Chapter 8

Socioeconomic Inequalities in Health: The South African Story

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Introduction

South Africa is characterised by income and wealth inequalities, as well as a high disease burden typical of a developing country. Given that income is an essential determinant of health and healthcare, one can imagine that access to critical healthcare and health outcomes will depend on socioeconomic position. This chapter, therefore, presents an overview of health inequalities in South Africa as related to socioeconomic position. The focus is on the magnitude of health disparities and, where data availability permits, ascertaining whether and in what direction such disparities have changed over time. By the end of this chapter, the reader would have been sufficiently informed about the stark socioeconomic inequalities that diminish health and healthcare access in South Africa. This knowledge will hopefully encourage debate about the need and ways to tackle health inequalities in the country aggressively.

South Africa: A Land of Extreme Inequalities

South Africa is judged the most unequal country globally regarding income and consumption, with several dire statistics underlying its unenviable position. Its *per capita* consumption Gini coefficient[1] has consistently exceeded 0.6 in the post-apartheid period. Moreover, on average, the top 10% of the adult population earned more than 60 times the national income earned by the bottom 50% in 2021. This translates to the top

1 The Gini coefficient is an index of inequality, rising with higher inequality. It ranges from 0 (perfect equality) to 1 (perfect inequality).

10% and bottom 50% earning 65% and only 5.3%, respectively, of national income. Indeed, the share of incomes captured by both groups has consistently widened since the mid-1990s, implying that inequality has worsened over the post-apartheid period. A lot of this inequality is accounted for by what happens in the labour market – disparities between the employed and unemployed and between high and low earners.

Regarding the latter, the country had a net wage Gini coefficient of 0.67 around 2017. Wealth inequality is understandably worse, with the top 10% of the country owning 86% of total wealth in 2021 (compared to a negative wealth share for the bottom 50%). To underscore this point, the net wealth Gini coefficient was 0.76 in 2019.[1,2]

South Africa's inequality is deeply intergenerational. Inequality of opportunity – disparities driven by pre-existing factors beyond an individual's control, such as race, parental education, and parental occupation – account for almost half of inequality in *per capita* consumption, with race responsible for about 39% of inequality of opportunity.[3] It is, therefore, little wonder that South Africa is characterised by low intergenerational earnings mobility.[4]

A widely held belief is that more equal societies enjoy better health outcomes than unequal ones. This remains true, despite differences in beliefs about the underlying mechanisms or whether the relationship is causal. Some scholars even attribute substantial mortality to income/socioeconomic inequality.[5] This suggests the existence of socioeconomic inequalities in health given that, at the very least, some of the hypothesised effect of socioeconomic inequalities on mortality emanates from the health disparities between different socioeconomic classes. However, before examining the nature of socioeconomic inequalities in health in South Africa, it is essential to understand the state of health and healthcare provision in the country.

Access to Health Care and Health Outcomes in South Africa

The South African health system is segmented into a private sector that resembles developed countries' health systems, and an overburdened and financially stressed public sector providing free or heavily subsidised services.[6] Access to the well-resourced private health system is mainly funded through membership of medical aid schemes, which are unaffordable for most of the population. Unsurprisingly, medical scheme membership has a significant racial gradient. For instance, while only 16% of South Africans belonged to such schemes in 2018, only 10% of black Africans were members, while 73% of whites had membership.[7]

Differences in resources between the private and public sectors are stark. For instance, private health expenditure as a percentage of current health expenditure was 44% in 2017.[8] Given that such a huge resource outlay was mostly accounted for by medical scheme membership, which constituted only 17% of the population in 2017,[9] one begins to realise the huge inequalities in resources that characterise healthcare provision in the country, despite the government devoting about 15% of its budget to the health sector in the same year.[10]

