

## Health in South Africa 1



# The health and health system of South Africa: historical roots of current public health challenges

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The roots of a dysfunctional health system and the collision of the epidemics of communicable and non-communicable diseases in South Africa can be found in policies from periods of the country's history, from colonial subjugation, apartheid dispossession, to the post-apartheid period. Racial and gender discrimination, the migrant labour system, the destruction of family life, vast income inequalities, and extreme violence have all formed part of South Africa's troubled past, and all have inexorably affected health and health services. In 1994, when apartheid ended, the health system faced massive challenges, many of which still persist. Macroeconomic policies, fostering growth rather than redistribution, contributed to the persistence of economic disparities between races despite a large expansion in social grants. The public health system has been transformed into an integrated, comprehensive national service, but failures in leadership and stewardship and weak management have led to inadequate implementation of what are often good policies. Pivotal facets of primary health care are not in place and there is a substantial human resources crisis facing the health sector. The HIV epidemic has contributed to and accelerated these challenges. All of these factors need to be addressed by the new government if health is to be improved and the Millennium Development Goals achieved in South Africa.

### Introduction

South Africa's history is permeated with discrimination based on race and gender. The country's infrastructure was moulded by the violent subjugation of indigenous people, appropriation of their land and resources, and the use of unjust laws, to force black people to work for low wages to generate wealth for the white minority. South Africa is also a country of political resistance; after 82 years, the organised multiracial struggle against unjust rule finally won democracy in 1994, along with a constitution that establishes the foundation for democratic institutions and upholds wide-ranging human rights. The history of South Africa has had a pronounced effect on the health of its people and the health policy and services of the present day. Before 1994, political, economic, and land restriction policies structured society according to race, gender, and age-based hierarchies, which greatly influenced the organisation of social life, access to basic resources for health, and health services. Modern South Africa is a multiracial democracy, where the black African majority (79.2% of the population), sits alongside minority groups that are white (9.2%), coloured (9.0%), and Indian (2.6%; the terms used for the different races are consistent with those in common use and employed by the national census, and do not imply acceptance of racial attributes of any kind).<sup>1</sup> After 15 years, South Africa is still grappling with the legacy of apartheid and the challenges of transforming institutions and promoting equity in development.

South Africa has four concurrent epidemics, a health profile found only in the Southern African Development Community region.<sup>1</sup> Poverty-related illnesses (table), such as infectious diseases, maternal death, and malnutrition, remain widespread, and there is a growing

burden of non-communicable diseases.<sup>2</sup> HIV/AIDS accounts for 31% of the total disability-adjusted life years of the South African population, with violence and injuries constituting a further cause of premature deaths and disability. Although South Africa is considered a middle-income country in terms of its economy, it has health outcomes that are worse than those in many lower income countries. South Africa is one of only

### Key messages

- Freely elected governments are the minimum condition for effective health policies. The health and social consequences of despotic, unelected, or poorly functioning elected governments can be longlasting.
- The will of the people, expressed through resistance to oppression or mobilisation against failed policies in democracies, is the best investment for a healthy future.
- Programmes that directly address social determinants of health and development, such as discrimination and stigma, subordination of women, poverty and inequality, violence and traditional practices, are essential for promoting health and reducing disease.
- Macroeconomic policies that promote growth alone are insufficient; an economic architecture should allow the development of programmes that reduce poverty, unemployment, and inequities.
- Good leadership, stewardship, and management of health and related services are crucial to achieving health for all people.
- Innovative approaches to health service delivery are needed in developing countries that are affected by both communicable and non-communicable diseases.

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This is first in a [Series](#) of six papers on health in South Africa

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Disease, injury, or condition	Proportion of total DALYs* (%)
HIV/AIDS	30.9%
Interpersonal violence injury	6.5%
Tuberculosis	3.7%
Road traffic injury	3.0%
Diarrhoeal diseases	2.9%
Lower respiratory infections	2.8%
Low birthweight	2.6%
Asthma	2.2%
Stroke	2.2%
Unipolar depressive disorders	2.0%
Ischaemic heart disease	1.8%
Protein-energy malnutrition	1.3%
Birth asphyxia and birth trauma	1.2%
Diabetes mellitus	1.1%
Alcohol dependence	1.0%
Hearing loss (adult onset)	1.0%
Cataracts	0.9%
<b>Risk factor</b>	
Unsafe sex/STIs	31.5%
Interpersonal violence (risk factor)	8.4%
Alcohol harm	7.0%
Tobacco smoking	4.0%
High BMI (excess bodyweight)	2.9%
Childhood and maternal underweight	2.7%
Unsafe water sanitation and hygiene	2.6%
High blood pressure	2.4%
Diabetes mellitus (risk factor)	1.6%
High cholesterol	1.4%
Low fruit and vegetable intake	1.1%
Physical inactivity	1.1%
Iron deficiency anaemia	1.1%
Vitamin A deficiency	0.7%
Indoor air pollution	0.4%
Lead exposure	0.4%
Urban air pollution	0.3%

Reproduced with permission from reference 2. BMI=body-mass index. DALYs=disability-adjusted life years. STIs=sexually transmitted infections. \*Total DALYs for entire South African population.

**Table: Leading causes of morbidity and risk factors for morbidity in South Africa, 2000**

12 countries where child mortality has increased, rather than declined, since the Millennium Development Goals baseline was set in 1990.<sup>3</sup> With 69 deaths under the age of 5 years per 100 000 live births, the country's mortality rate is far in excess of that, for example, of Peru (25 deaths per 100 000 live births), Egypt (35), Morocco (37), and Nepal (59).<sup>3</sup>

This report examines the historical roots of the determinants of health in South Africa and the development of the health system through colonialism and apartheid to the current post-apartheid period. We

present historical dimensions of current problems of gender inequity and violence, and those related to sexuality and the family, as well as the macroeconomic and socioeconomic contexts of health. We also discuss some of the failures in health system governance of the post-apartheid period that have delayed progress in addressing this historical inheritance (figure 1 and figure 2). These failings are key to the health problems currently facing the country and thus set the scene for the debates presented in the five subsequent reports in this Series, which focus on maternal and child health,<sup>20</sup> HIV/AIDS and tuberculosis,<sup>21</sup> non-communicable diseases,<sup>22</sup> violence and injury,<sup>23</sup> and finally the way forward to improve health in the country.<sup>24</sup>

## Social, political, and economic contexts of health

### Modern history of South Africa

The white population of South Africa traces its roots back to 1652 when the first permanent European settlement was established in the Cape of Good Hope. The settlers found the land inhabited by the KhoiKhoi and San tribes, whose ancestors had lived in southern Africa for between 10 000 and 20 000 years. Over the following century, and despite a series of wars of resistance, these indigenous people were forcibly dispossessed of their land and cattle, and driven off, or forced to work on settler farms. The settlers expanded their occupation eastwards into the lands of the amaXhosa, one of several black African tribes living in the area. From 1654, slaves were imported to the Cape from west Africa, Mozambique, Madagascar, India, and Indonesia to work on the settler farms. These farm workers and slaves were to become some of the ancestors of the people classified as coloured under apartheid. The ancestors of the present day Indian population were brought as indentured labourers from India to Natal, from 1859, to work in the sugar plantations.<sup>14</sup>

The Dutch East India Company politically controlled the settled area of the Cape until the British occupation in 1806 began a century of uninterrupted British rule. Over this time, British military expansion, and inland migration from the Cape Colony of armed Afrikaner farmers, saw the occupation of the land area of modern South Africa. The native inhabitants were either reduced to being tenants or wage-labourers and forced off land or driven into impoverished and circumscribed tracts of rural land (reserves). Violence and warfare were used to establish dominance between the settler powers, and to subdue the indigenous population. The British victory in 1902 in the Anglo-Boer War brought together the two Afrikaner republics (Orange Free State and Transvaal) and two British colonies (Cape Colony and Natal Colony) under one flag. In 1910, when the Union of South Africa was founded, the colonies became provinces within the state, which was a dominion in the British Empire (webappendix p 1 shows the maps of South Africa from the colonial period to apartheid).<sup>25,26</sup>

The transformation of the country from an agricultural to an industrial economy, following the discovery of diamonds in Kimberley in 1867 and gold in the Witwatersrand in 1886, resulted in profound changes in society. Mining became the cornerstone of the economy until well into the 20th century, and the development of the manufacturing sector was integrally linked to mining.<sup>27</sup> With massive foreign investment flowing into the country, and the potential for generation of wealth through the mining industry, the demand for cheap black male labour became insatiable, with ever more ruthless methods used to procure it.<sup>14</sup> A combination of coercive legislation, taxes, restrictions on access to land and means of production, and punitive control of desertions, served to enforce migration of male labourers to the towns.<sup>13,28</sup> This system greatly undermined the rural black agricultural economy. The number of miners increased from 10 000 in 1889 to 200 000 in 1910, and 400 000 in 1940.<sup>29,30</sup> Cheap migrant labour thereafter became, and remained, the mainstay of social, economic, and political developments and a major determinant of subsequent disease patterns, both in South Africa and in neighbouring countries that also sent migrants to the South African mines.

