Social Dimensions of COVID-19 in South Africa: A Neglected Element of the Treatment Plan

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Notwithstanding moments of shared elation – Nelson Mandela’s triumphant release from prison 30 years ago, those halcyon weeks in 2010 when we were hosts to the Soccer World Cup, or more recently Siya Kolisi’s diverse team of players overcoming enormous odds to achieve a global rugby victory – the unity and transcendence of the rainbow nation largely have eluded us. While a pandemic is not the occasion to point fingers, it does expose the structural fault lines that undermine social cohesion. In “normal” times, these fissures are mostly tucked away safely in the recesses of our national collective consciousness. It is as if the virus, anthropomorphised, has pulled back the veil, baring the naked truth of our imperfect realities. There is no place to hide; and, to be totally honest, we are afraid.

ALREADY COMPROMISED INDIVIDUAL BODIES

In South Africa, with over 2000 total COVID-19 cases and 25 deaths at the time of writing, it is important to reflect on the intersections between the biomedicine of the novel coronavirus and its sociopolitical manifestations. While SARS-CoV-2 is clearly a biological phenomenon that clinicians and researchers are learning more and more about each day, we also observe that the disease plays out differently in different bodies and in different social–political realities. No two people, and no two countries, are living and dying from COVID-19 in exactly the same way. While there are common threads of pathophysiology and constraints of health-care systems, the illness experiences of individuals, families, communities and countries are unique, based on underlying contextual factors that are embedded in culture, economics, politics and philosophy. As clinicians, what can we learn from analysing what has happened in countries that are ahead of us in viral spread? Is it possible to avert a future imperfect in our context that is already fraught with social upheavals and inequity? What will a post-COVID-19 health-care workforce look like? These questions, and others, probably keep many of us up at night with good reason. As we struggle to plan for meaningful interventions, what social considerations need to be kept in mind?

In the past month, vast amounts have been written capturing the South African experience of the SARS-CoV-2 adenovirus that causes COVID-19 disease. From the social distancing necessary to reduce the speed of transmission and flatten the curve, to buying essential goods for the duration of a communal lockdown, to the suffering endured by not consuming alcohol and tobacco, to reports about the personal and collective economic costs, to the nightly release of case statistics by geographical region, to the biographies of those who have died, we have amassed a hefty repository of pandemic stories that are intended to reveal a shared humanity and promote common cause. Yet, there is something that should niggle at us, a discomfort as we begin to realise that apart from the similarities, there are also major divergences in our narratives. While transmission is the same for everyone (droplet spread vs aerosolisation which only occurs during invasive medical procedures), we are told that the expression of symptoms can range from completely sub-clinical to severe respiratory failure and death. Biomedically, these differences are accounted for by age and/or other comorbidities. In his daily broadcasts, Minister of Health Dr Zweli Mkhize reassuringly informs the public that those who have died so far would have died anyway from their co-morbid conditions: those with hypertension, diabetes, obesity, chronic obstructive lung disease, end-stage cancer, underlying immunosuppression...
and the elderly (with the exception of two people under age 50). (1) By implying that COVID-19 was simply an added insult to an already-compromised human, he attempts to avoid panic by explaining that these people were already sick. He acknowledges that while the loss to each family is significant, the loss to the collective should be mitigated by this understanding. How true is this, however? It is certainly a more palatable explanation for the mounting death toll; weakened constitutions, people battling to stay alive anyway, a necessary culling of the herd.

Individual bodies live in communities with histories. These reveal the complex and less visible web of a person’s or a community’s inherent sociopolitical vulnerabilities that emerge as risk factors for poorer health outcomes. Increasingly, it appears that someone’s positionality on the uneven playing field of life will determine her prognosis in addition to biological factors for COVID-19. (2, 3) Although there are well-established links between social positionality and the body’s ability to mount an effective immunological response, the exact mechanism of these interactions remains elusive. (4, 5) In the United States, we observe relationships between zip code, race and death from COVID-19, such as in New York City, where Latinx people (those with Latin American cultural or ethnic identity in the United States) make up 29% of the population but account for 34% of the death rate, a difference also seen with black New Yorkers (24% of the population and 28% of the deaths). (6) There is speculation that poorer access to the advanced technologies for heroic life-saving interventions was the reason; however, there is a growing body of evidence pointing to the intersectional stressors of living with inequality, racism, classism, marginalisation or being “othered” that act at a cellular level even in the presence of adequate medical care. (2)