Like many developing countries, South Africa has a substantial disease burden. The main components of this disease burden – dubbed a quadruple burden of disease – are communicable diseases like HIV/AIDS and tuberculosis, maternal and child morbidity, noncommunicable diseases (NCDs), and injury and trauma.[11] For instance, population HIV prevalence in 2021 was 13.7%. However, it was 19.5% for the 15-49-year age group, with women in this age group having a prevalence of 23.9%.[12] In contrast, the global 15-46-year-old prevalence was only 0.7% in the same year.[13] Similarly, while the global incidence of tuberculosis was 127 per 100 000 people in 2020, that of South Africa was more than four times the global average, at 554 per 100 000 population.[14]

However, in terms of NCDs, while South Africa has a substantial burden, it has outperformed the global average in terms of NCD-related deaths. Globally, NCDs made up 74% of

mortality in 2019. In South Africa, however, they only accounted for 51% of total mortality in the same year.[15]

One key component of the NCD burden is obesity, and South Africa has a significant obesity problem. Adult obesity prevalence consistently increased between 1998 and 2016, with the problem more severe among women. While adult male obesity prevalence increased mildly from 10.1% to 11% over the period, adult female obesity prevalence rose sharply from 27.9% to 41%.[16] The implications of these trends, especially female obesity, are dismal for the health system and economy. According to the Global Obesity Observatory, the total direct and indirect costs of obesity and being overweight for the South African economy accounted for 2% of the GDP, amounting to $7.62 billion in 2019.

It is not difficult to imagine that the enormous income and wealth inequalities have severe implications for health outcomes and access to quality healthcare in South Africa. Thus, the above general view of the state of health and healthcare access needs to be more about the country's health distribution. Consequently, socioeconomic inequalities in health/healthcare access are examined using nationally representative datasets supplemented by additional evidence. This provides a more meaningful picture of who bears the brunt of poor health and inadequate access to healthcare in the country.

Measures of Socioeconomic Inequality

This chapter utilises three measures of inequality. Firstly, the concentration curve plots the cumulative shares of a health outcome/health access indicator against the cumulative shares of the population ranked by socioeconomic position. A 45-degree line indicates a line of equality, whereas a curve above it depicts a pro-poor distribution (i.e., the health outcome is disproportionately concentrated on people experiencing poverty). The converse holds for a curve lying below the line of equality.[17]

The concentration curve will be supplemented by the concentration index, which provides a summary measure of inequality. It is defined as twice the area between the line of equality and the concentration curve. A negative concentration

index depicts a pro-poor distribution, while the converse obtains a positive index.

In addition to these two measures, the top-10/bottom-50 ratio (T10/B50) will be used. In the present context, it captures the proportion of a health variable borne by the population in the top 10% of the socioeconomic ranking variable relative to the proportion borne by the bottom 50%.

Socioeconomic Inequalities in Health in South Africa

HIV prevalence concentration curves – based on the 2012 and 2017 rounds of the South Africa National HIV Prevalence, Incidence, Behaviour and Communication Survey (SABSSM data – are shown in Figure 1.

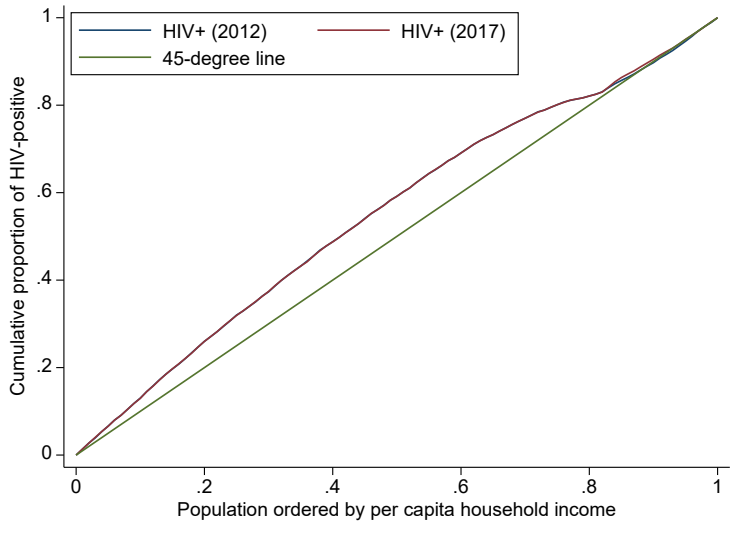

Fig. 1 Income-related inequality in HIV positivity. Author's computations. Source: SABSSM 2012 and 2017

