

## South Africa's Return to Primary Care: The Struggles and Strides of the Primary Health Care System

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Primary health care has a unique history in South Africa, where efforts to provide holistic health care to rural communities began in the early 1940s. The racial and social inequalities brought by apartheid caused this progression in medical care to be reversed until South Africa's liberation in 1990. Since then, the nation has attempted to adopt a health care system with its main focus on primary care and prevention. However, given the numerous other economic and political issues the government faces, the establishment of a strong primary care network has proven difficult. In May and June 2013, the author traveled to Cape Town, South Africa and volunteered at a large public primary health care facility. By discussing the current challenges of the South African health care system from personal experiences in the clinic, this paper highlights the central problems that continue today and suggests areas for improvement within primary health care in the post-apartheid nation.

This case study describes one rural and one urban family's diets and reported changes in diets; it was found that even the rural family was experiencing changes in dietary habits that suggest the presence of a nutrition transition. This singular case study could serve as a springboard for future rural nutrition transition research using more statistically significant samples. Further research could determine if this is a confined case or a widespread issue, and could explain how different rural locations in Latin America, and the world, may be experiencing the nutrition transition.

### The Effect of Apartheid on Primary Care: An Overview

In 1990, South Africa's oppressive system of apartheid was removed, leaving the nation with high hopes but also great difficulties. The years of severe inequality for non-whites under the former system of government had impacted every facet of society, including the health care system. Apartheid had left many non-white South Africans without access to adequate primary care.<sup>1</sup> Here, primary care refers to the first line of health care that a patient receives, including the treatment of disease by regular medical visits, referral to more specialized care if needed and prevention by health education aimed at individuals, families and communities.<sup>2</sup> The deficiency of primary care for non-white South Africans during apartheid led to disproportionately high serious health problems in this population, manifested in higher infant mortality rates and lower life expectancies compared to the white upper class.<sup>3</sup> The numbers are shocking: in the 1960s, the average life span was about 65 for white men and 72 for white women, but only 51 for black men and 59 for black women.<sup>3</sup> While the post-apartheid government has since developed a model of primary-centered health care aimed at all South Africans, the political, economic and social legacy of apartheid continues to affect the quality of primary care in the nation today. Currently, primary care in South Africa is challenged by two major problems, as witnessed by the author, which are rooted in the underlying socioeconomic inequalities that were implemented during the apartheid era: (1) the differential burden of disease and (2) the inequality between private and public health care. Before delving into the current challenges the country faces with regard to primary care, a brief history of the nation's health care system over the past 70 years will be provided to develop a context of the nation's current health care system.

### Background: Before and During the Apartheid Struggle

Prior to the institution of apartheid, grassroots efforts for a health

care system centered on primary care were spreading throughout South Africa. In 1940, the Pholela Health Center model of community-oriented primary care (COPC) was developed by the South African Health Ministry as a response to limited access to medical care in rural Natal.<sup>1</sup> Since this system would provide easier access to health care, the hope was that more individuals would be able to see health care providers, thereby allowing better management of existing conditions and facilitating the prevention of more serious diseases. Two major figures behind the COPC movement, Drs. Sidney and Emily Kark, furthered the focus on primary care by using epidemiological analyses of the communities with which they worked to determine the medical needs of certain regions and to predict how they would change with time.<sup>4</sup> The couple's emphasis on community care was effective, as more people—providers and patients included—became involved in the management of health care and more primary care units were set up across the country.<sup>1,5,6</sup>

Following the introduction of apartheid principles with the National Party's rise to power in 1948, however, the primary care-centered model quickly deteriorated. Not unlike the Jim Crow laws in the United States, apartheid policy imposed severe legal restrictions based on race, leaving non-white peoples with little freedom. The values associated with apartheid extended to medicine, as the new party in power did not support the tax burden that the white upper class would have to face if a primary care model such as the National Health Care Center program had been implemented.<sup>7,8</sup> When Drs. Kark, who had been among the strongest supporters of primary care, left South Africa in 1959, the PHC movement lost significant leadership and was open to further attack by apartheid policies.<sup>7</sup>

