

The Canary in the Mine:
Understanding the South African Mining Industry's
Response to HIV/AIDS in the Workplace

by
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Abbreviations

AIDS	Acquired Immune Deficiency Syndrome
ANC	African National Congress
ARVT	Antiretroviral Treatment
AZT	Azidothymidine (also known as Zirodene)
COSATU	Congress of South African Trade Unions
GDP	Gross Domestic Product
HAART	Highly Active Antiretroviral Treatment
HIV	Human Immunodeficiency Virus
KZN	Kwa-Zulu Natal
NUM	National Union of Mineworkers
PHC	Primary Health Care
STI	Sexually Transmitted Infection
TB	Tuberculosis

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INTRODUCTION

“The establishment of comprehensive HIV workplace programmes by business has to be underpinned by the consideration of one key question: Where do business’ responsibilities start and end?”¹

“We could pick [black low-skilled] workers off the tree like apricots”²

The first quote, taken from a publication by the Global Business Coalition on HIV/AIDS in 2002, poses a question that had long been answered by South Africa’s mining industry throughout the previous decades. The second quote, however, recorded during an interview with a senior human resources manager in the mining division of the large South African company Deco, illustrates why public perception and historical memory of the mining industry’s delayed response to the HIV/AIDS epidemic in South Africa overshadow its unique response effort. Beginning in 1986, mining companies developed ad hoc HIV policy to curb—independent from the national government—which extended beyond its labor force.

The consequences of the mining industry’s response to the outbreak of HIV/AIDS have occupied countless scholars of South African history. Considering the heavy financial costs, why did the mining industry develop autonomous HIV policies and programs when their national government has historically assumed this role? From 1986 to 2004, South Africa’s mining industry possessed an

¹ N. Mistry and B. Plumely, "Hiv/Aids Workplace Protocols and Practices for Businesses in Resource Poor Settings," *Global Business Coalition on HIV/AIDS* (2002). p. 6

² Quoted in D. Dickinson, "Corporate South Africa's Response to Hiv/Aids: Why So Slow?," *Journal of Southern African Studies* 30, no. 3 (Sep 2004), <http://dx.doi.org/10.1080/0305707042000254137>.

abnormally high incidence of HIV—particularly amongst its black migrant laborers. In July of 1987, South Africa had only 1,093 confirmed cases amongst blacks, 943 of whom were miners. Over the next five years, miners would make up nearly forty percent of South Africa’s entire HIV-positive population.³ By 2004, HIV prevalence in the mining industry peaked at 30% before its steady decline, compared to the 22% and 15% in the agricultural industry and national population, respectively.⁴ The staggering gap during this period between mineworkers and the rest of South Africa’s adult population was a clear indication that the mining community possessed unique qualities that made it conducive to the rapid transmission of HIV/AIDS.

This corporate anomaly of the mining industry’s independent response effort raises several questions. The most obvious: What internal and external pressures caused this shift in HIV/AIDS action from the public to private sector as the mining industry assumed some of the responsibilities of its national government? What features were absent from the South African government’s HIV policy prescription that forced the mining industry to assume the

³South African Institute of Race Relations, *Survey of Race Relations in South Africa: 1988/89*, Book, Section vols. (1989). 758.

⁴ National figures on HIV prevalence during this era were typically inexact or averaged from several estimates. Unfortunately, the noted national prevalence rates during this period were only estimates calculated on an empirical base. Due to poor health infrastructure, information-gathering systems were very poor and relatively non-existent. Prevalence rates among pregnant women at antenatal clinics constituted the only efficient and widespread measurement for infection across South Africa. These figures, combined with other available data and estimates of key indicators (the regularity of condom usage and infection rates among sex workers, for example), were run through epidemiological models to estimate adult prevalence levels in the adult population.⁴ In the mining industry, HIV examinations were only conducted on miners already at STI clinics, and considering the virus’ asymptomatic nature, these figures often underestimated prevalence rates within the industry.

responsibility of this role? What distinct qualities did the mining industry possess that enabled it to create effective programs and policies separate from the state? Considering its expansive migrant labor structure and family disruption, did the industry have an inherent duty for addressing the systemic causes of the epidemic? In many ways, the mining industry created a labor climate congenial to the rapid transmission of HIV/AIDS through its migrant labor system, single-sex hostels and dangerous working conditions. Is it possible that the industry's refusal to label HIV/AIDS as an occupational disease, as it did with tuberculosis and other lung infections, actually benefited the mining population and opened the door for increased prevention and treatment programs? Finally, even as disappointment and a growing death toll formed historical memory on the industry's response, it is still important to ask whether the abnormal prevalence and delayed action should suggest that this response was a categorical failure. While miners certainly would have benefitted swifter, pre-emptive measures, the mining industry's response, operating through political rupture, exposed the financial advantages of employee healthcare and well-being.

Scholars have dealt with the nature of South Africa's private sector response to HIV/AIDS. There exist countless accounts of the impact of HIV/AIDS in South Africa and the state's policy prescription that resulted in the devastating epidemic. Less work exists on the role of the private sector during this period. Considering its recent nature, the influx of scholarship on this topic did not come until the early 2000s. Various fields emerged such as sociology (Dickinson, 2004

& 2005), psychology (Campbell, 2004), economics (Sunter and Whiteside, 2001; Natrass, 2004; Lewis, 2004), anthropology (McCulloch, 2006, 2013), and history (Philips, 2004 & 2012), which discuss various relationships between HIV/AIDS and the mining industry. However, due to both temporal proximity and the ongoing epidemic, these works tend to offer solutions rather than historical insight. These different disciplinary frameworks address the mining industry's role in the initial outbreak, but do not address the evolution of the HIV workplace programs on the mining industry over time. My argument will focus, instead, on the development of mining HIV policy prescription and behavior over time and the historical context of the industry's behavior towards prior epidemics and infectious diseases.

The most relevant work has come from David Dickinson and his analysis of the corporate response to HIV/AIDS. In *Understanding the response of large South African companies to HIV/AIDS* (2005) and *Corporate South Africa's response to HIV/AIDS: Why so slow?* (2006), Dickinson explores the HIV program initiatives, employee rights and prevention efforts of South Africa's private sector. He argues, "while business is not alone in failing to respond to the threat of HIV/AIDS, it is unable to claim that, when a new challenge arose, its response was adequate."⁵ Dickinson infers four distinct tensions—political, moral, industrial relations and socio-economic—to argue that the private sector moved to slowly in its response effort throughout the 1990s. In his case studies, he explores not only the mining industry, but also other major South African

⁵ Dickinson, "Corporate South Africa's Response to Hiv/Aids: Why So Slow?." 98

industries including chemical, IT, agricultural and health to draw his conclusions. This discussion, however, groups the mining industry in with all the other South African industries and the national private sector.

As a sociologist, Dickinson's work provides valuable insight into how corporations were able to delay HIV prevention and treatment under the auspice of a national response. The mining industry, however, possessed unique features, including a migrant labor force, an autonomous health care system, and most importantly, an abnormally high incidence of HIV, which make it an exception in the private sector. Thus, Dickinson's work makes generalized conclusions not only about the mining industry's response, but also the mine-specific 'tensions' that drove the industry towards its eventual response by grouping together the entire private sector. Dickinson wrote his piece as a warning and an informative call to arms for corporations both domestically and globally. While his arguments significantly contribute to the literature on this topic, his work suffers from a lack of historical perspective. By widening the historical lens, and examining the mining industry's prior response to occupational diseases, it becomes evident that the industry's response followed a predictable pattern, but emerged distinct from prior responses. In this way, the industry's response was both with and without precedent.

In addition to work on the private sector's response to HIV/AIDS, this thesis contributes to the growing literature on occupational diseases on South African mines (Packard, 1989; McCulloch, 2006 & 2012; Hecht 2012). In *White Plague, Black Labor* (1989), Randall Packard tracks the industry's long history

with tuberculosis (TB), a preventable and treatable disease, which continued to plague black South African workers during the twentieth century.⁶ Packard's work provides an insightful parallel to HIV/AIDS considering tuberculosis transmission on the mines also typically stemmed from the cramped living conditions. He roots the ineffectiveness of the mining industry's TB response to the massive government cover-ups and racial bigotry of the apartheid system. The contrast between the mining industry's HIV programs against the state's policy can help explain the progression and speed industry's response. In *Asbestos, Lies and the State: Occupational Disease and South African Science* (2006) and *Being Nuclear: Africans and the Global Uranium Trade* (2012), Jock McCulloch and Gabrielle Hecht, respectively, write far more polemic works—holding the mining industry accountable for health negligence and cover-ups. McCulloch employs mining documents, health tests, and mining conditions to conclude that the only way to understand the industry's inhumane behavior is through understanding their economic motivations. Hecht's work follows a similar path by tracking the profitable uranium marketplace to indict greedy mining companies for the increasing number of miner deaths from uranium poisoning.⁷ By adopting a similar methodology, this thesis will look at the specific economic and political motivations in the mining industry that

⁶ Randall M. Packard and Societies American Council of Learned, *White Plague, Black Labor: Tuberculosis and the Political Economy of Health and Disease in South Africa* (University of California Press, 1989).

⁷ Gabrielle Hecht, *Being Nuclear : Africans and the Global Uranium Trade* (Cambridge, Mass: The MIT Press, 2012).

ultimately urged companies to develop workplace HIV programs that saved lives, not cover-up deaths.

Analyzing these three sets of primary sources (the South African Institute of Race Relations' (SAIRR) annual *Survey of Race Relations*, The Chamber of Mines of South Africa's *Annual Report*, and The National Union of Mineworkers' (NUM) *NUM Newsletter*) can help to understand how the NUM and other institutions prompted the mining industry to adopt more substantial HIV intervention strategies. First, SAIRR was founded in 1928 to encourage study on racial struggles promote goodwill and co-operation between white and black South Africa. In its early years, the Institute, made up of around forty affiliated bodies (including social welfare organizations, women's societies, churches, universities and over seven hundred individual members), soon became an influential opposition to apartheid. While attempting to be free of government or political parties, the Institute quickly became, one of the oldest liberal institutions in the country,' but never garnered the political clout to influence policy.⁸ The annual *Survey*, however, provides key statistical information on South Africa's general health, economy, HIV/AIDS perspective, and policy prescription. Next, the Chamber of Mines of South Africa publishes *Annual Reports* on the general state of the mining industry each year. The Chamber of Mines of South Africa began as a small group of three mining companies at the Witwatersrand Gold mine in 1889, but has since developed into a large national conglomerate of the country's most prominent mining companies. In 1986, the

⁸ Julie Hearn, "Aiding Democracy? Donors and Civil Society in South Africa," *Third World Quarterly* 21, no. 5 (2000), <http://dx.doi.org/10.1080/713701079>.

organization, representing about 90% of the country's mineral production, regulated relations between companies and mining employees, petitioned legislative bodies regarding policy concerning the mining sector, established industry-wide standards for in employee welfare (including medical schemes, pensions, safety precautions, etc.) and general managed all other things necessary to accomplishing the aforementioned objects.⁹ Since its, the Chamber has published an *Annual Report* to inform its members, employees and South African society on the current macro-economic state of the industry, its political developments, significant events in the titular year, and general employee welfare. For this thesis, these reports serve as the prominent voice and position of the mining companies during this era. Lastly, the National Union of Mineworkers, the union for black miners to be discussed in further detail later, published an bi-monthly *NUM Newsletter* until the fall of apartheid in 1994. This newsletter provides not only key information political positions of the union, but also the information awareness of the average black miner.

The exploration of these key primary sources, and historical literature of South Africa's prior epidemics and infectious diseases will demonstrate how current scholarship does not properly recognize the ways in which The real issue is to do with the disciplinary framework of academic writing about the mining industry's response during this period. The common thread in most, if not all, of existing literature is that it too easily groups the mining companies with other private sector industries. By investigating the industry as a separate

⁹ Chamber of Mines of South Africa, *Chamber Constitution* (South Africa: 2015).

entity and positioning it within not only South Africa's past epidemics, it will become evident that their actions were unique among companies in the private sector. This thesis will utilize a historical lens to illustrate the shift of HIV/AIDS program responsibly between the mining industry and the public sector that began on the eve of the epidemic. By treating this response as a progression from the prior experiences within South Africa's mining industry, rather than the holistic private sector that it's been associated with, it can be viewed as both a corporate anomaly and predictable.

In order to solve the puzzle of this unprecedented private sector response, this thesis will argue that the NUM's demands and the company's economic motivations coincided with the good of the people. Unlike in other instances of occupational disease on South African mines, the mining companies benefited financially from investing in substantial HIV prevention and treatment programs. Due to the high prevalence among workers, mining companies could not afford to wait for the national government assume its traditional responsibilities and face the epidemic. This thesis will be divided into two chapters, each analyzing the industry's HIV/AIDS response under the two distinct South African governments. Chapter One "The NUM and the Conditions of Infection: 1986 - 1993," will unpack the lengthy history of the mining industry in South Africa, how its twentieth century development created the perfect conditions for the rapid transmission of AIDS, and how the NUM influenced HIV/AIDS policy on the mines. Chapter Two "Economic Motivations and Epidemic: 1994 - 2004" discusses the virus' transition from outbreak to

epidemic, and how the industry's economic imperatives came to coincide with the good of the people. The two chapters saddle the fall of apartheid and South Africa's democratic transition; to both consider both the integral role of this political rupture on HIV/AIDS policy prescription, and the industry's distinct relationship to the two governments. In 2004, HIV prevalence rates among miners plateaued and began their steady decline for the first time 1986, thus marking an end to the industry's first wave of response.

By exploring the HIV program failures of national government and Department of Health's HIV programs, it will become how a private industry, especially one so engulfed with the infection, influence the spread of infection on a national scale. Thus, the mining industry's response was not a branch of the state response, but became an HIV/AIDS pioneer in both South Africa's private and public sector.

Chapter One: The NUM and the Conditions of Infection

During the mid-eighties, the South African groups primarily afflicted with HIV—commercial sex workers, intravenous drug users and homosexuals—were already marginalized and stigmatized citizens. The virus only perpetuated the pre-existing bigoted societal discourse towards these groups. South Africa's apartheid government did little to combat these opinions. Decades of institutionalized racism and malevolence from the apartheid regime conditioned the blacks to distrust any state messages or education. From some blacks, AIDS was viewed as an 'Afrikaner Invention to Deprive us of Sex' or as a government procurement aimed at black genocide.¹⁰ On the other side, the ultra-conservative, pro-apartheid *Afrikaaner* newspaper accused the government of concealing "information that HIV could be transmitted in casual contact, because it threatened the process of desegregating public amenities."¹¹ By mid-1988, with both whites and blacks skeptical of the government's every move, Willie Van Nierkirk, the South African Minister of Health, could not even raise enough funding for distribution of AIDS education brochures.¹² But, for the most part, the government adopted conservative HIV policy, criminalized HIV-positive individuals and claimed the virus to be the result of 'promiscuous behavior.'

¹⁰ Quoted in: Virginia van der Vliet, "The Politics of Aids," *West Africa*, no. 4149 (1997). Kyle Dean Kauffman and David L. Lindauer, *Aids and South Africa: The Social Expression of a Pandemic* (New York: Palgrave Macmillan, 2004). 50.

¹¹ Quoted in: *Aids and South Africa: The Social Expression of a Pandemic*. 50

¹² Louis Grundlingh, "Government Responses to Hiv/Aids in South Africa as Reported in the Media, 1983–1994," *South African Historical Journal* 45, no. 1 (2001/11/01 2001), <http://dx.doi.org/10.1080/02582470108671405>. 139.

Thus, it was no surprise in August of 1986 when the apartheid government demanded the immediate repatriation of HIV-positive Malawan miners working in South Africa. Over five hundred thousand African¹³ men awoke in their single-sex hostels for another rigorous day on the mines. That afternoon the Chamber of Mines announced that 130 Malawan miners had tested HIV-positive. This announcement stunned the nation—which had only recorded thirty-four total AIDS cases to date.¹⁴ The apartheid government’s call to repatriate these miners, however, was met with stiff opposition from the National Union of Mineworkers (NUM). The Chamber of Mines, stuck between the state and the NUM, needed to make a take a side on this contentious debate and convey a decision—one that would expose the distinct elements of the mining industry that made it uniquely prepared to combat HIV/AIDS. This chapter will explore the pre-existing conditions and historical context that influenced the mining industry’s pivotal decision and made it uniquely prepared it to curb the spread of the virus. Then it will demonstrate the ineffectiveness of the government’s response and the defragmentation of the healthcare system,

¹³ During the apartheid era, the racial structure consisted primarily of three distinct groups: Whites, Coloureds, and Africans (black). The white population (17.9%) descended from either the British colonial settlements or the Dutch settlements that came before it. The Coloured population (10.3%) was a multi-ethnic group that included most mixed-race individuals, descending from various different countries and backgrounds. Coloureds were higher in the racial caste system than the Africans, which granted them better rights and voting power. The Africans (68.7%), interchangeable with black, were the indigenous race, and while a mixture of cultures and geographical ancestry, were grouped together in a single racial class during the apartheid era. These racial distinctions were integral to shaping South African infrastructure and policy prescription, and definitions that this thesis will employ in order to adequately illustrate the divisions of the period.

¹⁴ South African Institute of Race Relations, *Survey of Race Relations in South Africa: 1988/89*. 225.

which opened the door for the NUM to influence the industry's HIV workplace policy and programs.

Historical Context of the South African Mines Up to 1986

South Africa's own socio-economic development cannot be separated from the mining industry. The country's infrastructure, urban centers and economy were tailored to cater to the success of mining companies. A historical examination of the mining industry's development will not only explain how mining companies developed a reliance on cheap black laborers, but also the various features that made mining communities particularly vulnerable to rapid transmission of infectious diseases. Moreover, it will expose how state legislation both facilitated the construction of these mining conditions and reinforced the relentless subjugation of black workers.

