A Health Care System Divided: How Apartheid’s Lingering Effects Harm South African Maternal Health

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ABSTRACT

From 1948 to 1994 South Africa was under the repressive Apartheid regime. Among many other actions taken to ensure white South Africans maintained power, the regime put in place discriminatory health policies that deprived black South Africans of equitable health care. As the apartheid era came to an end in 1994, the newly elected African National Congress sought to prioritize equity by creating the National Health Act. Despite this, major disparities in health care persist. The purpose of this case study is to shed light on such disparities in the South African health system by using maternal health as a proxy. Mothers living in rural areas continually contend with barriers to access, affordability and availability. Rural areas account for about 46% of South Africa’s population but service provision is only 12% and 19% of the nation’s doctors and nurses respectively. The lack of medical professionals in these areas make it difficult for mothers to receive vital procedures, such as emergency obstetric care, without traveling unmanageable distances. Moreover, high transport costs offset progress made by the elimination of out-of-pocket expenses and continues to make the cost of accessing care prohibitively expensive, accounting at times for 51.4% of household income.

Introduction

Apartheid (Afrikaans: “apartness”), the racial segregation and discrimination of non-whites, was first officially introduced in South Africa in 1948(1, 2) During the apartheid years, race was classified into three categories: white, black (African), and coloured, based on appearance, social acceptance and descent (4). Riots and protests by black South Africans eventually
garnered substantial resistance to white rule (2).

The African National Congress (ANC), with Nelson Mandela at its helm, fought to end the apartheid regime and successfully did so in 1994, at which point the nation transitioned to a constitutional democracy. (2, 3) Central to this transition was the need to eliminate the racial discrimination and segregation in health care to ensure proper care for the whole South African population (3). The South African government’s aim was to place health care reform high on the agenda to promote accessible and affordable primary health care (5). This reform was meant to improve access to health care for the poorest South Africans by eliminating out-of-pocket health care fees and expanding health care facilities (5). At the time, the burden of disease rested heavily on the shoulders of poor black South Africans (5), as they received the least amount of resources, despite constituting the major demographic in South Africa as per Figure 1 (7).

The inverse care law, coined by Julian Tudor Heart, posits that, “The availability of good medical care tends to vary inversely with the need for it in the population served”. (6, 8) Despite the changes made since the end of apartheid, the inverse care law can still be used to describe the South African health care system; health services are distributed unequally and the utilization and benefits of health services are enjoyed primarily by wealthy South Africans, who happen to be mostly white, in the public and especially the private sector (6). The purpose of this case study is to show that health care reform in South Africa has failed to address the systemic disparities produced by apartheid, thereby making South African health care yet another example of the inverse care law taking shape in global health. This study will use maternal health as a proxy for the South African health system and therefore draw on maternal health for evidence of this failure.

The Apartheid Era
During the apartheid era in South Africa, extreme inequalities in health status between the white and non-white populations reflected the top-down discrimination that permeated throughout the country. In addition to discriminatory health policies, the policy of forced relocation of Black South Africans away from the major cities and into what were referred to as Bantustans were instrumental in maintaining economic and political power for the white population (9). This resulted in health resources being disproportionately allocated in favour of the white population outside the Bantustans, to the detriment of non-white people’s health (9).

Under apartheid, many laws and policies that encouraged racial discrimination against black Africans were put in place,
thereby hindering their access to health care services. Deregulation of public health care led to the expansion of the private sector in South Africa as well (10). The privatization of health care further enhanced the gap between the white and the black South African populations. This resulted in health care being very expensive and therefore inaccessible to the non-white lower classes (10). While white South Africans dominated the use of the private sector, very few black South Africans could afford the cost associated with those services (Figure 2)(11, 12).

Consequently, health system privatization increased the disparities in health between South Africa's racial groups (13). In the 1960s, 80% of whites were covered by medical schemes, whereas 95% of blacks relied heavily on the public sector (13). Another metric that heavily points to the systemic inequality of the Apartheid health care system, is the number of health care workers and resources available for black South Africans. According to the health minister Rina Venter, there was a surplus of 11700 beds for white patients, while there was a deficit of 7000 beds for the black population (14). In 1992-1993, expenditure in the private sector was estimated to be 61% of total health expenditure, which cared for a mere 23% of the population (Figure 3)(11). Between 1992 and 1993, 59% of doctors, 93% of dentists, and 89% of pharmacists...
worked in the private sector (15), demonstrating the lack of health resource allocation towards the public sector.

Apartheid’s private health system lacked a primary health care strategy and was instead biased towards curative services (13). This lack of primary care for non-white South Africans led to serious health problems, manifested by higher infant mortality and lower life expectancies in the black population. In 1980, the infant mortality rate was a staggering 20% in the black population compared with only 2.7% in the white population (16). In the same year, life expectancy was only 55 years of age for black South Africans - 15 years short of the 70-year life expectancy of the white upper class (17).

