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**HIV/AIDS Responses in the Western Cape: The
Implementation of
Treatment Programmes in Construction Companies**

**A thesis presented for the degree of Master of Philosophy
In the Department of Construction Economics and Management
University of Cape Town**

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Declarations

Acknowledgement of contribution to the research

The research described in this thesis was undertaken by Ms Dondo as part of a wider departmental collaborative project under the leadership of Professor Paul Bowen. Ms Dondo selected the research methodology and was responsible for the design and administration of the opinion survey questionnaire. She undertook the analysis and interpretation of the response data from the full survey response sample. Ms Dondo, Dr Peter Edwards and Professor Bowen collaborated in the design and preparation of the interview protocol for the follow-up case studies, and Ms Dondo undertook the selection of the interviewees. The interviews were conducted jointly by Ms Dondo and Dr Edwards, with Ms Dondo leading the interviews for her topic focus. Ms Dondo developed her own transcripts from the audio recordings of the interviews, and carried out her own separate analysis of the case studies.

Declaration

The content of this thesis is entirely my own work, except for the specific and acknowledged references to the published work of others.

I confirm that no part of this thesis has been submitted to any other institution for academic award of any kind.

Signed at.....this day of 2012

Chido Francisca Dondo.....

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Abstract

HIV/AIDS poses a threat to the productivity and growth of organisations. The construction sector not only stands to be threatened by the disease, but also poses as a contributor to the spread of the HIV virus. A combined survey and case study approach was employed to determine the responses to HIV/AIDS of construction companies in the Western Cape area. An exploratory survey was conducted through an online questionnaire to ascertain the perceptions of HIV/AIDS as a threat and to reveal the nature of interventions employed. Findings from the survey of 42 construction participants revealed moderately strong perceptions of HIV/AIDS as a long-term threat. This is however not coupled with a comprehensive response as the focus of the majority of HIV/AIDS interventions take the form of HIV/AIDS awareness and prevention campaigns. The provision of HIV/AIDS treatment programmes is not common due to a lack of perceived need, non-disclosure, perceived cost implications, size of companies, fears of stigmatisation of HIV positive people, and a lack of knowledge on how to provide these services.

Follow-up face-to-face case study interviews were conducted with 12 construction participants, making use of a case study protocol. Six of the construction companies were considered for analysis as they provided an in-depth account of construction professionals' experiences in dealing with HIV/AIDS. Common among construction companies is the use of an external service provider in the provision of awareness and prevention campaigns and to a certain extent treatment programmes. Treatment programmes are not popular as a result of perceptions of high costs of provision and the invisibility of the HIV/AIDS disease. Perceptions of high costs were not confirmed by companies providing treatment as they reported on benefits outweighing costs of paying for treatment and high levels of disclosure by HIV positive employees. Despite efforts by construction companies in managing HIV/AIDS in the workplace, their responses lacks comprehensiveness in preventing new infections and managing existing infections. It is recommended that professional associations for construction companies play a proactive role to embark on an HIV/AIDS treatment campaign by providing guidelines based on examples of successful workplace HIV/AIDS treatment programmes.

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List of Abbreviations

AIDS	Acquired Immune Deficiency Syndrome
ART	Anti-retroviral treatment
ARVs	Anti-retrovirals
ASSA	Actuarial Society of South Africa
BER	Bureau for Economic Research
CD4	Cluster of Differentiation 4
GDP	Gross Domestic Product
HAART	Highly Active Anti-retroviral Treatment
HEARD	Health Economics and HIV/AIDS Research Division
HIV	Human Immunodeficiency Disease
HSRC	Human Sciences Research Council
ILO	International Labour Organisation
KAP	Knowledge, Attitude and Practices survey
KZN	KwaZulu-Natal
MRC	Medical Research Council
MTCT	Mother to Child Transmission
NGOs	Non-governmental Organisations
OIs	Opportunistic Infections
PLWHA	Person/People living with HIV/AIDS
SA	South Africa
SABCOHA	South African Business Council on HIV/AIDS
SME	Small, Medium and Micro-enterprises
STD(s)	Sexually Transmitted Disease(s)
UNAIDS	United Nations Program on HIV/AIDS
VCT	Voluntary Counselling and Testing
WC	Western Cape
WHO	World Health Organisation

CHAPTER 1: Research Overview

1.1 Introduction

This chapter introduces the research topic. The purpose of the study is to establish the responses by Western Cape construction companies to the HIV/AIDS pandemic in South Africa. This chapter is divided into four sections. The first section is a brief background to the problem, which provides the context of the research problem on a global, regional and construction industry scale. In the second section, the research problem is concisely stated, followed by a formulation of the research questions and research proposition. Section three is an outline of the objectives of the research and a clearly defined research method. Limitations of the research are identified in this section, and lastly, an outline of the structure of the research report is given.

1.2 Background to the Study

Since the beginning of the global awareness and recognition of an HIV/AIDS epidemic in about 1981, an estimated 60 million people have been infected with the HIV virus and 25 million have died of AIDS-related illnesses worldwide (UNAIDS, 2009). In the business sector alone, an estimated 28 million workers have been lost since 2005 due to HIV/AIDS (ILO, 2008). The effects of the disease extend beyond just the individual, resulting in extreme social and economic consequences (Fourie and Schonteich, 2002). HIV/AIDS deprives developing economies of already limited resources, deprives children of their parents, destroys a generation in the prime of their working lives, reduces life expectancy, and slows down economic growth (Drimie, 2002).