This process began nearly a hundred years before HIV/AIDS arrived at the South mines, when Erasmus Jacobs stumbled upon a glistening stone on his farm near Kimberly, South Africa. Jacobs' discovery turned out to be a 21.25-carat diamond. In just three years, an 83.5 carat diamond—dubbed the Star of South Africa—was unearthed below Jacob's farm soil, and after exchanging hands several times over the next few years, eventually sold in London for £25,000—equivalent to present day 4.2 million US dollars.¹⁵ In the following months, two to three thousand white men flocked to this hillock. Consequently, when a small farm discovered the Witwatersrand gold reef in 1886, prospective

¹⁵ Martin Meredith and Inc ebrary, *Diamonds, Gold, and War: The British, the Boers, and the Making of South Africa*, vol. 1st (New York: PublicAffairs, 2007). 15.

miners were, of course, acutely aware of the financial bounty that awaited them. Within ten years, a hundred thousand fortune hunters migrated to the Witwatersrand. This newly formed community became Johannesburg—South Africa’s largest city.¹⁶ From then on, mine sites erupted throughout Northern and Eastern South Africa—coming to produce primarily gold and coal, but operations also included diamonds, uranium, silver, iron, copper, platinum and other minerals.¹⁷ Considering the Union of South Africa¹⁸ was founded in 1910, the new state’s development was married to the evolution and expansion of the mines. The identity of modern South Africa will always be rooted and traced back to Erasmus’ diamond discovery and the greater mining industry.

The burgeoning mining sector flourished in the decades to follow and soon became the backbone of the South African economy. In his 1973 photography book, *On The Mines*, revered photographer David Goldblatt noted:

“On nine farms in Africa in 1886 there began gold mining operations that were to produce great riches and political and economic power that would outlive the deposit of ore and the individual lives of successive generations of men who mined it. There also began a way of life shaped by the nature of the work to be done, the relationship of the strangers who came together to do it, and the blankness of the place on earth where they found themselves.”¹⁹

South Africa’s financial and societal infrastructure was constructed on the basis of the persistent subjugation of the African people, the confiscating of their resources and land, and the enactment of racially imbalanced laws; all to force

¹⁶ Ibid. 15.

¹⁷ Chamber of Mines of South Africa, *Annual Report: 1986*, vol. 97 (Johannesburg, South Africa: 1986). 1.

¹⁸ In May of 1910, the four British Colonies of modern day South Africa unified to create the Union of South Africa, which would exist until British decolonization in 1963.

¹⁹ D. Goldblatt and N. Gordimer, *On the Mines* (C. Struik, 1973). 1.

the black majority to work for meager wages and generate profits for the white minority. By the twentieth century, the mining industry would make up nearly a third of South Africa's Gross Domestic Product (GDP),²⁰ and in order to maintain their success, the industry developed a reliance on cheap black laborers based on an extensive migrant labor system. By 1986, over half a million black miners would migrate each year to work and reside on the mining property, living in all-male hostels, sleeping in bunk-bed dormitories, and staying for the entirety of their eleven month shift.²¹

However, this migrant labor force was not novel. The mobility of the labor force was deeply embedded into Southern Africa's economic structure before the mining companies. Over past centuries, South Africa's population in the rural interior would regularly travel long distances to find work and income far from their homes. Throughout the 19th century, young black men worked and travelled with richer homestead owners, and trade merchants, in exchange for livestock or other goods. Black men would often accompany these white trekkers for extended periods of time before returning home. Although, in this early era, many black workers also retained economic alternatives including access to land, livestock and rural trading opportunities. While some decided to leave home in search of work, many of these men opted to remain in rural villages. The alternative work options provided black men with bargaining

²⁰ Deborah James and Dinah Rajak, "Credit Apartheid, Migrants, Mines and Money," *African Studies* 73, no. 3 (2014/09/02 2014), accessed 2015/10/07, <http://dx.doi.org/10.1080/00020184.2014.962872>. 457.

²¹ "Miners Return Home," *Business Day* 1987.

leverage over wages—and facilitated a system that supported fairer employee rights for black workers.²²

Thus, when a rapid influx of employment opportunities opened up at the small mines, black men arrived in large numbers. The continuous flow of black workers, motivated by the diamond boom, however, became a significant point of contention with white diggers. In the 1870s, independent white diggers leased small plots of land from the government, determined to resist the formation of large companies, and were committed to the concept of a 'digger's democracy'. White diggers feared the influx of black workers as competition, yet without the assistance of black laborer diggers risked financial ruin. During these years, nearly 50,000 black laborers would migrate for three to six months to work for white diggers. With five thousand independent white diggers contending for labor, black workers were able to move freely between diggers looking for better pay or employment.

Over the next thirty years, state legislation reduced the economic agency of black laborers and the 'digger's democracy' evolved to more closely resemble an oligarchy. The growth of large mining companies enabled the small controlling white base to maintain strict control over a ballooning black labor force.²³ Between 1910 and 1969, "profit margins in the gold mining industry fluctuated between 23 percent and 17 percent while the portion paid to black

²² Peter Delius, "The Making and Changing of Migrant Workers' Worlds (1800–2014)," *African Studies* 73, no. 3 (2014/09/02 2014), accessed 2015/10/07, <http://dx.doi.org/10.1080/00020184.2014.969479>. 316.

²³ Meredith and ebrary, *Diamonds, Gold, and War: The British, the Boers, and the Making of South Africa*. 45-49.

workers declined from 16.4 percent to 8.8 percent.”²⁴ By the 1970s, the mining corporations expanded labor-recruiting efforts far beyond the South African border in search of cheaper labor—and ultimately foreign workers made up seventy percent of the mine’s workforce.²⁵ These migrants hailed from overpopulated and resource scarce regions, which could not support so many families. By 1986, 60%-80% of the economically active men left home in rural villages for work on the mines.²⁶ The history of black labor in South Africa can be characterized by repeated white subjugation, racist legislation to restrict black economic opportunity, and mine-centric infrastructure that brought cheap labor into low-paying positions. During the onset of HIV/AIDS, the mutually dependent relationship between cheap black labor and the mining companies became an integral leverage point in the industry’s eventual urgency to keep black workers healthy and the union appeased—or risk dismantling the foundation of its labor system.

In addition to larger mining companies, apartheid *land alienation policy* in the 1960s and 1970s further entrenched a migrant labor system in South Africa’s economic fabric. Under the Group Areas Act of 1950, the apartheid government instituted mass removals of blacks from white areas into black “homelands,” known as Bantustans, or *townships*, outside of urban areas. The Bantustan project became a powerful tool of white South blacks to completely

²⁴ Delius, "The Making and Changing of Migrant Workers' Worlds (1800–2014)." 315.

²⁵ Ibid. 316.

²⁶ This mass exodus of healthy men left the Bantustans as vastly impoverished areas, inhabited and tended only by the sick, elderly, young, or disabled and unemployed women. Noted in: Kauffman and Lindauer, *Aids and South Africa: The Social Expression of a Pandemic*. 67.

segregate and geographically position themselves more concretely in power. By separating blacks by ethnic heritage, the apartheid government forcefully relocated the black population to one of twelve Bantustans—areas that held no historical or ethnic significance for blacks.²⁷ The massive de jure segregation of ethnic groups left black families uprooted and thrown into poverty-stricken, over-crowded and resource-deprived slums. In regions unequipped to support the influx of black families, unemployment amongst black men unemployment skyrocketed in the 1970s.²⁸ Subsequently, when the wage gap between whites and blacks widened—ultimately increasing to twenty to one in 1969—these young black men felt financially handcuffed to their job in the mines. While an enormous flow of black laborers had been coming to the mines for over half a century, rising unemployment only further decreased their economic leverage for wage pay and maltreatment. The Bantustan project characterized the country's history of black negligence and contributed to the state's support in the migrant labor system, the poverty and poor-health of blacks, and the racially imbalanced wage gap. Once again, the mining industry and the state worked together to subjugate the black population and reinforce a migrant labor system that would become a primary vehicle for the dissemination of HIV/AIDS.

In addition to the migrant labor system, social conditions in mining communities created a textbook perfect environment for the spread of infectious

²⁷ Jeffrey Butler, Robert I. Rotberg, and John Adams, *The Black Homelands of South Africa: The Political and Economic Development of Bophuthatswana and Kwazulu*, vol. 21;21.; (Berkeley: University of California Press, 1977). 9.

²⁸ T. R. H. Davenport and Christopher C. Saunders, *South Africa: A Modern History*, vol. 5th (Hampshire [England];New York;: Macmillan Press, 2000). 435.

diseases. In 1986, miners were enduring difficult and dangerous lives on a daily basis. Posing as a miner, black photojournalist Ernest Cole snuck onto the gold mines Witwatersrand of Transvaal and discovered that,

“living conditions were miserable almost beyond imagining—worse even than in the worst slums of Johannesburg. The miners are quartered in long, brick-walled structures with corrugated iron roofs. They live twenty to a room that measures eighteen by twenty-five feet. Each man has a concrete cubicle, the slab floor of which is his bed.”²⁹

Cramped quarters were conducive to the transmission of tuberculosis (TB) and other airborne illnesses. In the HIV/AIDS era, these illnesses—TB in particular—acted as opportunistic diseases, commonly paired with AIDS, to kill its host. Moreover, poverty and malnutrition, both consequences of these deplorable living conditions, accelerated the progression of HIV to AIDS—one of many reasons miners were among the earliest groups to show symptoms.

During time off, miners would often engage multiple partners from the prolific commercial sex industry surrounding their single-sex hostels. Separated from their families, the miners often dreaded the boredom more than the work. They would sleep, sew clothing, play music with handmade instruments, drink at the local bar or engage with sex workers.³⁰ Around the all-male hostels existed a thriving community of commercial female sex workers. These women—often escaping abusive men, dropping out of school following a pregnancy or the death of one parent or both—frequently came from rural villages to find money. The women commonly had between 2 and 18 sexual encounters per week, with

²⁹ Ernest Cole and Thomas Flaherty, *House of Bondage* (New York: Random House, 1967). 23

³⁰ *Ibid.* 23

condoms being used in less than 10% of all interactions. The typical exchange, as documented in a squatter camp outside a South African gold mine, proceeded as follows,

“Sex worker: Can I help you? Client: Can you help me? Sex worker: Do you have money? It will be R20 [\$2.50]. Client produces the money and hands it over. Sex worker gives the money to a colleague for safekeeping. Both client and worker move a little distance away, behind bushes if they are available, but often within sight of colleagues if there are no bushes. Sex worker removes her panties and lies down on her back, client takes his trousers down to just above his knees. Penetrative sexual intercourse takes place (usually taking about 3 min). Thereafter they both stand up, dress and the client walks away. Verbal communication apart from the initial negotiation of money is rare.”³¹

The male-dominated communities stripped women of their agency to demand the use of condoms. If a woman made this request, she risked losing clients to another sex worker. It would be surprising if these young miners, some only teenagers, abstained from sexual encounters for eleven months of the year. In the late 1970s through 1990s, the South African revolt against apartheid fostered a youth revolution against the historically conservative sexual mores. The social conditions on the mines were congenial to the youth revolt that encouraged multiple sexual partners, demanded ‘flesh-to-flesh’ intercourse and when asked about the risk of STI infection, one 1990 activist said: ‘It’s a case of eat, drink and be merry, for tomorrow we die!’³² Even with cursory

³¹ C. Campbell, "Selling Sex in the Time of Aids: The Psycho-Social Context of Condom Use by Sex Workers on a Southern African Mine," *Social Science & Medicine* 50, no. 4 (Feb 2000), <Go to ISI>://WOS:000084469600003. 484

³² Quoted in Howard Phillips, *Ohio Short Histories of Africa : Epidemics : The Story of South Africa's Five Most Lethal Human Diseases* (Athens, OH, USA: Ohio University Press, 2012). 119.

understanding of the dangers of STIs, miners rarely concerned themselves with such issues.

With constant exposure to sickness and death, miners considered HIV/AIDS as simply another addition to the growing lists of threats faced daily in the mines.³³ Over a twenty-year career, black miners had a one in forty chance of being killed on the job.³⁴ These fatal accidents in mines became so commonplace that workers labeled mines 'The Modern Slaughter House.'³⁵ On Gencor's Kinross gold mine in September of 1986, for instance, the industry experienced the second largest mining accident to date when some a polyurethane foam caught fire and killed 177 mining employees. The dangers of using polyurethane foam were well known, and British mines had banned its use over twenty years prior.³⁶ While publicly committed to improving worker safety, the persistence of hazardous materials and fatal accidents indicated that the Chamber of Mines prioritized profits over miner safety and health. Moreover, by fostering a lifestyle that created a 'life-free, ride-fast' mentality, this would contribute to the lack of miner interest in HIV/AIDS education programs.

The combination of a migrant labor system, family disruption and social dislocation, the prevalence of commercial sex workers, and the persistence of occupational diseases and fatal accidents, made the mining industry extremely

³³ Ibid. 32

³⁴ Campbell, "Selling Sex in the Time of Aids: The Psycho-Social Context of Condom Use by Sex Workers on a Southern African Mine." 480.

³⁵ National Union of Mineworkers, "Modern Slaughter House South African " *NUM News*, April, 1991. 6.

³⁶ South African Institute of Race Relations, "Survey of Race Relations in South Africa: 1987/88," (1988), 758.

vulnerable for rapid transmission of sexually transmitted infections. In December, at the conclusion of their eleven-month stay at the mining hostel, 660,000 miners, 95% of whom were migrants, would return home and frequently introduce HIV to rural villages along the way. These workers derived from all over South Africa or various countries—including Malawi, Mozambique, Lesotho, Botswana, Zimbabwe, Swaziland, and the homelands.³⁷ Seeing family became ceremonial, whereas extended periods of time in all-male hostels was the routine. The mines developed into a hotbed for STIs, consistently traded amongst partners. Subsequently, the migrants would travel long distances—often over 500 miles—home, engaging with more multiple partners along the way and, through commercial sex, introduce HIV to the rural communities. The migrants acted as vectors for the disease, transporting it from urban mining communities to the rural interior of Southern Africa.

Over the course of the 20th century, motivated by wealth, the mining industry offered up a perfect storm of conditions for the rapid dissemination of HIV/AIDS. On the other hand, the state played an integral role in reinforcing the mining labor system and living conditions through racially bias policy prescription, stripping black families of their land and resources. Familial disruption became commonplace and mining communities were frequently the 'home' for most miners. The industry's reliance on cheap black labor, however, made the mining companies vulnerable to the NUM's demands. It is commonly accepted that the structural foundation of the mining industry facilitated the

³⁷ *Survey of Race Relations in South Africa: 1991/92*, Book, Section vols. (1993). 238
ibid.752.

spread of infection, but which institution was responsible for deconstructing these particular underlying social conditions of HIV transmission: the industry that cultivated it or the government that allowed it?³⁸ The mining sector brought in these migrant workers, was it fair to expect the government to step in and fix this migrant mess? Even if the mining companies' inherent involvement made it uniquely equipped to influence significant change on at the national level by having the ability to dismantle the living and working conditions that it nurtured over past century.³⁹

South Africa's History of Infection and the 'Modern Epidemic'

In many ways, the elements of South Africa's HIV/AIDS epidemic were unique: the slow progression from HIV to death, its asymptomatic nature, and the distinct medical, political and social environments in which it was allowed to foment. While reams of academic work, both scholarly and popular, predominately discuss the HIV/AIDS epidemic as inexplicable and without precedent, the history of epidemics in South Africa reveals that many of its features fit within a well-established pattern.⁴⁰ As Howard Phillips argues, "it

³⁸ The following sources substantiate the claim that the migrant labor system contributed to the spread of HIV: Howard Phillips, "Aids in the Context of South Africa's Epidemic History: Preliminary Historical Thoughts," *South African Historical Journal* 45, no. 1 (2001/11/01 2001), <http://dx.doi.org/10.1080/02582470108671400>. 12.

Karen Jochelson, Monyaola Mothibeli, and Jean-Patrick Leger, "Human Immunodeficiency Virus and Migrant Labor in South Africa," *International Journal of Health Services* 21, no. 1 (January 1, 1991 1991), <http://dx.doi.org/10.2190/11ue-l88j-46hn-hr0k>.

³⁹ Packard and American Council of Learned, *White Plague, Black Labor: Tuberculosis and the Political Economy of Health and Disease in South Africa*.

⁴⁰ Phillips, "Aids in the Context of South Africa's Epidemic History: Preliminary Historical Thoughts."; Hoosen Coovadia et al., "The Health and Health System of South Africa:

does not stand outside of South Africa's epidemic past; it has grown out of it."⁴¹ South Africa's HIV/AIDS outbreak did not possess features of a traditional epidemic. A true epidemic, Charles Rosenberg defined, "is an event, not a trend. It elicits immediate and widespread response... As a social phenomenon, an epidemic has dramaturgic form."⁴² In *Health, Civilization and the State*, Dorothy Porter argued that epidemics function like "hurricanes," and cause large-scale social upheaval.⁴³ In 1995, William Johnston re-examined Rosenberg's definition and the epidemic, and argued that modern "epidemics of acute infectious diseases can themselves become a part of the 'background noise' of society."⁴⁴ For Johnston, the 'modern epidemic' cannot only be studied in biological or medical terms, but must consider the social, cultural and political influences as well.⁴⁵ Johnston's update encouraged the inclusion of social conditions into epidemiological discourse. The rapid influx of HIV into the South African landscape did not disrupt social order, or cause mass hysteria, and thus, Rosenberg's traditional definition did not adequately encompass South Africa's experience. The path of HIV/AIDS, and the social conditions that expedited its spread, fit more precisely into Johnston's 'modern epidemic.' The examination of South Africa's epidemic history, using the definition of this 'modern epidemic,'

Historical Roots of Current Public Health Challenges," *The Lancet* 374, no. 9692 (accessed 2016/03/29, [http://dx.doi.org/10.1016/S0140-6736\(09\)60951-X](http://dx.doi.org/10.1016/S0140-6736(09)60951-X)).