Despite legislated attempts to restrict black people to the reserves, the urban black population grew by 94% between 1921 and 1936.<sup>30,31</sup> Some women and children had moved to the urban areas; however, there were very few economic opportunities for women and they were largely dependent on men. Racial segregation of urban areas, with reservation of land mostly for white people, and failure to provide proper housing for the migrant workers, led to the creation of overcrowded, unsanitary hostels and slums in the urban black areas (figure 3). The high turnover of mine workers (100% in a year in some gold mines), due to their return to families in the reserves, and forced repatriation of labourers too ill to be productive, spread tuberculosis to the reserves. By the late 1920s, more than 90% of adults in parts of the rural reserves of Transkei and Ciskei had been infected with tuberculosis.<sup>28</sup>

From 1948, when the right-wing National Party came to power, the state policy of apartheid consolidated the political exclusion, economic marginalisation, social separation, and racial injustices of the preceding 300 years.<sup>12,13</sup> The system was based on racial classification from birth of all South Africans into European (white), Asian (Indian), coloured, or Bantu (black) and a rigid racial hierarchy, with white people positioned at its apex. This classification determined where a person could live, work, and go to school, whom they could marry, whether they could vote, and the resources allocated to their education, health care, and pensions. All laws were reinforced by draconian state control and repression. Black people were denied citizenship in South Africa and millions were forcibly removed to areas of land centred on the rural labour reserves and designated as bantustans (homelands; webappendix p 1).<sup>12,13</sup> They were forced to

carry passes recording permission to work and reside in urban areas; this requirement was ruthlessly policed and transgressors jailed. In the absence of employment, the physically able were forced to leave and seek work in cities, and during any period, between 60–80% of the economically active adult men who lived in the bantustans were away from home.<sup>12,13</sup> As a consequence, the bantustans were vast, highly impoverished areas inhabited for most of the year by those who were very young, elderly, sick, or disabled, and women who were unemployed.

The African National Congress (ANC) was formed in 1912 and is the oldest liberation movement on the African continent. Its founders had opposed the formation of the Union of South Africa because it denied political participation to the country's black majority. Over the following decades the ANC organised protest action against the pass laws, the 1913 Land Act, and further restrictions on political participation. From the 1940s, the ANC became more militant. After police killed peaceful protesters in Sharpeville in 1960, a state of emergency was declared and the ANC and other organisations were banned. Over the next three decades, thousands of South Africans who opposed apartheid were forced into exile and the ANC adopted a new tactic of armed struggle. Anti-apartheid organisations within the country became widespread and militant from the mid-1970s, and much of the 1980s were characterised by state violence and extreme repression in the townships (black urban areas), but also by increasing mobilisation of civil society in opposition to apartheid. At this time, reformists within the white ruling class identified an economic and social imperative to relax laws inhibiting the growth of a black middle class and the skilled, urban workforce; they perceived this relaxation to be essential for newer, more complex industrial enterprises and social stability. The combined pressure from resistance and reformers ultimately resulted in the dismantling of apartheid and the country's first democratic elections in 1994.

### Gender and violence in historical perspective

Embedded in this backdrop of racial discrimination, other key contributors to the health problems of the democratic era were subordination of women, disrupted family life, poverty, and conflict, all of which are discussed in this Series. The history of war and violence has shaped the dominant forms of South Africa's racially defined masculinities, in that they all valorise the martial attributes of physical strength, courage, and an acceptance of hierarchical authority.<sup>33</sup> Research on white masculinity, for example, has shown how in colonial Natal, school and sport participation inculcated these values, as well as ideas of racial superiority, gender hierarchy, and class chauvinism. These ideas strongly influenced the political and social history of the region, and until very recently had been little changed.<sup>34</sup> In the Boer republics in the 19th century, Afrikaner boys were organised from a young age

	Social dynamics and status of women	Key health challenges	Health-care resources*	Health system†
<b>1652–1800 Dutch colonialism 1800–1910 British colonialism</b>	<ul style="list-style-type: none"> <li>Late 19th century: migrant labour on the mines—chiefly short term to accumulate bride wealth‡</li> <li>Polygamy was practised by wealthier African men</li> <li>Some acceptance of African women living independently without husbands</li> </ul>	<ul style="list-style-type: none"> <li>17th century: diseases of poverty; epidemics of smallpox and measles; poisons; malaria; famines; schistosomiasis; trypanosomiasis. Trade in European alcohol and Caribbean tobacco</li> <li>19th century: epidemics of syphilis, tuberculosis, and bubonic plague; yellow fever, typhus, cholera; soil parasites; malnutrition</li> </ul>	<ul style="list-style-type: none"> <li>Traditional healers, European trained doctors, missionaries, and other health providers offered a mix of services</li> <li>Early 19th century: domination by medically trained doctors; indigenous and traditional healers were marginalised</li> <li>Late 19th century: orthodox medicine became a professional practice with trained nurses and doctors</li> </ul>	<ul style="list-style-type: none"> <li>17th and 18th centuries: hospital care provided by Dutch East India Company, colonial governments, and Christian missions</li> <li>1807: first health legislation; establishment of Supreme Medical Committee to oversee all health matters</li> <li>1830: Ordinance 82 allowed for regulation of all health practices in Cape Colony; other three colonies followed the Cape's lead</li> <li>1883: Public Health Act in response to the smallpox epidemic made notification and inoculation of smallpox compulsory</li> <li>Mid-1800s: hospitals in most major centres</li> <li>1897: Public Health Amendment Act separated curative and preventive care</li> <li>Missionaries provided orthodox medical health care for black Africans</li> </ul>
<b>1910–48 Period of segregation</b>	<ul style="list-style-type: none"> <li>Labour migration intensified, becoming more long term</li> <li>Migration of women to urban areas increased</li> <li>Family life was undermined by labour migration</li> </ul>	<ul style="list-style-type: none"> <li>Poor urban working and living conditions with diseases caused by overcrowding, poor sanitation and diets, stress, and social disintegration</li> <li>Syphilis, tuberculosis, malaria, venereal diseases continue to spread</li> <li>Maternal mortality high</li> <li>Malnutrition growing</li> <li>Lung disorders and mesothelioma in mine workers</li> </ul>	<ul style="list-style-type: none"> <li>1940: overall ratio of one doctor per 3600 population, but the mine workers noted that there was one doctor for every 308 white people in Cape Town compared with one doctor for 22 000 to 30 000 people in the reserves§</li> </ul>	<ul style="list-style-type: none"> <li>1910: establishment of Union of South Africa; health services were fragmented among the four provinces</li> <li>1919 Health Act established the first Unionwide Public Health department</li> <li>1942–44: Gluckman Commission advocated for a unitary national health service</li> <li>1945: Polela Experiment; Gluckman became Minister of Health in 1945 and at the same time several community health centres were set up. These centres were the forerunners of community-based primary health care, with the health of the population of prime concern</li> </ul>
<b>1948–94 The apartheid years</b>	<ul style="list-style-type: none"> <li>Poverty deepens and results in a decline in marriage</li> <li>Women's employment largely domestic work</li> <li>Children increasingly raised by extended family in the bantustans</li> </ul>	<ul style="list-style-type: none"> <li>Non-communicable diseases rise in white people and poverty-related diseases persist in black people</li> <li>Maternal, infant, and child mortality high</li> <li>Apartheid-related mental disorders common in black and coloured people</li> <li>Tuberculosis rates and deaths much higher in black and coloured populations than in white populations</li> <li>In urban areas, teenage pregnancy rises and unsafe abortion and infanticide escalate</li> </ul>	<ul style="list-style-type: none"> <li>Doctor to patient ratios in the provinces increased from 1:2427 in 1946 to 1:1721 in 1976¶</li> <li>Early 1970s: in the Bantustans, the doctor to population ratio was estimated at 1:15 000 compared with 1:1700 in the rest of the country  </li> <li>Health services in bantustans were systematically underfunded</li> <li>By 1980, 40% of doctors worked in the private sector, increasing to over 60% by 1990**</li> </ul>	<ul style="list-style-type: none"> <li>1952: segregated medical school established for black students in Durban</li> <li>State takeover of missionary hospitals, which formed the backbone of the bantustan health services</li> <li>1977 Health Act perpetuated the fragmentation with curative services being a provincial responsibility and prevention a local government responsibility</li> <li>1978: Alma-Ata Declaration failed to have an effect on an increasingly isolated South Africa</li> <li>1983: Tricameral Parliament further fragmented health services with white, coloured, and Indian "own affairs" departments</li> <li>1994: African National Congress Health Plan built on principles of primary health care</li> </ul>
<b>1994–2008 Post-apartheid democracy</b>	<ul style="list-style-type: none"> <li>1996 Constitution enshrines principle of gender equality</li> <li>Removal of gender inequitable legislation and practices and a substantial increase in involvement of women in politics</li> <li>1998 Domestic Violence Act prohibited physical, sexual, and emotional violence against women and allowed for protection orders to be sought</li> <li>2007 Criminal Law (Sexual Offences and Related Matters) Amendment Act establishes a new broad definition of rape</li> <li>1998 Maintenance Act aims to strengthen fathers' financial support of their children; implementation is weak</li> </ul>	<ul style="list-style-type: none"> <li>Quadruple burden of disease recognised: diseases of poverty (perinatal and maternal diseases), non-communicable diseases, HIV/AIDS (communicable diseases), and violence and injury lead the causes of mortality and healthy years of life lost</li> </ul>	<ul style="list-style-type: none"> <li>Stagnation in government funding of health care</li> <li>Expenditure per head on medical schemes†† was three times greater than was public expenditure in 1996; this difference had increased to almost six times greater by 2006‡‡</li> <li>By the end of the 1990s, almost three-quarters of generalist doctors worked in the private sector§§</li> <li>Redistribution of government funding between geographic areas</li> </ul>	<ul style="list-style-type: none"> <li>1996: free care for children younger than 6 years and pregnant women, and free primary health care for all</li> <li>1996: the Choice on Termination of Pregnancy Act legalised abortion, increased access, and led to marginal declines in septic abortions and stabilisation in maternal mortality from septic abortions in recent years¶¶</li> <li>A rights-based approach to youth sexuality: promotion of information and youth-friendly sexual health services, and banning the exclusion of pregnant pupils from schools; teenage pregnancy declined by 56% from 124 births per 1000 women aged 15–19 years in 1987–89 to 54 per 1000 in 2003   </li> <li>1999: Tobacco Products Control Amendment Act prohibited smoking in public places, restricted tobacco product promotion, and enhanced taxation; contributed to substantial reduction in smoking</li> <li>2000: Firearms Control Act restricted access to firearms; a reduction in gun-related homicides followed</li> <li>2001: Free Basic Water Strategy defined water as a social and developmental good and basic human right</li> <li>2002: Mental Health Care Act legislates against discrimination against mental health-care users</li> <li>2004: National Health Act legislates for a national health system incorporating public and private sectors and the provision of equitable health-care services; provides for fulfilling the rights of children with regards to nutrition and basic services and entrenches the rights of pregnant women and children to free care throughout the public sector if they are not on a medical scheme; legislates for the establishment of the district health system to implement primary health care throughout South Africa</li> </ul>

**Figure 1: Trends and changes between colonialism and post-apartheid South Africa in social dynamics and status of women, key health challenges, health-care resources, and the health system**

\*Financing and human resources. †Structure and service delivery. ‡Money paid by the groom to the parents of the bride. §Reference 4. ¶Reference 5. ||Reference 6. \*\*Reference 7. ††Private voluntary health insurance organisations. ‡‡Reference 8. §§Reference 9. ¶¶Reference 10. ||||Reference 11.

