on modalities and policy frameworks for citizen engagement during public healthcare emergencies in South Africa.

6. Declarations

Author Contributions: Conceptualisation (R.M.K. & S.M.K.); Literature review (R.M.K. & S.M.K.); methodology (R.M.K. & S.M.K.); software (N/A); validation (N/A); formal analysis (R.M.K.); investigation (N/A); data curation (N/A) drafting and preparation (R.M.K.); review and editing (S.M.K.); supervision (S.M.K.); project administration (R.M.K.); funding acquisition (N/A). All authors have read and approved the published version of the article.

Funding: This study did not receive any external funding.

Acknowledgements: There is no acknowledgement to make.

Conflict of Interest: The author declares no conflict of interest.

Data availability: This is a literature review-based paper; all materials used are referenced. The reference list has the title and, where possible, links to those materials.

References

Ackah, B. B., Woo, M., Stallwood, L., Fazal, Z.A., Okpani, A., Ukah, U.V., & Adu, P. A. (2022). COVID-19 vaccine hesitancy in Africa: A scoping review. *Global Health Research and Policy*, 7(2). https://doi.org/10.1186/s41256-022-00255-1

Angaw, K.W. (2021). Policy responses and social solidarity imperatives to respond to the COVID-19 pandemic socioeconomic crises in Ethiopia. *ClinicoEconomics and Outcomes Research*, 279-287, https://doi.org/10.2147/CEOR.S300695

Bardosh, K., De Figueiredo, A., Gur-Arie, R., Jamrozik, E., Doidge, J., Lemmens, T., ... & Baral, S. (2022). The unintended consequences of COVID-19 vaccine policy: why mandates, passports and restrictions may cause more harm than good. *BMJ Global Health*, *7*(5), e008684.https://doi.org/10.1136/bmjgh-2022-008684

Bhusal, T. (2020). Citizen participation in times of crisis: Understanding participatory budget during the COVID-19 pandemic in Nepal. *ASEAN Journal of Community Engagement*, *4*(2), 321-341. https://doi.org/10.7454/ajce.v4i2.1103

Boateng, F.G., Kusi, S., & Ametepey, S. (2022). COVID-19 lockdown defiance, public 'indiscipline', and criminalisation of vulnerable populations in Ghana. *African Review of Economics and Finance*, *14*(2), 142–159. https://hdl.handle.net/10520/ejc-aref_v14_n2_a9

Bol, D., Giani, M., Blais, A., & Loewen, P.J. (2021). The effect of COVID-19 lockdowns on political support: Some good news for democracy? *European Journal of Political Research*, *60,* 497–505. https://doi.org/10.1111/1475-6765.12401

Centres for Disease Control and Prevention (2023). Past Flu Pandemics. https://www.cdc.gov/flu/pandemic-resources/basics/past-pandemics.html

Republic of South Africa. (1996). *Constitution of the Republic of South Africa.* Government Gazette.

Cooper, S., Van Rooyen, H., & Wiysonge, C. S. (2021). COVID-19 vaccine hesitancy in South Africa: how can we maximise uptake of COVID-19 vaccines? *Expert Review of Vaccines*, *20*(8), 921-933. https://doi.org/10.1080/14760584.2021.1949291

Creswell, J.W. (2014). *Research design: Qualitative, quantitative, and mixed methods approach* (4th ed.). Sage Publications.

De Villiers, C., Cerbone, D., & Van Zijl, W. (2020). The South African government's response to COVID-19. *Journal of Public Budgeting, Accounting & Financial Management, 32*(5), 797-811. https://doi.org/10.1108/JPBAFM-07-2020-0120

Denscombe, M. (2014). *The good research guide for small-scale social research projects.* Open University Press.

Department of Health. (2020a). *Minister of Health Opening Statement on Coronavirus*. Department of Health South Africa.

Department of Health. (2020b). *South Africa's COVID-19 Testing Capacity Increased with 60 New Mobile Lab Units Launched*. Department of Health South Africa.