In Africa, the vast majority of people infected with HIV are the most productive population aged between 15 and 49 years (USAID, 2008). As companies rely on this population for productivity, they can no longer assume that HIV/AIDS is a government's responsibility alone because the disease poses a substantial threat to company productivity, profits and stability (Rau *et al.*, 2002). In South Africa, the first established business coalition on HIV/AIDS was launched in the year 2000, with the birth of the South African Business Coalition on HIV/AIDS (SABCOHA) (UNAIDS, 2008b). This was a significant step towards fighting HIV/AIDS in the workplace.

Over the years, companies have been implementing different workplace HIV/AIDS strategies and interventions which include, *inter alia*: awareness and education; voluntary counselling and testing; prevention campaigns; and treatment and care programmes (Rosen *et al.*, 2004a; Dickinson and Stevens, 2005). These responses have however been reported mostly among large companies (Rosen *et al.*, 2007). Small to medium enterprises face various constraints to offering HIV/AIDS services (Connelly and Rosen 2005).

While there has been an increase in responses among the various industrial sectors, the construction industry's response has been slow compared to the manufacturing and financial services industries that are less vulnerable to HIV/AIDS (SABCOHA, 2006). Many of the construction industry's responses have been described as following a slow and passive approach, characterised by once-off education and awareness campaigns (Meintjes *et al.*, 2007). This has been attributed to a lack of effective leadership and legislation in the industry, which if present can govern the universal adoption of HIV/AIDS programmes (ILO, 2008).

Construction is particularly prone to the effects of the HIV/AIDS pandemic, due to the large informal workforce, high usage of migrant labour (DPW, 2004), and risk factors associated with the industry's workforce which include: the age of the workforce, nature of employment and the nature of occupation (Bowen *et al.*, 2008). The construction industry's response is of particular importance because of its contribution to the South African economic growth. In 2008, the industry contributed an estimated 3.4% of the country's Gross Domestic Product (GDP) (StatsSA, 2008). Furthermore it plays a significant role that extends from strengthening economic performance to creating one of the largest employment opportunities (CIDB, 2004).

Before establishing the nature of the study, a brief review of the definition of HIV/AIDS and the nature of the disease is necessary to provide an insight into the illness. This is followed by a discussion on HIV/AIDS in South Africa, the workplace and in the construction industry.

1.3 Definition of HIV/AIDS

AIDS is a disease caused by the Human Immunodeficiency Virus (HIV) which leads to the suppression of the body's immune system, and therefore allows opportunistic pathogens to cause diseases in HIV-infected persons (Walensky *et al.*, 2006). Opportunistic diseases can be classified as respiratory infections, oral and gastrointestinal infections, skin conditions, neurological infections and genital tract infections (ILO, 2007).

The time-period between HIV infection and the onset of AIDS-identifying opportunistic infections can range from eight to ten years (Patterson, 2008), meaning that one can live for years with the HIV virus. The progression of HIV/AIDS from infection to full-blown AIDS constitutes the following clinical stages and symptoms identified by WHO (2005, p.5):

Primary HIV infection – asymptomatic, acute retroviral syndrome.

Clinical Stage 1 – asymptomatic and persistent swollen lymph nodes.

Clinical Stage 2 – moderate unexplained weight loss which is <10% of presumed or measured body weight, respiratory tract infections, herpes and oral ulcerations.

Clinical Stage 3 – chronic diarrhoea lasting longer than one month, persistent fever, severe weight loss which is >10% of presumed or measured body weight, severe bacterial infection and unexplained anaemia.

Clinical Stage 4 – HIV wasting syndrome, severe pneumonia, chronic herpes infection, and meningitis.

Antiretroviral Therapy

The preferred method that is currently available for treatment of HIV/AIDS is antiretroviral therapy. A standard antiretroviral therapy (ART) consists of the use of at least three antiretroviral (ARV) drugs to maximally suppress the HIV virus and stop the progression of the HIV disease (WHO, 2009). This form of treatment has been reported to reduce mortality and opportunistic infections by 60% to 90% (Burman and Jones, 2001).

The criteria for HIV patients to be started on treatment are based on WHO (2009) recommendations. These state that for patients with HIV and WHO clinical stage 1 or 2 to start antiretroviral treatment, CD4 count testing is required. A CD4 count test determines the number of fighting cells in the blood. The normal CD4 count in adolescents and adults ranges from 500 to 1500 cells per cubic millimetre of blood (WHO, 2007). According to WHO recommendations, ART should start in all patients with a CD4 count < 350 cells per cubic millimetre irrespective of clinical symptoms and in all patients with HIV and assessed as WHO clinical stage 3 or 4 irrespective of CD4 count (WHO, 2009).

With effective ART treatment HIV-positive individuals can live longer and healthier lives, meaning that workers can continue being productive whilst on HIV/AIDS treatment (Auerbach, 2004). However, compliance with treatment regimens is essential to continued good health (Hope and Israel, 2007).

1.4 HIV/AIDS in Africa and Southern Africa

In 2004, WHO (2004) reported HIV/AIDS as the leading cause of death in Africa and the sixth cause of death globally. The pandemic remains an enormous economic, social and human challenge in Africa (World Bank, 2008). National HIV prevalence rates amongst adults vary from country to country across Africa.