	Political context	Macroeconomic and socioeconomic context	War, crime, and violence
<b>1652–1800</b> Dutch colonialism 1800–1910 British colonialism	<ul style="list-style-type: none"> <li>• 1652–1798: Dutch East India Company established settlement in the Cape with political control; colonial expansion inland</li> <li>• 1806: British occupation commences</li> <li>• 1834: Afrikaner farmers begin Great Trek—inland migration from Cape Colony to occupy land of modern South Africa</li> <li>• Late 19th century: South Africa comprised two Afrikaner Republics (Transvaal, Orange Free State) and two British Colonies (Cape, Natal)</li> </ul>	<ul style="list-style-type: none"> <li>• Economy based on farming and the main form of labour until 1838 is imported slaves</li> <li>• Discovery of diamonds in 1867 and gold in 1886 transformed economy from agricultural to industrial</li> </ul>	<ul style="list-style-type: none"> <li>• Violent subjugation of indigenous peoples during colonisation with extermination of the San people, in the name of preventing stock theft</li> <li>• 19th century: under British rule a professional army was formed and a systematic process of military defeat of local rulers undertaken; the Boer republics also waged war against local rulers</li> <li>• The First Boer War (1880–81) and the Second Boer (Anglo-Boer) War (1899–1902) fought between British and Boers. 70 000–80 000 people died in the Anglo-Boer War, of whom 40 000–50 000 were civilians</li> <li>• 1906: Bambatha Rebellion, by Zulus, was violently suppressed by state</li> <li>• 1890–1920: the Ninevites—growth of organised crime, chiefly across the mining areas. A movement of Africans organised along paramilitary lines, victims were predominantly black Africans, especially mine workers</li> </ul>
<b>1910–48</b> Period of segregation	<ul style="list-style-type: none"> <li>• 1910: Union of South Africa</li> <li>• 1913 Native Land Act and 1936 Native Trust and Land Act designated 87% of land for white people*</li> <li>• 1912: African National Congress launched</li> </ul>	<ul style="list-style-type: none"> <li>• World War I stimulated manufacture of items previously imported; aggressive efforts to promote manufacturing industry from late 1920s to provide employment for growing numbers of poor white people</li> </ul>	<ul style="list-style-type: none"> <li>• Escalation of violence in mining compounds and underground, predominantly between black African mine workers and white bosses</li> <li>• From 1930s, criminal gangs emerged in African urban areas</li> <li>• From 1940s, violence against women escalated, abduction and rape of women were particularly associated with gangs</li> <li>• South African involvement in World War I and World War II on the side of the Allies</li> </ul>
<b>1948–94</b> The apartheid years	<ul style="list-style-type: none"> <li>• 1948: Nationalist Party elected and the policy of apartheid was introduced</li> <li>• Mass removals of about 3 million people from settled areas to bantustans—the labour reserves†</li> <li>• Stratification of society along racial lines in almost every aspect of human life, including workplace, schools, residential environments, civic activity, and social intercourse</li> </ul>	<ul style="list-style-type: none"> <li>• Post-World War II economic boom driven by manufacturing industry; job reservation for white people</li> <li>• Rapid growth of the service sector from 1960s, but of limited benefit to black people because of low educational levels</li> <li>• Growing unemployment since 1974 and GDP growth declining (negative in some years)</li> </ul>	<ul style="list-style-type: none"> <li>• 1960: Sharpeville massacre of civilians who were protesting against the pass laws</li> <li>• 1961–94: armed struggle for liberation of the African National Congress</li> <li>• 1966–88: Namibian War of Independence from South Africa</li> <li>• 1976–93: compulsory military service for white men</li> <li>• 1970s: early 1990s violence became more directly political in character with the apartheid state fighting comrades; the army in townships in the 1980s; comrades fighting criminals, notably in the 1970s; Inkatha Freedom Party fighting the African National Congress</li> </ul>
<b>1994–2008</b> Post-apartheid democracy	<ul style="list-style-type: none"> <li>• 1994: first democratic elections</li> <li>• 1994–98: Mandela years, pro-poor progressive policies, including the Reconstruction and Development Programme</li> <li>• 1999–2008: Mbeki years, health system not transformed; legislative measures to ensure right of access to health care and within framework of Constitution Section 27 "progressive realization of socio-economic rights"; implementation challenges</li> </ul>	<ul style="list-style-type: none"> <li>• From mid-1996, focus changes to neo-liberal policies; economic growth pursued, through promotion of private investment, increased productivity, better export competitiveness, tight monetary and fiscal policies</li> <li>• Real GDP growth of 2% to 5%‡</li> <li>• Increasing income inequalities</li> <li>• Improved social services such as water and sanitation, housing, and electricity supply</li> <li>• 2007–08: 12.4 million beneficiaries of social grants§</li> </ul>	<ul style="list-style-type: none"> <li>• 1994: very high numbers of murder, rape, illegal gun ownership, and other forms of violence. Since then public safety has improved although levels of violence remain high. In April, 1995–March, 1996, nearly 27 000 murders were reported to the police; this declined to 21 405 in 2001–02 and 18 487 in 2007–08, a decline of over 40%¶</li> <li>• Rape is seemingly not declining; in 1996, 50 481 rapes were reported to the police, a rate of rape of 124 per 100 000 population. This declined to 121 per 100 000 in April, 2001–March, 2002, and to 117 per 100 000 in 2005–06, a decline of 6%  </li> </ul>

Figure 2: Trends and changes between colonialism and post-apartheid South Africa in the political, macroeconomic, and socioeconomic contexts, and in wars, crime, and violence  
GDP=gross domestic product. \*References 12 and 13. †References 12–14. ‡Reference 15. §Reference 16. ¶Reference 17. ||References 17–19.

into a form of military organisation known as the Boer commando. Very similar values were reflected in white paramilitary responses to insurgency under apartheid.<sup>35</sup>

Among the black population, socialisation of boys included childhood training in indigenous martial arts, such as stick fighting, which instilled in them discipline, courage, and fighting skills, and contributed to the development of a notably pugilistic black masculinity predicated on toughness and defence of honour.<sup>33,36</sup> Although traditions are somewhat varied, there has been an expectation, at least among the Xhosas, that adult men should use persuasion and law, not violence, to solve problems.<sup>37,38</sup> However, disruption and change in traditional socialisation have resulted in a persistent use of interpersonal violence between men, often involving weapons, which accounts for a substantial burden of premature mortality.

Contemporary research has shown that the control of women is a central part of present day constructions of South African masculinity and that the use of physical

and sexual violence against women is legitimated when the goal is to secure such control or to punish resistance to it.<sup>37</sup> The historical record suggests that these ideas have long been prevalent.<sup>39,40</sup> One of the early anthropologists, Isaac Schapera, described in 1933 how uninitiated youths among the Kgatla

"Sometimes will seize upon any girl who they fancy, and ask her to sleep with them. She is by no means always unwilling, but if she refused, they whip her with canes they habitually carry and force her to comply with their wishes...I have often seen boys at the end of his dance, take a girl out of the chorus and walk away with her into the neighbouring bushes... If the girl resists he thrashes her, and unless she succeeds in running away, she will be forcibly violated."<sup>41</sup>

The ideas of sexual entitlement, which are illustrated in this quote, became exaggerated in the gang culture and violence of urban areas, and as levels of labour migration and urbanisation increased from the 1930s, so did violence against women.<sup>39</sup> There are several accounts

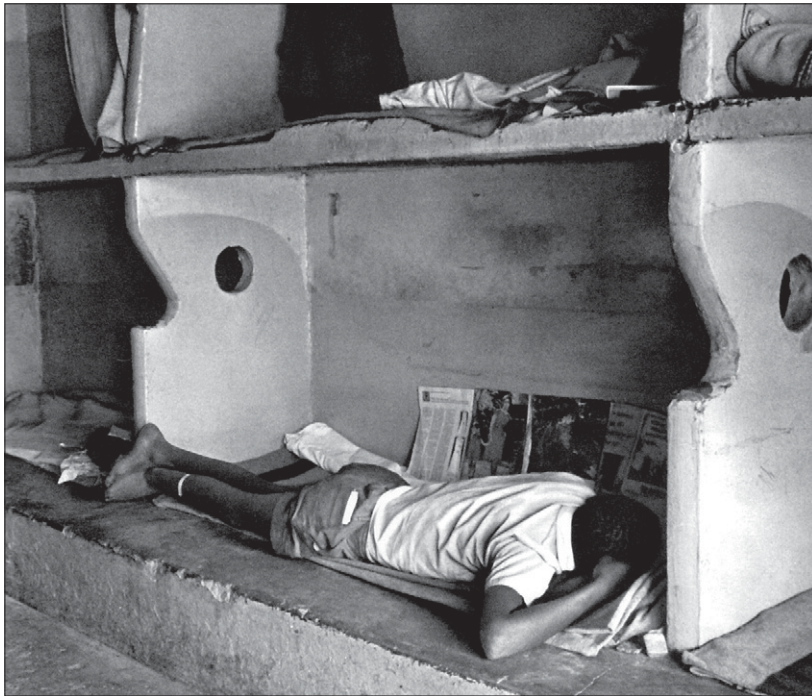


Figure 3: Housing conditions for mine workers, circa 1960  
Reproduced with permission from reference 32.

from that time of gangsters viewing women who lived within their territory as “belonging” to them sexually. Abduction and rape were common features of township life in Witwatersrand from the late 1940s and remain so today.<sup>39</sup> Although gang culture was and is an extreme form of urban youth sexuality, the underlying values have continuities with earlier rural practices. An important explanation for the involvement of many black and coloured young men in criminal gangs was that apartheid had rendered so many traditional aspects of adult manhood unattainable, including a family and fulfilment of a provider role. Thus, manhood was refashioned to draw on resources that were available, which increasingly meant the application of strength, courage, strategy, and male camaraderie to the criminal pursuits of gangs, which then provided ways of generating income through various forms of crime.