This interplay between inherited and acquired vulnerability works its way into an embodied expression of disease at a granular level. However, there are ways to conceptualise some of the social and structural forces that increase risk (such as power and privilege) and simultaneously silence the expression and visibility of such suffering. (7) Paul Farmer points out, “Structural violence is one way of describing social arrangements that put individuals and populations in harm’s way. […] The arrangements are structural because they are embedded in the political and economic organization of our social world; they are violent because they cause injury to people … neither culture nor pure individual will is at fault; rather, historically given (and often economically driven) processes and forces conspire to constrain individual agency”. (8) Unlike the direct police violence resulting in the Marikana Massacre or the brutal rape and murder of UCT student Uyinene Mrwetyana, structural violence is often invisible and has been likened to the unseen mass that lies beneath the tip of every iceberg exerting its influence by creating unequal life chances. Structural violence is viewed as simply the way the world works, the natural order of things; entrenched power has become so normalised that it is often difficult to fathom where and how the injury came about.

FRAMING ACCOUNTABILITY

Reflecting a recent episode of structural violence in our own health-care context, the Life Esidimeni tragedy comes to mind. As well intentioned as psychiatric deinstitutionalisation is in theory, economic expediency and a callous disregard for human life trumped professional ethics and the right to dignity. At least 144 people died from hunger, starvation, hypothermia and neglect following the ill-conceived transfer of long-term mental health patients to community-based non-governmental organisations that were not equipped to care for them. What is striking about this disaster, however, is the role of those in the Gauteng Department of Health who foresaw nothing unusual, or turned a blind eye to possible pitfalls, while executing the deinstitutionalisation plan. When reading out the findings from evidence presented to the arbitration commission he chaired, retired deputy chief justice Dikgang Moseke commented about the sheer lack of official accountability for the Life Esidimeni tragedy: “Senior provincial health officials had lied, played the victim, abused their power and knowingly violated the rights of mentally ill patients and their families because the instruction had come from above”. (9) Given that those who were directly responsible for the plan have not yet faced criminal prosecution, it remains whether this incident will be seen as a catastrophe of inordinate proportions or as a massive injustice perpetrated by particular individuals who benefited.

The late political theorist and legal philosopher Judith Shklar in her book The Faces of Injustice posits how accountability is apportioned according to how an incident is framed. If one interprets what has occurred as a “misfortune” or rather as an “injustice”, there is an important distinction between whether and how accountability can be attributed. Although people suffer either way, the depersonification of responsibility for that suffering in the case of a misfortune – a tsunami, landslide, tornado or other natural disaster – assumes that it is the invisible hand of fate at fault. According to Shklar, however, a calamity is rarely neutral: scratch deeply enough and there will be an injustice where someone or something has behaved with culpability. (10) Returning to our current crisis of COVID-19, we actually have a choice in how our own responses will be judged by history. Like famine, pandemics can either be mitigated or exacerbated by the political leadership and the decisions they make. (11) In fact, as many have argued, the root causes of mass starvation are wholly human-made. (12) Although extreme weather events such as drought or flooding or a scourge of locusts or other blight may destroy food crops, theorists of the politics of famine argue that it is human beings who first determine their degree of responsiveness to climate change that actually results in such “natural” disasters and after, the nature and extent of
food distribution that has been banked for emergencies, often privileging one group over another as food becomes weaponised.

PROMISES WORN AND BROKEN

The National Department of Health in its COVID-19 Infection Prevention and Control Guidelines for South Africa states an obvious truth about combatting the spread of the virus in our particular situation: “South Africa has a unique challenge of a large vulnerable immunocompromised population living in overcrowded conditions”.(13) Over the past 26 years, prior to being hit by the SARS-CoV-2 virus, this is a frank admission that we have been sluggish in our duty to address the needs of the masses. Despite constitutionally enshrined guarantees to housing, sanitation, nutrition, education, recreation, gender equity and protection of those most vulnerable, progress on these fronts has been achingly slow. While pandemics are the ultimate litmus test of a nation’s health system, the social determinants of health have never been more meaningful in our context. The Minister of Health, Dr Zweli Mkhize, made it clear, “At this point … this is collaborative work. We did say [that] to defeat COVID-19, it’s no longer an issue of a nurse and a doctor. It’s actually about society…about going into a combat zone to fight this infection”.(14) Attention to the social determinants of health, those underlying predictors of life and death, should give us pause to realise that no amount of ventilators and hospital beds can in fact stem the ravages of a virus that only knows a single pathway, that of vulnerability. We have ignored engaging with them at our peril.