With reference to Figure 1.1, North Africa recorded the lowest prevalence rates at below 1% West and Central Africa recorded HIV prevalence rates below 2% in the range 1 to 5%. In seven Southern African countries including South Africa, HIV prevalence rates exceeded 15% and fell in the range 10 to 28% (UNAIDS 2008a). High HIV prevalence rates in Africa are attributed to the presence of poverty, natural disasters, violence and social turmoil (Bingham, 1999). These factors provide a fertile environment for the transmission of HIV infections in Africa.

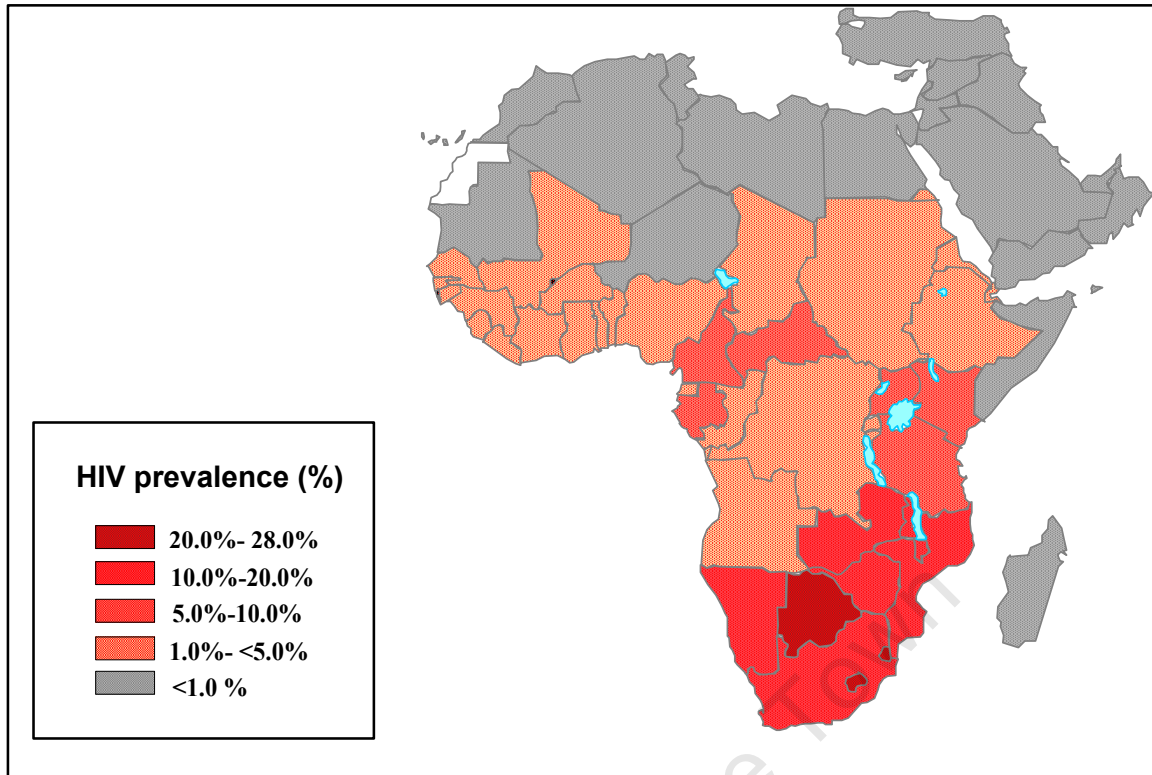


Figure 1.1 HIV prevalence (%) in adults (aged 15-49 years) in Africa, 2007

(Source: UNAIDS, 2008a: p. 39)

Although HIV/AIDS is most prevalent in African countries (UNAIDS, 2008a), Sub-Saharan Africa remains the epicentre of the epidemic (UNAIDS and WHO, 2009). As illustrated by Figure 1.1, the Sub-Saharan region presented the highest HIV prevalence rates, exceeding 10%. In 2008, an estimated 22.4 million people were living with HIV in this region, representing two-thirds of the total number of people living with HIV globally (UNAIDS, 2008a). Development goals in the Sub-Saharan region have been threatened by the burden of HIV/AIDS, unlike anywhere else in the world (World Bank, 2008).

1.5 HIV/AIDS in South Africa

In 2007, HIV data from population based surveys and ASSA modelling recorded South Africa as the country with the largest HIV epidemic in the world, with an estimated 5.7 million people living with HIV (UNAIDS, 2008a). Having borne one of the largest epidemics, the responses in South Africa have been marginalised due to apartheid politics and democratic transition (Meintjes *et al.*, 2007).

During the *apartheid* era, initiatives by the regime were questioned and not well received (Ashforth, 2001). Following that, the subsequent government of national unity denied HIV/AIDS as a social problem, further impeding the government's response (Nattrass, 2004).

In 1999, the government acted as a major barrier to the provision of medication to AIDS patients when President Thabo Mbeki questioned the usefulness of ARV drugs and whether HIV was the cause of AIDS (Chigwedere *et al.*, 2008). A lack of leadership involvement and commitment delayed disclosure of accurate HIV/AIDS data and the development of adequate interventions (Meintjes *et al.*, 2007). As a result, the South African government's response has been mixed, with slow policy and programme implementation (Gauri and Lieberman, 2004).

According to UNAIDS (2004), treatment and care policy changes were driven by pressure from the country's HIV-positive community, prominent legal and health professionals, and many national and international NGOs. In October 2003, after pressure from civil society organisations such as the Treatment Action Campaign (TAC), the government began the national rollout of antiretroviral drugs to HIV-infected people (Nattrass, 2004). Since the rollout, an indication of progress has been reported through stabilising prevalence levels even though prevalence rates remain high as fewer people die from AIDS-related illnesses (UNAIDS, 2008a).