#### Families and sexual socialisation

Rape and violence against women increase the vulnerability of women to HIV/AIDS, since they greatly reduce women’s ability to determine the timing and circumstances of sex.<sup>42–44</sup> Rates of HIV infection in South Africa are higher in young women than in men. The epidemics of sexually transmitted infections in the country and other problems, such as teenage pregnancy, have been shaped by the context of sexual socialisation and constructions of family.

Historical perspectives on sex in South Africa reveal two competing discourses on sexuality. In one, rooted in

Christianity, sex is for procreation within marriage and not a topic for discussion with young people. The other view reflects traditional black ideas that sex is a normal, healthy, and essential feature of life for all ages, and something about which there should be openness and communication.<sup>39,45</sup> This discourse normalises sex play in childhood and presents sexual activity as a natural part of adolescence. Historians have described how traditional youth groups, which were central to the socialisation of young people, were responsible for ensuring the sexual behaviour of members remained within established rules, in particular upholding the prohibition on premarital penetrative sex (and thus pregnancy), and punishing those who transgressed.<sup>39,40</sup> These youth groups operated mainly in rural areas. One consequence of urbanisation was that teenagers, without the restraining and positive influence of youth structures and often with little adult supervision, began to have penetrative sex.<sup>39</sup> In the past 50 years, premarital, and often teenage, pregnancy has become normal for black women, and until recently, unsafe abortion was a major cause of reproductive morbidity and mortality. Law reform has made safe abortion much more accessible in the post-apartheid period. Although teenage pregnancy rates have declined since the 1980s, it is still the case that half of all women have an extramarital pregnancy before the age of 21 years.<sup>46,47</sup>

One of the dimensions of openness about sex and sexuality is an acceptance that over the course of a lifetime most people will have multiple sexual partners. Concurrence has a special place in traditional black society in the form of polygamous marriage, but the practice clearly extends well beyond marriage. For example, in the Zulu idea of *isoka*, the archetypal man has lots of female sexual partners.<sup>48</sup> The cultural notions of *nyatsi* and *khwapheeni*, terms used in Sesotho and Xhosa, describe the secret concurrent relationships of both men and women.<sup>44</sup> In a context in which both women and men are viewed as having sexual needs and sex is seen as essential for healthy life, there is a degree of tolerance of even married women (discreetly) having more than one partner, especially if their spouse is living away from home. Conveniently, any consequences of this activity have been socially accommodated because cultural practices related to paternity (and thus family membership) have been based on social fatherhood rather than biological fatherhood. Historically, and, in some cases, continuing to the present day, absent, impotent, or even dead men could become fathers because all children born to women married into a family belong to the husband and his clan, irrespective of biological paternity.<sup>49</sup> The migrant labour system further affected these sexual practices. Male migrants usually had sexual partners, either male (common in mining hostels) or female, in towns as well as in their rural home and many men established second families in urban areas.<sup>50</sup> In rural areas, women often had another sexual

partner too when men were away.<sup>51</sup> These practices had substantial implications for the spread of sexually transmitted diseases.

Apartheid, through the migrant labour system and general impoverishment of the African population, had a major effect on the structure of the black family. Traditional marriage requires the payment of bride wealth (*lobola*)—ie, money or property paid by the groom to the parents of the bride. In the early period, labour migration provided the groom with the resources to marry; however, from the 1950s, deepening poverty made marriage increasingly unaffordable for the groom.<sup>39</sup> As a result, cohabiting without marriage became very common and the median age of marriage for black people increased (28·5 years for black women in 2003<sup>47</sup>). Over 40% of black households in 2003 were female headed, reflecting the high proportion of adult women who live, usually with their children, without cohabiting men.<sup>47</sup> It is usual for children to be raised without fathers contributing to their upbringing either socially or financially.<sup>52</sup> This trend has magnified the problem of childhood poverty and undermined the process of socialisation in children (particularly boys) into disciplined and responsible adults; both of these consequences have very important implications for child and adult health. Children are often raised by a social (rather than biological) mother, frequently a grandmother or aunt. This arrangement enables teenage mothers to continue at school, or migrant mothers to work away from home, but has a major effect on emotional and material experiences of childhood. Without their biological mother to defend their interests, children might be seen as a burden, be moved between different households, have their emotional needs neglected, and girls might be exploited as cheap labour in the home. In South Africa, there are high levels of sexual, physical, and emotional abuse and neglect of children, which has major effects on their mental and physical health, and increases the likelihood that boys will become involved in crime and violence.<sup>45,53</sup> Protecting children from abuse and poverty and strengthening the financial and social roles of fathers in children's lives are essential aspects of a social policy agenda that aims to improve health.

#### Macroeconomic and socioeconomic context

One of the most important influences on the health of South Africans has been the impoverishment of the black population in the face of general white affluence. In the late 19th and 20th centuries, low wages, overcrowding, inadequate sanitation, malnutrition, and stress caused the health of the black population to deteriorate.<sup>28</sup> These factors have been inseparably linked with the very high burden of poverty-related diseases (table). Income inequalities have also had a major effect on the problems of crime and violence.

The roots of poverty and income inequality in South Africa lie in what Terreblanche calls “unfree black labour”.<sup>54</sup> During much of the 20th century, despite

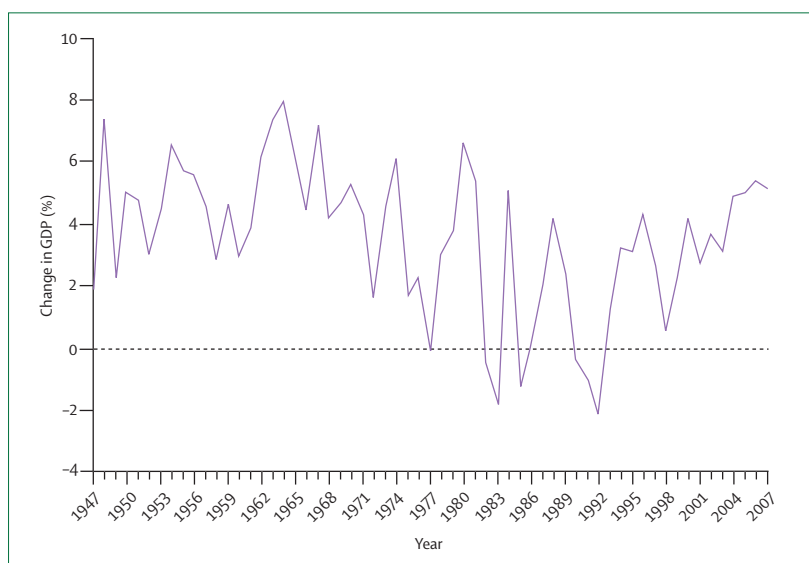


Figure 4: Changes in GDP in South Africa, 1947-2007

GDP=gross domestic product. Data adjusted for effect of inflation. Data from reference 15.

generating great wealth for the mines, mine owners paid black workers much less than a living wage, and “...in real terms, migrant workers on the gold mines earned 20 per cent less in 1960, and 8 per cent less in 1972, than they did in 1911”.<sup>54</sup> The plight of black South Africans was exacerbated by legislation on racially based job reservation, education, and wage variation. In the mines, for example, white people earned 11 times more than black people did in 1935 and 20 times more in 1970.<sup>27</sup> In 1980/81, expenditure per head on education for white children was double that for Indian children and more than five times that for black children.<sup>55</sup> This disparity was caused by a policy of deliberate under-education of black people. The apartheid-era opinion of Bantu education was that black people should be educated to a level appropriate for a menial position in society. Since 1974, unemployment (largely among black people) has become a major problem, mainly caused by increasingly capital-intensive modes of production, reduced foreign investment, and other macroeconomic difficulties.<sup>54</sup> Unemployment has been worsened by low educational attainment, and a dysfunctional education system is a persistent legacy of apartheid. The current rate of unemployment is approximately 25% with the narrow definition that includes only those actively seeking work, or 37% with the broader definition that includes all who are not employed and are seeking work, as well as those who have become discouraged from seeking work.<sup>16</sup>

The national system of social grants provides some relief from the impact of poverty and unemployment. South Africa is one of the few developing countries to have this system. One of the successes of the post-apartheid years has been to unify the national state pension system and disability grants and to introduce

new grants including a child support grant. From Oct 1, 2008, for example, old age pensions were R940 (about US\$112) per month and child support grants were R230 (about \$27.5) per child younger than 9 years (recently extended to children younger than 15 years).<sup>56</sup> The number of beneficiaries of social grants increased from 2.4 million in 1996/97 to 12.4 million in 2007/08.<sup>16</sup> This increase was largely caused by the introduction of the child support grant, which has 8.2 million beneficiaries.<sup>16</sup>

Despite the redress of wealth disparities being identified as a key goal of the post-1994 government, wealth disparities grew in the first decade of democracy. The Gini coefficient is a measure of income inequality and ranges from 0, which reflects complete equality, to 1, which reflects the maximum possible level of inequality. The Gini coefficient in South Africa increased from 0.56 in 1995 to 0.73 in 2005.<sup>57,58</sup> Currently, the richest 10% of the population accounts for 51% of income, whereas the poorest 10% accounts for just 0.2% of income (from work activities and social security grants).<sup>58</sup> The mean household income per year in the poorest decile is R4314 (about \$516) compared with R405 646 (about \$48 462) for the richest decile.<sup>58</sup>

Recent efforts to increase social grants have lessened some of these inequalities—the Gini coefficient is 0.8 when these grants are not taken into account<sup>59</sup>—but clearly, these efforts are too little. Part of the reason for the growth in income inequality in the past decade has been the almost exclusive focus on the macroeconomic policy (Growth, Employment and Redistribution [GEAR]),<sup>59</sup> which fosters growth, and not redistribution. Figure 4 shows the fluctuations in economic growth in South Africa since the late 1940s. In real terms (ie, after taking account of inflation), the South African economy grew between 2% and 8% per year between the late 1940s and the mid-1970s.<sup>15</sup> This growth almost exclusively benefited the white population. The economy was ailing at the time of the first democratic elections in 1994, and the government was under substantial pressure, both domestically and internationally, to adopt a macroeconomic policy that would encourage economic growth. Since the 1994 elections, growth has been positive in every year and remained in the range of 2% to over 5%, apart from in 1998 when only 0.5% growth was achieved. South Africa will not be unaffected by the current global economic crisis, which will constrain further efforts to address income inequalities.