Furthermore, the racial segregation of health facilities meant that ‘black’ hospitals were often overcrowded and understaffed due to the large proportion of health resources being allocated towards ‘white’ hospitals (10). In 1981, there was one physician for every 330 whites but only one for every 91,000 non-white persons (17). This disparity was maintained by an inefficient health care system fragmented across 14 different departments: 10 ‘homelands’ departments, three “own affairs” departments, and one ‘general affairs’ department (13). Separate departments were established for the different racial groups (16). The apartheid system produced white doctors who did not practice in rural areas or black townships, the very same areas that needed doctors the most (18). This fragmentation resulted in major cost-inefficiencies and provided differential access and quality of care for

![Figure 3. Health expenditure and population coverage (1992-1993)](image-url)
white versus non-white groups. After the end of apartheid in 1994, this fragmented system was absorbed into nine provincial health services (19).

The Post-Apartheid Era
In 1994, South Africa held its first democratic election, in which the ANC won with an overwhelming victory, thus marking the end of the apartheid era. The ANC National Health Plan was established as the first comprehensive sectoral plan with deeply rooted principles of social justice and equity (13). This plan acknowledges that health goes beyond simply providing health services as it strives to improve the health of South Africans through equitable social and economic development, through such provisions as standards of education, the provision of housing, clean water, sanitation and electricity (20). The National Health Plan was given a high priority within the Reconstruction and Development Programme (RDP), as it was understood that addressing health inequities was required in order to resolve the racialized socio-economic inequities in South Africa in a timely manner (20).

In order to implement these plans, the ANC drafted the white paper in 1999, which was used as the basis for the National Health Act in 2003, whose goal was “to regulate national health and to provide uniformity in respect of health services across the nation” (21). The act strived to achieve this goal by establishing a national health system with both private and public health providers that provides the public with the best possible health services in an equitable manner. The National Health Act is viewed, at least in theory, as being one of the most progressive pieces of health legislation, with firm values of equity and social justice (13). However, accessing private health care is dependent on one’s ability to pay. In South Africa, the National Department of Health created and implemented a national health policy, which the nine provinces’ Departments of Health deliver to their populations (22). Additionally, there are local departments of health that are charged with health promotion and preventative services (22). The public hospital system is organized into three tiers: tertiary, district and regional, with the majority of patients accessing their primary health needs at the level of the District Health System (9, 23).

Given that the private sector serves the richest 16% of the population but employs 70% of the country’s doctors while the public serves 84% of the population but employs 30% of the country’s doctors is where this global health failure lies (22). Despite 4,373 new doctors being added to the public sector between the years 2002 to 2010, most health care professionals, especially specialists, are still found in the private sector (Figure 4)(24).
In order to benefit from the private health sector, one must be part of medical schemes (i.e. private health insurance), to which individuals and their employers will contribute 1571 USD per year on average (9). This systematically excludes those in lower socioeconomic standings, namely black people, as white South Africans have a significantly higher likelihood of being part of a medical scheme than their black counterparts. In 2017, 72.4% and 10.1% of white South Africans and black Africans respectively were covered by private health insurance (Figure 5)(25). Since the government does not fund private health care, only those with private insurance or who have enough to pay out-of-pocket, are able to access private sector services. However, those who can afford to be privately insured make up most of the top two income quintiles. According to statistics South Africa published in 2015 (26), almost half (46.58%) of black households fall within the two lowest income quintiles, whereas only 11.09% are found in the upper quintile. As a comparison, 84.60% of white households were situated in the upper quintile, with as few as 0.13% in the lowest quintile (26). The lack of access to healthcare for the black population is undeniable as this demographic represents 80% of yearly deaths in South Africa, while only representing 70% of the population (27).
The public health sector as of now still has no real formal coverage, resulting in low quality public health care available to those who rely on it (9). This demonstrates that although apartheid ended 25 years ago, there remains deep-rooted systemic racism in South Africa, as black people to this day do not have access to adequate health care, a fundamental human right as set by the constitution of the WHO in 1946 (28). The South African Department of Health initiated the National Health Insurance plan (NHI) in 2009 to reduce disease burden, improve overall health and make healthcare more accessible and affordable for all (29). This plan, however, relies on enforced contribution from employers and employees to fund part of the system. This is where the plan falls apart as the subset of the population that earns the most and would therefore contribute a large portion of this fund, is already covered by medical schemes (22). They are therefore uninterested in moving to the public system and having their money distributed across the nation. A lack of stewardship, economic support and action has left the NHI in its implementation phase and as such South Africa has been, is and will remain a shining example of the inverse care law.