Even though South Africa is claimed to have the largest ART programme in the world (HSRC, 2008), challenges are still rife as demand exceeds supply (Nattrass, 2006). Of the one million chronically AIDS-ill individuals that were targeted to be enrolled on the ART national programme by 2008, fewer than 50% of these individuals were actually enrolled (Gow, 2009). This failure has been met with lack of political commitment and an inadequate public health system capacity (Gow, 2009).

Continued poor management of the disease at a national level has resulted in the shift of HIV/AIDS costs from household level to industry level, thereby calling for a response from the business sector.

1.6 HIV/AIDS and the Workplace

Employers have come to the realisation that HIV/AIDS not only results in the loss of workers but dramatically affects the labour market, stalling economic activity and social progress (UNAIDS 2002). The impact on economies is severe, with a study of 33 countries worldwide estimating an 18% loss of the Gross Domestic Product by 2020, which is a representative cumulative shortfall of USD 144 billion in lost growth due to HIV/AIDS (ILO, 2008).

Even though businesses have recognised the impact that the HIV virus has on human, financial and social costs to business operations and host communities (UNAIDS *et al.*, 2000), the responses by most businesses have been isolated (UNAIDS, 2008b). Some companies merely focus on their core business and do not have time to address the epidemic, whilst other companies are aware of the risks but lack the knowledge about how or where to start mitigating the risks (UNAIDS, 2008b).

Among the first in the private sector to respond to HIV/AIDS was the mining industry, which was the first to be confronted with HIV/AIDS in South Africa in the mid-1980s, with comparatively high rates of infection (IFC, 2002; Mapolisa *et al.*, 2004). The mining sector continues to outperform other industries such as retailers, wholesalers, vehicle dealers and the building and construction sector in terms of implementing voluntary counselling and testing (VCT) programmes and care, support and treatment programmes (SABCOHA, 2005). Across different company sizes, large companies have been leading in the provision of HIV/AIDS services to employees (Rosen *et al.*, 2007).

1.7 HIV/AIDS in the South African Construction Industry

Since the beginning of the decade, in the early 2000s, the South African construction industry has undergone dramatic growth (IOM, 2010). In 2001, the formal and informal sectors of the industry employed 520,000 workers (CIDB, 2004). By mid-2009, these two sectors had more than doubled, employing about 1.1 million workers, which represented 8.3% of the country's workforce (IOM, 2010).

Being a significant employer in the country, construction enterprises are at risk because of the impact of HIV/AIDS on their workforce (ILO, 2008). Lost days of work among construction workers is a major concern for the industry (Haupt *et al.*, 2005). In 2005, a study indicated a loss of up to a month's work per employee per year due to HIV-related absenteeism in South African businesses (Meintjes *et al.*, 2007). In terms of costs, direct and indirect costs of HIV/AIDS for construction companies were estimated to be in the range of 4.5 to 7.9% of labour costs (ILO, 2008).

The construction industry not only stands to be affected by the disease, but also emerges as a high contributor to the spread of the HIV virus (Meintjes *et al.*, 2007). The nature of the work requires the continuous migration of the labour force from their homes to the construction sites (Dickinson and Versteeg, 2004). Consequently, construction workers often live a nomadic, on-site lifestyle, in temporary accommodation, away from their families and support systems for long periods of time, with few recreational facilities (IOM, 2010).

On these sites, workers are prone to visit sex workers or have multiple sexual partners, increasing their risk of contracting HIV (Fourie and Schonteich, 2002), while far-removed from the proximity of health care facilities (Bowen *et al.*, 2008). In cases where health care facilities are available, undocumented (illegal) workers may be reluctant to seek medical services for fear of harassment or deportation (IOM, 2010). Such conditions create a fertile environment for the transmission of the HIV virus, as other sexually transmitted diseases or infections may go untreated for long periods of time.

The research documented in this thesis has been informed by earlier studies done on HIV/AIDS in the South African construction industry. One of the first studies of HIV/AIDS interventions in the construction industry in South Africa was done by Haupt and Smallwood (2002), who reported a lack of involvement in HIV/AIDS interventions by construction employers.

The HIV/AIDS intervention activities reported were the presence of HIV/AIDS policies and the distribution of educational material. There were no reports of interventions extending beyond awareness. Similar findings from Meintjes *et al.* (2007) reported HIV/AIDS interventions implemented by independent companies being limited to awareness initiatives at project level. Meintjes *et al.* (2007) called for a sector-specific response with an increased focus on HIV/AIDS that extends beyond awareness and education only.

A study by Bowen *et al.* (2008) highlighted the threat of HIV/AIDS to the construction industry by showing the extent of HIV/AIDS prevalence among construction workers in South Africa. The study covered 55 construction companies countrywide. Out of 10,243 workers who were tested, 1,430 (13.96%) were HIV positive. Although the study did not cover the full extent of HIV prevalence countrywide, the results show to some degree the extent of HIV/AIDS prevalence in the construction industry. In comparison to the national HIV prevalence rate of the total population in 2008 (10.9%), the construction industry recorded a higher HIV prevalence (Shisana *et al.*, 2008).