Under apartheid control, the South African health care system was strikingly different from the COPC model that had been prominent for nearly a decade, and severe inequality between whites and non-whites emerged. The most significant change with apartheid was

the deregulation of public health care. By removing public health care, the private sector expanded, which made health care more expensive and prevented the non-white lower classes from being able to afford such care; this in turn added to the National Party's restriction of the non-whites and helped to ensure their goal of white supremacy.<sup>1,9</sup> The daily conditions that non-whites faced brought additional challenges to their ability to attain health care. For example, apartheid policy forced black South Africans to live in areas known as Bantustans, which were expected to organize their own system health care separate from the apartheid government.<sup>1</sup> Despite many efforts of dedicated health care providers, these conditions could not support a strong health care network, and as a result, the burden of disease increased in these regions.<sup>1</sup>

Health care worsened in the 1960s and 1970s, when the state began seizing control of the missionary hospitals responsible for providing most health care to the people living in the Bantustans during apartheid.<sup>10</sup> Without the missionary hospitals, the doctor-to-population ratio in the Bantustans was reported to have dropped to almost nine times lower than that of the rest of the nation.<sup>11</sup> The lack of health care providers forced doctors and nurses who remained in the Bantustans to move their focus to patients with more serious conditions, making it difficult to implement a resource-intensive model of primary-centered care. Because of this shift towards higher level care, only 11% of funding for public health care was used for primary care under apartheid policy, severely affecting the quality of the nation's health care system.<sup>12</sup> Until the termination of apartheid in 1990, the highly segregationist policies remained and the health of non-white South Africans continued to be jeopardized.

### The End of Apartheid: Strides and Struggles of a Re-emphasis on Universal Primary Care

Since the end of apartheid, the South African government has aimed to improve the health care situation by outlining a clear model with primary care at the base. The election of Nelson Mandela of the African National Congress (ANC) in 1994 spurred the creation of the National Health Plan, which laid out goals for a universal public primary care-centered system.<sup>10</sup> In 2002, additional legislation was passed in the form of the National Health Bill with standards to provide "comprehensive primary health services" to all (Section 27.2.k) by promoting "health and healthy lifestyles" (Section 27.2.s) and "community participation in the planning, provision and evaluation of health services" (Section 27.2.t).<sup>13</sup> Some of these aims have been effective: since standard protocols were established, over one thousand new clinics were built, and the public has been educated on important preventative measures such as immunizations and the dangers of smoking.<sup>10</sup> The government also provides free primary care for all citizens and special cost-free community health centers for pregnant women and children under the age of six.<sup>10</sup>

However, while certain gains have been made towards a primary care-centered and community-based health care system, much work still remains. The nation has been reported to spend 8.3% of its GDP on the health care industry,<sup>14</sup> which in 2009 was the highest of any middle-income country in the world.<sup>10</sup> Despite such expenditure, infant mortality rates have been on the rise, making South Africa one of only a handful of countries where such a discrepancy exists.<sup>14</sup> Today, most problems with providing satisfactory primary care can be attributed to (1) the divide between private and public health care and (2) an increasing burden of long-term diseases. Both of these issues are augmented by the historical struggles of apartheid that South Africa has faced in regard to its economy, politics, and societal structure. The next two sections will describe these current challenges and relate them to personal experiences at Tafelsig Clinic, a public primary care facility located in the township of Mitchell's Plain in Cape Town, South Africa, where the author worked for twenty days in May and June of 2013. Since the clinic was located in a relatively large facil-

ity, with an average of 500 patients per day, many challenges of the primary care system could be observed. Since other clinics across the country may face similar issues, it is important to understand the nature of these problems so that areas of improvement can be addressed and solutions can be identified to improve the primary care system in South Africa and achieve the nation's vision of health for all.

### The Divide: Private vs. Public Health Care

Most South Africans utilize the free public health care services provided by the government. However, while private health care is used by only 14% of the nation, it has been reported to account for up to 60% of national health care expenditure.<sup>10</sup> Patients choose private care for a number of reasons, including shorter waiting times, more personal care and increased confidence in the quality of health care.<sup>15,16</sup> However, in recent years, the private sector has been criticized due to its increasing costs of care along with their tendency to provide more services than are necessary, which also increases prices for patients<sup>17</sup>; both of these concerns may cause more patients to move towards the public health care system in the future. While most South Africans currently use either public or private care, 16% of patients

use a mix of both sectors.<sup>17</sup> These individuals commonly use the private sector for primary care and public care for more specialized health care, such as hospital visits,<sup>18</sup> This is likely because health care at the public primary care level tends to be the most overburdened among the health care sectors, and so individuals will avoid it if they are able to afford private care. Thus, public

primary care is used mostly by poor non-white South Africans, and as a result, there is little crossover of patient demographics between public and private primary care.