Department of Water and Sanitation. (2023). South Africa is a water-scarce country: Clean up and protect water resources. https://www.dws.gov.za/campaigns/Clear-River2022/Documents/Clear%20Rivers_Booklet_A4%202022.pdf

Douglas, K. M. (2021). Are conspiracy theories harmless? *Spanish Journal of Psychology*, *24*, 1-7. https://doi.org/10.1017/SJP.2021.10

Ebrahim, A. (2020). *COVID-19 and socioeconomic impact in Africa: The case of South Africa*. United Nations University World Institute for Development. https://doi.org/10.35188/UNU-WIDER/WBN/2020-2

Greyling, T., Rossouw, S., & Adhikari, T. (2021). The good, the bad and the ugly of lockdowns during Covid-19. *PLoS One 16*(1), e0245546. https://doi.org/10.1371/journal.pone.0245546

Griffith, A. K. (2020). Parental burnout and child maltreatment during the COVID-19 pandemic. *Journal of Family Violence*, 1–7. https://doi.org/10.1007/s10896-020-00172-2

Halvorsen, E., Stamu-O'Brien, C., Carniciu, S., & Jafferany, M. (2020). Psychological effects of COVID-19 on parenting and maternal-fetal mental health. *Dermatologic Therapy,* 33(4), 1–13. https://doi.org/10.1111/dth.13579

Hoque, A. M., Alam, A.M., Hoque, M., Hoque, M.E., & Van Hal, G. (2021). Knowledge, attitudes, and practices towards COVID-19 of pregnant women at a Primary Health Care facility in South Africa. *European Journal of Medical and Health Sciences*, *3*(1), 50-55. http://dx.doi.org/10.24018/ejmed.2021.3.1.654

Kajiita, R. M., & Kang'ethe, S. M. (2021). Social distancing during the Sars-Cov2 (COVID-19) pandemic: Interpretations and implication in the African Context. *Perspectives on Global Development and Technology, 20,* 289–312. https://doi.org/10.1163/15691497-12341596

Kebede, Y., Birhanu, Z., Fufa, D., Yitayih, Y., Abafita, J., Belay, A., et al. (2020). Myths, beliefs, and perceptions about COVID-19in Ethiopia: A need to address information gaps and enable combating efforts. *PLoS One, 15*(11), e0243024. https://doi.org/10.1371/journal.pone.0243024

Kollamparambil, U., & Oyenubi, A. (2021). Behavioural response to the Covid-19 pandemic in South Africa. *PLoS Oon, 16*(4), e0250269. https://doi.org/10.1371/journal.pone.0250269 .

Makin, A. J., & Layton, A. (2021). The global fiscal response to COVID-19: Risks and repercussions. *Economic Analysis and Policy*, *69*(2021), 340-349. https://doi.org/10.1016/j.eap.2020.12.016

McCartney, S. & Parent, R. (2015). *Ethics in Law Enforcement*. Victoria, B.C.: BCcampus. http://opentextbc.ca/ethicsinlawenforcement/

Moodley, K. (2022). The ethics behind mandatory COVID-19 vaccination post-Omicron: The South African context. *South African Journal of Science*, *118*(5-6), 1-6. https://doi.org/10.17159/sajs.2022/13239

Munzhedzi, P. H. (2021). Analysing the application of governance principles in the management of COVID-19 in South Africa: Lessons for the future. *Africa's Public Service Delivery and Performance Revie*w, *9*(1), a490. https://doi.org/10.4102/apsdpr.v9i1.490

Neidleman, J. (2012). The Social Contract Theory in a global context. *E-International Relations*. https://www.e-ir.info/2012/10/09/the-social-contract-theory-in-a-global-context/.

Ngangue, P., Pilabré, A. H., Barro, A., Pafadnam, Y., Bationo, N., & Soubeiga, D. (2022). Public attitudes towards COVID-19 vaccines in Africa: A systematic review. *Journal of Public Health in Africa*, *13*(1), 2181. https://doi.org/10.4081/jphia.2022.2181

Obasa, A. E., Singh, S., Chivunze, E., Burgess, T., Masiye, F., Mtande, T., ... & Moodley, K. (2020). Comparative strategic approaches to COVID-19 in Africa: Balancing public interest with civil liberties. *South African medical journal= Suid-Afrikaanse tydskrif vir geneeskunde*, *110*(9), 858.

Okunlola, M. A., Lamptey, E., Senkyire, E. K., Dorcas, S., & Dooshima, B. A. (2020). Perceived myths and misconceptions about the novel COVID-19 outbreak. *SciMedicine Journal*, *2*(3), 108-117. http://dx.doi.org/10.28991/SciMedJ-2020-0203-1

Olson, C. S. C., & Nelson, A. (2022). "Maskulinity," femininity and a pandemic: gender and belief in myths around COVID-19. *Feminist Media Studies*, *23*(5), 2471-2495. https://doi.org/10.1080/14680777.2022.2056756

Ozili, P. (2020). COVID-19 in Africa: socio-economic impact, policy response and opportunities. *International Journal of Sociology and Social Policy*, *42*(3/4), 177-200. https://doi.org/10.1108/IJSSP-05-2020-0171

Ozili, P. K., & Arun, T. (2023). Spillover of COVID-19: impact on the Global Economy. In *Managing inflation and supply chain disruptions in the global economy* (pp. 41–61). IGI Global.https://doi.org/10.2139/ssrn.3562570

Patton, M. Q. (2015). *Qualitative research and evaluation methods. Integrating theory and practices* (4th ed.). Sage Publications.