Evidence from various studies has indicated the prevalent adoption of awareness and prevention interventions in the construction industry. The SABCOHA (2005) study reported on the implementation of awareness, prevention and treatment programmes. Evidence showed that 31% of construction companies had implemented an HIV/AIDS workplace awareness programme; 15% provided VCT; 10% had instituted an HIV/AIDS care, support and treatment programme; and only 3% provided ART. Another review of the interventions undertaken by general building contractors reported the use of posters, awareness education (speaker), pamphlets / flyers, provision of condoms and induction as the most prevalent (Smallwood *et al.*, 2001).

In view of the high HIV prevalence among the construction workforce, the response by construction companies does not constitute a comprehensive response to curb the disease. Surprisingly, given the increased drive for corporate reporting on HIV/AIDS among listed companies (Fakier, 2004) and a drive towards good corporate governance in large South African companies (Dickinson and Stevens, 2005), the construction industry's response is still lacking. Much of the awareness and prevention initiatives are targeted towards preventing new infections, with few efforts to manage already existing HIV infections.

The focus of this study then, is to explore in detail the type of responses that companies operating in the Cape Town area have implemented, their reasons for such responses and the potential barriers to the implementation of treatment programmes.

1.8 Problem Statement

The problem to be examined in this study is stated as follows:

The construction industry's response to HIV/AIDS lacks comprehensive intervention programmes, with the majority of the programmes focusing largely on awareness and prevention with little emphasis on treatment programmes.

1.9 Research Questions

The research questions to be addressed are as follows:

- a. What are the perceptions of HIV/AIDS as a threat to the construction industry?
- b. What are the responses of construction companies to HIV/AIDS in the Western Cape construction industry?
- c. What are the barriers to the implementation of treatment programmes within construction companies?
- d. What are the benefits of implementing treatment programmes within construction companies?

1.10 Research Proposition

The study is based on the following proposition:

The benefits of implementing treatment programmes outweigh those of non-implementation, rendering the implementation of treatment programmes an effective response.

1.11 Aim of the Research

The aim of this research study is to:

Establish the response to the HIV/AIDS pandemic by selected Western Cape construction companies.

1.12 Objectives of the Study

The objectives of this study are to:

- a. Establish the perceptions of construction firms regarding the extent of the HIV/AIDS threat to the industry.
- b. Establish the nature of existing programmes that address HIV/AIDS in construction companies.
- c. Examine how construction companies have implemented treatment programmes.
- d. Establish the benefits of, and barriers to, implementing treatment programmes.

1.13 Research Method

To achieve the research objectives, the following research method is employed:

1. A review of pertinent literature on the impacts of, and responses to HIV/AIDS in the construction industry.
2. A questionnaire survey of construction participants on their perceptions of HIV/AIDS as a threat to the industry, and their workplace responses to the pandemic.
3. Case studies of selected construction companies to examine the nature and extent of their responses to the HIV/AIDS pandemic.
4. Analysis of the findings, conclusions and recommendations.

1.14 Limitations of the Study

The study is subject to the following limitations:

- a. The area of study is limited to construction companies in the Western Cape region of South Africa. Practical logistical reasons preclude expansion of the research to the whole of South Africa, particularly for the case studies.
- b. Considering the sensitivity of HIV/AIDS, obtaining statistical data relating to the HIV status of employees proved difficult.

1.15 Structure of the Report

This research report is structured in seven chapters:

Chapter One introduces the background to the study, highlighting the definition of HIV/AIDS, its impact on Africa and South Africa, and its impact on the workplace; specifically in the construction industry. This is followed by an outline of the research problem and research question. The research proposition is defined, followed by an outline of the aims and objectives of the study. Finally, a description of the research method is provided, together with the limitations of the study.

Chapter Two presents a critical review of the literature pertaining to HIV/AIDS in the South African construction industry. This chapter explores the impact of HIV/AIDS on the construction industry, the vulnerability of the construction industry to HIV/AIDS, the motivations for, and barriers to, responses by construction companies and the nature of responses. This chapter provides a conceptual framework that facilitates the empirical research in the chapters to follow.

Chapter Three proposes an opinion-based survey research design to determine the nature and availability of workplace HIV/AIDS programmes. This chapter introduces the research methods to be adopted in this study and the justification thereof.

Chapter Four comprises the analysis and interpretation of the questionnaire survey results, together with a discussion of the findings.

Chapter Five describes a case study design to explore the underlying issues identified by the survey results. It aims to further explore the implementation or non-implementation of HIV/AIDS intervention programmes of selected construction companies in the Western Cape.

Chapter Six comprises the analysis and interpretation of the case study results.

Chapter Seven: presents a discussion of the findings, draws conclusions and makes recommendations for future research on HIV/AIDS in the construction industry.

CHAPTER 2: HIV/AIDS in the South African Construction Industry

2.1 Introduction

This literature review discusses the impact of HIV/AIDS on the South African construction industry, the industry's vulnerability to the disease, and the nature of responses employed to fight HIV/AIDS in the construction workplace. While there is considerable information generally on workplace responses to HIV/AIDS, literature directly assessing the impact of HIV/AIDS on the construction industry and the type of responses employed is relatively limited. Much of the literature available is generalised and derived from studies across different industrial sectors.

This chapter is divided into four sections. The first section provides an overview of the South African construction industry's profile and its vulnerability to HIV/AIDS. The next section is a presentation of evidence-based findings on the impact of HIV/AIDS on the general business sector. Section three is the focus of this study as it analyses responses of the construction industry to HIV/AIDS by looking at the policies and the nature of government's and the private sector's responses. Of particular interest is the implementation of treatment programmes which looks at the motivations for providing treatment services to employees and the different models available.