In addition to the disparate patient populations between private and public care, the number of health care providers within each system is also disproportionate. The World Health Organization estimates that only 30% of all South African physicians work in the public sector, despite the fact that it serves over 80% of the nation's population.<sup>18</sup> The lowered number of health care providers along with the increased volume of predominantly poor patients in the public health care system causes public care to be overburdened in comparison to the private sector. In turn, public health care workers are spread too thin and are left unable to provide all of the personalized services of the private sector which would require more time per patient.<sup>19</sup>

Additionally, the economic divide between the rich and the poor, which continues remnant of the apartheid era, also contributes to the persisting inequality between private and public health care. For example, in 2007 South Africa had the world's tenth highest Gini index at 0.578, a measure of income inequity among a nation's population,<sup>20</sup> The economic divide has translated to a separation within the nation's health care system which has created a marked discrepancy between the resources used by public health care and the private sector and is evidenced by the high expenditure and low volume of patients in the private sector as compared to the public system. Furthermore, it has been reported that the development of private-public partnerships, which result in the transfer of funds from public to private sector services in order to increase efficiency and delivery within the South African health care industry, have decreased the public health care sector's budget but kept the demand for their services largely unchanged.<sup>21</sup> Because the gap between the rich and the poor is so wide and public primary care centers are overburdened as the major source of health care for South Africans,<sup>18,19</sup> effective primary care is difficult to attain at the national level.

As a public health care facility, one of the most defining features of Tafelsig Clinic was the high volume of patients seen each day. According to the facility's records, nearly 500 patients cycled through the clinic daily and faced long waiting times, a number consistent with reports from other South African public primary care facilities.<sup>22</sup>

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## The most significant change with apartheid was the deregulation of public health care.

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Some patients had to come two or more days in a row if they were not seen the previous day, and many had to come in to the clinic weekly if they were on certain treatment regimens (e.g. for TB). As a result, many patients missed work or were unable to keep a regular job. Additionally, most patients did not have efficient modes of transportation and were forced to walk to the clinic, creating more missed time from work and missed appointments. As a whole, the clinic lacked the number of health care providers that would be necessary to fulfill the personal, community-based values of the PHC model outlined in the National Health Bill.

### An Increased Burden of Long-term Diseases

Along with the economic divide, another defining characteristic of South Africa's public primary health care system is the wide array of long-term diseases that providers must treat, taking time away from other aspects of primary care such as counseling and prevention. Transmittable diseases like HIV/AIDS and TB are still widespread and treated at the primary care level, but non-communicable diseases including hypertension and diabetes are also rising to prevalence.<sup>23</sup> With more chronically ill patients, public clinics are unable to dedicate sufficient resources for assisting all patients.

Currently, South Africa's biggest public health problem is its combined HIV/TB infection rate.<sup>24</sup> In 2011, the prevalence of HIV among South Africans ages 15-49 was 17.3%, which is among the highest in the world.<sup>25</sup> Furthermore, because HIV/AIDS results in a compromised immune system, affected individuals are more susceptible to other opportunistic infections, such as tuberculosis (TB), that healthy people are more easily able to combat. In fact, people who are HIV positive are ten times more likely to develop TB,<sup>26</sup> and in 2014, TB was the leading cause of death in South Africa.<sup>24</sup> Methods to treat TB exist, but they consist of strict treatment regimens that can last up to six months and require visits to a clinic five times a week.<sup>26</sup> The large amount of time required for TB treatment increases the burden of transmittable diseases on primary care facilities and also makes patients less likely to complete their recommended course.<sup>24</sup>

Post-apartheid political leadership has also contributed to the growing HIV/TB problem, specifically with regard to propagating misconceptions of the disease. Thabo Mbeki, who served as the nation's president from 1999 to 2008, denied a causal relationship between HIV and AIDS and recommended that South Africans not use anti-retroviral therapy (ART). He insisted that the treatment was dangerous and could even cause death, despite scientific evidence supporting the effectiveness of such treatments.<sup>27</sup> As a result, HIV rates have remained among the highest in the world, with the South African public largely under-concerned about the severity of the infection.<sup>28</sup> However, as a transmittable disease, HIV can be more directly targeted through primary care than non-communicable diseases, which have a broader range of causes. When HIV is managed sufficiently well, clinics will be able to spend more time promoting health awareness and disease prevention rather than strictly providing treatment.