Being HIV-positive was disproportionately concentrated in people with low incomes in both 2012 and 2017. However, while not apparent from the figure, the extent to which HIV positivity was concentrated in the poor significantly declined over the period

(the relative prevalence among the poorest 50% relative to the wealthiest 10% declined). This does not necessarily indicate a positive outcome, as it may have resulted in greater mortality among the poor. That said, the prevalence of HIV in both the rich and poor increased between 2012 and 2017 (most probably a reflection of the greater longevity of people living with HIV).

Getting people tested for HIV and reducing the number of undiagnosed cases is critical for HIV prevention. Knowing one's status (which is realised through effective HIV testing) is crucial to the realisation of the Joint United Nations Programme on HIV/AIDS' (UNAIDS) 90-90-90 target for effective HIV/AIDS control. Thus, it matters whether those who do not test for HIV are the poor or affluent. Results indicate that having never tested for HIV was disproportionately concentrated among the poor in both 2012 and 2017. This is despite testing being free in public health facilities. Such a significant concentration of non-testing in people experiencing poverty in the face of essentially free public services is possibly indicative of structural barriers to accessing care, such as spatial factors that impede, say, rural dwellers (who have higher poverty rates) from adequately testing.[18]

This overall picture provides an incomplete narrative of the burden of never testing for HIV. A gender disaggregation reveals that among women, while never testing was significantly more concentrated in the rich in 2012, there was no significant inequality in 2017. Most of the inequality was driven by men, where poorer men were consistently more likely to never test for HIV. Indeed, while the prevalence of never testing among women was similar for the top 10% and bottom 50% of the income distribution in both years, for men, the prevalence among the bottom 50% was approximately double that of the top 10% in both years.

In its 2022 Dangerous Inequalities report, UNAIDS noted that young adults are less likely to get tested globally. This is mirrored in South Africa, where young adults (15-24 years) were most likely to have never tested for HIV among the under-50 population. A surprising result is that young, affluent, adult females appear to be the group most likely never to get tested,

with a double prevalence in 2012 (70%) relative to poor, young females (35%). While this prevalence substantially declined among the former by 2017 (to 51%), the gap was still significantly high relative to the latter (36%).

Conversely, South Africa appears to have primarily achieved equality in placing HIV-positive patients on antiretroviral (ARV) therapy (the second arm of the 90-90-90 targets). The SABSSM data indicates no significant income-related inequality in being on antiretroviral therapy in 2012. Moreover, while there was a statistically significant concentration of low-income people on ARV therapy in 2017, the magnitude was trivial. That said, more recent reports show nontrivial variations in overall performance on the 90-90-90 targets across the provinces, with Kwazulu-Natal and the Free State (one of the poorest provinces) the best performers, while the North West and Gauteng (one of the wealthiest provinces) are the worst performers.[19] The contrasting performances of the Free State and Gauteng suggest that while material resources are essential for healthcare delivery, non-financial elements are also essential for effective healthcare delivery.

As indicated earlier, South Africa bears a disproportionate burden of overweight/obesity compared to global averages. Figure 2 – based on the National Income Dynamics Study (NIDS) dataset – indicates that adult obesity was disproportionately concentrated among the rich in 2008 and 2017. This remained virtually unchanged over the period.