Health Care Financing and Expenditure
The manner in which the South African health system is financed heavily influences the access and financial burden individuals will face when obtaining healthcare, as
described by Carrin et al. (30). The private and public sectors are financed through a combination of sources including general taxes, private insurance and out-of-pocket payments (31). Overall, private sources dominate in relative contribution, as seen in Figure 6 (31).

The majority of the South African population is dependent on the public sector, which is primarily funded by public financing, almost entirely through allocations from general tax revenue (27). In 2005, general tax revenue allocations accounted for an estimated 43% of the total health care finance, which corresponds to coverage for about 68% of the population, which primarily consists of individuals that are completely dependent on the private sector (31). Private insurance contributions accounted for an estimated 44% of total health care finance, which corresponds to coverage of about 16% of the population (31). Private insurance contributions accounted for an estimated 44% of total health care finance, which corresponds to coverage of about 16% of the population (31). Less than 1% of total health care funding is contributed by donor or non-governmental organisation (NGO) funding, (32) however, these funds are mainly earmarked for specific diseases, such as malaria, tuberculosis and HIV/AIDS (32).

In 1996, the user fee for the public sector primary health care services was abolished.
as a step towards reducing the financial barriers to accessing health care, particularly for those of low socio-economic status (33). Thus, the utilisation of health services increased specifically among the poor. However, the government failed to increase total health care financing accordingly (33).

Between 1996 and 2007, greater health care allocations were given to provinces with predominantly white populations and with pre-existing infrastructure, depriving provinces with greater need for health care allocations (34). By 2007, the South African provinces with the greatest health burdens, least economic resources and largest black populations received the smallest allocation of the national public health care funds (33). This distribution of health care funding allocation in South Africa highlights the essence of “The Inverse Care Law”, as the regions with greater health needs receive fewer financial resources (34).

According to the World Health Organization (WHO) National Health Account Database, the total health expenditure as a percentage of gross domestic product slightly increased from 8.3% in 1995, to 8.8% in 2014, with the total private sector expenditure outweighing that of the public sector (31, 35). Over the past two decades, less than 15% of general government expenditure was consistently spent on the health sector. This proportion of health expenditure ranks less than the global average and less than that of upper-middle-income countries (31).

### Accessibility, Affordability and Availability

Drawing from Frost and Reich’s access framework, maternal and child care in South Africa can be assessed via a three-pronged approach: accessibility, affordability and availability (36). The World Health Organization (WHO) defines accessibility as the availability of good health services, such as emergency obstetric services, within reasonable reach to those who need them (37). Affordability is “a measure of people’s ability to pay for services without financial hardships” and takes into account the price of the health services and indirect costs to receive maternal and child care (37). Finally, the availability of health care is defined by the WHO as “the sufficient supply and appropriate stock of health workers with the competencies and skills to match the health needs of the population.” (38).

### Accessibility and Affordability

One of the lasting impacts of apartheid is the spatial and racial dimensions of poverty. The apartheid regime put policies in place that restricted the geographic mobility of black South Africans, in order to create a segregated South Africa. Spending on sanitation and housing was also highly unequal, racialized, and tied to regional segregation. From the 1960’s to 1980’s, the Apartheid regime moved, sometimes force-
fully, black South Africans to Bantustans. The Bantustans were artificially created provinces that only covered 13% of the land of South Africa, but were meant to host 72% of the population, namely all the black South Africans (39).

Now even after apartheid has ended, the poorest households are most often black, and often lay in the outskirts of cities or in rural areas (40). A study has found that 14% of black South Africans live further than 5 kms away from a clinic, while that number is only 4% for white South Africans (41). McCray demonstrated that most mothers that began prenatal visits only after their third trimester, or never received prenatal care at all, lived more than five kilometers away from a healthcare facility (42). This is again related to the spatial consequences of apartheid, and more precisely the Bantustans, as South Africa’s rural areas account for about 46% of the population but only 12% of doctors and 19% of nurses (43).

An issue resulting from geographic segregation is the high cost of transport for poor women. While there are no user fees for receiving maternal healthcare, there can often be high costs related to transport to the nearest clinic or hospital. This was found to be a significant barrier especially for women giving birth. A study found that transport costs present a significant barrier for women, especially in rural areas where there is little public transit and ambulances are difficult to arrange (44). Overall, health facilities, goods and services cannot be accessed within a safe physical reach as easily for black South Africans compared to white South Africans.

Compounded with transport fees, the costs associated with childbirth at a clinic or even hospital presents a significant barrier to the affordability of maternal healthcare services in South Africa. A study found that women often have to buy supplies for delivery at smaller clinics, such as nappies, sanitary towels, and food (44). Silal et al. found that poor women might even have to borrow money to be able to access healthcare services, despite these services being free at the point of use (45). The same study found that in two rural and poor districts, women had to spend upwards of 51.4% of their household expenditure on said delivery costs, and upwards of 14% of households had to resort to borrowing money or selling assets to pay for delivery costs (45).