At Tafelsig Clinic, the lack of health care providers and its effect on the burden of chronic disease was evident. Although a quarter of examination rooms were reserved for individuals with non-communicable diseases such as diabetes and hypertension four mornings per week, patients would often leave and come back later, or patients with more immediate concerns such as open wounds or breathing problems would come in and need to be seen, causing the appointments to be delayed until the afternoon. As a result, the nurses and physicians who planned to see the non-communicable disease patients were often spread too thin, and they were unable to provide the government's ideal of administering personalized, community-oriented care.

In addition to low numbers of providers, Tafelsig Clinic was also overburdened by the high incidence of TB. One section of the clinic was dedicated to providing TB treatments, where two to three nurses would work as a unit to deliver medicines, monitor patient compliance, and record information. The nurses explained that a major problem they face was that some patients begin to feel better before completing their treatment plans and do not realize they may still be infected, causing many of them to default. The WHO reports that up to 25% of patients default from TB treatment,<sup>29</sup> which in turn cre-

ates an additional burden on the nation's health care system because patients eventually may develop multi-drug resistance and make their conditions even harder to treat.<sup>26</sup> Some of the patients who came in for TB treatment did admit that they had formerly stopped treatment and were on their second or third regimen, which they had had to begin anew. Since TB remains the number one killer in South Africa, it would be useful to educate patients at the primary care, community-based level so that people understand the risks involved and the importance of receiving and completing treatment before they develop more serious problems and must receive more specialized care.

### Evaluating the Challenges

Today's major challenges of the public primary care system lie largely in the fact that HIV/AIDS and TB are the top burdens of disease but appear to be undertreated at the primary care level.<sup>30</sup> In 2007, a study by Bradshaw et al. was conducted that profiled the major primary care complaints in the country. The researchers found that the nation's largest burden of disease, as estimated using an approach known as disability adjusted life years, was from HIV/AIDS and TB.<sup>31</sup> However, when Mash et al. (2012) analyzed the data from nurses and doctors working in public primary health care settings sampled from 31,451 patient encounters within four provinces in the country, they found that HIV/AIDS and TB were not the top reasons for primary care visits. Instead, they found that the number one reason for patient visits to the clinic associated with chronic care was for cardiovascular concerns, at nearly ten percent. Tuberculosis and HIV were fourth and fifth on the list, at 2.8% and 2.2%, respectively.<sup>30</sup> Mash et al. (2012) suggest a reason for this seemingly low number may be that HIV and TB are also treated in specialized clinics outside of basic primary care facilities. While specialized treatment programs provide a step in the right direction for managing South Africa's HIV/AIDS epidemic, they are not without flaws. For example, Howard and El-Sadr (2010) set up HIV/TB clinics in



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South Africa and found that the effectiveness of such programs was hindered by problems integrating the new programs into existing ones at local primary care clinics. Thus, the researchers argue for the tailoring of HIV/TB clinics to the needs of an individual community,<sup>32</sup> an idea in line with the PHC model pioneered nearly seven decades ago.

Understanding the differences between the diseases that South Africa faces and those faced by other nations can also be useful in evaluating the nation's primary health care system. In addition to elucidating the reasons for primary care visits, Mash et al. (2012) compared the top diagnoses in South Africa with those of other countries, which especially shed light on differences in the treatment of mental health issues. In South Africa, depression and anxiety only accounted for 0.2% and 0.1% of all diagnoses made at the primary care level but, interestingly, these concerns were among the top 25 diagnoses at primary care clinics in the Netherlands, Poland, Japan, and the U.S.<sup>30</sup> Furthermore, it has been reported that in 2009, 16.5% of the nation's population had one or more mental disorders, but only 25% of patients were treated for their concerns.<sup>31</sup> One potential reason for the lowered rates of mental health diagnoses may be due to differences in cultural values. However, given the fact that up to 80% of the population uses public primary care, it is likely that factors such as decreased numbers of providers and the burden of other diseases in the public health care system also contribute to the relatively low diagnosis of mental health concerns in South Africa compared to other nations around the world.

Since violence and injury together comprise the second leading cause of death in South Africa, it is important for health care to address mental and emotional health issues that may arise from such societal effects on health.<sup>34</sup> It has been observed that socio-cultural influences such as alcohol and drug abuse and patriarchal views of male toughness increase mental health issues such as anxiety and depression in South Africans.<sup>34</sup> Further, high unemployment rates and lack of effective governmental leadership to enforce non-violence have heightened the number of people who are estimated to suffer from mental health disorders.<sup>34</sup> Thus, by incorporating treatment of mental health issues at the primary care level, South Africa may be able to better address violence and crime as a method of prevention as well as improve the overall health of its individuals.