⁴¹ Kauffman and Lindauer, *Aids and South Africa: The Social Expression of a Pandemic*. 45.

⁴² Charles E. Rosenberg, "What Is an Epidemic? Aids in Historical Perspective," *Daedalus* 118, no. 2 (1989), <http://www.jstor.org/stable/20025233>. 1.

⁴³ Dorothy Porter, *Health, Civilization, and the State: A History of Public Health from Ancient to Modern Times* (New York; London;: Routledge, 1999). 79.

⁴⁴ William Johnston, *The Modern Epidemic: A History of Tuberculosis in Japan*, vol. 162 (Cambridge, Mass: Council on East Asian Studies, Harvard University, 1995). 9.

⁴⁵ *Ibid.* 294-301

can help illustrate how the mining industry's ad hoc HIV policy programs would be both with and without precedent; and how its distinctive nature fits into a larger epidemiological discussion.

In the course of South Africa's history of epidemics, past governments have predominantly facilitated measures to curb the spread of infectious diseases when confronted with an epidemic. The frightened masses historically have turned to prayer, pointed fingers, blamed scapegoats, or isolated themselves from society. With most epidemics, however, the state assumed the primary role for providing national aid and stopping the spread of the illness. During a six-week span in 1918, for instance, three hundred South Africans succumbed from the devastating Spanish Flu. The Union of South Africa, still under the dominion of the British Empire, provided swift assistance with newly developed biomedicine and pressed state laboratories to cultivate impromptu anti-flu vaccines. The Department of Health shut down trading ports and drafted emergency plans to deal for the state to handle a relapse of the epidemic, which included a standard and centralized healthcare response.⁴⁶ Later in the century, from 1918-1963, white middle class South Africans endured a frightening epidemic of poliomyelitis. While polio only took the lives of 940 South Africans, the significance of the government's response comes from not only the number of children it maimed, but also the extent of the apartheid government's financial investment and aggressive policy prescription to combat the virus. The state doubled its healthcare budget and immediately adopted the international

⁴⁶ Phillips, *Ohio Short Histories of Africa : Epidemics : The Story of South Africa's Five Most Lethal Human Diseases*. 13-38

standard for polio prevention.⁴⁷ These state responses set the precedent for the future South African leaders during the onset of the HIV/AIDS crisis.

More directly, an examination of the TB pandemic presents key comparisons to the HIV/AIDS policy prescription. William Johnston employs the TB crisis in Japan as his primary case study to prove the emergence of the 'modern epidemic.' In the first two decades of the 20th century, similar to South Africa, Japan suffered from the rapid spread of TB—stemming from overcrowded and unclean factories, densely populated residential land and poor nutrition.⁴⁸ The TB crisis in Japan exemplified an atypical epidemic, which did not fissure the social fabric, but rather slowly infected civilians by rooting itself in pre-existing social and structural conditions.

Not unlike Japan, TB had also been a major concern for South Africa, and in the 20th century, the mining community, in particular. The close living quarters and poorly ventilated working conditions, similar to Japan, were conducive to the spread of TB. Throughout the 20th century, the industry made steady progress in its fight against tuberculosis, highlighted by the 1973 amendment to Occupational Diseases in Mines and Works Act, which explicitly included tuberculosis amongst other occupational diseases.⁴⁹ Since close living conditions expedite the transmission of airborne tubercle bacillus, its classification as occupational disease made it extremely significant, considering its close relationship with HIV/AIDS. The two illnesses commonly worked in

⁴⁷ Ibid. 94-111

⁴⁸ Johnston, *The Modern Epidemic: A History of Tuberculosis in Japan*.

⁴⁹ Chamber of Mines of South Africa, *Annual Report: 1989*, vol. 99 (Johannesburg, South Africa: 1989).

combination to kill black miners. However, the Chamber made it very clear that the provision of medical services for TB patients is only available to miners contracted the disease while working.⁵⁰ Moreover, in order to receive medical compensation and healthcare Chamber committees put the miners put through humiliating tests that often included the forcing the black worker to stand nude in front of ten white doctors as they inspected his health. Understandably, the miners rarely chose to endure this embarrassing due process.

But South Africa also maintained their expansive migrant labor system, which developed into a social conduit for TB and other infectious diseases. In the 1920s, postwar expansion of the mining industry produced overcrowded shantytowns and worsened housing conditions for the cheap African laborers. Mining companies repatriated infected migrant workers, underreported TB incidence among miners, and, until 1973, denied sick African miners healthcare. It was evident the Chamber of Mines was unconcerned with the health of miners infected with TB, or they would have provided miners with health benefits and sick pay. However, as Randall Packard argues, these mining companies were not required to provide assistance, rather the failure was “due to the government’s overriding concern for separate development, presenting the creation of an efficient system of health care, as well as to the continued existence of living and

⁵⁰ Noted in the Occupational Diseases on Mines and Work Act, 1973: tuberculosis was accepted as an occupational disease when “in the opinion of the certification committee, was contracted while the person concerned was performing risk work, or with which the person concerned was in the opinion of the certification committee already affected at any time within the twelve months immediately following the date on which that person performed such work for the last time”

Cameron Cross Attorneys, *Occupational Diseases in Mines and Works Act 78 of 1973* 78 (1973).

working conditions that prevent Africans from maintaining good health.”⁵¹ Packard puts the onus on the state for not imposing helpful TB policies, while instead underreporting TB cases and suppressing medical information from the public. Packard’s analysis follows the traditional belief system that the state must be held accountable for the sick, particularly during an epidemic.

In addition to TB, asbestosis and uranium poisoning (both preventable occupational diseases) evolved into fatal concerns for African miners. Starting in the 1960s, the mining industry suppressed the problems of asbestos mining, stifled public knowledge and remained idle as African miners died from the deadly lung condition. Once again, the government played a key role in hiding the connection between mining and *asbestosis*. The financial return of mining asbestos, at that time, were extraordinary—partly due to occupational hazards of mining it.⁵² In 1963, the first radiology conference in South Africa found that radiation and uranium poisoning extended beyond the mining industry and plagued small towns in South Africa. The mining companies “saw profits and health concerns did not get in the way.”⁵³ Without union backing, these miners never had a voice in the matter. In both instances, the asbestosis and radiation exposure, the mining companies, with the assistance of the government, sacrificed African lives to generate wealth. Occupational disease on the mines must always be considered in relation to the motivation of financial gains.

⁵¹ Packard and American Council of Learned, *White Plague, Black Labor: Tuberculosis and the Political Economy of Health and Disease in South Africa*. 167.

⁵² Jock McCulloch, "Asbestos, Lies and the State: Occupational Disease and South African Science," *African Studies* 64, no. 2 (2005/12/01 2005), <http://dx.doi.org/10.1080/00020180500355694>. 5-9.

⁵³ Hecht, *Being Nuclear : Africans and the Global Uranium Trade*. 337

However, the arrival of HIV/AIDS in South Africa complicated the relationship between the industry, the state and the disease. The state needed to assume a leadership role in curbing its spread, but this epidemic did not behave like the ones in previous years, primarily afflicting marginalized sets of the population. It was evident, early on, that an exclusively medical or biological approach would not be successful, and that HIV/AIDS needed to be thought of in terms of the social and political conditions that facilitated its rapid dissemination. For over a century, however, the mining industry fostered similar social conditions conducive to the transmission of TB and decided to await government intervention rather than address the underlying causes. What features of HIV/AIDS caused mining companies to wake up and aggressively address the same conditions that had plagued prior TB prevention? The historical investigation of the industry's response will demonstrate how company behavior towards HIV/AIDS fits perfectly into the industry's prior behavior towards diseases in the workplace. Unlike the other cases, economic motivations generated urgency for ad hoc prevention and treatment programs. However, if the state had actively implemented effective HIV intervention, the mining industry's response would not have progressed as quickly, or possibly ever. But the apartheid government's contradictory HIV discourse and "deny" policy prescription required an answer from the private sector.

The Apartheid Government, Medical Community and Societal Response

From 1986 – 1993, as the virus' reach extended beyond already marginalized circles, the apartheid government's HIV response shifted from denial and the criminalization of infected persons, to conservative discourse on social behavior and a return to pre-1960 values. The initial response, highlighted by government inaction, stemmed from a state denial and negligence of HIV-positive citizens. In what Virginia Van der Vliet coined as the 'silent years,' the national response until 1988 can be characterized by government inaction, highlight by the criminalization, quarantine and stigmatization of HIV-positive persons.⁵⁴ The white consensus, reinforced by their apartheid government's absent efforts, was to ignore the issues of infected persons, considering HIV/AIDS, as Peter Fourie explained, "appeared to have the greatest impact amongst isolated fringes of South African society, affecting mainly homosexuals, commercial sex workers and intravenous drug users—sections of society who had already been legislated against; indeed, criminalized."⁵⁵ The state's focus on criminalizing HIV-positive persons not only reflected national discrimination, but also overlooked any measure of prevention. Moreover, the state's response, or lack thereof, dismissed the concerns of these dispensable groups and overlooked the socio-economic conditions that facilitating spreading the disease. However, as the latent virus spread through miners, the characterization of these people as 'dispensable' would prove ironic, considering the economy relied so heavily on mining and an African labor force. Thus, the 'silent' response failed

⁵⁴ Vliet, "The Politics of Aids." 71.

⁵⁵ Pieter Fourie, *The Political Management of Hiv and Aids in South Africa: One Burden Too Many?* (New York; Basingstoke [England]; Palgrave Macmillan, 2006). 71.

to recognize how its inaction would undermine the economic linchpin of the mining industry—which would soon require the mining companies to compensate with ad hoc HIV programs of their own.

In addition to discriminative legislation, the ineffectiveness of state appointed organizations on HIV/AIDS demonstrated the nation's crippling addiction to curative medicine. By the winter of 1985, South African president P.W. Botha employed an independent AIDS Advisory Committee to guide research and provide comprehensive information on the issue of AIDS in South Africa. However, this committee, comprised of only *white* men, tried to find a silver bullet medical solution instead of addressing the deeper structural causes for the virus' rapid spread.⁵⁶ By 1987, a small non-governmental AIDS Advisory group attempted to tackle the issue. The collected intellectuals pigeonholed their work in the same curative medicine folly and never laid out any initiatives.⁵⁷ Yet, Professor Jack Metz, the advisory group's Chairman, speculated that the mining industry could evolve into an 'AIDS positive pool' because "the migrant labor system prevented contract workers from living with their wives. In other words, deprived of 'normal sexuality' with their wives, the men sought contact with prostitutes and 'a certain incidence' of homosexuality."⁵⁸

During the same calendar year, a charity based in London found the mining industry pertinently responsible for the impending HIV/AIDS issue. This report foresaw that "as migrant workers travel, it [the AIDS virus] will be

⁵⁶ Pieter Fourie and Melissa Meyer, *Politics of Aids Denialism : South Africa's Failure to Respond* (Farnham, Surrey, GBR: Ashgate Publishing Group, 2010). 72.

⁵⁷ *Ibid.* 60.

⁵⁸ South African Institute of Race Relations, "Race Relations Survey, 1987/88," (1988). 317.

disseminated throughout the country... Cities such as Johannesburg, Cape Town, Durban, Port Elizabeth, and Pretoria would undoubtedly provide large reservoirs of the virus.”⁵⁹ These special interest groups contradicted the government appointed committees and exposed pressing issues with South Africa’s structural placement of labor.

Rather than addressing the deep structural issues, the government’s aim was to legislate, stigmatize and isolate the marginalized groups. These groups were comprised of primarily whites with the Clade B strain of HIV. By 1987, a Clade C strain had arrived in South Africa within the poor African community. In fear of this new ‘black AIDS,’ and with 946 of the 1,043 Africans infected being miners, the government expanded its isolation and criminalization edicts to include the migratory miners. Even with Professor Metz’ warning and the external London report, the government opted for isolationism. On October 30th, 1987, this isolationist ethos became law vis-à-vis the manipulation of regulations based on the Admissions of Persons to the Republic Act of 1972 and subsequently granted officials the ability to deny non-South Africans who were HIV positive entry into the country.⁶⁰ The government’s domestic policy of stigmatization slowed future action against the epidemic, but the immigration regulation immediately impacted the mining industry.

Rather than identifying the urgent situation in terms of a modern epidemic, as elaborated by Johnston, the apartheid government only thought of

⁵⁹ Ibid. 317

⁶⁰ Grundlingh, "Government Responses to Hiv/Aids in South Africa as Reported in the Media, 1983–1994." 132.

HIV/AIDS as a treatable medical problem. The structure of the public health system in South Africa, however, was deeply fragmented and disorganized along similar racial imbalances as the political and economic institutions. South African health facilities were not only racially segregated, but also divided amongst local, provincial and national systems. Throughout the 20th century, the government's expansion of segregation efforts to relocate its black population to homelands and townships further decentralized the health system. By 1986, South Africa had fourteen separate health departments. Already segregated between whites, coloureds, and blacks, unclear delineation of responsibilities between the various health departments caused immense bureaucratic problems and paralyzed implementation of effective health programs.⁶¹ Even while the department of national health and population development maintained theoretical power over enacting general policy on disease prevention, this structural fragmentation made it nearly impossible to implement a national medical response. From the onset, the state's pigeonholing of HIV/AIDS, as exclusively a medical problem, resulted in the disregard of preventative measures and primary health care.

In addition to problems caused by the health department's division of power, the racial imbalance of health care paralyzed state HIV programs and treatment. The Bantustan hospitals have been historically underfunded. The daily hospital expenditure for a patient in Baragwanath Hospital (for Africans) was R39 compared to R118 at a Johannesburg Hospital (for whites).

⁶¹ Coovadia et al., "The Health and Health System of South Africa: Historical Roots of Current Public Health Challenges." 819.

Additionally, white medical personnel almost always refused to work in black hospitals,⁶² leaving the African health system with primary fly informally trained and unprepared medical staff.⁶³ The public health system had also been experiencing a shift of doctors moving from the public to private sector. In 1980, only 40% of doctors worked in the private sector, quickly jumping to over 60% by 1990.⁶⁴ These disadvantaged health services were poorly staffed and too underfunded to handle the influx of AIDS patients during this first phase.

Even when blacks received medical attention, the country's health systems suffered from a crippling emphasis on hospital and curative medicine. In the decades preceding the HIV/AIDS epidemic, only 4.7% of South Africa's annual healthcare expenditure was allocated to preventative care. In the 'homeland' of QwaQwa, for example, in 1990 the Elizabeth Ross Hospital and Manapo Hospital were budgeted R17,382,000 and R34,933,000, respectively. In contrast, the entire province's clinical services were granted only R280,000.⁶⁵ Manapo Hospital superintendent Dr. J.S. Moloji wrote that his hospital was "not covering as much as we'd like to, i.e. we're viciously hooked on curative medicine."⁶⁶ Without proper health clinics, these medical staffs were simply waiting for their population to get sick in order to treat them. Preventative

⁶² Medical professionals often refused to work in black hospitals due to the geographic obligation of living in these black neighborhoods. The grand apartheid 'homeland' relocation effort, consequently, further developed the fragmented health system.

⁶³ South African Institute of Race Relations, "Survey of Race Relations in South Africa: 1987/88." 780.

⁶⁴ Coovadia et al., "The Health and Health System of South Africa: Historical Roots of Current Public Health Challenges." 820.

⁶⁵ Jeremiah Seati Moloji, *Qwaqwa Health Bulletin, The Superintendent Manapo Hospital* (1991). 8.

⁶⁶ *Ibid.* 8.

infrastructure—educational clinics, nutritional guidance, vaccinations, and sexual education—could have been integral weapons in the health sector’s capacity to slow the spread of HIV. Without education, primary care, and nutritional infrastructure in place, the Department of Health lacked the medical strategies for reaching the rural villages in South Africa.

Even while public health systems failed to extend into the rural interior, the Department of Health refused to work with traditional healers—instead dismissing them as quacks. In 1989, speaking to the City Press paper, Dr. E.F. du Plessis, the Port Elizabeth medical officer, steadfastly denied working with these healers and said he “would only train personnel who were convinced that AIDS was a ‘modern disease’ with a modern cause and had to be treated with modern care.”⁶⁷ Without a medical infrastructure, traditional healers, known as *sangomas*, were the only medical ‘officials’ trusted by the African rural interior. The health department’s stance most starkly affected the poor black villagers who were already unable to access proper health systems due to proximity or overcrowding. In addition, these rural villagers were often the families and dependents of miners. Aside from HIV/AIDS, these families were continuously dying from tuberculosis, malnutrition diphtheria and the stomach flu—all treatable conditions.⁶⁸ The *sangomas* could have functioned as an essential conduit to at least warn the families of the virus, but unfortunately, these healers did not fit into the rigid framework of the health department’s social behavior

⁶⁷ Grundlingh, "Government Responses to Hiv/Aids in South Africa as Reported in the Media, 1983–1994." 129.

⁶⁸ *Qwaqwa Official Development Information* (QwaQwa, South Africa: South African Department of Health, 1985). 3.

policy.

In addition to the willful disorganization of grassroots medical care; the South African biomedical officials disseminated contradictory messages on HIV/AIDS. In June of 1986, Andres Brink, president of the South African Medical Research Council (SAMRC), began begging for his medical colleagues to alter their way of thinking, pleaded that, “Who people are and what they do is irrelevant to the issue—all we want to do is save lives.”⁶⁹ His message, however, was drowned in white noise, as his medical colleagues continued to use homophobic language in HIV discourse. Cape Town’s Chief Medical Officer was claimed, “the disease only occurred amongst homosexuals and he believed that there were not many of those kind of people in Cape Town.”⁷⁰ Because of gross contradictions, even the correct messages from the medical community carried little weight.

By 1989, HIV had extended outside of already discriminated people, marking the end of the ‘silent response’ and into a phase of HIV/AIDS re-conceptualization. Societal discourse shifted from away from ‘who you are’ - blaming the individuals for their actions. In this line of thinking, those infected with HIV were considered promiscuous, immoral, sexual outlaws, anti-Christian and low-class. Legislation punctuated this sentiment by repealing the October edict that criminalized HIV carriers and dropping all immigration regulations.⁷¹

⁶⁹ Fourie, *The Political Management of Hiv and Aids in South Africa: One Burden Too Many?* 67.