The fourth section will shed light on companies' motivations for responding to HIV/AIDS and possible barriers for failure to respond, presenting challenges common to the construction industry in implementing comprehensive responses. Concluding the review is a summary of the important issues determined in the literature.

2.2 Profile of the Construction Industry

A collective description of the construction industry given by the CIDB (2004) describes it as an industry that delivers products in a uniquely project-specific environment involving different combinations of: investors, clients, contractual arrangements and consulting professions; site conditions, design, materials and technologies; contractors, specialist subcontractors, skills and the workforce. The general structure of the construction industry comprises innumerable companies of different sizes and categories as well as many different role players (CIDB, 2003).

Company sizes range from large to micro enterprises as categorised by Stats SA (2009a) according to their annual turnover. Statistics presented by Stats SA (2009) shows the distribution of employment among the different company sizes as illustrated in Table 2.1.

Table 2.1 Distribution of employment by company size (of annual turnover) in the formal sector – 2009

Size	Annual Turnover	Employment Figures	Percentage of total (%)
Large	Turnover \geq R26m	190 681	35.3
Medium	R13m \leq Turnover $<$ R26m	126 804	23.5
Small	R6m \leq Turnover $<$ R13m	55 476	10.3
Micro	Turnover $<$ R6m	167 620	31.0
Total		540 581	100.0

(Source: Stats SA, 2009a)

As depicted in Table 2.1 large and micro-sized companies contribute the largest share of employment, 35% and 31% respectively. Statistics from 2008 showed a similar pattern, with large companies contributing 35.8% and micro contributing 30.8% to the total employment in the industry (Stats SA, 2008).

In terms of the distribution of companies by sizes in the construction industry, the Construction Education and Training Authority (CETA) estimate 95% of construction enterprises to be small or micro organisations, both in the formal and informal sectors (Bowen *et al.*, 2008). This could be attributed to the dominance of small to medium enterprises (SMEs) in the informal sector (Davies and Thurlow, 2009).

The industry offers different types of services which include: site preparation; construction of buildings; construction of civil engineering structures; construction of other structures; construction by specialist trade contractors; plumbing; electrical contractors; shop fittings; other building installations; painting and decorating; and other building completion (Stats SA, 2008). Among these services, the largest employers and contributors of income are in the construction of buildings, followed by the civil engineering structures (Stats SA, 2008).

In South Africa, the construction industry's role is important to the country's economic growth. In 2009, the industry contributed 3.9% towards the gross domestic product (GDP) (SABCOHA, 2010). Investment in the construction sector has grown over the years, with an estimated 9.2% annual increase since 2000 (Quantec database). In 2008, the gross domestic fixed investment was reported at ZAR 5 billion (Quantec database). Although there was a significant contribution from private building activity, this expansion was mainly attributed to the public investment in stadiums and infrastructure.

To the wider South African community, the industry forms the basis for all modern human endeavour, economic growth and social development (CIDB, 2004). This is achieved through facilitating the objectives of providing potable water, sewerage disposal, electrification, health, education, housing and productive employment (CIDB, 2004). The industry provides employment to a significant portion of the economy, as illustrated in Table 2.2.

Table 2.2 Employment by economic sector (September 2009)

Economic Sector	Formal Sector	Informal Sector	Total Employment	Employment share (%)
Agriculture	-	-	653 000	5.07
Mining	297 000	2 000	299 000	2.32
Manufacturing	1 547 000	176 000	1 723 000	13.37
Utilities	80 000	2 000	82 000	0.64
Construction	804 000	253 000	1 057 000	8.20
Trade	1 882 000	970 000	2 852 000	22.13
Transport	179 000	558 000	737 000	5.72
Finance	1 557 000	126 000	1 683 000	13.06
Social services	2 341 000	286 000	2 627 000	20.39
Private households	-	-	1 166 000	9.05
Other	6 000	-	6 000	0.05
Total	8 693 000	2 373 000	12 885 000	100.00

(Source: Stats SA, 2009b)

Being an employer in both the formal and informal sectors, construction offers a wide range of jobs for different skills levels. The industry employs highly skilled workers such as consulting engineers, project managers, architects and quantity surveyors whose involvement is essential to the delivery of construction projects. Besides being an employer of skilled professionals, the industry also employs a significant number of semi-skilled and low-skilled workers such as labourers, machine operators and artisans. A breakdown of employment skills of different economic sectors presented in the HSRC (2008) report, reported the construction sector as the largest employer of semi-skilled workers. A reported 11% of all semi-skilled workers relative to all economic sectors belonged to the construction sector in 2004.

Due to the nature of the job and the physical demands, the workforce is predominantly male. As shown in Figure 2.1, the construction industry employed the highest percentage of male workers in 2009 at 87% (Stats SA, 2009b). Moreover, compared to other industries, the industry has the largest margin between male and female workers.