Stats SA data from 2014/2015 indicate that almost half of the adult population (men and women over age 18) were living below the upper bound poverty line, the cut-off point at which there is just enough money for basic nutrition and other essential non-food items such as soap, clothing and sanitary pads.(15) In 2019, that amount was R1227 per person per month, with women experiencing 6% higher rates of poverty (52%) than men.(16) As regards changes in housing value over a 10 year period, the statistics are also grim: “more than half of South African households headed by black Africans lived in dwellings that were valued at less than R50 000 […] [In contrast], most households headed by Indians/Asians and Whites lived in properties valued at R400 000 or more”.(17) In terms of both the number of rooms in these dwellings – and by implication size – “there has been a shift between 2002 and 2014 towards more rooms in formal/dwellings and changes from multiple rooms in informal housing to one to two rooms” (italics added for emphasis).(18) In another report released by Stats SA in February 2020 explaining income inequality, there is the stark finding that the poorest 60% of South African households are now relying more on social grants than paid employment to attain overall household income. This intervention prevents an even greater “income inequality gap between the bottom and top deciles”.(18) Despite this attempt at economic stabilisation, the divide between rich and poor is so wide that South Africa carries the dubious honour of being the longest running most unequal country on the planet from 2006.(19) Now it seems we must pay the price as the virus threatens to run its course along the fault lines of poverty and inequity.

Therefore, adherence to World Health Organisation directives like social distancing is impossible for large swaths of South Africans who, through no fault of their own, lack the necessary infrastructure for such adherence. In an ironic twist, a resident of a rural community in Mpumalanga expressed his “thanks” to the coronavirus for water. Commenting on the installation of “six boreholes [with running taps] and six 10,000 litre water tanks” in the space of a week after years of waiting for access to fresh water, another resident pointed out that, “[a]lthough they [government] had promised us water a long time ago, […] now that we have this virus, we see fast delivery”.(20) Ongoing service delivery protests bear testament that in other parts of the country, after decades of neglect, improving access to water and sanitation has not been as successful.

Similarly, sheltering in place takes on new meaning across the inequality divide. Given the challenge highlighted by Stat SA (2014) in that 14% of the country’s population live in informal dwellings, corresponding to 8 million people,(21) physical distancing in such conditions becomes next to impossible. There are substantive differences in self-isolating with a fridge and freezer full of food, opportunities for recreation on one’s own lawn or swimming pool or tennis court versus the informality and overcrowding that are daily realities for much of the population. In the early days of the lockdown, we recall the images of law enforcement officials acting with zealousness to confine people to their shacks. As the BBC reported, “The police and army have, at times, acted with thuggish abandon in their attempts to enforce the […] lockdown, humiliating, beating, and even shooting civilians on the streets of the commercial capital, Johannesburg, and elsewhere”.(22) Similar reports from front-line colleagues providing primary medical care in the townships expressed exasperation that the mall in Ebony Park remained open, or that it was “business as usual” with informal traders and food vendors in Daveyton.(23)

WHICH HUMANS? WHICH RIGHTS? WHOSE LIVES?

Despite application of the Siracusa principles (see Table 1) during the declaration of a national disaster to ensure that any limitations of human rights are the least restrictive possible and affect all members of the population without discrimination, is it really possible to apply these principles equally if we live in such an inequitable society? These principles are not explicitly discriminatory against the poor. Yet, the lockdown disproportionately affects low-wage workers
in precarious employment. During and after the 5-week lockdown, the consequences of staying home are substantively different on the one hand, for a person with no guarantee of sustainable income or paid sick leave and on the other, for a person with job security or a stable business. Can we blame the population for wanting to leave their overcrowded homes and travel to the local clinics during the lockdown to consult on previously neglected health matters? Can we blame a parent who, because of lockdown, is not working at her usual three jobs and sees it as an opportunity to catch up on delayed immunisations for children, to extract a tooth that has been bothersome for months or to pass by for a social visit with the staff or other patients? The experiences of confinement and boredom are psychological for those of us with adequate housing. In the townships and informal settlements, these experiences are spatial and material. Davis and others have described such toxic urban environments as “... a dumping ground for a surplus population working in unskilled, unprotected and low-wage informal service industries and trade”.(26)

In such contexts, does the restriction of rights to freedom of movement and employment carry the same meaning or intention?