⁷⁰ Ibid. 67.

⁷¹ Fourie and Meyer, *Politics of Aids Denialism : South Africa's Failure to Respond.* 65

Thus, the problem of AIDS, in South Africa's socio-political discourse, could only be solved if people returned to pre-1960 values of family, marriage and the home. In lieu of programs, Minister of Health Van Nierkirk advised that "promiscuity is the greatest danger, whether one likes it or not. We have to say that. It is a fact. There is no way one can say, 'I still want to sleep around but I don't want to get AIDS.'"72 In 1990, Dr. Rina Venter, Nierkirk's predecessor, defended Van Nierkirk's stance and argued the Health Department was "doing all we can. The problem of AIDS is that it is not primarily a medical problem. It relates to social behavior. You can't legislate against social behavior!"73. In November of 1990, Venter coupled this speech with a R1.8 million cut in the nation AIDS budget.74 The AIDS budget only allocated money to medical researchers and biomedical communities for a possible cure. Nierkirk and Venter's message was poignantly emblematic of the national perspective and an effect of the poor information gathering being accumulated by his government and medical community.

Busy on frontlines of other political battles, The African National Congress (ANC) did not fight the Department of Health on this matter. In 1990, at an ANC summit in Maputo, several individuals voiced concern about the burgeoning epidemic. Even as apartheid regime change dominated discussion, one member pleaded, "we cannot afford to allow the AIDS epidemic to ruin the

⁷² Grundlingh, "Government Responses to Hiv/Aids in South Africa as Reported in the Media, 1983-1994."128.

⁷³ Ibid. 128.

⁷⁴ South African Institute of Race Relations, *Survey of Race Relations in South Africa: 1991/92*, Book, Section vols. (1993). 129.

realization of our dreams, for now.”⁷⁵ But political aspiration relegated HIV/AIDS down the prior As the Congress of South African Trade Unions (COSATU) clearly identified, while the apartheid government developed ineffective HIV programs, “turbulent political and labour climate pushed AIDS low down on the list of priorities.”⁷⁶ After 1989, despite the apartheid government declaring HIV a high priority national concern, violent politics crowded and distracted the political landscape—on both sides of the political spectrum. Health concerns in general, and HIV/AIDS in particular, took a back seat.

Fighting for its existence in a fervent political battle with the ANC, the apartheid government did little to alter the spread of the virus. The ‘silent years’ criminalized and dismissed infected persons. The following years only advocated for behavioral change. The modest attempts towards treatment were paralyzed by contradictory messages in the medical community, ultra-conservative discourse, and a fragmented and racially imbalanced health care system. Even if blacks received curative care in the township, the overcrowded, understaffed and underfunded hospital provided little assistance or counseling—but most often the lack of primary health care made it difficult for medical attention to reach the rural interior. The lack of medical attention for blacks coincided a significant shift in how society perceived AIDS at the end of apartheid. In 1989, 60% of AIDS cases were homosexual white South African men, with only 20% of cases being black men, but by 1993, 71% of AIDS cases

⁷⁵ Kauffman and Lindauer, *Aids and South Africa: The Social Expression of a Pandemic*. 52.

⁷⁶ *Ibid.* 52-53

were black men, women and children, from 1989.⁷⁷ The black sexual rebellion, the migrant labor system, overcrowded shanty townships and black society's distrust of the government contributed to the shift from predominantly white to predominantly black groups. The ANC's rise to power coincidentally paralleled the virus' own transition from white to black South blacks. From this point on, the virus was considered an African disease and a part of the identity of black South Africa.

The Mining Industry's Response

South African mining companies historically sacrificed employee health and welfare if it meant larger profits. In their 1986 *Annual Report*, Chamber of Mines President E.P. Gush acknowledged the Chamber's "first duty is to invest and to generate wealth, without which the economic needs of South Africa cannot be met."⁷⁸ After ensuring that the mining corporations had generated adequate profits, President Gush promised to "do the utmost to provide a safe and healthy working environment and, where applicable, also congenial living conditions."⁷⁹ The routine course for the Chamber had been to make hollow promises on improvements or cover up occupational disease. Gush's statements came only several months after the NUM Newsletter claimed, "the Chamber of Mines doesn't try hard enough to make mines safe. It spends more time and

⁷⁷ South African Institute of Race Relations, *Survey of Race Relations in South Africa: 1993/94* (Johannesburg, South Africa: 1994). 142.

⁷⁸ Chamber of Mines of South Africa, *Annual Report: 1986*, 5.

⁷⁹ *Ibid.* 5

money finding new ways to get gold out of the ground.”⁸⁰ Consistent with previous industry messages, Gush’s statements exemplified the industry’s priorities on the eve of epidemic. While it prioritized the industry’s economic gains over the health of their workers, the Chamber of Mines would soon discover how its dependence on cheap laborers would also grant miners certain influence over HIV policy.

The genesis of this influence started in 1982, as black mineworkers celebrated a historic victory when the Chamber of Mines officially recognized the National Union of Mineworkers (NUM), becoming the first black union to participate in negotiations on behalf of black miners, and the granted the largest gain in bargaining power for black miners since the 1946 African Miner’s Union Strike.⁸¹ This recognition demonstrated something bigger, as the *Daily Maverick* commented, “a semblance of humanity, a grudging acceptance from mine owners that mine workers too are human beings.”⁸² This landmark moment marked the culmination of several years of steady increasing assemblage by the

⁸⁰ National Union of Mineworkers, "A Thousand Ways to Stop Dying," *NUM News*, October, 1986. 5.

⁸¹ In 1941, at an African miner’s conference, the African Miner’s Union formed and sought recognition from the Chamber of Mines. After significant resistance, the Chamber agreed to minor improvements to living conditions, but at concurrently issued a ban against any gatherings of twenty or more black men without permission. But on August 12, 1946, 60,000 African mineworkers in the Witwatersrand refused to continue working without increased wages. A peaceful procession in Johannesburg was met with fierce opposition from the police, where violence ensued and the strike was squashed. 1,248 workers and 9 were killed on this day, which ultimately resulted in the abolition of the African Miner’s Union’s brief stint.

Documented in: M.P. Naicker, "The African Miners' Strike of 1946," (2016). South African Institute of Race Relations, "Survey of Race Relations in South Africa: 1983," (1984). 155.

⁸² Khadija Patel, "Analysis: Num - Rich History, Unforgiving Present," *Daily Maverick* accessed 2016. <http://www.dailymaverick.co.za/article/2012-09-05-analysis-num-rich-history-unforgiving-present/#.VvtAGxIrJE5>.

black miners. In an unofficial capacity, the NUM established satellite locations on eight different mines and quickly accumulated nearly 6000 members. Soon after its recognition, South African prime minister P W Botha argued, “the right of workers to organize and deliberate on working conditions must be accepted.”⁸³ The Chamber never made any official announcements indicating their reasons for recognizing the first black union; but presumably they understood that union rejection would have faced stiff, and possibly violent opposition. By December of the following year, membership grew to 55,000 and union leaders were participating in serious negotiations.

The NUM gained its influence through its newly acquired voice in the public realm. After formation, the organization began publishing an NUM newsletter, which not only informed miners of ongoing negotiations and significant strikes but also created more transparency across the industry, as miners were better informed. With membership and communication increasing, the NUM could threaten large-scale strikes and accuse the industry of violations with a stronger voice. Almost overnight, the black miners attained the organizational clout to make demands from The Chamber of Mines. By 1986, the influence and existence of the NUM still remained unique in South Africa’s private sector, considering no other black unions existed in other major industries.⁸⁴ These wage negotiations did not result in life-change increases, but dialogue and discourse had made a clear and apparent shift for the black miners.

⁸³ Quoted in South African Institute of Race Relations, *Survey of Race Relations of South Africa: 1982* (Johannesburg, South Africa: 1983). 165.

⁸⁴ *Survey of Race Relations in South Africa: 1987/88*, Book, Section vols. (1988). 318

In August of 1986, the NUM's degree of influence was tested when the apartheid government called for the repatriation of HIV-positive miners. State officials expressed serious concern that unless "the foreign miners were repatriated, there would be a rapid escalation in the number of AIDS carriers and victims in South Africa."⁸⁵ But the NUM levied immense pressure on the Chamber to combat the repatriation of the infected miners. NUM press officer Marcel Golding quickly accused the government of, "trying to export unemployment and diseases to the rural areas."⁸⁶ For Golding, "the question of whether a worker should return home should be decided by him and his family."⁸⁷ While his polemic may have been purely speculative, the continuous movement of mine laborers would soon become the disease's chief method of transmission across Southern Africa. The Chamber of Mines, stuck between the government and its labor force, needed to pick a side. In a rare departure from its past, the Chamber, and its affiliates, sided with the black miners and vowed to continue employing, not repatriating the Malawan workers.

The Chamber of Mines' decision to refuse the government's request to support the repatriation of the Malawan miners demonstrated the industry's ability to oppose government demands and marked the first HIV policy by a company in the private sector. This set in motion the gradual shift of efficient HIV/AIDS policy leadership from the government to the mining industry. While historic, this maneuver directly opposed the national government, and even with

⁸⁵ South African Institute of Race Relations, "Survey of Race Relations in South Africa: 1987/88." 799.

⁸⁶ Ibid. 759

⁸⁷ Quoted in: *ibid.* 316.

industry's economic clout, the risk of resisting the political order required significant calculation. Considering the mining industry typically acted on behalf of its own interests, the costliness of the NUM's wage-strikes and encouraged violence evidently resonated in the pockets of the mining companies. Continuing to employee HIV-positive miners certainly set a precedent for employee rights, but instituting independent prevention and treatment programs would require significant capital. The NUM pressed the Chamber for increased intervention because the industry possessed a privatized health care program, which freed its members from the fragmented and racially biased public health system.

The industry's long-established private medical infrastructure enabled the industry to develop their independent response. Since the industry's genesis, the health of its miners has always presented an economic problem. In the early 1900s, for example, mining recruits from tropical regions died from pneumonia at a rate of 26.5 per thousand. In 1911, Dr. A.J. Orenstein, appointed by the Rand Mines, made wholesale reforms of the mining health system and within two years had made great strides— with the death rate among all diseases dropping to 21 per thousand. Orenstein's construction of a private healthcare system, exclusively for miners, would revolutionize the industry's attention to health. By 1967, the miner death rate from disease had been reduced to 1.87 per thousand. But disease in the mines remained an important issue. Prevalence of tuberculosis in South African mines, for instance, had historically been three times larger than the national average.⁸⁸ But since the 1970s, black miners were

⁸⁸ J P de V van Niekerk, *The Health of Mine(R)S*, vol. 103, 2012 (2012).

offered, albeit segregated, access to the industry's health facilities and by 1986, the Chamber expanded health care services to include health development and mental instability in order to encompass the alcoholism issues among its white workers,⁸⁹ which involved industry interest in non-work related health concerns—another precedence for future behavior towards HIV in the workplace.

The industry's in-house healthcare system distinguished the South African mining sector amongst the international mining community. Among the five⁹⁰ other largest global mining industries at this time, the privatized healthcare system in South Africa dwarfed the others. Aside from outpatient clinics and on-site medical men, the other industries did not have private hospitals, nor did they require it. The deeply entrenched migrant labor system and all-male hostel living quarters was atypical for mining. Migrant workers certainly existed in all the corners of the globe, but the large number of men involved, the distances travelled and routine of familial disruption made South Africa's labor system particularly unique. The features of the South African mining industry that contributed to both the spread and curbing of HIV were not terribly emblematic of mining worldwide. Lacking the influx of migrants and

⁸⁹ Chamber of Mines of South Africa, *Annual Report: 1989*. 14.

⁹⁰ The top five largest mining industries, based on mineral reserves, in the 1980s: South Africa, Australia, Russia and Guinea.

overcrowded of mining communities, other industries did not require an enormous, well-funded private healthcare system.⁹¹

Furthermore, the considerable size of the mining industry's healthcare services allowed for a self-sustainable training program. Through the 1980s, hospitals not only recruited medical students from Scotland, Italy, Germany, and several accredited South African institutions, but also trained doctors and mining medical officers on site. Separated from the segregated public healthcare system, the industry did not suffer from the same disorganization as its public counterpart. In the 1980s, The Rand Mutual Hospital, a flagship infirmary of the industry, averaged an annual capacity of 368 patients for its 642 serviceable beds.⁹² In comparison, the entire QwaQwa Bantustan had only 245 beds between its two hospitals.⁹³ Moreover, in 1986, the Chamber and its affiliates dedicated R38374, or nearly seven percent, of its total expenditure to hospital services.⁹⁴ While its health facilities heavily catered to its white workers, the industry had a smooth functioning private health system in place prior to the arrival of HIV/AIDS. This private system, including its expanded social services, privatized medical services and more racially balanced quality of care, possessed distinctive features that were absent from the public healthcare system.

⁹¹ Tracy-Lynn Humby, "Redressing Mining Legacies: The Case of the South African Mining Industry," *Journal of Business Ethics* (2014), <http://dx.doi.org/10.1007/s10551-014-2380-8>.

⁹² Chamber of Mines of South Africa, *Annual Report: 1989*. 43

⁹³ *Qwaqwa Official Development Information*. Table 10.2.1

⁹⁴ *Annual Report: 1986*, 97.

In 1987, the Chamber announced the unfurling of educational HIV/AIDS pamphlets to its black mining staff.⁹⁵ The effectiveness of these pamphlets were presumably minimal, not only considering the Chamber did not disclose the volume of printed copies, methods for dissemination of the plan or the information presented, but also that only 45% of Africans were literate at this time.⁹⁶ In other words, industry officials neglected to make sure their workers were retaining this information. Once again, the NUM pressed for more changes. On April 5, 1987, *City Press* newspaper reported that the NUM threatened to rally further strikes and action against the Chamber if they did not accommodate better housing for the mineworkers' families. In response, Anglo, one of the largest mining corporations, promised to build 24,000 homes for miner families over the next several years. Mr. Golding, the NUM press officer, contended that this figure was insignificant considering the Anglo Company alone employed over 180,000 men at the time.⁹⁷ Mr. Golding's anger indicates the NUM's inability to accept compromise with Chamber officials, as the 24,000 home construction plan clearly demonstrated positive gains to ending the migrant labor system. However, the plans traditionally moved painfully slow. By 1993, only 2.1% of Anglo miners would receive family-style house, compared to the 89% still living in all-male hostels.⁹⁸ Moreover, Anglo's modest attempt was still a glowing

⁹⁵ Chamber of Mines of South Africa, *Annual Report: 1987*, vol. 98 (Johannesburg, South Africa: 1987). 13.

⁹⁶ South African Institute of Race Relations, *A Survey of Race Relations in South Africa: 1986* (1987). 435.

⁹⁷ Relations, "Race Relations Survey, 1987/88." 318.

⁹⁸ Mark N. Lurie, "The Epidemiology of Migration and Hiv/Aids in South Africa," *Journal of Ethnic and Migration Studies* 32, no. 4 (2006/05/01 2006), <http://dx.doi.org/10.1080/13691830600610056>. 663.

exception, not the norm. Following the decision to retain the Malawan workers, the industry accomplished very little in the first two years—matching with the state’s ‘silent’ response. Nevertheless, the NUM’s relentless pressure, exemplified through Mr. Golding’s unwillingness to compromise, would push the Chamber to adopt concrete HIV/AIDS policies and programs.

Coming out of the ‘silent years,’ as other industries shied away, the Chamber adopted a more aggressive and defensive discourse regarding the HIV/AIDS response. By 1988, Eskom, an electricity provider, stood as the only company outside the mining industry to address the HIV subject—only to announce they’d be requiring mandatory pre-screening tests for prospective employees and denying any infected applicants.⁹⁹ Aside from barring HIV-positive employees, most other South African corporations avoided implementing any prevention or treatment programs.¹⁰⁰ Subsequently, in early 1989, the Chamber press secretary frankly criticized the apartheid government for not taking proper action against the virus’ growth. While developing independent corporate programs made intuitive sense, there was no precedent for such action.¹⁰¹ However, the Chamber did not outline possible programs for government intervention or demand specific treatments be available to miners.

The Chamber’s oratory tone, while critical of the government, closely resembled the South African government’s discourse. In March of 1989, John Liebneberg, the Chamber of Mines’ senior general manager of public relations

⁹⁹ Dickinson, "Corporate South Africa's Response to Hiv/Aids: Why So Slow?." 5.

¹⁰⁰ South African Institute of Race Relations, *Survey of Race Relations in South Africa: 1988/89*. 320

¹⁰¹ *Ibid.* 314

for the mining industry, defended his industry and voiced publicly their alignment with the government's social behavior stance. While investigatory methods were unreleased, Liebnerberg claimed that the mining industry had not contributed to bringing the virus into South Africa, nor were mining hostels 'breeding grounds' for HIV, as critics charged. Liebnerberg's critiques of the government read more similar to complaints—upset that the state had no plan to curb the virus' spread. Rather than being pro-active, the Chamber refuted claims of promiscuity, accused the government of delays, and shied away from any major investment in HIV workplace intervention. The only improvement included the Chamber's further deracialization of health services to improve welfare benefits and medical services to blacks. Once again, this moderate improvement did not satisfy the NUM's unrest.