Piret, J., & Boivin, G. (2021). Pandemics throughout history. *Frontiers in Microbiology*, *11*, 631736. https://doi.org/10.3389/fmicb.2020.631736

Ramaphosa, C. (2020a). *South Africa's Response to the COVID-19 Coronavirus Pandemic*. Department of Health South Africa.

Ramaphosa, C. (2020b). *Statement by President Cyril Ramaphosa on Further Economic and Social Measures in Response to the COVID-19 Epidemic*. Department of Health South Africa.

Ramaphosa, C. (2020c). *Statement by President Cyril Ramaphosa on Measures to Combat COVID-19 Epidemic*. Department of Health South Africa.

Republic of South Africa. (2022). *Declaration of a national state of disaster. Disaster Management Act, Republic of South Africa.* Government Gazette No. 43096:313.

Ryan, M. (2020). World Health Organisation: COVID-19 update. *SABC News*. https://www.youtube.com/watch?v5cS7YBPxd0uk

Sampath, S., Khedr, A., Qamar, S., et al. (2021). Pandemics throughout history. *Cureus, 13*(9), e18136. https://doi.org/10.7759/cureus.18136

Sreedhar, S. (2019). The right of nature and political disobedience: Hobbes's puzzling thought experiment. In R. Douglass & J. Olsthoorn (Eds.), *Hobbes's on the citizen: A critical guide* (pp. 71–88). Cambridge University Press. https://doi.org/10.1017/9781108379892.005

Staunton, C., Swanepoel, C., & Labuschaigne, M. (2020). Between a rock and a hard place: COVID-19 and South Africa's response. *Journal of Law and the Biosciences,* 1–12. https://doi:10.1093/jlb/lsaa052

Sylvester, A., Tate, M., & Johnstone D. (2013). Beyond synthesis: re-presenting heterogeneous research literature. *Behaviour & Information Technology*, *32*(12), 1199–1215. https://doi.org/10.1080/0144929X.2011.624633

Templier, M., & Paré, G. (2015). A framework for guiding and evaluating literature reviews. *Communication Association for Information System*, *37*(6), 112–137. https://doi.org/10.17705/1CAIS.03706

Ullah, H., Ullah, A., Gul, A., Mousavi, T., & Khan, M.W. (2021). Novel coronavirus 2019 (Covid-19) pandemic outbreak: A comprehensive review of the current literature. *Vacunas*, *22*(2), 106-113. https://doi.org/10.1016/j.vacun.2020.09.009.

Ullah, I., Khan, K. S., Tahir, M. J., Ahmed, A., & Harapan, H. (2021). Myths and conspiracy theories on vaccines and COVID-19: Potential effect on global vaccine refusals. *Vacunas*, *22*(2), 93-97. https://doi.org/10.1016/j.vacun.2021.01.001

Upadhaya, B., Wijethilake, C., Adhikari, P., Jayasinghe, K., & Arun, T. (2020). COVID-19 policy responses: reflections on governmental financial resilience in South Asia. *Journal of Public Budgeting, Accounting & Financial Management, 32*(5), 825-836. https://doi.org/10.1108/JPBAFM-07-2020-0130

WHO. (2020). Coronavirus disease (COVID-19) outbreak. https://www.who.int/emergencies/diseases/novel-coronavirus-2019 . Accessed June 20, 2020.

Word Health Organization (2023). International Health Regulations (2005) – Third edition. https://www.who.int/publications/i/item/9789241580496

World Health Organization (2022). International Health Regulations. https://www.who.int/healthtopics/international-health-regulations#tab=tab_1

World Health Organization. (2023). WHO coronavirus (COVID-19) dashboard. https://data.who.int/dashboards/covid19/cases?n=c

Yang, M., Shi, L., Chen, H., Wang, X., Jiao, J., Liu, M., Yang, J., & Sun, G. (2022). Comparison of COVID-19 vaccine policies in Italy, India, and South Africa. *Vaccines*, *10*, 1554. https://doi.org/10.3390/vaccines10091554

Yu, D. (2023). Revisiting the COVID-19 vulnerability index in South Africa. *Development Southern Africa*, *40*(1), 91–108. https://doi.org/10.1080/0376835X.2021.1973887

Zondi, S. (2021). Covid-19 and the return of the state in Africa. *Politikon*, *48*(2), 190-205. https://doiorg/10.1080/02589346.2021.1913805