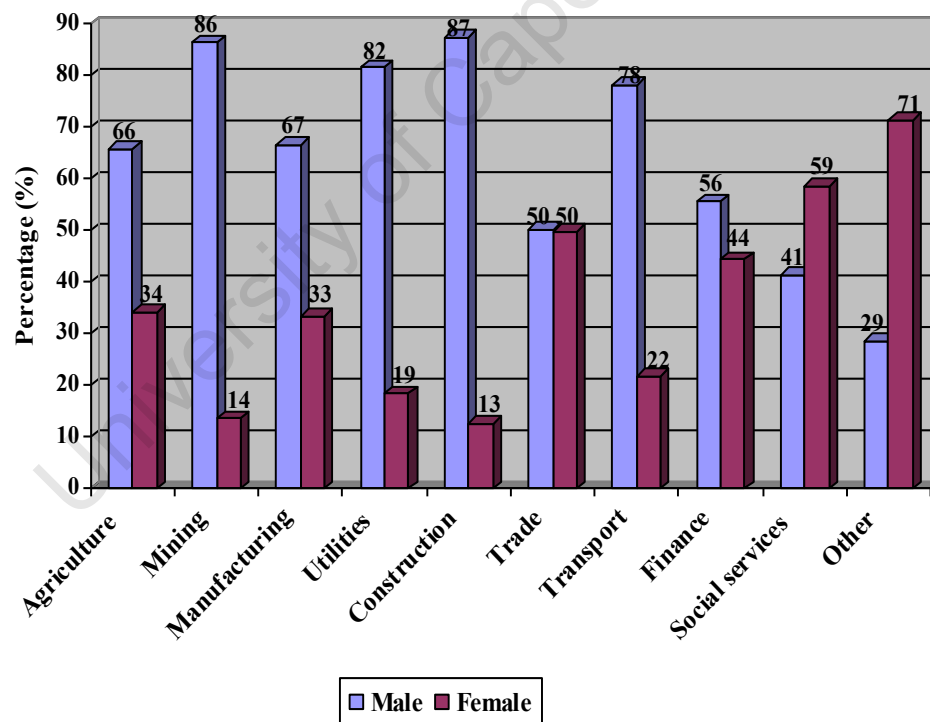


Figure 2.1 Employment by industry and sex at the end of September 2009

(Source: Stats SA, 2009b)

The background information on the industry's profile has provided an insight into understanding possible areas of concern in the context of HIV/AIDS. This leads to a discussion on the factors that make the construction industry vulnerable to HIV/AIDS. Reference is made to some of the relevant statistics presented above.

2.3 Vulnerability of the Construction Industry to HIV/AIDS

There are risk factors associated with working in the construction industry, which are likely to increase the HIV prevalence rate among the workforce. In construction, the workforce not only emerges as the most susceptible to the impact of HIV/AIDS but is also the largest contributor to the industry's vulnerability (ILO, 2008). Meintjes *et al.* (2007) point out factors that increase the vulnerability of the construction workforce. These include the migratory nature of the workforce, the employment of informal labour, the tendency to employ semi-skilled and unskilled workforce, and the aging of the workforce. These factors are explained more fully below.

2.3.1 Migratory labour

Migration plays a major role in the spread of the HIV virus. For migrant workers, the spread of HIV/AIDS is generally as a result of men becoming infected while away from home and on returning, infecting their wives and/or regular partners (Isaksen *et al.*, 2002). By being separated from their regular sexual partners, migrant workers are prone to engage in risky sexual behaviour with multiple sexual partners including sex workers (Fourie and Schonteich, 2002). Migrant workers are therefore susceptible to contracting and spreading HIV/AIDS (ILO, 2003). In a study on the impact of migration on HIV transmission in South Africa, migration was reported to be an independent risk factor for HIV infection among men (Lurie *et al.*, 2003).

Statistical evidence presented in Figure 2.2 shows that migrant men have higher HIV prevalence than non-migrant men, across all age groups.

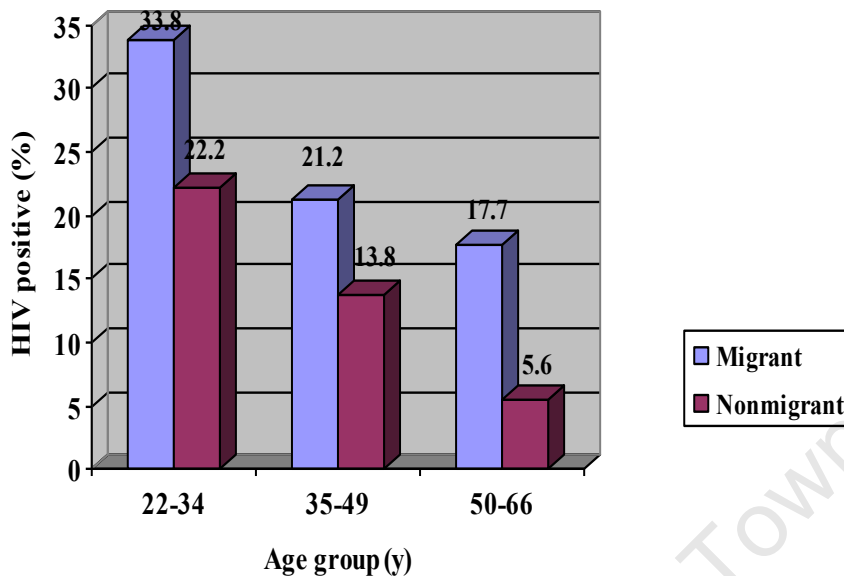


Figure 2.2 Age-specific HIV prevalence (%) for migrant and non-migrant men

(Source: Lurie *et al.*, 2003)

The predilection of the construction industry to employ migrant labour is paramount to the industry's vulnerability to HIV/AIDS (Haupt *et al.*, 2005). There is an inherent migratory nature to construction, where the movement of labour is relatively high compared to other industries (IOM, 2010). A process of circular migration is created whereby migrant workers return home once their job is completed and return to work only when further work is available (IOM, 2010). The nature of migrant employment places workers in conditions that promote poor lifestyle choices that increase the risk of contracting HIV with little or no immediate health care facilities (Bowen *et al.*, 2008). The risk of infection not only lies on the workers themselves, but also on their families and the communities sited near construction sites (Isaksen *et al.*, 2002).