In May of 1990, the NUM accused the Chamber of overlooking the mining conditions causes of the disease and requested a new industry-wide HIV long-term strategy offensive. Addressing health concerns on a mine-by-mine basis, the NUM argued, was no longer an acceptable approach to combating the crisis. The NUM suggested a four-part plan: HIV should not be cause for discrimination or dismissal; HIV screenings can only be justified if the NUM has signed off on the Chamber's objectives; the mining industry should commit itself to increased family housing; and a coordinated education and counseling plan must be developed by both management and worker representatives.¹⁰² This proposal demonstrated a clear knowledge of both effective preventative measures and

¹⁰² Ibid. 420

solutions to the root causes of HIV/AIDS transmission—such as the lack of family housing. Unlike major AIDS protests of the time, the NUM did not take on the government, but rather put the onus on the private corporations—signifying that the mining companies were indeed responsible for providing comprehensive HIV programs. Where mineworkers primarily continued to disregard the dangers of HIV infection, the NUM pressed to alter this perspective among its members. This four-pronged plan represented a significant step in framing an HIV policy for South African mines. The NUM both introduced the urgency for prevention programs and opened a discussion for reforming the living conditions at the mines. The NUM did not hesitate to put the responsibility on the mining companies for implementing these programs, nor did its four-part plan include a ‘wait for government intervention’ clause. Uninterested in the traditional roles in South Africa’s prior epidemics, the NUM shifted responsibility of HIV intervention away from the state and into the hands of mining companies.

The increased violence, both locally and nationally, provided the NUM with the leverage it needed to affect change. Through violence, the NUM gained leverage over the Chamber. In the same way that blacks used violence to bring down the apartheid regime, the NUM did it to influence HIV/AIDS reform. Over the next three years, as national violence intensified at the mines, the NUM conversely acquired greater bargaining power over the Chamber. On October 17, 1990, thousands of miners skipped work to protest the proposed retrenchment plan of black workers. Moreover, the NUM were regularly organizing regional ‘stayaway days’, a one-day employee boycott from work, to commemorate ‘black

solidarity against repression.’¹⁰³ These strikes were not often without violence. In late 1987, white anti-union activists bombed the COSATU headquarters killing 200 union members—including the NUM’s Natal organizer.¹⁰⁴ The violence on the mining communities coincided with the political uproar in the South African townships. The nation’s political fabric was in upheaval, with 1,403 political deaths in 1989—a twenty percent increase from the previous year.¹⁰⁵ In June, August and October of 1989, three police cars exploded from detonated grenade-type mines while the cars patrolled Soweto, South Africa’s largest township and mining community.¹⁰⁶ The possibility of strikes and violence posed not only safety concerns, but also financial losses—making these strikes a significant negotiating tool for miners. At the same time, years of violence and a massive social revolution had begun to unravel the apartheid regime before its ultimate collapse in 1994. In a strange way, the NUM’s movement resembled the socio-political revolution, wearing down the powerful Chamber of Mines to a point in which it could no longer fight the substantive HIV reform policies of its black labor force. The similarities, of course, were not coincidental, but appropriate considering the historically interwoven evolution of the mining industry and the South African government.

¹⁰³ South African Institute of Race Relations, *Survey of Race Relations in South Africa: 1989/90* (Times Supplements Ltd, 1990). 232.

¹⁰⁴ National Union of Mineworkers of South Africa, "It's War on the Workers," *NUM News* May, 1987.

¹⁰⁵ South African Institute of Race Relations, "Survey of Race Relations in South Africa: 1989/90." 234.

¹⁰⁶ *Ibid.* 238.

As a result, the Chamber increased its HIV workplace programs and adopted more progressive language and discourse. From 1990-1993, HIV policy intervention was significant. In the first two years, they both accepted the NUM's demands for an industry-wide policy and also developed several independent measures towards limiting the threat of HIV. In 1990, for the first time, the Chamber's annual report discussed the HIV threat with an air of optimism. With a hint of self-congratulation, the report acknowledges that the mining industry had been at the forefront of HIV programs and education within the private sector. In that year, the industry did institute an industry-wide policy, which implemented several "programmes aimed at curbing the spread of HIV infection within the Republic of South Africa, Southern Africa and the mining industry in particular. These programmes include prevalence surveys, information and education campaigns, training of AIDS counselors and contributing to knowledge and research about AIDS"¹⁰⁷. These pioneering programs were significant in two ways: they inaugurated the influential reform period and acknowledged that the mining industry's role in the larger South African crisis.

During a year when the apartheid government cut their HIV education budget in half, the mining industry reported its final HIV policy measure under the apartheid government. In August of 1993, the Chamber of Mines and the NUM signed South Africa's first industrial agreement on AIDS. The terms of the agreement indicated "HIV infection and AIDS should be treated on the same basis as any other serious condition... HIV-positive employees will be protected

¹⁰⁷ Chamber of Mines of South Africa, *Annual Report: 1990*, vol. 100 (Johannesburg, South Africa: 1990). 17.

against discrimination, victimization and harassment.”¹⁰⁸ The first industry to adopt such a policy, the Chamber of Mines championed a policy that provided free health coverage to mining medical personnel who were infected with HIV during work-related incidence. While it excludes black miners, this significant measure, for the first time, recognized HIV infection as an occupational disease. By introducing this concept, the Chamber grew more perceptive of the mining conditions that attributed to the rapid transmission of HIV.¹⁰⁹

In 1993, the Chamber announced further healthcare appendages, which included installing an internal insurance company, which would cover all 504,000 employees—and include medical aid. Later that year, the industry also took further financial steps towards phasing out single-sex hostels—working with both miners and real estate developers.¹¹⁰ In 1993, on the eve of political overhaul, it was evident the Chamber had heard the NUM’s pleas and was attempting to turnaround the course of HIV in the workplace. While they met several of the NUM’s requests, there existed a continued understanding that further HIV intervention would still come from the public sector.

While minor, the mining industry’s HIV efforts during this period would indirectly extend beyond into the South African population. The migrant labor system, while still a catalyst in the dissemination of HIV, was now being utilized as a vector to dissemination HIV education, prevention and information. While

¹⁰⁸ Relations, *Survey of Race Relations in South Africa: 1993/94*. 49.

¹⁰⁹ Chamber of Mines of South Africa, *Annual Report 2001/02* (Johannesburg, South Africa: 2002). 42

¹¹⁰ South African Institute of Race Relations, *Survey of Race Relations in South Africa: 1991/92*. 174.

the health department refused the use of local *sangomas*, these miners now served as a social conduit to reach rural villagers throughout Southern Africa. Further housing developments and construction also decreased the network of this migrant labor system by bringing the families to work. Additionally, the availability of family housing decreased the propensity for workers to engage with local sex workers and the sex workers along the long routes home during mandated vacations. The healthcare reforms indirectly helped reduce overcrowding in the public hospitals, so that non-mineworkers could receive better care without having to compete with local miners. While larger HIV prevention and treatment programs would still need to be introduced, these subdued effects demonstrated that the mining companies could significantly influence the virus' spread—even outside its labor force.

The efforts, however, did not slow the rapid transmission of HIV in the mining industry. After 1991, HIV-positive workers at STI mining clinics raised from 3.66 in the first half to 5.41 in the second half of the year alone.¹¹¹ Even worse, these figures only reflect those individuals who were already seeking out STI clinics, but a majority of persons infected were unaware of their condition. Due to the NUM's persistence, the Chamber forged its own response effort, but one that did not rectify the problem overnight. While these ad hoc programs developed independently of the government, the mining companies never openly or actively sought the responsibility for providing HIV/AIDS relief. Moreover, it was not evident whether the NUM's leverage would expand to force

¹¹¹ Chamber of Mines of South Africa, *Annual Report: 1991*, vol. 101 (Johannesburg, South Africa: 1991). 18.

sweeping HIV reforms, or had the slack tightened on their bargaining power, after the Chamber met several of their demands.

In the post-apartheid era, the problem of HIV/AIDS would continue to plague black miners. No longer would the mining industry only have to contend with union pressure, but also the HIV-induced economic costs and employee turnover. A report from the AIDS Economic Research Unit that predicted that 70% of the country's black labor force would have died or be HIV carriers by 2000.¹¹² Even so, several questions remained. Would the industry provide distinctive levels of health care for HIV-positive workers based on their individual value to the company? What will happen to family members and sex workers, who remain outside of the private sector, but major agents of a transmission? Will they also receive prevention programs and the latest therapy? The NUM forced the Chamber to elevate the rights of the infected miners, but in the coming decade, it would be the economic pressures that would force companies to expand its prevention and treatment programs.

The predominant internal force, the NUM, and the lack of external assistance from the apartheid government highlighted the beginning stages of this gradual shift in HIV intervention leadership. The industry's powerful economy and privatized healthcare system uniquely prepared it to adequately combat the virus in the coming decade. Significant missing features—a centralized healthcare system, aggressive prevention strategies and primary health care, the availability of biomedical treatment, and a broad

¹¹² South African Institute of Race Relations, "Survey of Race Relations in South Africa: 1989/90." 232.

conceptualization of the 'modern epidemic'— underscored the apartheid government's ineffective HIV intervention programs. While the political transition invited in a new plan of action, the new government would inherit these same problems. The NUM introduced awareness for prevention and reform of mining conditions, but in 1993, only 1,353 total South African citizens died of AIDS.¹¹³ The urgency was not apparent in the NUM's message. Thus, the industry's response during this period consisted mainly of subdued education campaigns and HIV intervention on a per mine basis.

Economic motivations drove the Chamber's handling of occupational diseases in the past, and the appeasement of the NUM, and avoiding further strikes, was rooted in the same longstanding priority for generating wealth. The industry's profit-hungry economic credence can be easily comprehended. Even with its leadership role in HIV/AIDS treatment and prevention, mining was still a business and without profits, it would collapse. The suppression of TB information and prevalence rates, the relentless unearthing of asbestos and the persistence of radium poisoning only emphasized the industry's primary motivation and its ability to disregard employee well-being to achieve it. The Chamber's compliance with the government's 'silent' approach gradually developed over the eight years into increased recognition of the state's ineffective medical and preventions schemes. While the apartheid medical system steeped deeper into curative medicine, the NUM created awareness for prevention programs and deeper structural concerns. With the union's influence,

¹¹³ South African Institute of Race Relations, "Survey of Race Relations in South Africa: 1994/95," 20 (1994/95). 307.

the Chamber's discourse on HIV intervention had shift slightly away from the government. In the next chapter, As the state's HIV policy shuffles through socio-political transition, the mining industry will not be further pressed to adopt prevention and treatment options, and will able to wait patiently for the government's assistance.

Chapter Two: Economic Motivations and Epidemic

On April 26, 1994, South Africa held its first all-race election. Nearly twenty million citizens gathered at their local polling booths to mark their ballots and take place in an historic moment for the entire country. In the months preceding, the National Party—the governing power during the apartheid years—unfurled a campaign plan that rebranded itself as the ‘new’ National Party, the flagship for democratic excellence. But the country was eager for change. ‘Now is the time,’ prodded the campaign slogans of the rival African National Congress (ANC). As arbiters for the country’s recent liberation, the African National Congress campaigned on a promise for ‘A better life for all.’¹¹⁴ On the back of that the promise and under the shepherding of Nelson Mandela, the ANC won over sixty percent of the electorate—giving birth to hope, long overdue equality and a newly minted democratic nation. On that evening, newly elected President Mandela addressed his citizens with a mixture of relief and determination, assuring them that, “we are all South Africans, we have had a good fight. But now this is the time to heal old wounds and to build a new South Africa.”¹¹⁵ With racial inequality seemingly in the rearview mirror and having shed its political baggage, South African sat poised to transition into a new age—hopeful to turn the tides on the HIV/AIDS epidemic.

¹¹⁴ Martha Evans, *Broadcasting the End of Apartheid: Live Television and the Birth of the New South Africa*, vol. 44; (London: I.B. Tauris, 2014). 179.

¹¹⁵ Nelson Mandela, “ANC Election Speech”

Over the next decade, however, HIV/AIDS policy developed into one of the most notorious aspects of the post-apartheid government. With Mandela at the helm, the spread of the virus no longer presented itself as an insurmountable, inevitable crisis. Because it had been cripplingly politicized in the years prior to his election, and on the eve of epidemic, Mandela skated around the issue, apparently having been told that the topic was too risky politically.¹¹⁶ Instead, the government dragged its feet on providing anti-retroviral treatments (ARVT), focused on traditional medicine and poverty, prioritized the country's political reconstruction, and ultimately failed to curb the burgeoning incidence. While the democratic government championed "new" South Africa, failed HIV/AIDS programs and delayed medical schemes bore striking resemblance to the old South Africa.

The mining industry could not, on the other hand, afford to be so late in its response to the escalating epidemic. In 1994, almost ten percent of South African mineworkers, tested at STI clinics, were positive for HIV. By 2001, this figure ballooned to over 30 percent.¹¹⁷ In 1995, the Chamber of Mines' Chief Executive frustratingly acknowledged that, "South Africa's celebrated transition to democracy has yet to fully deliver the anticipated surge in industrial and commercial prosperity."¹¹⁸ Following the country's radical political revolution, when rioters substituted violence for reconciliation, hopeful discourse now

¹¹⁶ Kahreen Tebeau and Ian Shapiro, *After Apartheid : Reinventing South Africa* (Charlottesville: University of Virginia Press, 2011). 181

¹¹⁷ Phillips, *Ohio Short Histories of Africa : Epidemics : The Story of South Africa's Five Most Lethal Human Diseases*. 134.

¹¹⁸ Chamber of Mines of South Africa, *Annual Report: 1994/95* (Johannesburg, South Africa: 1995). 4.

captured the hearts and minds of many South Africans—and the mining industry was not immune. While pressure from the National Union of Mineworkers (NUM) increased worker rights and generated awareness for HIV prevention strategies, the Chamber of Mines required further financial incentive to develop costly prevention and treatment programs. Exploring the cost-analysis of HIV/AIDS impact on the mining industry can help explain why the industry ultimately adopted substantial policy reform. As Mandela's government demonstrated its failure to transform the government's traditional response, shown in prior epidemics, the mining companies embraced this role and successfully curbed the spread of HIV/AIDS amongst its mineworkers. Perhaps, the most interesting element of the industry's eventual success came from its refusal to qualify HIV as an occupational disease. By not initially providing workers with the benefits and health care associated with occupational diseases, the Chamber's more closely treated HIV/AIDS as a consequence of labor practices. Corporations consider occupational diseases as endemic, inevitable byproducts of the work, whereas labor practices can be altered and, combatted and in by not categorizing HIV/AIDS as an "occupational disease," the industry opened the possibility for its complete elimination.

The Economic Advantages of HIV/AIDS Prevention and Treatment

The economic impact of HIV/AIDS has been well documented. In the mid-1990s, Clem Sunter, the former executive of the Anglo American mining corporation, warned that, "AIDS is going to have a significant impact on bottom-

line profits.”¹¹⁹ Sunter made this exclamation to disprove a widely regarded myth that AIDS was a ‘soft business issue’ that could be best handled through the human resource departments.¹²⁰ By 1996, the mining industry, before other large South African companies and even the national government, gained an acute understanding of Sunter’s prediction.

However, in the early years of the post-apartheid era, the validity of Sunter’s prediction remained unclear. Certain economic theory on the corporate management of disease prompts a sacrifice of the sick in favor of the healthy. In his book, *The Moral Economy of AIDS in South Africa*, Economist Nicoli Nattrass postulated that the ideal ‘rational’ response would be to “concentrate on protecting the most productive individuals (because they contribute most to growth), and otherwise devote resources to enhancing growth.”¹²¹ Obviously, this theory would be absent any moral obligation or concept of equality for employees. However, economics, as Paltiel defined, “is an efficiency-driven science with no moral compass with regard to equity or compassion.”¹²² This ‘rational’ response sounds eerily similar to the policies and behavior of South Africa’s Chamber of Mines throughout the 20th century. Yet, by the late mid-1990s, the economic incentives and cost-effectiveness of their healthcare initiatives moved closer in line with a moral obligation and benevolence—

¹¹⁹ Kauffman and Lindauer, *Aids and South Africa: The Social Expression of a Pandemic*. 99.

¹²⁰ Quoted in: Dickinson, "Corporate South Africa's Response to Hiv/Aids: Why So Slow?." 7.

¹²¹ Nicoli Nattrass, *The Moral Economy of Aids in South Africa* (Cambridge: Cambridge University Press, 2004). 35.

¹²² *Ibid.* 36

creating a mining industry that prioritized reducing the spread of HIV and assisting the unskilled laborers.

The economic impact of workplace AIDS manifested in several ways for the mining companies. The direct costs constituted the expenses paid to specific purposes—including health clinics, disability insurance, pensions, increased recruitment expenses, and employee training.¹²³ The less tangible expenses, indirect costs, took the form of sickness related absenteeism, decreased on-duty productivity, funeral leave, leave to care for dependents with AIDS, and, ultimately, a workforce of inexperienced employees due to morbidity and constant turnover. Even more abstract were the costs of lowered morale and concentration, disruption of schedules, and a breakdown of workforce discipline. By the late 1990s, mine supervisors often hired two to three workers for every new job in anticipation that at least one would die of AIDS.¹²⁴ HIV incidence among miners swiftly ascended during this period, as did the financial burden that accompanied it.

The countless variables that contributed to labor costs made it nearly impossible to measure the impact across industries. In order to compare costs between businesses, a financial metric must be implemented to measure the aggregate cost of AIDS that each firm paid. Formulated by *Harvard Business Review*, an AIDS ‘tax’ was created, to indicate “what each firm, implicitly relative to its wage, bill in order to cover the current and future costs of infected

¹²³ Ibid. 165

¹²⁴ Jonathon Simon Sydney Rosen, Jeffrey R. Vincent, William MacLeod, Matthew Fox, and Donald M. Thea, "Aids Is Your Business," *Harvard Business Review*, no. February (2003). 6-8.

workers.”¹²⁵ While a colloquial version was used to indicate a firm’s HIV costs, the etymology of the AIDS ‘tax’ in the *Harvard Business Review* came from a 1999 analytical study of six various corporations in South Africa, ranging in firm size and employee demographics. Among the six, utility, agribusiness, metals processing, retail and media, the unnamed mining corporation bore the largest AIDS tax at 5.9%. In other words, the total annual cost of AIDS was nearly six percent of total salaries and wages. For this particular mining company, the total annual cost of AIDS amounted to \$206,000, or \$412 per miner.¹²⁶ Moreover, the mining company’s ‘tax’ doubled that of the second largest industry’s ‘tax’. In comparison, the average African miner earned R1302 (\$302) per month.¹²⁷ The additional payments could have simply been included into the cost of labor, but later in the late 1990s, cost-analysis suggested the average cost of treatment and prevention programs per worker amounted to only \$10-\$15 annually.¹²⁸ At the time, these companies did not possess the analytics to calculate their own ‘tax’ on an individual basis, but these figures emphasized a growing trend in the mining industry.