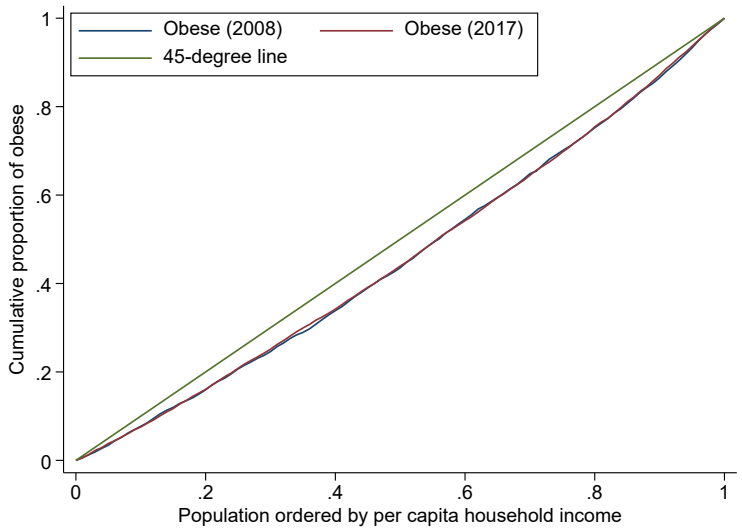

Fig. 2 Income-related inequality in adult obesity. Author's computations. Source: NIDS 2008 and 2017

The T10/B50 ratio (based on household *per capita* income) provides an even clearer picture of how much adult obesity is concentrated among the rich in South Africa (see Figure 3). The obesity prevalence rose from 20.2 to 22.7% for the bottom 50 and 29.4 to 31% for the top 10 between 2008 and 2017. Much of this socioeconomic gap was driven by men, due to low obesity prevalence among poor men (which declined from 5.9 to 4.3% between 2008 and 2017) compared to affluent male prevalence rates of 23.4 and 22.4%, respectively, over the same period. However, obesity prevalence among rich women increased from 36.9 to 42.6%, while that of poor women increased from 28.4 to 33.9% over the period. Thus, the obesity burden on rich women was almost ten times that of poor men in 2017. These results echo previous evidence regarding a positive relationship between affluence and body mass in South Africa.[20]

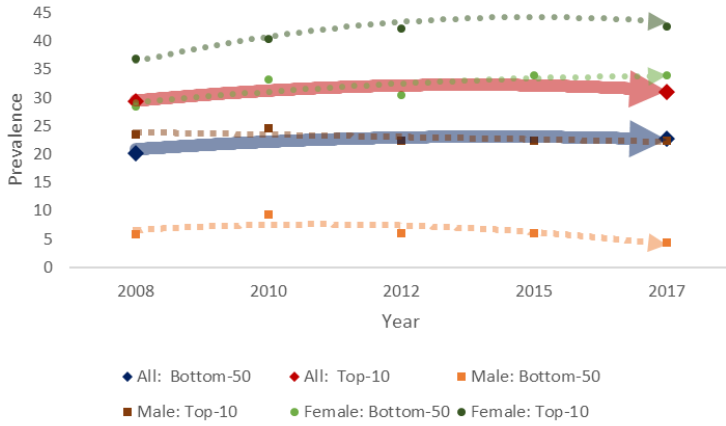

Fig. 3 Adult obesity prevalence across the income distribution. Author's computations. Source: NIDS wave 1-wave 5.

It is, therefore, clear that upper-middle-class and wealthy women are the most critical populations to target for an effective fight against adult obesity in South Africa. Most of the burden among this top female income population appears to be borne by African and Coloured women – with prevalence rates of 51% and 44% respectively in 2017. Given the enormous economic cost of being overweight and obesity, the fight against obesity must be tackled with urgency, especially given its chronicity and comorbidity with other severe conditions such as type 2 diabetes, heart disease, and certain cancers.