A core component of the GEAR policy was to reduce the budget deficit (ie, the extent to which government expenditure exceeded government revenue). The apartheid government had consistently run a large budget deficit, and in 1994 the new government inherited debt amounting to nearly 45% of gross domestic product (GDP).<sup>59</sup> Total government debt declined to 25.5% of GDP in 2008, and for the first time since the 1950s, government revenue exceeded government expenditure in 2007 (National Treasury,

2008), despite reductions in income tax rates. This achievement is partly a result of the efforts of the South African Revenue Services, which have greatly improved tax collection systems to increase total tax revenue, but is also a result of constraints placed on government expenditure.

One of the achievements of the post-1994 government has been the improvement in access to basic services (panel 1<sup>7,16,60</sup>). Government policy provides poor households with free water and electricity to meet the most basic needs, defined, for example, as 25 L of water per person per day. However, there have been huge difficulties with implementation. Preoccupations with cost recovery at a municipal level have resulted in many illegal household disconnections, many people have been unable to access their entitlement, and municipalities have implemented flow restrictions to the point where water becomes difficult to use.<sup>61</sup>

From 1994, government expenditure was substantially lower than it was during the apartheid era, despite GEAR having identified government spending on social services as the primary mechanism for wealth redistribution. Spending on social services, especially health and education, was very constrained in the 1990s and has only increased in recent years.<sup>62</sup> Most of this increase in spending has been directed to social grants. In the context of massive income inequalities and the challenges of the HIV/AIDS epidemic and failing education system, the wisdom of restricting government expenditure on health and other social services so severely during the 1990s has been widely questioned.

### Health inequities

The South African constitution binds the state to work towards the progressive realisation of the right to health. Yet 15 years after democracy, the country is still grappling with massive health inequities. There are marked differences in rates of disease and mortality between races, which reflect racial differences in the access to basic household living conditions and other determinants of health. For example, national prevalence estimates for HIV show that white and Indian men and women have a very low prevalence of the disease (0.6% and 1.9%, respectively), whereas the highest prevalence is found in the black population (13.3%).<sup>63</sup> In 2002, infant mortality rates varied between 7 per 1000 in the white population and 67 per 1000 in the black population, and life expectancy for white adult women was 50% longer than it was for black women.<sup>64</sup>

There are substantial inequities in health between provinces and also within provinces (figure 5 and figure 6).<sup>16,65</sup> For example, in 2000, mortality rates for children under 5 years ranged from 46 per 1000 livebirths in Western Cape province to 116 per 1000 livebirths in KwaZulu-Natal province.<sup>18</sup> Even within the Cape Town metropolitan area there is an almost three-fold difference in infant mortality between middle-class



areas and squatter settlements.<sup>66</sup> The age-standardised death rate from asthma in men in the Eastern Cape was four times higher than in the Western Cape; the age-standardised death rate from tuberculosis in the Eastern Cape was three times higher than in Gauteng province.<sup>18</sup>

Differences in health between men and women are also pronounced. Mortality is 1.38 times higher in men than in women, despite the fact that women have a higher rate of HIV infection.<sup>18</sup> Alcohol accounted for 7% of all deaths in South Africa in 2000, with four times as many alcohol-related deaths in men than in women.<sup>67</sup> The age-standardised death rate from injuries in men was three times that for women.<sup>18</sup> Women also face a substantial burden of violence from men. In 2005/06, 54926 rapes were reported to the police,<sup>18</sup> and it has been estimated that every 6 h a woman in South Africa is murdered by an intimate partner.<sup>19</sup>

A key remaining challenge for the new administration is to reduce health inequities and interprovincial and urban–rural differences in access to health and related services, which will be made all the more difficult by the global financial crisis. This initiative will need more government spending on health, education, and social services and better redistribution of resources. It also requires political leadership and social interventions (eg, in schools) aimed at promoting a more responsible, caring, and non-violent masculinity. Such interventions are essential for efforts to reduce violence, crime, and AIDS. Additionally, interventions are necessary to reduce rapid urban drift and squalid urbanisation, which requires a strategy for land and rural development as well as employment creation and urban development. Furthermore, renewed efforts to protect children and imaginative social programmes to support families are needed to redress the harm caused by years of apartheid and migrant labour.

## The health system through colonialism and apartheid

A notable feature of the history of health services in South Africa has been fragmentation, both within the public health sector and between the public and private sectors. At an early stage, health facilities were racially segregated, and curative and preventive services were separated (by the Public Health Amendment Act of 1897). The 1919 Health Act gave responsibility for hospital curative care to the four provinces and preventive and promotive health care to the local authorities. The Gluckman Commission (1942–44) was an attempt to redirect the health system.<sup>4</sup> At the heart of this vision was a chain of community health centres, which were forerunners of community-based primary health care. Gluckman became Minister of Health in 1945, but the Nationalist Party assumed power in 1948, before the Gluckman recommendations had been implemented, and they were subsequently rejected.<sup>10</sup>

### Panel 1: Social services in South Africa

#### Sanitation

In the late 1980s, 62% of people living in urban areas had waterborne sewerage, 5% had buckets or VIP latrines, and 33% had minimal facilities. In rural areas, 14% had access to adequate sanitation (VIP or flush toilet).<sup>7</sup> The proportion of households with access to sanitation increased from 50% in 1994 to 73% in 2007.<sup>16</sup> In 2007, 60% of all households had access to a flush or chemical toilet (an increase from 51% in 1996).<sup>60</sup>

#### Water

In urban areas in the late 1980s, 59% of people had a tap in their house, 14% had a tap in the yard, and 7% had communal stand pipes. In rural areas, 53% had a safe and accessible water supply.<sup>7</sup> Households with access to a water infrastructure meeting RDP standards (a minimum of 25 L of potable water per person per day within 200 m of household) increased from 62% in 1994 to 87% in 2007.<sup>16</sup>

#### Electricity

Only 35% of the South African population had access to electricity in the late 1980s.<sup>7</sup> Households with access to electricity increased from 51% in 1994/95 to 72% in 2006/07.<sup>16</sup>

#### Housing

Between 1996 and 2007, the proportion of households living in formal dwellings increased from 64% to 71%; with declines from 16% to 15% in households not in formal dwellings, and from 20% to 12% in households living in traditional structures.<sup>16</sup>

#### Literacy

Adult literacy rate increased from 70% in 1995 to 74% in 2006.<sup>16</sup>

#### Social grants

Between 1996/07 and 2007/08, beneficiaries of social grants increased from 2.4 million to 12.4 million. The new child support grant reached 8.2 million beneficiaries; recipients of the disability grant, which is payable to people with AIDS, doubled to 1.4 million; and old age pensioners rose from 1.6 million to 2.2 million.<sup>16</sup>

#### Subsidised access and affordability

Water, sanitation, and electricity services have to be paid for by consumers. The government has provided the poorest households with free water and electricity to meet the most basic needs. However, many households are still unable to afford proper access to water and electricity.

VIP=ventilated improved pit. RDP=Reconstruction and Development Programme.

The apartheid system further entrenched fragmentation of health care when the bantustans were created, each with its own health department. The bantustans (and their government departments) acted separately from each other, like quasi-independent powers, with control carefully manipulated by Pretoria. By the end of the apartheid era, there were 14 separate health departments in South Africa (including one from structures reporting to each of the three parliaments), health services were focused on the hospital sector, and primary level services were underdeveloped.