For mining firms, however, the alternative to these high levels AIDS-related costs meant investing resources, capital and time into expanding HIV/AIDS programs. The development of their response efforts required tackling two modes of relief: prevention and treatment. The optimal prevention

¹²⁵ Kauffman and Lindauer, *Aids and South Africa: The Social Expression of a Pandemic*. 109
Sydney Rosen, "Aids Is Your Business." 8

¹²⁶ Sydney Rosen, "Aids Is Your Business." 11

¹²⁷ South African Institute of Race Relations, *Survey of Race Relations in South Africa: 1996/97* (1997). 284.

¹²⁸ Sydney Rosen, "Aids Is Your Business." 13.

programs included four components: “educating employees, families, and the surrounding community about HIV/AIDS and how it can be avoided; distributing condoms to employees; treating other sexually transmitted diseases; and providing free counseling and testing services for employees and families.”¹²⁹ These prevention measures were aimed at slowing down the spread of the virus by remedying the systematic roots of HIV dissemination in its workforce.

On the other hand, the provision of sufficient antiretroviral medicine for the mineworkers also proved to be a tricky endeavor. The effectiveness of AZT floundered in the late 1980s and early 1990s, but by the mid-1990s, the advent of highly active anti-retroviral treatment (HAART) soon proved to be the single most important step towards fight the AIDS virus. Through HAART treatment, the global death rate from HIV would fall 50-80% over the coming decade.¹³⁰ The newly developed cocktail therapy combined five unique drugs to form a strong line of cell defense against HIV. The therapy requires a combination of three ‘drug cocktails’ taken daily, and the close monitoring from healthcare personnel. The introduction of HAART brought a vital weapon to the arsenal against the war on AIDS, and once again, welcomed a new era of hope.

However, an economic breakdown of tangible AIDS costs in the private sector only emerged in the early 2000s, several years after the mining industry instituted their own ad hoc responses to occupational hazards in the workplace.

¹²⁹ Ibid. 14

¹³⁰ Martin Delaney, "History of Haart—the True Story of How Effective Multi-Drug Therapy Was Developed for Treatment of Hiv Disease," *Retrovirology* 3, no. 1 (2006). 1.

The possibility of an economic understanding of the HIV/AIDS impact into quantifying figures became an essential instrument for the mining sector.

Post-Apartheid Government Response to the HIV/AIDS Epidemic

In their first hundred days, the African National Congress laid down new plans and priorities aimed at fixing the broken body politic. Mandela's government proposed a massive initiative, the Reconstruction and Development Program, designed to cut inflation and procure R2 billion towards education, welfare, health, land, housing, urban water restoration and other similar projects. Along a similar vein, Mandela set out to tackle a myriad of issues that stemmed from the apartheid. In education, he sought to displace the segregated school system and balance out the pupil-teacher ratio equally among schools. In urban areas, he hoped to render the racial imbalance of home ownership by blending ethnic groups together in new neighborhoods.¹³¹ Concurrently, land distribution and property rights quickly ascended into the forefront of discussion. In August of 1994, the ANC allocated R62 million to the restitution of the communities who suffered throughout the former Bantustans. In November of 1994, South Africa's Parliament passed the Restitution of Land Rights Act, which established, "a land claims court and commission on the restitution of land right to address the claims of individuals forcibly removed from their

¹³¹ Davenport and Saunders, *South Africa: A Modern History*. 570.

land.”¹³² In late 1994, rather than handling individual claims, Mandela’s government transferred three million hectares of land to a Zulu King¹³³—granting him the power to administer land to his people. On the legislative side, Mandela immediately unified the segregated local governments and centralized them under a national government. His plan was for a unified administration that would facilitate the redistribution of services. In matters of health, the ANC announced its intention to radically alter the nation’s healthcare paradigm towards greater emphasis on primary care and coalesce the country’s fragmented healthcare system. In 1995, the South African Health Review (SAHR) heralded the previous four years as “the first attempts to effect significant break from the past... marked by efforts to bring about defragmentation and deracialisation of government structures.”¹³⁴ The new government’s determination to unite the various health departments and bring primary care to the recently deprived areas seemingly arrived at the perfect time. Unlike in other areas, the ANC appeared to be in position to build upon the work being done in the previous years, shift the medical paradigm and wean the nation from its tunnel vision towards curative medicine.

By 1995, however, Mandela’s promises and the ambitious plans for reconstruction began to stall. As Rodney Davenport, a noted South African

¹³² South African Institute of Race Relations, "Survey of Race Relations in South Africa: 1995/96," 21 (1995/96). 276.

¹³³ The Zulu people, led by the royal Zulu family, are an ethnic group in South Africa residing mainly in the Kwa-Zulu Natal—the highest prevalence of HIV among all of South Africa’s provinces.

¹³⁴ Health Systems Trust, *South African Health Review*, vol. 1 (1995). 96

historian, noted, “the electoral promises had been very easy to make, but rebounded on the maker when delivery failed, especial

ly from people increasingly nurtured on a culture of entitlement and protest.”¹³⁵ Unfortunately, the struggling economy stymied South Africa’s capacity to increase production and its programs. The land redistribution issues and ‘Bantustan’ disintegration resulted in massive squatters in land that had been tagged for development. The Zulu King case, in particular, became a highly contentious issue considering the unclear powers granted to the Zulu King and the vague precedent set for defining ‘promised land.’¹³⁶ The recently appointed administrators lacked experience, especially with fiscal responsibility, which stagnated initiatives for improved primary healthcare. While this program did work in large urban centers, the smaller local governments encountered more serious problems. Mandela’s intentions idealistically believed the black administrators could quickly adapt to the new load of responsibility, but unfortunately, this was not the case.¹³⁷ Mandela’s government also needed to completely restructure the institutional racial inequalities, which required immense attention and financial backing. After promising to improve each citizen’s quality of life and build a new South Africa, Mandela’s government immediately made ambitious and time-consuming plans for a national overhaul. The problems of racial injustices, the ailing healthcare system, and the mushrooming AIDS crisis finally appeared to be surmountable. But Mandela’s

¹³⁵Davenport and Saunders, *South Africa: A Modern History*. 570

¹³⁶ Ibid. 570.

¹³⁷ Ibid. 581

plans and promises required money amid a national recession, and quickly the apartheid era's racially charged citizens' anger turned to animosity. Over the subsequent five years after Mandela's historic election, the expected golden age of South Africa developed more into a gilded age—and the government's feet dragging on HIV/AIDS prevention was at the heart of it. During the ANC's first years in power, it was quickly apparent that the issues of 'new' South Africa would bear striking resemblance to those of old South Africa. As Peter-Dirk Uys, the South African satirist, quipped, "In the old South Africa we killed people. Now we're just letting them die."¹³⁸ Post-1994 government response was no longer maimed by denial, but rather earmarked by foot-dragging, postponements and hollow excuses on biomedical treatments and prevention efforts.

In this new era, however, the focal shift towards an increase in primary health care resulted in nominal improvements rather than the anticipated overall advancements. The term 'primary health care' (PHC) came from the World Health Organization's Alma Ata Conference in 1978, and was defined by a five pillar criteria: Equity, Community Involvement, Prevention, Appropriate Technology and Multi-Sectorial Approach. These elements, and their consistent application, coalesced to address statewide health concerns. The medical system during the apartheid era, however, failed to meet the requirements set by each of the Alma Ata pillars.¹³⁹ On equity, the segregation of hospitals and racial imbalance of clinical access yielded disproportionate medical treatment favoring

¹³⁸ Quoted in: Catherine Campbell and Institute International African, *Letting Them Die: Why Hiv/Aids Intervention Programmes Fail* (Oxford: International African Institute, 2003). 24.

¹³⁹ Trust, "South African Health Review." 295

the white minority. On community involvement, both the relocations of the 'Bantustan' plan and the Department of Health's distrust of local healers thwarted any efforts for a clinical network in rural areas. The apartheid government's addiction to curative medicine, as proven, disregarded any preventative measures in health. Finally, the gross imbalance of the infrastructure, centered around the mines and white areas, not only paralyzed the government's capacity to get appropriate technologies to rural areas, but also the unclear division of responsibilities between health departments impeded a multi-sectorial approach.

In May of 1994, the ANC unrolled the National Health Plan for South Africa, which set out a five-year plan to create a single, integrated, national healthcare system based on primary healthcare. According to the National Health Plan, "a single minister of health and a single health authority would be accountable for the implementation of a national health system."¹⁴⁰ In conjunction, Mandela's government also granted free healthcare to all children under six and pregnant mothers.¹⁴¹ The radical shift in primary health care appeared to address the core issues of apartheid and coalesce the various departments under a single, unified minister.

The healthcare system and the National Health Plan, however, struggled to fulfill its promises. Mass emigration of medical personnel and severe underfunding paralyzed any substantive outreach into rural areas and assistance

¹⁴⁰ South African Institute of Race Relations, "Survey of Race Relations in South Africa: 1995/96." 278

¹⁴¹ South African Institute of Race Relations, "Survey of Race Relations in South Africa: 1994/95." 275

for impoverished Africans. Within two years, roughly 1,200 healthcare professionals emigrated from South Africa, with 387 doctors leaving the service of state hospitals in the first five months of 1995 alone. The *Citizen* newspaper reported the causes for the medical exits in the public sector were due to “insufficient pay, heavy workloads, going into private practice, the absence of long-term career prospects, threats by and disruptions of services by trade unions, and unsatisfactory working conditions.”¹⁴² The medical emigration was only a fragment of the greater white emigration movement that took place following apartheid. Over ten thousand persons emigrated from the nation in 1994—resulting in the country’s first net loss in nearly a decade.¹⁴³ This distinct movement, in what became dubbed the ‘brain drain’, consisted of primarily white, middle class, active persons. The mining industry alone saw an 103% increase in departed employees from 1992 to 1994.¹⁴⁴ The various other non-migratory causes for exiting health professions, however, magnified the issues with the struggling state’s health sector. These doctors fled their posts before new Minister of Health Nkosazana Clarice Dlamini-Zuma could redistribute the medical staff to the nation’s various hospitals. To counteract this medical emigration, Minister Zuma announced a hiring of 200 Cuban doctors to help alleviate the critical shortage of practitioners. In conjunction, she began to offer subsidies for personnel willing to work in rural villages and typically African areas, but with the minimal overall workers, these places continued to be left

¹⁴² Quoted in South African Institute of Race Relations, "Survey of Race Relations in South Africa: 1995/96." 215.

¹⁴³ Ibid. 26

¹⁴⁴ Ibid. 27

unattended.¹⁴⁵ The ‘brain drain’ plucked several doctors and the working conditions pushed out much more—ultimately paralyzing development in the public health sector.

The primary health care movement also faced an uphill fiscal battle against the growing private health sector. In 1995, the public sector only contributed 39% of South Africa’s total funds spent on healthcare, in comparison to the private sector’s 61% contribution¹⁴⁶. Among the lowly public budget, the per capita expenditure still heavily favored primarily white areas such as the Western Cape and Northern Cape. KwaZulu-Natal, the province most heavily inflicted with HIV, received the least per capita assistance in public health care, and even still, the hospital services continued to dwarf community health services¹⁴⁷. Over this next phase, the primary healthcare bill soon proved much costlier than its available budget allotted.

The pharmaceutical industry did not alleviate any of the financial burdens for the national government either. In 1994, the drug companies inflated drug prices by 21%, which were subsequently marked up 50% by pharmacists.¹⁴⁸ These inflated prices fortified the curative wall between HIV patients and drug treatment. In 1994, Zirodene—a antiretroviral drug (AZT)—composed most of the biomedical arsenal up, but due to inflated prices and high demand, the cost

¹⁴⁵ Ibid. 215

¹⁴⁶ Ibid. 211

¹⁴⁷ Ibid. 211

¹⁴⁸ Ibid. 221

of annual treatment ran upwards of \$8,000.¹⁴⁹ AZT did not have a significant impact on slowing the virus' progression. In these days, the use of AZT only gave patients a prolonged year or two of life, but it was the hefty price that restricted its availability in South Africa's public and private health centers. Both the drug companies and rising healthcare costs foreshadowed significant healthcare problems for the state—particularly for a government trying to both expand coverage and dedicate funding to other infrastructure improvements. These financial obstacles, in conjunction with the 'brain drain', derailed the development of the National Health Plan and fostered further untimely distractions while HIV continued its ravaging course through the African population.

Mandela's government also needed to contend with a conservative society that shied away from sexual education—particularly in schools. In 1990s South Africa, the dominant education discourse warned that sex education in schools would yield a loss of innocence and considered children 'too young to know' about sexual health.¹⁵⁰ In Mpumalanga, a city in the Eastern Cape, a female teacher was baffled to hear, after teaching HIV in schools, "a lot of parents come to us and they complain that we are discussing sexual issues with their children and they say they don't want their children to discuss sexual issues with

¹⁴⁹ The annual cost of AZT only dipped two thousand dollars in the six years it had been on the market.

¹⁵⁰ Deevia Bhana, "Discourses of Childhood Innocence in Primary School Hiv/Aids Education in South Africa," *African Journal of AIDS Research* 7, no. 1 (2008), <http://dx.doi.org/10.2989/AJAR.2008.7.1.15.443>.

anybody.”¹⁵¹ The parental hostility towards education on HIV/AIDS strained the government’s ability to implement its programs.

The ANC also adopted an ineffective strategy for decelerating the spread of HIV/AIDS. By 1995, roughly two million South Africans were already infected with HIV, with nearly fifteen thousand people having progressed to full-blown AIDS.¹⁵² In its annual study, the South African Health Review calculated migrant workers were three times more likely to be infected with HIV than their more stable counterparts.¹⁵³ Moreover, most carriers were yet to show visible symptoms. The virus’ current asymptomatic nature resulted in underreporting, and often patients dying from other diseases—most commonly tuberculosis—had been unknowingly suffering from AIDS as well. Anthony Butler, regular contributor to *African Affairs*, classified the state’s post-apartheid AIDS policy prescription with two competing paradigms,

“The ‘mobilization/biomedical’ paradigm that emphasized society-wide mobilization, political will, and anti-retroviral (ARV) treatments; and a ‘nationalist/ameliorative’ paradigm that focused on poverty, individual responsibility, palliative care, traditional medicine, and appropriate nutrition”¹⁵⁴.

Butler’s paradigms provide a useful framework to discuss the government’s HIV/AIDS policy during this phase. These definitions may not initially appear to be competing, but in the coming years, the state’s decision to

¹⁵¹ Phillips, *Ohio Short Histories of Africa : Epidemics : The Story of South Africa's Five Most Lethal Human Diseases*. 124

¹⁵² Trust, "South African Health Review." 232

¹⁵³ Ibid. 233

¹⁵⁴ Anthony Butler, "South Africa’s Hiv/Aids Policy, 1994–2004: How Can It Be Explained?," *African Affairs* 104, no. 417 (October 1, 2005 2005). 592

enforce this ameliorative policy made the differences of these paradigms vastly apparent.

Brazil and Tanzania incurred similar outbreak patterns in the mid-1990s, but in both cases the national government implemented swift prevention programs and made ARVT widely available to infected citizens. Brazil, another country also with high-income inequality and a lack of social cohesion, experienced a similar HIV outbreak. In 1996, the Brazilian government provided free HAART to all people with HIV/AIDS, which over three years provided over 100,000 of its people with the proper antiretroviral treatment. From 1996-1999, the AIDS-mortality rate in Brazil reduced by 50% and the incidence of opportunistic disease deaths dropped almost 80%. In addition to medical treatment, Brazil significant increased its primary health care budget and coordinated national prevention programs.¹⁵⁵ Moreover, Brazil's two-pronged approach, of free HAART and widespread prevention programs, resembled future mining industry HIV policy implementation in the early 2000s.

The case of Tanzania bears similarities to South Africa. In 1994, both populations had approximately 10% incidence among pregnant women attending antenatal clinics. However, by 2004, the incidence in Tanzania remained at 10% and declining, whereas South Africa's tripled to 30%. The Tanzanian government achieved this success by focusing on cutting down the number of total STIs. While national prevalence stayed constant, by heavily advocated condoms, provided free treatment of all STIs, reducing the number of

¹⁵⁵ Roseanne da Silva, "A Comparison of the Hiv Epidemics in South Africa and Brazil," *International Acturial Association* (2004). 3.

sexual partners, HIV infection in Tanzania dropped by 42% over this period.¹⁵⁶ The cases of Brazil and Tanzania illustrate that effective government intervention was possible, and the strategies were not far-fetched, but available to the South African government.

In 1996, as Brazil celebrated the results of its HIV programs, it was clear that Mandela's government had not been able to slow the national rate of infection. The case of South African HIV intervention suffered from an ill-timed political rupture. While commonly understood the apartheid government did little to curb its spread, Mandela's government also had to craft new HIV policy from the ground up, and apply it to a racially reconstructed system and a conservative populace. Neither Tanzania nor Brazil experienced anything similar to South Africa's political or social revolution. The massive political rupture, understandably, resulted in policy inconsistencies between the comparative governments. The mining industry, however, remained relatively unscathed through this transition, which enabled it to build and develop upon programs from the apartheid era. From the mining industry's viewpoint, to expect the ANC to step into this role and immediately turn the tide of the epidemic would be unrealistic.