Another NCD that has a significant bearing on wellbeing is depression, and South Africa bears a significant burden. While the lifetime prevalence of depression in South Africa is 9.7%, the South African Depression and Anxiety Group (SADAG) reports that about a fifth of South Africans will experience a depressive disorder at least once in their lifetime. Like most mental health conditions, depression has a debilitating effect on health and the economy. A SADAG study of 1 000 currently/previously employed workers in South Africa revealed several ways in which depression adversely affects output and productivity, thereby exerting a significant cost on the economy. While 25% of respondents had been diagnosed with depression by a health professional,

those diagnosed took an average of 18 days off work due to the condition. There was also evidence of substantial productivity loss as 54% of sufferers reported taking more time to complete simple tasks, while one-half reported making more mistakes than usual at work.

Given the preceding facts, it becomes critical to ascertain where most of the burden of depression lies. Figure 4 depicts the depression concentration curves for both 2008 and 2017.

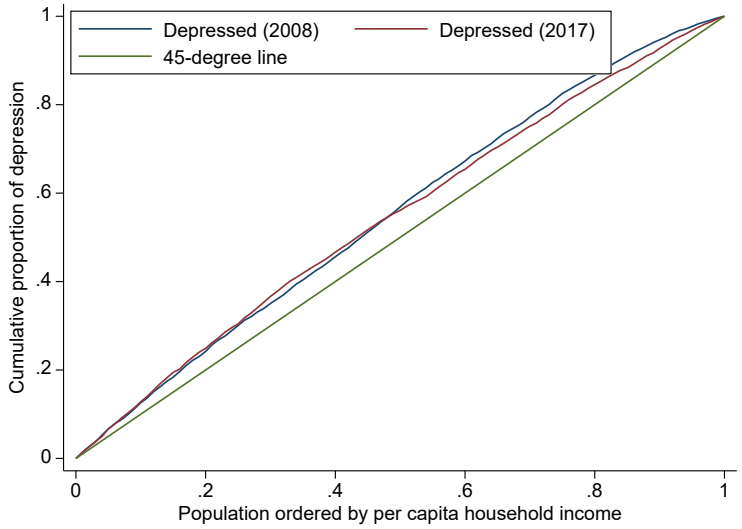

Fig. 4 Income-related inequality in adult depression. Author's computations. Source: NIDS wave 1 and wave 5

Figure 4 and other analyses not shown indicate that adult depression was significantly disproportionately borne by the poor in both periods in South Africa. This is consistent with previous evidence.[21] However, the extent to which the condition was concentrated in low-income people lessened between 2008 and 2017. In addition, the T10/B50 ratio reveals in greater detail how the burden of depression was distributed across socioeconomic status and gender over the 2008-2017 period (Figure 5).

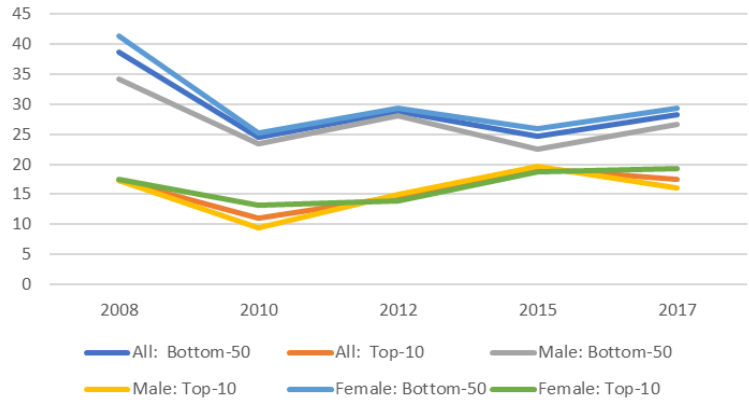

Fig. 5 Income-related inequality in adult depression. Author's computations. Source: NIDS wave 1-wave 5

Figure 5 confirms the earlier assertion that people experiencing poverty consistently bore a more significant burden of depression over the 2008-2017 period. However, more recent data suggests that this unambiguous burden of depression on the poor reversed in the early part of the COVID-19 pandemic, with the more affluent population shouldering much of the depression burden. At the same time, the relationship between the poor and affluent subsequently became largely insignificant.[22] One possible reason for this outcome is that the economically better off might have had elevated fears about losing accumulated valuable resources due to the massive dislocation caused by the pandemic, an explanation supported by the Conservation of Resource theory. Tracking socioeconomic inequalities in depression remains an important area of inquiry in the post-pandemic era, with a return to normalcy.