There are stark socioeconomic inequities that remain from the days of Apartheid, as poor and black women still face costs associated with healthcare. There is also a divergence in health outcomes for poor women versus wealthy women. A study found several key characteristics about the Maternal Mortality Rate (MMR) in South Africa. There was also a huge ineqiuty
in the MMR in different racial populations, where the MMR for black women was 614, and the MMR for white women was 67, meaning that the mortality rate for black women was ten times higher than for white women (46). While the relationship between socioeconomic status and MMR was not entirely linear, the MMR was much lower for wealthier women, as the MMR for women who declared no income was 650, and for women who made more than 28,800 Rand (SA currency) the MMR was 208 (46).

Availability
In terms of availability, there are several services that can be assessed to determine the quality and accessibility of maternal and child care. One service that is vital to the survival of mothers and children is the availability of emergency obstetric care. One study found that only hospitals, and not all district clinics, had proper emergency obstetric care protocol services and drugs (47). A large issue with the availability of maternal health services is the lack of qualified medical professionals. As discussed earlier, there is a significant disparity between the resources available in the public health system and in the private medical scheme system. This has serious consequences for the accessibility of medical services, maternal or otherwise. One consequence is the lack of medical practitioners in the public system, as there is one government-employed doctor for every 2,457 people (48). This can be contrasted with the private system, in which there is one doctor for every 429 people (49).

The disparate public system is then further distributed unequally amongst the provinces, with some provinces having double the number of doctors per 100,000. Figure 7 clearly illustrates this disparity in coverage between provinces. When compared
with a map of the relative maternal mortality rates between the provinces, it is evident that the provinces with the highest mortality rates are also the ones with the lowest rate of doctors, showing a clear correlation between the two indicators (50).

However, there is also evidence that the lack of medical practitioners has a direct effect on maternal health. The 2014-2016 ‘Saving Mothers Report’ published yearly by the South African government stated that a lack of qualified and skilled doctors was recorded in 51% of women who died due to ectopic pregnancies, 33% due to miscarriages, 46% due to pregnancy related sepsis, 48% due to obstetric haemorrhage, 34% due to hypertension and 71% due to anaesthetic related cases (50). Figure 8 illustrates the percentage of deaths during delivery that cited lack of qualified and skilled doctors. It is clear that there are issues pertaining to the availability of maternal and child health services, as there is a lack of proper facilities as well as health care professionals.

Limitations
While the health care pillars addressed above provide a good overview of the health outcomes in the South African health care system as it pertains to maternal health, this review comes with its share of limitations. One such limitation stems
from the South African government’s rising corruption. According to Transparency International, which ranks the corruption of every country on a scale of 0 (most corrupt) to 100 (least corrupt), South Africa’s corruption score for 2018 is 43 (51). This score is down 18 points from 61 in 2015, meaning that corruption in South Africa is rapidly getting worse (51). South Africa currently sits at the global corruption average and is ranked as the 73rd most corrupt country in the world (51). A corrupt South Africa, whose government is already hypersensitive to its image pertaining to apartheid, is likely to distort statistics and silence research that it feels unhangs its progress in moving away from the Apartheid Era. This puts the research that this study draws on in the direct line of fire, especially considering that much of it is recent research, and therefore would have been published at around the same time as South Africa’s spike in corruption.

Not all gaps in knowledge on maternal health in South Africa’s health care system can be attributed to malice, however. There is also a strong possibility that research simply does not exist, or certain aspects of maternal health are understudied. Discrepancies are especially likely when considering the quality of data coming out of both the private and public sector respectively. While data in the public sector may be poorer in quality, data in the private sector is proprietary and may not be accessible to public researchers. Gaps might also exist when comparing data on white South Africans, who have experienced quality care for several decades, to coloured and black South Africans whose data only goes as far back as 1994 in many cases, but comprise a larger subset of the population in South Africa. Finally, by applying a national scope to the research question, this study may also be blind to local realities and the cultures and norms that shape them.

Conclusion
While 26 years have passed since South Africa was freed from the Apartheid regime, the racial inequalities in health persist. The lasting legacy of the forced relocation and systematic exclusion of black South Africans from the healthcare system has had lasting consequences for the current geographic and material distribution of access to healthcare. Resources and medical manpower are unequally distributed within the underfunded and overextended public healthcare system. This public and private divide in the healthcare system will keep reproducing the racial inequalities as long as there is a lack of affordable, accessible, and available access to maternal healthcare, and even healthcare in general, within the public system. In addition, the racial inequities that persist in economic activities, land allocation, education, also contribute to differential health outcomes,
as they are social determinants of health, thus contributing to the persistence of racial gaps in maternal health care. The National Health Insurance policy that is currently being debated and drafted will therefore have to take these inequities seriously in order to ensure better healthcare for all women in South Africa.

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