Health services in the bantustans were systematically underfunded—by 1986/87, public sector health-care spending per head ranged from R23 (about \$11) in Lebowa to R91 (about \$45) in Ciskei (bantustans) and from R150 (about \$75) in Transvaal to around R200 (about \$100) in Natal province and the Cape province.<sup>68</sup> Until the 1960s and 1970s when they were taken over by the state,

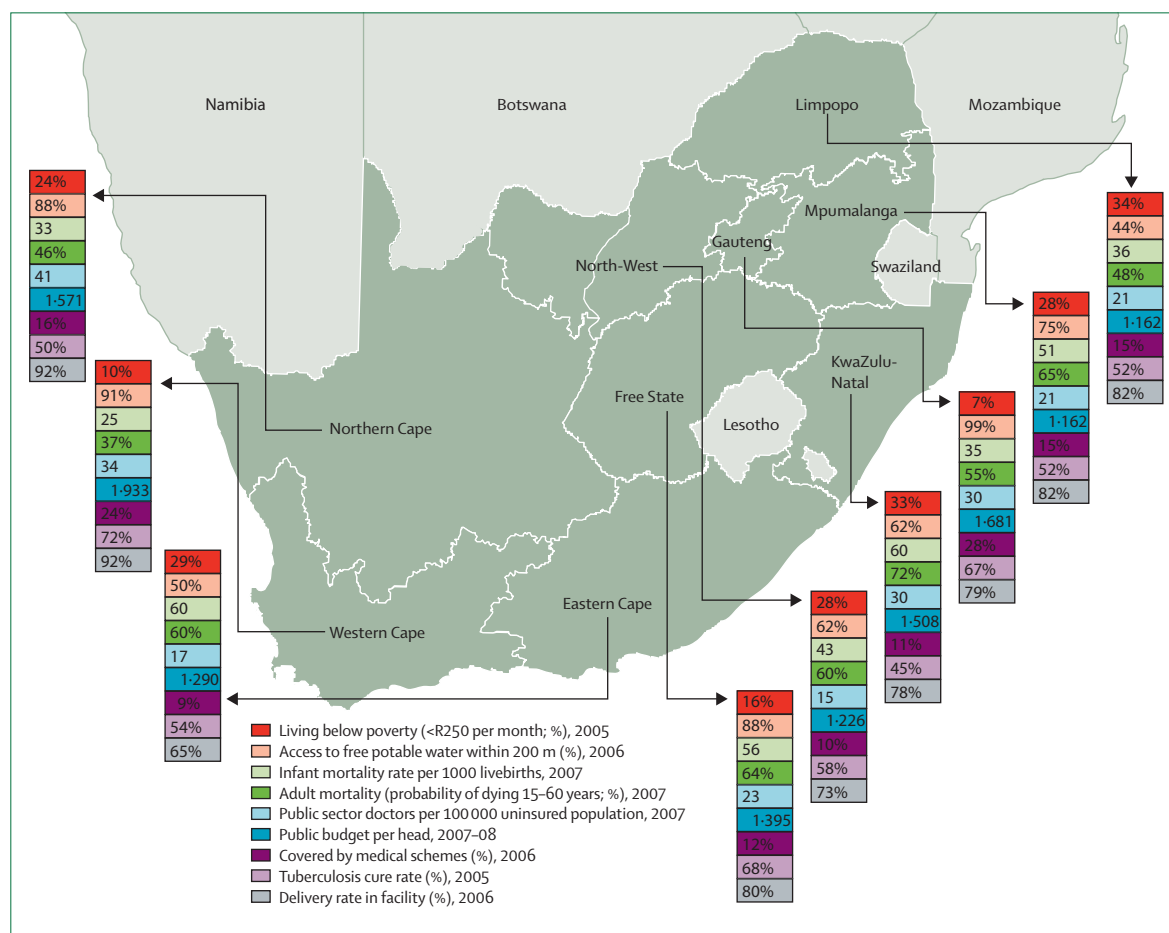


Figure 5: Indicators for health and development in South Africa's provinces, 2008

Data from reference 16. Reproduced with permission from reference 65 (Health Systems Trust, Durban).

the backbone of the health system in the bantustans were non-profit, missionary-run hospitals.<sup>12</sup>

### The growth of the private sector

Until 1889, all private health care in South Africa was funded by out-of-pocket payments. The first private voluntary health insurance organisations, called medical schemes, were introduced in 1889 to cater for the health-care needs of white mine workers, and membership to these schemes was restricted to white people until the late 1970s.<sup>69</sup> The development of the private health sector was largely stimulated by corporate capital, particularly the mining houses. These capitalist institutions are far more powerful and have influenced the political economy of South Africa and its health system to a greater extent than in most other post-colonial African and Asian countries.

Initially, private hospitals were limited to mission hospitals and industry-specific facilities such as on-site hospitals at large mines. For-profit general hospitals expanded in the 1980s and the number of for-profit general hospital beds nearly doubled between 1988 and 1993.<sup>70</sup> This expansion was fostered by an explicit

government policy of privatisation, which was specifically motivated by international trends towards an increasing role for the private sector.<sup>71</sup> By the early 1980s, about 40% of doctors worked in the private sector,<sup>6</sup> but a decade later, 62% of general doctors and 66% of specialists were in private practice.<sup>7</sup> Since private specialists generally locate their consulting rooms within private hospitals and admit their patients to these hospitals, the increase in the number of private hospital beds contributed to an even greater movement of specialist doctors into the private health sector.<sup>70</sup>

There is a substantial difference in resource availability between public and private sectors; less than 15% of the population are members of private sector medical schemes, yet 46% of all health-care expenditure is attributable to these schemes (in 2005, annual expenditure on medical schemes and out-of-pocket payments was approximately R9500 [\$1170] per beneficiary). A further 21% of the population use the private sector on an out-of-pocket basis mainly for primary level care, but are generally dependent on the public sector for hospital care (expenditure per head R1500 [\$185] per person in 2005).

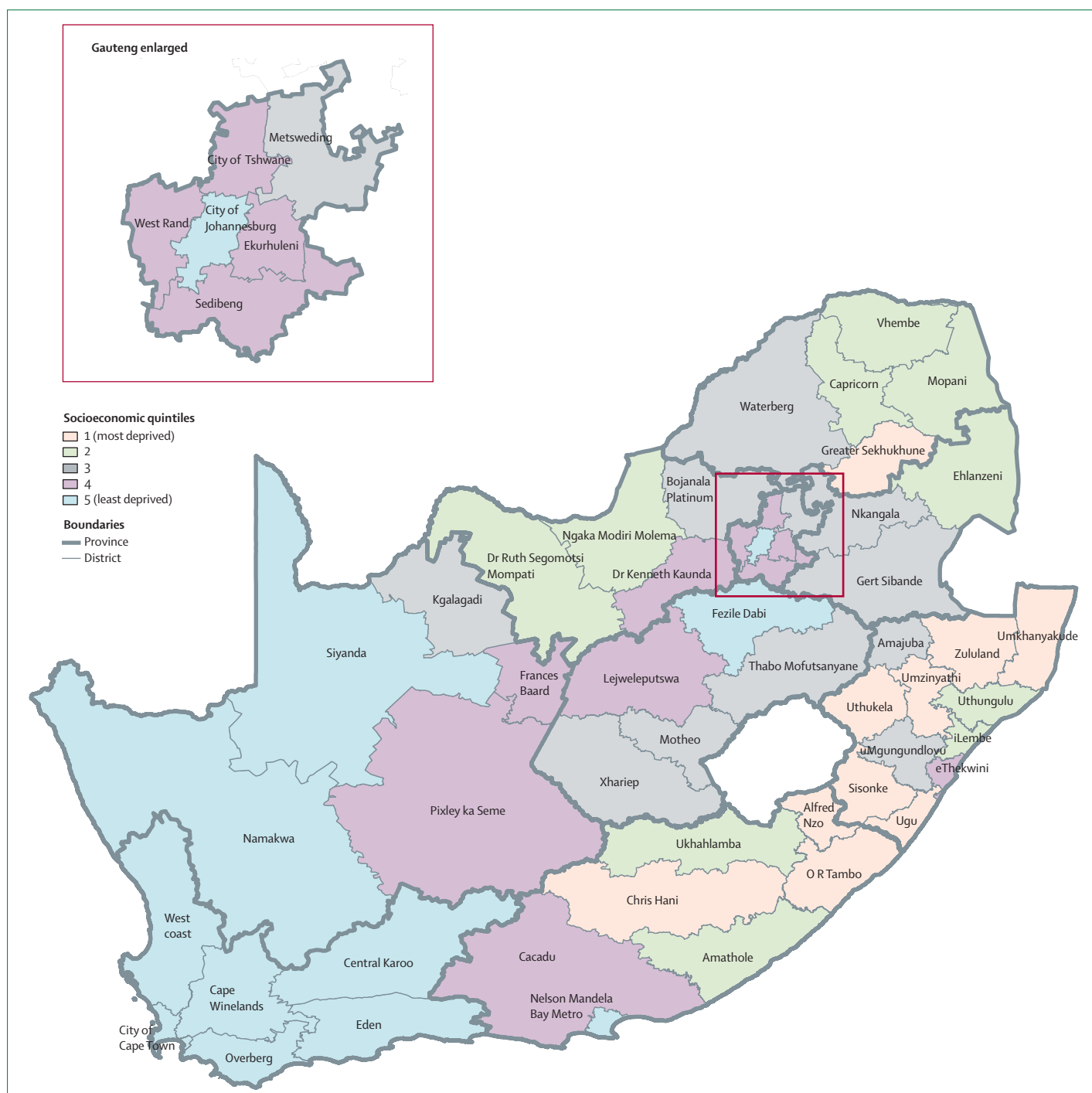
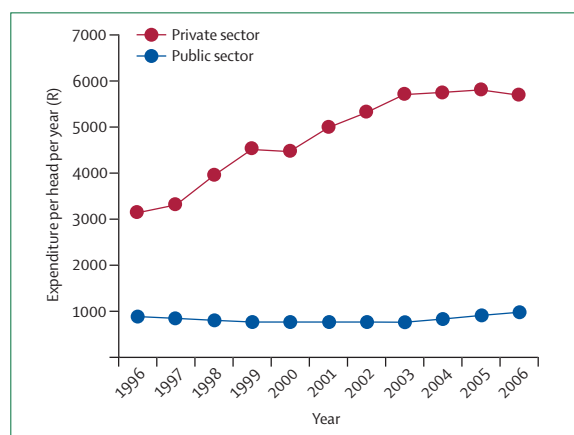


Figure 6: Socioeconomic quintiles in South Africa by district, 2007

Of the 237 subdistricts in South Africa, 47 (20%) are defined as being very deprived and need the most attention in terms of resources, access to services, and development. Reproduced with permission from reference 65 (Health Systems Trust, Durban).

The remaining 64% of the population are entirely dependent on the public sector for all their health-care services (less than R1300 [\$160] was spent per person for government primary care and hospital services in 2005).<sup>62</sup> The major cost drivers in the private sector are private

hospitals (over 35% of medical schemes' expenditure) and specialists (nearly 21% of schemes' expenditure).<sup>62</sup> Increased levels of private sector expenditure have been a result of cost escalation, which is in part driven by the fee-for-service payment system of the private sector,



**Figure 7: Health-care expenditure per head in South Africa's public and private sectors, 1996–2006**

Data adjusted for effect of inflation, expressed in 2000 prices. Data from reference 9.

rather than changing patterns of health of service users or the use of new technology.