Child health is one of the most important aspects of societal wellbeing, not just because of the intrinsic importance of child wellbeing, but because of the value of children's health for the survival and thriving of society. While South Africa has already achieved the UN Sustainable Development Goal (SDG)'s neonatal mortality target and is on track to meet the SDG target for under-

five mortality,[2] it is essential to ascertain whether progress is uniform across all socioeconomic strata, or whether people with low incomes are being left behind. Given that a significant amount of resources is often required to take adequate care of children, it is unfortunately not surprising that under-five (0-5 years) mortality is disproportionately concentrated in the poor. Figure 6 depicts under-five mortality rates by wealth quintile from the South African Demographic and Health Survey (SADHS) based on mothers' reports of child mortality *vis-à-vis* children ever born over five years.

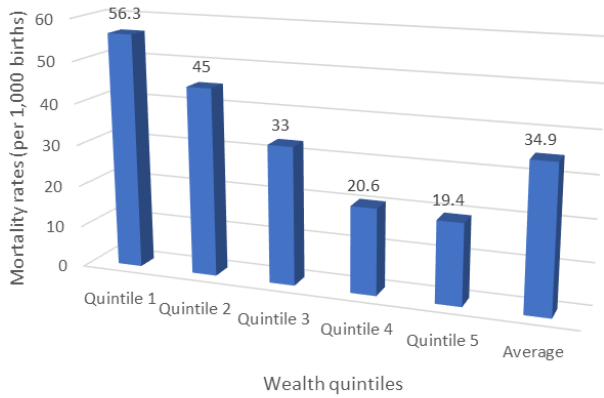

Fig. 6 Under-five mortality rates by wealth quintile. Author's computations. Source: SADHS 2016

As indicated by Figure 6, the under-five mortality rate per 1 000 births in the poorest quintile (56.3) was three times that of the wealthiest quintile (19.4). This wide disparity suggests that, as much as the country has made significant progress in improving child mortality, it appears that poor children are being left behind.

Moreover, while all nutritional health indicators – stunting, wasting, and being underweight – were disproportionately

2 The SDG targets (South Africa's 2020 rates) are 12 (10.6) and 25 (32.2) deaths per 1 000 live births for neonatal and under-five mortality, respectively – see https://sdgs.un.org/goals/goal3 and https://dashboards.sdgindex.org/static/profiles/pdfs/SDR-2022-south-africa.pdf.

concentrated in people with low incomes in 2016, only stunting was statistically significant. As reported elsewhere, 27% of South African children were stunted in 2016[23] – a worrying outcome, given its substantial and long-term adverse socioeconomic effects. Moreover, the prevalence of stunting among the bottom 50 of the wealth distribution (32.7%) was three times that of the top 10 (9.5%). Apart from the apparent effect of stunting on children's immediate physical and intellectual development, the fact that stunting is at least associated with lower subsequent educational attainment and earnings raises the possibility that stunting may be associated with perpetuating socioeconomic inequalities in the country.

Inequality in access to timely, quality healthcare is likely at the heart of some observed inequalities. As earlier indicated, the resources available to the relatively few who utilise private healthcare are enormous compared to what is available to the vast majority, who rely on severely overburdened public healthcare. Figure 7 plots the proportion of the top-10 and bottom-50 populations (by *per capita* household expenditure) who had private health insurance membership.