The ANC, however, made avoidable policy mistakes early in Mandela's presidency that crippled future intervention. In the two years following the National AIDS Plan, South Africa's HIV figures nearly doubled from 7.6% to

¹⁵⁶ Health Systems Trust, *South African Health Review*, vol. 2 (1996). 192.

14.2%, with about 90% of all reported cases involving Africans.¹⁵⁷ Mandela's positioning of HIV/AIDS as a health issue made it vulnerable to bureaucratic obstruction, disjointed goals, and ultimately a collective action problem unfolded between various provinces, undermining prevention efforts. Like other state promises of this era, the HIV/AIDS programs failed to accomplish their lofty ambitions. Minister Zuma, in her most infamous blunder, poured R14.2 million into *Sarafina II*—a large-scale, heavily funded musical—intended to promote AIDS education. Minister Zuma's musical Waterloo marginalized AIDS NGO's, drove a rift between the Health Department and society, and sent a clear message to the mining industry: we're not the savior you anticipated.¹⁵⁸ This moment marked the first fissure in society's previously unwavering support of the ANC government.

While the international community championed HAART, the Health Department questioned its value and delayed its implementation, deepening the civilian disapproval. Minister Zuma, on the other hand, struggled to initiate soluble programs after the fallout from the *Sarafina* scandal. In November of 1996, she announced that the Department of Health would never subsidize HAART for people with AIDS. She claimed that the 'cocktail therapy' would have little effect on the new infections happening daily and announced treatment

¹⁵⁷ Kauffman and Lindauer, *Aids and South Africa: The Social Expression of a Pandemic*. 54. South African Institute of Race Relations, "Survey of Race Relations in South Africa: 1995/96." 200.

¹⁵⁸ Kauffman and Lindauer, *Aids and South Africa: The Social Expression of a Pandemic*. 55

would amount to a monthly R4000 (\$400) per patient.¹⁵⁹ On the other hand, South African AIDS experts calculated, that cost would actually provide a person with treatment for an entire year.¹⁶⁰ Moreover, Minister Zuma only saw this as a nominal cost and failed to recognize that providing HAART would ultimately reduce the cost of a myriad of other AIDS-related programs.

Instead, the South African Department of Health poured money into its own independent research. Howard Philips argued the country's "nationalist wish to find an African remedy to an African disease meant that it was inclined to rush in at the merest glint of a locally discovered 'magic bullet.'"¹⁶¹ The field of medicine, also steeped in geo-political politics, was unable to gain perspective. In 1997, Minister Zuma announced that two Pretorian researchers had created an AIDS cure, Virodene, and approved it for public use. Highly skeptical, the Medicines Control Council found that Virodene—the "miraculous cure"—contained a 'highly toxic industrial solvent and had 'no proven benefit for the treatment of HIV/AIDS.'¹⁶²

While states like Tanzania and Brazil implemented two-pronged programs of treatment and prevention, Mandela's government did not initiate sweeping AIDS reform policies—forcing the private sector to establish their own independent response programs. The post-apartheid government faced countless serious hurdles trying to disseminate information to a distrusting

¹⁵⁹ South African Institute of Race Relations, *Survey of Race Relations in South Africa: 1996/97*. 462.

¹⁶⁰ Sydney Rosen, "Aids Is Your Business." 14.

¹⁶¹ Phillips, *Ohio Short Histories of Africa : Epidemics : The Story of South Africa's Five Most Lethal Human Diseases*. 129.

¹⁶² *Ibid.* 130.

society, that coupled with Minister Zuma's *Sarafina* disaster, their dismissal of ARVTs and HAART led to the continued rampaging spread of the virus and the spiraling health cost, both economic and personal.

The Mining Industry's Response

The Chamber of Mines, along with its workers, welcomed the hopeful discourse that accompanied South Africa's transition to democracy and quickly became a crucial instrument of change for Mandela's government. The fall of apartheid signaled the end of trade embargoes with significant partners such as the United States and several European nations. In November of 1994, in line with its government's progressive plans, the Chamber of Mines welcomed Minister Zuma for a two-day visit and a review of the mining industry's health services. The mining industry, Minister Zuma remarked, "with its considerable health care infrastructure and experience in the design and management of cost-effective health care delivery systems, is an important stake-holder in (and potential contributor to) any future healthcare dispensation in the country."¹⁶³ Following Zuma's full two-day review, the Chamber agreed to develop a nurse clinician training for Minister Zuma and the Department of Health.¹⁶⁴ Minister Zuma's decision to include the mining industry in her national tour of the health system and subsequent request for the industry to manage nurse-training programs demonstrated the industry's integral role in the nation's current and

¹⁶³ Chamber of Mines of South Africa, *Annual Report: 1995/96* (Johannesburg, South Africa: 1996).

¹⁶⁴ Chamber of Mines of South Africa, *Annual Report: 1994/95*. 20

future healthcare system. These mining corporations were considered leaders in South African healthcare, and even played a significant role in the public sector's restructuring.

Until 1996, the mining industry's behavior towards HIV/AIDS amongst mineworkers can be characterized by civil society's hopeful waiting, anticipation and ultimate disappointment with the government's ineffectiveness. In 1995, the Chairmen of Gencor¹⁶⁵ announced that twenty percent of the company's workforce of twenty thousand carried HIV. With every passing day thirty men died on a Gencor mine.¹⁶⁶ His awareness was not rare. In the same month, a doctor at a mining hospital admitted, "workers on the mines were three to five times more at risk of HIV infection than other workers because of social conditions on the mines."¹⁶⁷ Fortunately, for miners, pre-screening employment testing was, as Minister Zuma noted, "discriminatory and infringed basic human right."¹⁶⁸ Moreover, post-1994 labor legislation prevented the mining industry from dismissing workers due to lowered productivity.¹⁶⁹ While rights increased for HIV positive mineworkers, the prevalence of the virus in the mines doubled every year. The NUM no longer levied the type of clout that powered the industry's pre-1994 HIV/AIDS policy. That said, now the Chamber of Mines faced another significant pressure: decreasing profits.

¹⁶⁵ Gencor was, at the time, one of the industry's largest gold, coal and platinum mining companies.

¹⁶⁶ South African Institute of Race Relations, "Survey of Race Relations in South Africa: 1995/96." 201

¹⁶⁷ Ibid. 201

¹⁶⁸ South African Institute of Race Relations, "Survey of Race Relations in South Africa: 1994/95." 303.

¹⁶⁹ Dickinson, "Corporate South Africa's Response to Hiv/Aids: Why So Slow?." 19.

The mining companies were atypical among their other private sector firms at this time—highlighted by the availability of ARVT for workers. Three different models outlined the ways in which various companies provided ARVTs. Many contracted outside HIV/AIDS management organizations to provide programs and services to their workers. A second alternative provided its workers with third-party health insurance, similar to the method used in the United States, which decreased or eliminated a worker's copayment. Only in the mining industry, and a handful of agricultural companies, could the firms administer health care management to employees through 'in-house company clinics.'¹⁷⁰ As the epidemic escalated, only the mine healthcare systems could adequately absorb the influx of patients. Moreover, these mining companies experienced both higher prevalence rates, which led to a significantly higher AIDS 'tax' as well. The government's ameliorative approach neglected biomedical treatment and focused on palliative care, nutrition and encouraging individual responsibility—areas that did not alleviate or assist the burgeoning epidemic in the mining industry. Due to a higher prevalence rate, a greater AIDS 'tax', and healthcare system, mining companies could not wait to respond in the same fashion as other companies in the private sector.

Beginning in 1996, the Chamber of Mines and its affiliates slowly expanded and redesigned its HIV/AIDS policy. Back in 1986, the NUM recognized its national government had firmly denied the sickness threatening its African miners, and pressured the Chamber to create judicial labor laws,

¹⁷⁰ Sydney Rosen, "Aids Is Your Business." 14

expand education programs and recognize HIV as an industry-specific illness. For two years, in the new democratic nation, the mining companies took its foot off the prevention pedal in the hopes that Nelson Mandela would take back the wheel. By 1996, as HIV positive workers began dying of AIDS in larger numbers, economic constraints forced the industry to reassess its healthcare policies. In his annual address, Chamber of Mines President Tom Main, spoke with candid trepidation and recognized,

“Despite intents to manage transition with best judgment, there have been periodic expressions of concern that change has advanced at an unfortunate tangent or, at other times, that transition has not been swift enough... Employers and labour are instead under obligation to nurture and instill balance to maximize growth and prosperity for all. May our history of tomorrow reflect that we have indeed advanced our understanding of the world.”¹⁷¹

This 1996 address marked a distinct tonal shift for the Chamber of Mines. In past years, even in economic duress and with climbing occupational fatalities, the Chamber exuded optimism and strength. Here, even in his cryptic message, President Main feared the industry stood on shaky ground, and perhaps, the economic backbone of South Africa would be left behind. In the 1997 Presidential address, Chamber of Mines President Diliza admitted that “it has been a sobering induction for [him] to witness the once goliath mining industry of South Africa immersed in an often debilitating struggle for its very survival.”¹⁷² The subsequent authors of the *Annual Report* spoke in general terms, but the message was clear: A dark AIDS cloud lurked over ore hills of the

¹⁷¹ Chamber of Mines of South Africa, *Annual Report: 1996/97* (Johannesburg, South Africa: 1997). 4

¹⁷² Chamber of Mines of South Africa, *Annual Report: 1997/98*, vol. 99 (Johannesburg, South Africa 1998). 5.

mines. And in 1997, mining officials finally admitted, “the resulting ill health, work absenteeism and eventual death are impacting healthcare services and on training and productivity within the industry.”¹⁷³ This represented the first public acknowledgement of the economic toll HIV had on mining companies. While divvying out \$500 in HAART treatment for each infected worker still felt too economically hazardous, mining companies began to expand its awareness campaigns, treatment of opportunistic diseases and STIs, and offer free and anonymous HIV testing.¹⁷⁴ These concerted efforts, ushered in by the Chamber’s authoritatively worried tone, marked a significant step toward substantive prevention efforts in the new democratic South Africa.

The failures of sex education contributed to the miner’s perception of HIV/AIDS, its effects and the treatments available. More modest approaches could have attempted such as courses on body image, gender roles and relationships before intimacy. But by 1995, HIV levels in mineworkers hovered around 22 percent, with heterosexual intercourse as the chief mode of transmission. Throughout the mid-1990s, Catherine Campbell, a psychologist specialized in AIDS research, conducted a study to examine the HIV/AIDS awareness and knowledge among mineworkers in the Summertown mining community. Through educational programs, she found that, “while many heard of HIV/AIDS through educational programs, they remained unsure about its

¹⁷³ Ibid.33

¹⁷⁴ Phillips, *Ohio Short Histories of Africa : Epidemics : The Story of South Africa's Five Most Lethal Human Diseases*. 134.

existence because they had never seen somebody suffering from it.”¹⁷⁵ The miners’ concept of health was, “more holistic than that of the biomedical dominating western thinking about HIV/AIDS. They characterized it in a more harmonious balance between person and environment.”¹⁷⁶ In the event of illness, the typical miner would first consult a biomedical professional, and then seek advice and treatment of a traditional healer in order to properly kill the virus.

Furthermore, the mineworkers would often receive herbs, considered preventative medicines, from traditional healers to stop the transmission of STIs during sex. The traditional paradigm, as Campbell argued, “could have been altered through a more aggressive primary healthcare campaign. [The miners] had no means to seek clinical help.”¹⁷⁷ These traditional healers thus played an integral role in the misinformation that led to the rapid dispersion of the disease. The state’s fragmented health care system, and lacking primary health care, resulted in a climate of misdiagnosis and homemade nostrums. While the Mandela’s government struggled to introduce sexual education into a conservative society, the mining companies in the post-apartheid era, were positioned to command the attention of these workers through intensified workplace programs.

In 1999, a major mining company’s prevention experiment demonstrated to its peer firms that aggressive response efforts produced financial gains. In

¹⁷⁵ Campbell and International African, *Letting Them Die: Why Hiv/Aids Intervention Programmes Fail*. 26

¹⁷⁶ Ibid. 26

¹⁷⁷ Ibid. 27

early 1996, the Family Health International (FHI) partnered with the Harmony Gold Mining Company to experiment with significant HIV prevention programs. For Harmony Gold, the prevention experiment was a win-win scenario—the FHI representatives covered their costs and their workers received free healthcare. The mining community outside Virginia in South African’s Free State Province housed 4,000 mineworkers in three hostels for 11 months of the year. The ‘Lesedi’ Project¹⁷⁸, as it became known, targeted not only the miners, but also the sex workers in the surrounding community. Setting up mobile clinics, nurses would provide doses of the antibiotic azithromycin to treat easily curable STIs among community members—sex workers in particular. Alternative intervention services included peer educators for sex workers and other women at high risk, health education FHI encouraged both miners and sex workers to make follow-up visits and would often provide clinical outreach into the hostels to track patients and build trust within the community.¹⁷⁹ After nine months of unilateral community intervention, the Lesedi Project demonstrated the close link between STIs and HIV and dramatically reduced the community’s STI infection rates—and particularly HIV. Using probability models, Lesedi succeeded in preventing 41 HIV infections among women and 196 HIV infections among miners, saving the mining company over \$500,000 in medical costs.¹⁸⁰

¹⁷⁸ The sex workers living in the surrounding mining community called the project ‘Lesedi’—meaning, “we have seen the light.”
Defined in: *ibid.* 26

¹⁷⁹ De Coito T; Ralepeli S; Steen R, "Forging Multisectoral Partnerships to Prevent Hiv and Other Stis in South Africa's Mining Communities," *Impact on HIV 2* (2000).

¹⁸⁰ Neill McKee, Jane T. Bertrand, and Benton Lee Becker, *Strategic Communication in the Hiv/Aids Epidemic* (Thousand Oaks, Calif;New Delhi;: SAGE Publications, 2004). 167.

The collaborative approach through community involvement showed to be key lessons of the Lesedi's success, and set an example for fellow mining companies that HIV treatment is not only affordable, but also cost-efficient. Considering the mining companies lacked the luxury of cost-benefit analysis and the quantifiable 'AIDS tax,' the success of Lesedi provided peer companies with a cogent factual example of the financial advantages of intensified HIV programs.

Following Lesedi, as the ANC delayed ARVT rollouts, the mining industry ramped up its policies and altered the landscape of HIV/AIDS response in the private sector. Since 1986, life expectancy in South Africa dropped from 57 to 47. Nearly half a million South Africans had died of AIDS and in 1999, Johannesburg, subsequently, cremated 70,000 people compared to the 15,000 in 1994.¹⁸¹ Over fifty percent of the adult medical admissions near the Gauteng mining hospital were AIDS related.¹⁸² The average AIDS tax for mining firms had ballooned to 15.7% of total expenditure. However, the Lesedi's landmark success invited associate firms to experiment with increased prevention and treatment programs. Through only an annual \$10 per employee investment, one South African mining firm lowered its HIV infection rate by 50%.¹⁸³ Cost-benefit analyses from several studies¹⁸⁴ on the subject estimated that high-cost businesses with significant HIV prevalence stood to save the most from major

¹⁸¹ South African Institute of Race Relations, *Survey of Race Relations in South Africa: 1999/00* (2000). 220.

¹⁸² A. Whiteside and C. Sunter, *Aids: The Challenge for South Africa* (Human & Rousseau, 2000). 49.

¹⁸³ Sydney Rosen, "Aids Is Your Business." 11.

¹⁸⁴ Sources that substantiate this point: Rosen 2003; Sunter /Whiteside 2001; Natrass 2004; Lewis 2004.

prevention and treatment efforts—making mining firms the ideal candidates. In 1999, the Chamber of Mines finally acknowledged that its education and awareness programs were not successful, and unilateral and community collaboration was required to enact substance change in the course of the epidemic.

HIV/AIDS prevention and treatment no longer required a union compromise, nor the assistance of a government program, but was motivated by financial incentives. These efforts did not reflect good business, but rather business savvy. The industry began conducting studies into the prevalence rates among women in mining communities and soon admitted that “increased involvement by mines in their surrounding communities to treat sexually transmitted diseases have show success by dramatically reducing these diseases”¹⁸⁵. This ‘increased involvement’ meant the companies had begun extending their AIDS programs and education efforts outside of their immediate workforce and into the surrounding communities—including sex workers. In certain instances, in a radical program, mine facilities provided subsidies to sex workers who advocated for condom use and HIV education. These extensive efforts indicated that the companies realized that the mines were not on an island, and policy prescription needed to address deeper causes of transmission. By providing periodic STI treatment to these women, some mines estimated that HIV infection rates decreased by 46 percent—saving R2.34 million in exchange

¹⁸⁵ Chamber of Mines of South Africa, *Annual Report: 1998/99* (Johannesburg, South Africa: 1999). 45.

for only shelling out R268,000 for the STI treatment.¹⁸⁶ Only 7 million out of South Africa's 40.5 million people had medical coverage, with the entire population relying on the 360 public hospitals nationwide. In 1999, sixty mining clinics and hospitals were in practice, providing the industry with a well-funded ability to cover its uninsured employees with medical services, and quickly expand these HIV services to the surrounding communities.¹⁸⁷ At this time, approximately 69% of the sex workers in these communities were HIV positive.¹⁸⁸ In many cases, these women, often orphaned or impoverished, looked to the mining companies for AIDS relief, not the national government. HIV prevention among miners could not be successful without the consideration and inclusion of the commercial sex workers.

Over the next few years, nearly every mining company adopted new prevention efforts and provided antiretroviral therapy—effectively ending the increasing rate of infection. By 2003, several large mining companies had to make antiretroviral therapy readily available to mineworkers.¹⁸⁹ Understanding the tangible upside, the chief medical officer for Anglo American mining company explained, “we have done the health economics and shown that for every dollar we invest in our AIDS initiatives, we get a financial return that is

¹⁸⁶ Phillips, *Ohio Short Histories of Africa : Epidemics : The Story of South Africa's Five Most Lethal Human Diseases*. 134.