Other problems with the private sector include questions about the quality of clinical care provided by private general practitioners. Although some aspects of private medical care are excellent and in some areas, such as hypertension control, private general practitioners have been shown to provide better care,<sup>72</sup> there is no mechanism for the oversight of quality of care provided by the private sector. Research has also highlighted severe deficiencies—eg, in treatment of sexually transmitted diseases—by private general practitioners, particularly those treating clients who pay out of pocket.<sup>73</sup>

#### Key challenges facing the health system in 1994

The health system inherited by the newly elected government in 1994 was well resourced compared with that for other middle-income countries, with total health-care expenditure at 8·5% of GDP, albeit with more than half of the financial and human resources allocated to the private sector.<sup>70</sup> Within the public sector, key challenges were presented by the large inequalities in the distribution of infrastructure and financial and human resources between geographical areas, and inefficiency in the distribution of resources between levels of care with over 80% of resources going to hospitals. Academic and other tertiary level hospitals alone accounted for 44% of total public sector health-care spending. Only 11% of spending was devoted to non-hospital primary care services.<sup>70</sup> Since 1994, public health-sector resourcing has been fairly stagnant (figure 7),<sup>9</sup> whereas expenditure in the private sector has increased substantially.

#### The post-apartheid health system

The central task for the democratically elected state was to address the disempowerment, discrimination, and underdevelopment that over centuries had weakened the

health system. The ANC's health plan, published in 1994, was the post-apartheid model for health system change.<sup>74</sup> It had its antecedents in the concept of primary health care as promoted at Alma Ata and envisioned a system based on community health centres, in which children younger than 6 years and pregnant mothers would receive free treatment, reflecting the recommendations of the Gluckman Commission 50 years earlier.<sup>4</sup> The new government achieved several successes. The 14 health administrations of the bantustans and South Africa were consolidated into one national and nine provincial health departments. Health facilities were desegregated (in the late 1980s). Primary health care, delivered via a district health system, was made the cornerstone of health policy. The public health system was transformed into an integrated, comprehensive national service, driven by the need to redress historical inequities and to provide essential health care to disadvantaged (especially rural) people. A clinic infrastructure programme, in which 1345 new clinics were built and 263 upgraded, improved availability of and access to health-care services. Primary health care became available without cost to users. Mass immunisation campaigns greatly reduced the incidence of measles and accelerated progress in eradicating poliomyelitis. Essential drug lists and standard treatment guidelines were developed and issued for both primary health-care and hospital levels, and the availability of key drugs in public facilities was improved. Legislation was passed to transform the health professional councils to make them representative of the South African population, to create a new medicines regulatory body, and to re-regulate the medical schemes industry to return it to its previous mutuality, thus making health insurance more accessible and of better value to previously excluded populations.<sup>11</sup> Public health legislation was also passed to allow safe, legal termination of pregnancy, the control of firearms, and reduction of cigarette smoking, and to strengthen the role of the health sector in post-rape care. The HIV & AIDS and STI Strategic Plan for South Africa,<sup>75</sup> 2007–2011, has been internationally hailed as an example of good policy.

Progress has been made in redistributing resources between geographic areas and between levels of care. The gap in spending per person dependent on public sector health services, between the best and worst resourced provinces, declined from a five-fold difference in 1992/93 to a two-fold difference in 2005/06.<sup>62</sup> Spending on primary health care increased to over 22% of total public sector health-care expenditure in 2005.<sup>62</sup> However, major constraints to implementation of primary health care have been the confusion and delays incurred in defining the geographical boundaries and governance responsibilities and structures of the district health system. In the National Health Act, passed in 2004, both the district health system and primary health care were defined as provincial responsibilities; this definition centralised power with the provinces and resulted in

many local authorities relinquishing several of their preventive and promotive health functions, with the potential threat of the further marginalisation of these activities (panel 2).

Despite some successes, the ability to take forward the new policy vision has been constrained by several factors, such as inadequate human resource capacity and planning, poor stewardship, leadership, and management, and the increased stress on the public health system caused by the AIDS epidemic and restricted spending in the public health sector.

### Inadequate human resource capacity and management

#### *Historical perspective*

The first doctors for the settlers in the Cape were military men who came as employees of the Dutch East India Company; soon after, midwives began to arrive.<sup>25,76</sup> The indigenous population had their own healers, as did the slaves, and they all formed part of the health provider assembly of the Cape, alongside chemists, apothecaries, and shopkeepers.<sup>77-79</sup> Khoisan practices included the delivery of pregnant women and healing through the use of a range of methods such as poultices, lancing, and incisions (webappendix p 2).<sup>77</sup> Such an eclectic mix led to the growth of a Creole folk medicine.<sup>25</sup> In the 19th century, medical missionaries offered health care that initially differed little in outcome from that of traditional healers.<sup>25,76</sup> It was only following the scientific discoveries in the late 19th century that biomedicine became more effective.<sup>78</sup> The first two public hospitals, one for white people and the other for non-white people, were built in 1755 after the second major smallpox epidemic; many others were then built in the main urban areas.

The first doctors were European and in 1910 the first non-white doctors (one coloured; two Malays) were registered. From the start, medical training was racially segregated. The first faculty of medicine was established at the University of Cape Town in 1920, for training white doctors;<sup>79</sup> black doctors in any numbers were only trained after the University of Natal Medical School was opened in 1951. As a result, in the 1930s there were still fewer than ten black doctors in the whole of the Union of South Africa,<sup>80,81</sup> and between 1968 and 1977, for example, only 3% of doctors graduating were black.<sup>55</sup> Despite extending training of black doctors in the 1980s, in 1994 they remained a small minority of all medical professionals.

The output of doctors from medical schools before 2005 increased at a rate that was estimated to be inadequate to supply the needs of the country in the medium term. Furthermore, doctors and nurses in South Africa were until recently often ill-prepared by their training to provide services in primary care settings.<sup>82-85</sup> The influence of professional associations, the lure of the private medical sector, and the lobby of specialists within the medical schools have had a major effect on future career choices of

#### Panel 2: Structure of the South African health sector

- 1 National Department of Health responsible for national health policy.
- 2 Nine provincial departments of health responsible for developing provincial policy within the framework of national policy and public health service delivery.
- 3 Three tiers of hospital: tertiary, regional, and district.
- 4 The primary health-care system—a mainly nurse-driven service in clinics—includes the district hospital and community health centres.
- 5 Local government is responsible for preventive and promotive services.
- 6 The private health system consists of general practitioners and private hospitals, with care in the private hospitals mostly funded through medical schemes. In 2008, 70% of private hospitals lay in three of the country's nine provinces, with 38% located in Gauteng province (Johannesburg and Pretoria) alone.

medical students and have hindered any substantial change in orientation towards primary health care.

The nursing profession in South Africa was established for white English-speaking ladies in the last third of the 19th century and was at that time dominated by religious sisterhoods.<sup>86</sup> The first black professional nurse qualified in 1907, but for many years after this, few black nurses were trained. It was not until World War II, when faced with a serious shortage of nurses, that the authorities started training black nurses in large numbers. Although respected as part of the educated elite in black communities, black nurses experienced racial discrimination in the workplace as well as in wider society. Until the 1970s, they could not nurse white patients or have white subordinates and, until 1986, had lower salaries than did white nurses.<sup>86</sup>

Although many nurses had a prominent role in voluntary charity activities and the anti-apartheid struggle, the position of nurses in communities has been complex. From the 1950s, persisting to the present day, a popular image of nurses has been that they are cruel.<sup>87</sup> The roots of this image lie partly in deliberate attempts to position African nurses in the struggle for colonial hegemony. Nurse training, from the earliest missionary days, was regarded as a socialisation process, initiating students into both an ethos and way of life. Groomed as a middle-class elite, the task of nurses was to “moralise and save the sick and not simply nurse them”.<sup>86</sup> They were taught to see themselves as subordinate to doctors and as authority figures in control of the lives of their patients.<sup>86</sup> One of the challenges of the democratic era has been to improve relationships between nurses and patients, since rudeness, arbitrary acts of unkindness, physical assault, and neglect by nurses have been widely reported, particularly in sexual and reproductive health services.<sup>88,89</sup> These challenges are discussed further in the report on

maternal and child health in this Series.<sup>20</sup> The challenge for service development has been to improve basic working conditions for nursing staff and to democratise the practice of nursing, while also recognising the need to address issues that result from positioning nurses as a privileged social elite, such as the abuse of patients and lack of accountability towards the public.<sup>88</sup>

#### *Human resource challenges*

From 1994, the health sector in South Africa has been affected by a legacy of maldistribution of staff and poor skills of many health personnel, which has compromised the ability to deliver key programmes, notably for HIV, tuberculosis, child health, mental health, and maternal health.<sup>89</sup> The staffing crisis is especially acute at the district level and has persisted, despite 60% of the health budget being spent on human resources. This situation has been aggravated by several unfortunate policy decisions—such as the offer of voluntary severance packages to public sector staff in the mid-1990s that had the effect of moving (often skilled) staff out of the public sector and into the private sector, international agencies, or early retirement.<sup>89</sup> There has been a substantial decrease in the nurse-to-population ratio, from 149 public-sector professional (ie, registered) nurses per 100 000 population in 1998 to 110 per 100 000 population in 2007.<sup>91,92</sup> This reduction has resulted from a decline in the number of nurses graduating because of the closure of many nursing colleges in the late 1990s, migration from the public to private sectors and to jobs abroad, and attrition due to retirement and HIV/AIDS (which affects 16% of the nursing profession). With as many as 40% of nurses due to retire in 5–10 years, nursing remains the most crucial area for urgent policy intervention.<sup>93</sup> The situation regarding doctors is also serious, given that the percentage working in the private sector rose from about 40% in the 1980s to 79% in 2007, and external migration remains at high levels.<sup>90,92</sup> Human resources have also been unevenly distributed between the public and private sectors, within the public sector (between the provinces in favour of those that have large, mostly urban-based medical schools), and in the case of doctors, between hospitals and primary level care.