The current national debates about whether to extend the lockdown, and for how long, reveal the tensions between competing agendas. Although few people are explicit about the trade-offs in terms of lives worth sacrificing as opposed to lives worth preserving, experts speak as if we inherently share the same belief that some lives are more precious, or at least worth saving, than others. Further signifying the contingencies that will sway the balance between human life, and the survival of the economy is the personification of corporations and businesses: how long can the engines of industry remain moribund without suffering terminal complications? The flip side of this, however, is that there have been some very brave public health-motivated decisions taken by President Cyril Ramaphosa and his Cabinet to regulate industry and repurpose manufacturing to address the pandemic. Although the “combat zone” war metaphor may be problematic, it invokes powers for the Executive to act in ways that place health at the centre of a societal agenda, something that we have not seen during peacetime. It opens up certain possibilities that are at odds with “getting back to normal”, such as the mining industry is keen to do.(27) Embedded in this calculus is what number of human beings can be forfeited to get the stock exchange up and running again – so that the poor can get back to work and not starve; because without employment and in the absence of a meaningful social safety net they will die anyway. We are told that actuarial scientists are key to resolving these equations, presumably relying on a common understanding of what utilitarianism means in our context. While it is acknowledged that we will all take a hit, certain among us must pay with our lives as well as our purse.

So, what will be our levels of complicity with managing these "surplus people", those who in the best of times die from falling into a pit latrine, or a delayed cancer diagnosis, or at the hands of a violent partner or from a gang rape for being queer? In conversations with Gauteng colleagues regarding their role in the COVID-19 pandemic, they recall the trauma of working or training in apartheid-era segregated hospitals or wards with woefully inadequate resources and security police monitoring, or the overwhelming helplessness in the pre-antiretroviral days when AIDS patients lay dying on stretchers everywhere. Other colleagues are more in tune with the fluidity of this crisis: “Well, we are rationing all the time”, which is probably a more honest appraisal of the resource constraints (structural violence) we have come to accept as a normal condition of practising in South Africa’s public health sector in the 21st century. Whether we support National Health Insurance as the realisation of universal health coverage or not, we are now confronted with a number of questions that will determine our post-pandemic future. What is our appetite as clinicians to tackle these underlying sociopolitical issues, recognising their inexorable links to the current best medical and scientific management of COVID-19? It is not a one or another choice. Traditionally, clinicians have been averse to engaging in such issues because they are not regarded as purely “medical”, but rather political, something that I have written extensively about in the past. Yet, these are exceptional and truly ominous times.

Table 1: Siracusa principles on the limitation and derogation provisions in the International Covenant on Civil and Political Rights [1985] [24]

| The restriction is provided for and carried out in accordance with the law; |
| The restriction is in the interest of a legitimate objective of general interest; |
| The restriction is strictly necessary in a democratic society to achieve the objective; |
| There are no less intrusive and restrictive means available to reach the same objective; |
| The restriction is based on scientific evidence and not drafted or imposed arbitrarily i.e. in an unreasonable or otherwise discriminatory manner. |

A set of agreed-upon foundational principles when human rights are temporarily restricted and subject to ongoing review and appeal in so far as

- The restriction is provided for and carried out in accordance with the law;
- The restriction is in the interest of a legitimate objective of general interest;
- The restriction is strictly necessary in a democratic society to achieve the objective;
- There are no less intrusive and restrictive means available to reach the same objective;
- The restriction is based on scientific evidence and not drafted or imposed arbitrarily i.e. in an unreasonable or otherwise discriminatory manner.

Rights (1985) [24]
ETHICS AND ADVOCACY: CLINICIANS HAVE A CHOICE

In thinking about what instructs and informs physician advocacy, we can turn to various guidelines. First, the World Medical Association Statement on Patient Advocacy and Confidentiality advises, “Medical practitioners have an ethical duty and a professional responsibility to act in the best interests of their patients. This duty includes advocating for patients, both as a group (such as advocating on public health issues) and as individuals.”(28) (italics added for emphasis) The CANMeds Health Advocate role, adopted by the Health Professions Council of South Africa, states, “As Health Advocates, physicians contribute their expertise and influence as they work with communities or patient populations to improve health. They work with those they serve to determine and understand needs, speak on behalf of others when required, and support the mobilization of resources to effect change.”(29) (italics added for emphasis)

Inherent in these professional statements is a divide between the doctor and the patient or community, which recognises both the power differential and a need for therapeutic distancing that is purported to allow objectivity and reason to prevail. This divide also confers an element of safety, a recognition that doctor and patient are not in the same boat, at least not in that exact moment. COVID-19 has changed that equation. Now, it is not safe to be caring for patients with SARS-CoV-2, especially in an environment where access to appropriate personal protective equipment may be restricted. St Augustine’s Hospital in Durban is closed indefinitely due to an outbreak of COVID-19 at the facility, where 48 nurses and 16 patients who tested positive are being kept in quarantine.(30) The media coverage of both famous and ordinary doctors from around the world who have died in the line of duty caring for COVID-19 patients makes us question our own mortality and realise that, in this instance, nothing separates us from our patients really, except if fortunate, a medical or N95 mask. Even the retreat to the sanctuary of our own homes is fraught with the risk of unwittingly bringing the virus, Trojan horse-like, into our most sacred of spaces. Patients are us. We are them. Yet, not really.