Another issue to address is education for providers about the need for a focused, universal public primary care system. In 2009, legislation was passed to make family medicine a specialty; prior to the passing of this law, a study by Naidoo et al. (2009) was conducted to examine the opinions of primary care providers toward the proposed legislation. The researchers surveyed sixty South African general health care providers, and while they found that most physicians did support the new law, others disagreed with it because they did not see a need for

such a designation or believed it would increase competition among doctors.<sup>35</sup> While it is unrealistic to expect all physicians and other providers to agree upon every aspect of primary care, it is important that they share the common vision on the vital role that primary care, and family medicine in particular, plays in health care. The study by Naidoo et al. (2009) is an important reminder that South Africa has come a long way but still must work on increasing awareness—providers included—of the utility of a community-based, primary health care-centered model for the nation's health care system.

### Concluding Remarks: Opportunities for Growth

It is clear that much work remains to be done to reach the primary-centered model of care and attain health for all within South Africa's health care network. However, several options exist for improvement. Most importantly, South Africa must increase its number of public health care providers by making public care a more attractive working environment. Currently, public primary care centers such as Tafelsig Clinic are understaffed and overburdened by the number and scope of treatments they must provide. One study found that the movement of health care workers from the public to private sector was influenced most by high levels of stress and low satisfaction with their work in the public health care system rather than under-compensation.<sup>36</sup> This suggests that the implementation of the occupational specific dispensation (OSD) in 2007, which essentially created structured salary packages for public health care workers, was effective in decreasing the movement of workers out of the public health care system.<sup>36</sup> Thus, by focusing efforts on increasing the quality of work in the public system, the South African government may be able to further expand and retain its public health care force.

In order to create these changes, there must be some health care providers who are initially willing to move from the private sector to the public system of health care. This recruitment process can be carried out by initiating campaigns directed towards nurses, physicians, pharmacists and other providers that explain how the current divide between the sectors is exacerbating the socioeconomic gap among South Africans today, which in turn impedes progress to attaining better health across the country. By making such problems known and applying them to the lives of the providers directly, health care workers may be more motivated to assist their nation's situation, either by remaining in or moving to the public health care system.

While the expansion of the public health care workforce would certainly improve the situations of the providers, it is also important to understand how this change would better patients' lives. More providers means more opportunities for patients to be seen, which would decrease the long waiting times that are often common in public primary

care facilities. Efficient use of time at the clinics would allow patients to both receive treatment fairly quickly and not have to miss work. Patients would also be able to receive more personalized care under a public system with more providers, in accordance with the model of primary care set out in the nation's health care plan.

In addition to increasing the number of providers in the public sector, the burden of transmittable disease should also be targeted. By focusing on the prevention of HIV transmission through methods such as directed educational campaigns and strong political leadership, the burden of transmittable disease such as HIV/AIDS and TB can be decreased. Some of these tactics already exist in South Africa; for example, the community-oriented programs *loveLife* and *Soul City* provide media coverage targeted at teens and adults to help curb the HIV epidemic and promote healthy lifestyles.<sup>1</sup> Both programs have been shown to be effective in increasing HIV awareness, as it was reported that 92.5% of the population knew of such campaigns in 2006, and exposure to more than one of these programs resulted in a greater positive influence on people's ideas regarding HIV/AIDS.<sup>37</sup> Still, without sufficient numbers of doctors and nurses working in the public sector, such campaigns have little value in effecting actual change.<sup>2</sup> Thus, it is important to once again note that awareness campaigns should be targeted at providers as well as patients so that providers understand how essential they are to improving South Africa's primary care system.

Altogether, by focusing on (1) expanding the public health care workforce through awareness campaigns targeted at providers and improved working conditions and (2) lowering the rates of HIV/AIDS and TB, the public primary care system will be strengthened, allowing more personalized care, expansion of preventative health education, and improvement of the overall health of individuals and communities. Preventative programs including health education may in turn lessen the cases of chronic diseases and especially non-communicable diseases such as hypertension and diabetes, which are also on the rise and are among the most prevalent issues seen by primary care providers today. As South Africa continues to evolve as a democracy, there will surely be additional challenges the nation will have to face in establishing a robust health care network, as witnessed through personal observation. However, if the private and public sectors are better organized and long-term disease well-managed, health for all is a real possibility in South Africa's future.

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