Figure 7 is a depiction of the enormous socioeconomic inequality in access to private health care in South Africa, mirroring the country's huge income and wealth inequalities. Recall that South Africa has a segmented healthcare system with a grossly overburdened public sector and a well-resourced but expensive private sector. Thus, medical aid membership is often the ticket for accessing the latter. Therefore, one can only imagine the importance of private economic resources in accessing needed healthcare timeously and effectively – a luxury beyond most of the population, despite the best efforts of a well-trained public health workforce. Though not shown here, a racial disaggregation reveals that the most significant contributors to the very low bottom-50 medical aid membership were Africans and Coloureds. Also, Coloureds experienced the most significant drop in medical aid membership among the bottom-50 between 2013 and 2018 (70%) followed by whites (49%) – the latter, obviously, from a relatively high level of membership (34% membership rate).

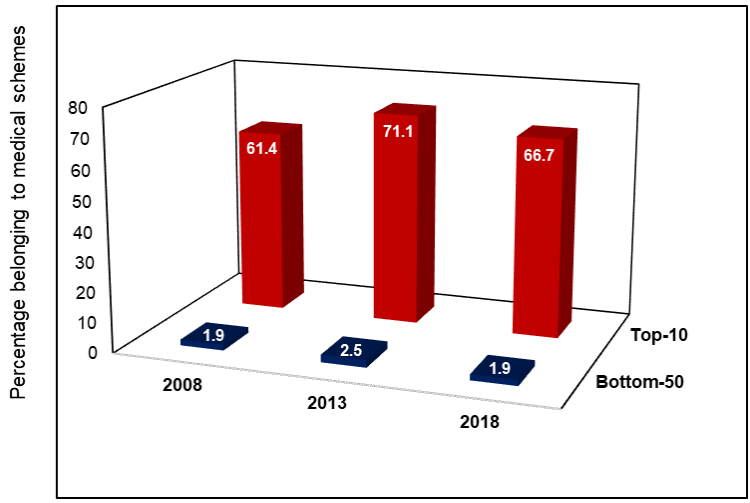

Fig. 7 Medical aid membership by socioeconomic status. Author's computation. Source: GHS

More recently, there is evidence that the COVID-19 pandemic exacerbated health inequalities linked to socioeconomic disparities. A study conducted earlier during the pandemic observed a five-fold increase in income-related health inequalities relative to what was obtained pre-pandemic.[24] Subsequent data does not indicate a reversal of this pattern long after the start of the pandemic. The implication is that COVID-19 might have exacerbated the already substantial socioeconomic inequalities in health, a prospect that has worrying implications for the poor. This is not surprising, given that the poor were more adversely affected by the economic fallout of the pandemic and were most likely worse off due to pandemic control lockdown restrictions.

Concluding Thoughts

Health is arguably the most critical aspect of human welfare. However, given that healthcare (an important determinant of health) is not readily available to all citizens, there is a possibility that socioeconomic inequalities may cause health disparities, mainly to the detriment of the poor. This presents a worrying set of possibilities for highly unequal societies like South Africa. To

this end, this chapter has interrogated the nature and magnitude of socioeconomic inequalities in various indicators of health and access to healthcare. The overriding message is that many health outcomes are closely related to socioeconomic position, to the detriment of the poor. This also holds for access to (mostly good quality and timely) private healthcare through private medical scheme membership. Worse still, the COVID-19 pandemic worsened socioeconomic inequalities in health. Moreover, even in instances where the country appears to be making remarkable progress – such as child health outcomes – the poor appear to be left behind.

In the face of free or heavily subsidised public healthcare, this situation indicates that merely removing user fees does not necessarily equalise health and healthcare. This suggests the possible existence of structural barriers, such as place of residence, that impede the health and healthcare of the poor. This is especially relevant given the country's history and the perpetuation of economic and spatial disparities that disadvantage a vast segment of the population. In this light, while pro-poor programmes and policies such as the proposed National Health Insurance Schemes theoretically hold promise for the realisation of universal health coverage, care must be taken to ensure that its design and implementation are efficient and effective, to avoid healthcare delivery being hindered by the same problems that currently confound public healthcare provision in the country.

Endnotes

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