The repercussions of the pandemic will exact a high toll on our collective psyche and on the public’s trust in medicine, nursing and the health-care system. Clinicians can choose to exhibit leadership in opening up difficult conversations that frame a set of questions about the value of life in principle and about the underlying and obvious value chains of who deserves human rights. We can advise on how to “get people to stay home” by giving them the resources to make that possible. Or, we can usher in a police state that will further violently punish poor people for existing while we do nothing to help stop the spread of the virus. Community engagement, public education, housing and financial support are required to help people practise physical distancing. Our treatment armamentarium for COVID-19 needs to expand if we have a hope of coming through this alive.

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REFERENCES

1. eNCA. WATCH: Coronavirus deaths in South Africa rise to 24 [Internet]. eNCA; 2020 [cited 2020 Apr 10]. Available from: <https://www.enca.com/news/coronavirus-deaths-south-africa-rise-24>.
2. Graham R. Being a person of color isn’t a risk factor for coronavirus. Living in a racist country is – The Boston Globe [Internet]. BostonGlobe.com. The Boston Globe; 2020 [cited 2020 Apr 12]. Available from: <https://www.bostonglobe.com/2020/04/10/opinion/being-person-color-isnt-risk-factor-coronavirus-living-racist-country-is/>.
3. Vulnerable Groups. World Health Organization [Internet]. World Health Organization; 2012 [cited 2020 Apr 12]. Available from: <https://www.who.int/environmental_health_emergencies/vulnerable_groups/en/>.
4. Williams DR, Gonzalez HM, Williams SA, et al. Perceived discrimination, race and health in South Africa. Soc Sci Med [Internet]. 2008[cited 2020-Apr 12];67(3):441–452.Available from: <http://doi.org/10.1016/j.socscimed.2008.03.021>.
5. Williams DR, Lawrence JA, Davis BA. Racism and health: evidence and needed research. Annu Rev Public Health [Internet]. 2019; 40(1):105–125. Available from: <https://doi.org/10.1146/annurev-publhealth-040218-043750>.
6. Dwyer C. New York City’s Latinx residents hit hardest by coronavirus deaths [Internet]. NPR; 2020 [cited 2020 Apr 10]. Available from: <https://www.npr.org/2020/04/08/829726964/new-york-citys-latinx-residents-hit-hardest-by-coronavirus-deaths>.
7. Farmer P. On suffering and structural violence: a view from below. Daedalus [Internet]. 1996 [cited 2020 Apr 12];125(1):261–283. Available from: <https://www.jstor.org/stable/pdf/20027362.pdf?req=1>.
8. Farmer P. Pathologies of power: structural violence and the assault on human rights. Berkeley: University of California Press; 2003.
9. TimesLIVE. IN FULL: Life Esidimeni arbitration handed down by Moseneke [Internet]. TimesLIVE; 2018 [cited 2020 Apr 12]. Available from: <https://www.timeslive.co.za/news/south-africa/2018-03-20-in-full-life-esidimeni-arbitration-handed-down-by-moseneke/>.
10. Shklar J. The faces of injustice. New Haven: Yale University Press; 2005.
21. Khoza M. ‘We thank virus for water’, say grateful Mpumalanga community. SowetanLIVE; 2020 [cited 2020 Apr 09]. Available from: <https://www.sowetanlive.co.za/news/south-africa/2020-04-07-we-thank-virus-for-water-say-grateful-mpumalanga-community/>.  
22. Harding A. South Africa’s ruthlessly efficient fight against coronavirus [Internet]. BBC News; 2020 [cited 2020 Apr 12]. Available from: <https://www.bbc.com/news/world-africa-52125713/>.  
23. Personal oral communications with clinical colleagues; March and April 2020.  
24. Siracusa Principles on the Limitation and Derogation ... ICCPR—legal-submission-1985-eng.pdf>.  
25. World Health Organization. WHO Guidance on human rights and involuntary detention for XDR-TB control [Internet]. World Health Organization; 2013 [cited 2020 Apr 09]. Available from: <https://www.who.int/tb/features_archive/involuntary_treatment/en/>.  
26. Davis M. Planet of Slums, NLR 26, March–April 2004 [Internet]. New Left Rev; 2004 [cited 2020 Apr 12]. Available from: <https://newleftreview.org/issues/II26/articles/mike-davis-planet-of-slums/>.  
27. Seccombe A. Amcu rules out mines returning to limited operations [Internet]. BusinessLIVE, Business Day; 2020 [cited 2020 Apr 12]. Available from: <https://www.businesslive.co.za/bd/national/2020-04-06-amcu-rules-out-mines-returning-to-limited-operations/>.  
28. WMA. The World Medical Association—WMA Statement on patient advocacy and confidentiality [Internet]. The World Medical Association; 2017 [cited 2020 Apr 12]. Available from: <https://www.wma.net/policies-post/wma-statement-on-patient-advocacy-and-confidentiality/>.  
29. Royal College of Physicians and Surgeons of Canada. CanMEDS role: health advocate [Internet]. The Royal College of Physicians and Surgeons of Canada; 2015 [cited 2020 Apr 12]. Available from: <http://www.royalcollege.ca/rcsite/canmeds/framework/canmeds-role-health-advocate-e.e>.  
30. Singh O. Durban hospital closed indefinitely due to Covid-19 outbreak [Internet]. TimesLIVE; 2020 [cited 2020 Apr 12]. Available from: <https://www.timeslive.co.za/news/south-africa/2020-04-08-durban-hospital-closed-indefinitely-due-to-covid-19-outbreak/>.  