Despite the development of a national human resources strategy in 1999/2000 and a human resources plan in 2006, there have been few concrete proposals, and fewer actions, to address the human resources crisis, especially at community and primary levels.<sup>94</sup> Important positive policies have included increased uptake by medical schools, legislated community service for newly graduated doctors and other professional categories (including nurses), and the introduction of mid-level health workers in the form of clinical associates. Unfortunately, the initiative to produce mid-level workers has been very slow to develop, with the number of students graduating being too low to offset the shortage of professionals. In 2001, 43% of doctors in community service expressed

their intention to leave South Africa to work overseas, complaining of inadequate preparation for and support during their deployment.<sup>95</sup>

The HIV/AIDS and accompanying tuberculosis epidemics have seen the rapid growth of a range of community carers (lay counsellors, tuberculosis directly observed treatment, short course [DOTS] supporters and home-based carers). Currently, these community health-worker programmes, involving tens of thousands of operatives, are run by many hundreds of non-governmental organisations funded by different donors. There is little standardisation of the roles of the health-care workers, or in their training and supervision, and there is still disagreement about whether they should be volunteers or remunerated workers.<sup>96</sup> They often are uninvolved in general district health services, focusing solely on tasks related to their diseases of focus. The national community health worker policy framework, implemented in 2004, allows for generalist community health workers, who are paid a stipend by provinces through designated non-governmental organisations. The success of this framework has not yet been fully assessed.

#### *Issues with human resources management*

A central challenge of the health system has been a reluctance to strengthen management of human resources. Part of the problem lies with managerial capacity. Under apartheid, senior management throughout the system was male and white, and public sector managerial competence was centralised and highly variable. The public sector had been expanded to reduce white unemployment, with the result that employment was seen as a goal in its own right. After 1994, a concerted effort was made to include women and black people in senior and top management teams. The changes resulted in loss of institutional memory and some problems associated with many inexperienced managers placed in positions of seniority (because competence had not been an essential criterion for public sector appointments in the past, lack of experience or expertise was not seen as a necessary barrier to employment). Inexperienced managers have struggled to handle the major challenges associated with transformation, and, in particular, efficient and effective management of human resources. Reports of ill discipline, moonlighting, and absenteeism are widespread.<sup>11</sup> Additionally, there is a serious shortage of training, support, and supervision.

There has been insufficient political will and leadership to manage underperformance in the public sector. There has also been a stubborn tendency to retain incompetent senior staff and leaders, including (until recently) the former Minister of Health. As a result, for many years, loyalty—rather than an ability to deliver—has been rewarded in the public sector and there has been no climate of accountability, apart from financial accountability of senior managers, which was ensured through

the Public Finance Management Act 1999. This move, however, has meant that cost-containment has become the dominant determinant of practice in the health system.<sup>97</sup>

Incompetence within the public sector is so widespread that it is an issue that has become very difficult to deal with. Limited capacity is a problem at every level of the health sector and throughout other sectors of government. It clearly stems from the historical legacy, but also from the disastrous education situation, which has resulted in most individuals emerging from secondary (and often tertiary) education with limited numeracy, literacy, and problem-solving skills.<sup>98</sup> There has been a consistent refusal of government to face up to the failure of the education system and to consider radical action to remedy it. A more efficient public sector requires the political determination to solve the problem of capacity, to deliver public services, and to change the culture of the public service from one that is oriented towards security of employment and reward for loyalty to one focused on accountability and delivery of services to the public, in which competence and performance are both expected and rewarded.

#### Poor stewardship, leadership, and management of the health system

The Ministry of Health's role in providing overall guidance on activities that contribute to improving levels of health in South Africa has generally been characterised by good policies, but without equivalent emphasis on the implementation, monitoring, and assessment of these policies throughout the system. Neither has the Ministry of Health given priority to these policies within the resources available. The scarcity of human resources, especially in rural areas and at lower levels of the health system, have presented one constraint to policy implementation, but another key constraint is that at all levels of the health system there has been inadequate stewardship, leadership, and management. There is an increasing number of studies examining these deficiencies in different combinations both at different levels of the system and even between facilities of the same type.<sup>99-104</sup>

The lack of stewardship and leadership has been evident in the highly variable quality of care delivered within the public sector. For example, the Western Cape province had tuberculosis cure rates of around 80% in 2007, whereas for most of the districts in KwaZulu-Natal, the cure rates were between 40% and 60%.<sup>105</sup> In the health district of the City of Cape Town, the managers decided to prioritise the distribution of male condoms as a preventive measure to combat HIV and in 2007/08 distributed over 55 condoms per sexually active male. By contrast, most districts distributed fewer than ten condoms per sexually active male.<sup>105</sup> The most recent data for 2007/08 show the differences in efficiencies in the management of district hospitals, with three-fold differences in mean expenditure per patient-day. There

are also wide ranges in the mean length of stay in these hospitals, with the better managed hospitals keeping patients for 3 days and poorly managed hospitals keeping patients for as long as 10 days.<sup>105</sup>

Another example concerns the former Transkei, one of the poorest and worst resourced regions of the country, where there are major differences in the performance of small district hospitals in the management of common conditions such as severe childhood malnutrition. The key factors accounting for major differences in case fatality rates between hospitals similarly disadvantaged in terms of infrastructure and human resource ratios were differences in leadership, teamwork, and managerial supervision and support. In the successful hospitals, there was a strong emphasis, especially by the senior nursing staff, on in-service training and induction of incoming staff and better supervision of junior staff and carers.<sup>106</sup> Poor stewardship at the policy level and weak management and supportive supervision at the implementation level are major obstacles to improving the health system in South Africa.<sup>100</sup>

The absence of stewardship is referred to repeatedly in relation to various components of the health sector, including the private sector,<sup>101</sup> human resources,<sup>102</sup> information management,<sup>103</sup> financing, pharmaceutical policy, and HIV/AIDS.<sup>104</sup> For example, the national tuberculosis control programme has lacked managerial oversight and accountability for performance. In 1996–2004, key outcome indicators, notably successful completion of treatment, deteriorated. In the most striking example of poor stewardship, the national HIV/AIDS epidemic was allowed to spread, with relentless and massive yearly increases in prevalence; the annual antenatal surveillance prevalence rate increased from 0.7% in 1990, to 8% in 1994, and to 30% in 2005.<sup>107</sup> The government's response to HIV/AIDS is detailed in the report on HIV and tuberculosis in this Series;<sup>21</sup> in essence, over much of this period, very few resources were devoted to efforts to control the epidemic. Indeed, national responses stagnated and even reversed for years under the influence of President Mbeki's (and his Health Minister's) bizarre and seemingly unshakable belief that HIV did not cause AIDS. This resulted in a great cost to the South African people, with hundreds of thousands of lives lost and a substantial burden of ill health.<sup>108,109</sup>

Poor stewardship has resulted in a failure to ensure that some of the fundamental facets of primary health care are in place, such as community involvement. The overseeing of the district health system is supposed to be the duty of local government-elected councillors (in terms of the Health Act of 2004), but provinces have failed to pass the required legislation. Similarly, in many places, clinic committees and hospital boards have yet to be set up and where they have, are often under-resourced and dysfunctional. With insufficient local political accountability, communities have lacked any real ability to change the quality of health care.<sup>110</sup>

Poor leadership has also resulted in a failure to effectively deliver intersectoral programmes, such as the Primary School Nutrition Programme, which was initially a responsibility of the Department of Health, but has since moved to the Department of Education. As a result, its sustainability and developmental potential have been compromised. 6 million learners in 18 000 primary schools are benefiting from the programme, which is to be extended to secondary schools in the poorest areas; in 2004, this programme had a budget of R832 million (\$101 million).<sup>111</sup> However, an opportunity to mobilise other sectors, generate employment, and make this programme sustainable over time was overlooked in favour of quick gains when, in the early years, tenders were issued for commercial suppliers to provide processed products, rather than sourcing from small-scale producers, locally grown foods, or items sold by local retailers. This situation has greatly compromised the potential long-term contribution of this programme to improving household food security and implementing the core primary health-care principle of intersectoral collaboration.<sup>99,112,113</sup>

The problem of insufficient stewardship and implementation is present in all sectors in South Africa and can be seen in the difficulty of developing a unitary vision across a range of different sectors with different cultures and priorities, and perhaps more so in the failure to acknowledge the need to demand personal accountability. The problem lies with the belief that people are a product of their past; therefore, is it fair to hold individuals accountable for actions and values that have been shaped through apartheid oppression? Furthermore, can we hold people accountable for an inability to manage and deliver if they were never given the opportunity to have the education and training to equip them for delivery? Without concerted efforts to change national thinking on accountability, South Africa will become a country that is not just a product of its past, but one that is continually unable to either address the health problems of the present or to prepare for the future.

## Conclusion

The distinctive features of South Africa's history that account for the current health problems include racial and gender discrimination, income inequalities, migrant labour, the destruction of family life, and persistent violence spanning many centuries but consolidated by apartheid in the 20th century. There has been a notable lack of progress in implementing the core health policies developed by the ANC, and some disastrous policy choices. This report suggests that to meet the Millennium Development Goals, it is necessary to address the unacceptable levels of income inequality, improve access to the full range of social services, introduce a broad ranging development policy, and promote gender equity. This programme would require a macroeconomic policy

that centres on redistributive growth, imaginative social policies, and interventions to prevent and treat the major health problems of HIV/AIDS and tuberculosis, other communicable and non-communicable diseases, sexual and reproductive disorders, substance misuse, crime, interpersonal violence and trauma, and should include policies and interventions that modify living and working environments and prevailing norms of masculinity. Moreover, it demands determined efforts to show leadership and improve stewardship and management in the health system and to ensure that sound health policies and social policies are both developed and implemented.

### Contributors

All authors participated in the literature search and writing of the report and approved the final version.

### Conflicts of interest

We declare that we have no conflicts of interest.

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