¹⁸⁷ South African Institute of Race Relations, *Survey of Race Relations in South Africa: 1999/00*. 231

¹⁸⁸ Campbell, "Selling Sex in the Time of Aids: The Psycho-Social Context of Condom Use by Sex Workers on a Southern African Mine." 1.

¹⁸⁹ Chamber of Mines of South Africa, *Annual Report 2003* (Johannesburg, South Africa: 2003). 6

way in excess of that initial investment.”¹⁹⁰ Perhaps the most significant development was the Chamber of Mine’s leadership in organizing a tripartite HIV/AIDS summit to “consolidate and strengthen partnerships in the fight against HIV/AIDS...The primary purpose of this strategy is to create awareness amongst to all South Africans of the mining industry’s decisive ability to propel socio-economic growth”¹⁹¹. Unlike previous years addresses, Chamber President Diliza’s tone now carried optimism and confidence, with the Chamber’s newfound position against AIDS. Moreover, the Chamber’s programs now officially included ‘all South Africans’, as President Diliza recognized that the mines were not isolated entities, but pieces of a larger viral network. The systemic roots of HIV dissemination needed to be addressed and the Chamber understood that included surrounding communities and miner families in rural villages. Members at the HIV/AIDS mining summit formed a tripartite HIV/AIDS Committee dedicated to, “all the important aspects of HIV/AIDS prevention, treatment, care and support, research, monitoring and evaluation; and socioeconomic development.”¹⁹² The tripartite committee’s collaborative methods, reminiscent of the Lesedi success, represented the final stage in HIV/AIDS response efforts, and completed the gradual shift of presumptive roles from the public to private health systems.

After significant hesitance, and detrimentally increasing AIDS costs, the industry realized that the comparatively small investment to curb the spread of

¹⁹⁰ Quoted in: Phillips, *Ohio Short Histories of Africa : Epidemics : The Story of South Africa's Five Most Lethal Human Diseases*. 135

¹⁹¹ Africa, *Annual Report 2003*. 6

¹⁹² Ibid. 55

HIV, and treat its infected employees, yielded substantial economic savings. In matters of health, one can arguably attach a philosophical element of morality to the mining companies' HIV/AIDS programs, and find a humane imperative in their action during this period. However, given their previous delays and ineffective programs, this revealed an instance in which the economic incentives coincided with the good of the people.

The significant impact of the mining industry's pioneering role must be understood in context with the government's actions over these years. While the Chamber of Mines credits its committee as instrumental in coalescing the public and private sectors on HIV/AIDS prevention, the national government continued to delay programs and release contradictory messages. Until 2003, Mandela's successor, President Thabo Mbeki, blocked the accessibility of ARVT in state health facilities, which only became available once his cabinet overruled his decision. However, even after that decision, ARV rollout came very slowly. Moreover, President Mbeki's Minister of Health, Manto Tshabalala Msimang, publicly advocated a "beetroot, garlic, lemons and African potatoes to replace ARVs as treatment for HIV/AIDS"¹⁹³. The support for these homemade nostrums complicated the HIV landscape and inhibited substantive treatment efforts. In 1999, HIV prevalence in the mining industry among mineworkers was 29%, but in 2003, that figure remarkably decreased to 28% while national numbers

¹⁹³ Phillips, *Ohio Short Histories of Africa : Epidemics : The Story of South Africa's Five Most Lethal Human Diseases*. 129

continued to rise each year—reaching 37% in some provinces¹⁹⁴. It was clear that the mining industry had implemented successful prevention and treatment programs, while the national government mismanaged the epidemic as thousands of South Africans died due to its delayed reform.

While the government balked on preventive measures, the benefits of the mining industry's education and awareness programs, treatment of curable STIS, and the provision of HAART, extended well beyond the scope of their workforce. By lowering infection rates on mines, companies reduced the number of infected migrants travelling along the migrant labor system, and consequently preventing multiple infections along the migrant's path. The more educated professionals brought awareness to previously unattended villages—particularly in the impoverished and heavily African provinces, the more success they found in combatting the spread of HIV. The industry successfully usurped a role commonly played by the state, and administered response measures to slow a national epidemic and assist an ailing African population.

By 2004, the industry's workplace HIV/AIDS programs produced tangible returns. This year marked the first time since 1986 that the HIV prevalence rate did not increase. Between 2003 and 2004, the estimated percent of infected miners plateaued at 30%.¹⁹⁵ Since 2003, the number of infected miners continued to decline. At this juncture, 20-45% of all HIV positive miners were receiving treatment, of which 94% returned to work. Moreover, the Chamber of

¹⁹⁴ South African Institute of Race Relations, *Survey of Race Relations: 2002/2003* (Johannesburg, South Africa: 2003). 316.

¹⁹⁵ *Ibid.* 318

Mine's concerns looked radically different than they had in previous years, stating urgency for the neglected HIV positive children, and recognizing "community-based programmes and the involvement of civil society are key interventions in the areas of prevention and treatment."¹⁹⁶ The industry's change in discourse on demonstrated a concreted shift in its approach to HIV/AIDS programs. In the mid-1990s, the Chamber's annual budget dedicated R445,820 for HIV/AIDS related projects, compared to inconsistent ad hoc donations to AIDS NGOs during the earlier years. The companies made a calculated investment to combat HIV/AIDS in the workplace, which only after several years, began to show real signs of progress.

Until 1998, Chamber's refusal to consider HIV as an occupational disease appeared to be disadvantageous for miners. Under the Occupational Mines and Works Amendment Act 1973, any worker, no matter his race, who contracted a disease during work procedures would be provided healthcare, covered medical expenses, and financial compensation. Furthermore, the 1993 amendment erased the racial clauses that afforded white workers higher compensation than blacks. By recognizing TB as an occupational hazard, for instance, the mining industry officially took an active role in the curative treatment of mineworkers. HIV-positive workers, on the other hand, did not receive free healthcare, and compensation. However, by labeling TB as occupational, mining companies conceded the possibility that TB could not be eradicated from work practices.

¹⁹⁶ Chamber of Mines of South Africa, *Annual Report* (Johannesburg, South Africa: 2005). 49.

Instead, companies configured the increased health benefits and compensation into labor costs.

By not positioning HIV under the umbrella of occupational disease, the industry underscored all HIV/AIDS policy with the possibility of eradicating the virus from its mines. Instead, HIV more closely fell under the umbrella of labor practices. While occupational disease categorization favored curative medicine, labor illnesses utilized prevention programs, treatment centers and educational awareness.

The vestiges of the apartheid system plagued HIV/AIDS programs in democratic South Africa. The de facto racial imbalance of health facilities still heavily favored the white areas and the fragmentation of both the political structure and the health department could not so easily be rendered. With lofty ambitions, the ANC balked on many of its promises due to lack of funding and administrative mishandling. However, the government's Health Department's delayed rollout of ARVs, the ameliorative approach (rather than a biomedical policy prescription on HIV/AIDS) and the crippling conservative awareness programs were the calculated mistakes. But the mining industry could not afford to wait out the epidemic and expect the national government to remedy its policies. In the apartheid era, the industry's policies only created fair labor laws and practices for HIV positive mineworkers and installed basic education and awareness programs.

The burgeoning epidemic in the post-apartheid mine era required expansive, well-funded and collaborative programs to curb the spread of disease

and alleviate AIDS business related costs. The role of most corporate leaders, however, remained unclear. For the mining industry, however, employee well-being coincided with the company's profit goals. Treatment and prevention didn't need the backing of a moral imperative, rather it was just business savvy. In the face of past epidemics, mineworkers most predominantly turned to its government for relief. But in this instance, relief came from the private sector. If the government had initiated prevention programs earlier, like those of Brazil and Tanzania, the industry would not have been prompted to develop HIV prevention to the degree that it did.

The industry's response since 1986 is both with and without precedent. In the prior cases of TB, asbestosis and radiation poisoning, the industry typically neglected the concerns of sick workers. The persistence of these occupational diseases was the consequence of financial greediness by the mine corporations. Mine companies suppressed information and public knowledge, underreported incidence and idly sacrificed black lives to generate profits. The industry's extensive HIV prevention programs and provision of treatment, at first, appeared to be a break from the industry's malevolent history of infectious diseases. But on closer examination, South Africa's mining firms responded predictably—motivated by financial gains. Only in this rare case, healthy workers became the linchpin of its economic gains. The industry's response was rooted in its prior behavior in, and to paraphrase Howard Phillips, the industry's

HIV/AIDS response 'doesn't stand out in the South African mining industry's history of disease; it has grown out of it.'¹⁹⁷

¹⁹⁷ Phillips, "Aids in the Context of South Africa's Epidemic History: Preliminary Historical Thoughts." 66.

CONCLUSION

Mining, by nature, always has an expiration date. Once all precious metals and minerals have been unearthed, the mine becomes obsolete and deserted. Perhaps, if the platinum, gold and silver had vanished sooner, the HIV/AIDS epidemic would have developed differently. But in South Africa, even as companies deserted infertile mines, precious metals and minerals would be discovered in new pockets of land and the cycle would repeat itself—becoming a magnet for poor black men searching for opportunities to feed their families. In such an unpredictable industry, the mining companies have remained a staple of the South Africa, maintaining steady profits, and consistently, for over a century, contributing to a significant portion to the national GDP and economy.

Ten years after the HIV prevalence plateaued amongst mineworkers, the industry has seen remarkable results from its HIV/AIDS treatment and prevention efforts. In 2014, the industry still employed 462,757 workers and made up 8.3% of the national GDP. The Chamber of Mines now included NUM representatives in discussions with stakeholders, and continued to engage in healthy wage, healthcare and pension negotiations with the NUM. In an effort to further increase communication and transparency, the Chamber also embarked on a social media campaign to continuously share information with mining communities and the contributions of mining to the daily lives of all South Africans. While HIV/AIDS continues to remain entrenched within the mining population, the measures taken in those first two decades have made significant impact on the spread of the virus. HIV/AIDS prevalence amongst unskilled

workers—still predominantly black laborers—decreased to 18.3% in 2014, compared to the nearly 30% in 2004. More impressively, these figures were now on par with other large South African industries, with agriculture (30%) and metal processing (18.7%).¹⁹⁸ During The total number of reported occupational diseases also declined from 18,371 to 6,810 from 2000 to 2014, respectively.¹⁹⁹ 100% of workers were now eligible for ARV treatment worker was now and treatment facilities reached a record average attendance of 88% among infected workers.²⁰⁰ These figures represent a clear victory for both the mining companies and black mineworkers alike.

As HIV incidence declined among mineworkers, the national rate did not improve over the next ten years. Among adults, HIV incidence in South Africa remained slightly constant, only declining from 20.1% to 19.1% since 2004. These figures were a reflection of the Mbeki government, which is widely considered to have been more detrimental to the spread of HIV than the two previous governments—including the apartheid regime. Heavily influenced by the notorious American biologist, Peter Duesberg, President Mbeki most notably embraced AIDS denial and any connection between HIV and AIDS. Instead of providing ARVTs, Mbeki's government continued to advocate for homemade

¹⁹⁸ Gavin George, Gavin Surgey, and Jeff Gow, "South Africa's Private Sector Investment in Training and Its Erosion as a Result of Hiv and Aids," *South African Journal of Economic and Management Sciences* 17 (2014), http://www.scielo.org.za/scielo.php?script=sci_arttext&pid=S2222-34362014000200001&nrm=iso. 111

¹⁹⁹ Chamber of Mines of South Africa, *Annual Report: 2014*, vol. 125 (Johannesburg, South Africa: 2014).51

²⁰⁰ *ibid.* 55

nostrums and palliative care. Mbeki infamously told his citizens, "If we only said safe sex, use a condom, we won't stop the spread of AIDS in this country."

While the virus still remained a concern for the mining industry in 2014, declining prevalence rates demonstrate that the industry's extensive and well-funded treatment and prevention programs were successful. When HIV/AIDS arrived in South Africa, the international medical community did not have a precedent for combatting it—considering scientists only discovered the virus in 1983. The mining industry became a trial run for HIV/AIDS in the private sector, and mineworkers bore the brunt of this experiment. The virus did not behave like South Africa's previous epidemics, citizens could not simply retreat from urban centers for several months for it to pass, nor identify infected persons based on visible symptoms. While scholarship on this subject is, for the most part, quick to blame the private sector for its slow response, there did not exist a previous 'quick' response from which to take example. The response developed as reactionary, rather than proactive, because the possible impact of HIV/AIDS was relatively unknown at the time. Fortunately, the black laborers on South African mines had the support of its nascent Union. Without the pressure from the Union, it's fair to assume these miners may not have been granted rights or basic counseling during the apartheid era. A major element of this reactionary response evidently became the industry's reaction to the demands of the NUM. The palpable requests of the NUM diverted a possibly worse crisis on the mines, and to ignore not only their influence would be forgetting a crucial component of the HIV/AIDS narrative in South Africa.

The economic benefits that yielded expanded treatment and prevention programs are more easily recognized as the pivotal force that drove the industry's response in the second chapter. By the late 1990s, South Africa was acutely aware of the looming economic impact of HIV/AIDS. In 2001, Clem Sunter, known as the 'father' of AIDS research and former CEO of Anglo's Uranium and Gold division, devoted an entire chapter in his book to 'HIV/AIDS in the Private Sector.'²⁰¹ The South African Institute of Race Relations focused annually on the current impact of HIV/AIDS on the national economy, often providing projections of economic declines as a result. Even while the financial warning signs existed, the industry still led the private sector in AIDS treatment and prevention, as the first companies to extend education to local communities, provide free ARVTs, allow employees to continue working through treatments and fixing non-occupational conditions to slow transmission. The mistakes and subsequent successes of the mining industry's ad hoc policy prescription can now serve as an example to future companies on the heels of an epidemic.

For example, Mongolia's mining industry now faces a similar situation. While their economy has traditionally been centered around agriculture and herding, the mining industry has recently come to dominate the economic composition of the country, which resulted in some Mongolians now referring to their home as 'Mine-golia.'²⁰² Minerals account for 80% of Mongolian exports,

²⁰¹ Clem Sunter and Alan Whiteside, *Aids the Challenge for South Africa* (2000).

²⁰² Langfitt, Frank. "Mineral-Rich Mongolia Rapidly Becoming 'Mine-golia'" NPR. May 21, 2012. Accessed March 2, 2016. <http://www.npr.org/2012/05/21/152683549/mineral-rich-mongolia-rapidly-becoming-minegolia>.

and the industry represents 18.5% of GDP, expected to increase to one-third of national GDP by 2020. In such a sparse country, however, many of the mines exist in the middle of the desert. Mongolia's largest copper mine sits deep in the Gobi desert, which requires that all supplies be shipped in by road—including workers. The 18,000 miners, of which 6,000 are migrants from China, are "housed in long prefabricated buildings or, for the luckier ones, traditional *gers*, circular felt tents."²⁰³ These copper miners make up a large part of the nearly 50,000 mineworkers in Mongolia.²⁰⁴ It is evident that Mongolia's mining sector will continue to grow, and its labor force will have to expand as well.

Mongolia also faces another important expanding figure: its number of HIV positive citizens. In 2007, UNICEF announced that Mongolia was beginning its early stage of an HIV epidemic, and one of the countries most vulnerable to the rapid spread of HIV/AIDS.²⁰⁵ At the end of 2014, UNAIDS estimated HIV prevalence to be at 0.03% of the Mongolian population. However, even with only 181 official cases in the calendar year, the number of cases nearly tripled every year in the previous three years. Due to several familiar indicators, including low knowledge, high STI rate, low condom use, increasing high-risk sexual behavior, UNAIDS predicts the "HIV epidemic is likely to worsen further given transition to low prevalence to concentrated HIV epidemic... Modeled projections show that

²⁰³ "Mine, All Mine." *The Economist*. January 21, 2012. Accessed March 06, 2016. <http://www.economist.com/node/21543113>.

²⁰⁴ "Labor Force - Total in Mongolia." Trading Economics. Accessed March 25, 2016. <http://www.tradingeconomics.com/mongolia/labor-force-total-wb-data.html>.

²⁰⁵ "HIV and AIDS Situation in Mongolia." UNICEF Mongolia. Accessed March 25, 2016. http://www.unicef.org/mongolia/activities_2589.html.

in five years HIV prevalence in Mongolia could triple.”²⁰⁶ While it has yet to be included in the conversation, Mongolia’s mining industry could play a pivotal role in the country’s upcoming war on AIDS.

In 1986, when South Africa’s Chamber of Mines announced that 130 of its Malawian workers tested HIV-positive, it was impossible to know the fatal consequences of their future decisions. No country, and certainly no industry, had yet been through an HIV/AIDS epidemic. Over the next two decades, the mining industry experimented with education programs, HIV counseling, various medical treatments, housing projects and community outreach. By 2003, when the prevalence rates plateaued, it was evident that they had arrived at a successful strategy. The mineworkers benefited from an influential union, and ultimately the rare situation in which employee welfare coincided with company profits. It is not sufficient to demonstrate how the industry’s efforts did not come quick enough, but to illustrate the factors that did elicit a response. A historical lens was required to properly contextualize the influences that guided mining companies during this era. The mining industry’s response can only be exposed as unique if the historical lens is widened to consider the behavior of the private sector in South Africa’s long history of epidemics and in contrast to the government’s response.

For an outsider, the industry’s post-apartheid response may appear to have stemmed from a moral imperative. But the history of occupational disease illustrates a clear pattern of the industry prioritization of financial gains. The

²⁰⁶UN AIDS, *Aids Response Progress Report – Mongolia* (2015). 8.

mining industry and the South African government have a long interwoven history and reliance on each other, mining companies had to leave behind traditional roles in epidemiology—shepherded by its economic incentives. The industry's careful calculation resulted in the decline of South Africa's most devastating epidemics. As Mongolia prepares to engage an upcoming HIV/AIDS epidemic, the mining industry should be acutely aware of its South African counterpart. Not only studying its errors, but the influential union, treatment and prevention programs that ultimately turned the tide on HIV/AIDS. South Africa's mining industry did not have an example to follow, but certainly set one.

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