11. Shoki W, Lema AR, Hoffman D, Chandler CL. From cholera to corona: the politics of plagues in Africa [Internet]. Africa Is a Country; 2020 [cited 2020 Apr 12]. Available from: <https://africascountry.com/2020/03/from-cholera-to-corona-the-politics-of-plagues-in-africa/>.  
12. Leftwich A, Harvie D. The political economy of famine. A preliminary report of the literature, bibliographic resources, research activities and needs in the UK. Institute for Research in the Social Sciences; 1986.  
13. National Department of Health. COVID-19 infection prevention and control guidelines for South Africa – draft V1. Department of Health. Republic of South Africa; 2020.  
14. Besent M. COVID-19 recovery patients quadruple: report. SABC News – breaking news, special reports, world, business, sport coverage of all South African current events [Internet]. Africa’s News Leader; 2020 [cited 2020 Apr 10]. Available from: <https://www.sabcnews.com/sabcnews/covid-19-recovery-patients-quadruple-report/>.  
15. Statistics SA. Men, women and children: findings of the living conditions survey, 2014-15 [Report], Pretoria; 2015. Available from: <http://www.statssa.gov.za/?page_id=1854&PPN=Report-03-10-02>.  
16. ISIbalo House. National poverty lines. Pretoria, GP: ISIbalo House; 2019. Available from: <http://www.statssa.gov.za/publications/P03101/P031012019.pdf>.  
17. ISIbalo House. General household survey. Pretoria, GP: ISIbalo House; 2018. GHS Series Volume VII: housing from a human settlement perspective In-depth analysis of General Household Survey (2002-2014) and Census (1996-2011) Media Statement 20 April 2016. Available from: <data:http://www.statssa.gov.za/?p=6429>.  
18. Statistics SA. Inequality trends in South Africa: a multidimensional diagnostic of inequality; 2019. Available from: <http://www.statssa.gov.za/?p=12930>.  
19. World Bank. Overview [Internet]. World Bank; 2019 [cited 2020 Apr 12]. Available from: <https://www.worldbank.org/en/country/southafrica/overview>.  
20. Khoza M. ‘We thank virus for water’, say grateful Mpumalanga community [Internet]. SowetanLIVE; 2020 [cited 2020 Apr 09]. Available from: <https://www.sowetanlive.co.za/news/south-africa/2020-04-07-we-thank-virus-for-water-say-grateful-mpumalanga-community/>.  
21. Khoza M. ‘We thank virus for water’, say grateful Mpumalanga community. SowetanLIVE [Internet]. SowetanLIVE; 2020 [cited 2020 Apr 09]. Available from: <https://www.sowetanlive.co.za/news/south-africa/2020-04-07-we-thank-virus-for-water-say-grateful-mpumalanga-community/>.