2.3.2 Workforce skills

SABCOHA (2006) identified two components of HIV/AIDS risk from the supply side. These include the HIV prevalence rate of the industry's workforce and the level of skills of the workforce. Evidence from Bowen *et al.* (2008) and SABCOHA (2006) shows a comparatively high HIV prevalence of 14% and 16% respectively, among construction workers in South Africa.

These figures are comparable to that of the hardest hit region in South Africa, the province of KwaZulu-Natal, which recorded a prevalence of 15.8% among the general population in 2008 (Shisana *et al.*, 2009). High HIV prevalence among construction workers is attributed to the labour-intensive nature of the industry and its tendency to employ semi-skilled and unskilled workers who generally have a higher HIV prevalence rate than the general population (Evian *et al.*, 2004).

Results of a national study by Bowen *et al.* (2008) of risk attributes of construction workers to contracting HIV/AIDS are shown in Figure 2.3. The highest prevalence rate (18%) was found to exist among hourly-paid workers, whether employed on contract or permanent staff. These results agree with the findings reported by SABCOHA (2005), which found HIV prevalence to be higher among contract workers and lower paid occupations than permanent workers and higher paid occupations.

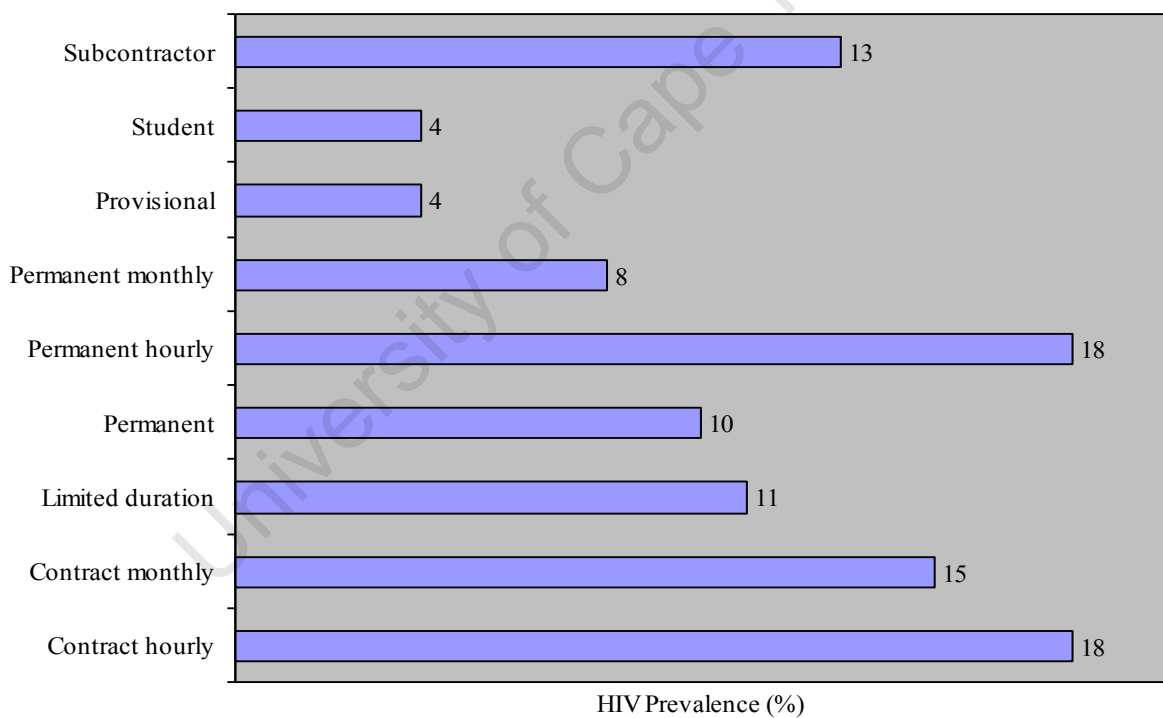


Figure 2.3 HIV prevalence among construction employees by nature of employment

(Source: Bowen *et al.*, 2008)

Highly skilled job categories, represented by permanent and monthly-paid permanent workers (see Figure 2.3), presented lower HIV prevalence (less than 10%) than contract and hourly-paid permanent workers (18%). Socio-economic status or occupation was observed to play a role in determining HIV prevalence, as salaried workers (monthly paid) such as site managers, engineers and foreman are likely to be more highly skilled (Bowen *et al.*, 2008).

Hourly paid workers or ‘wage earners’ are normally semi-skilled or unskilled workers with low levels of education and income (Bowen *et al.*, 2008). Low levels of education and low income levels are factors which are associated with low levels of HIV awareness, and, in turn, associated with high HIV prevalence (Colvin *et al.*, 2007). When infected, this pool of labour is adversely affected because they do not receive sufficient remuneration to afford HIV treatment in order to prolong their lives (Dickinson, 2004b).

In the same study, HIV prevalence was examined in terms of the occupation of the workers. Reporting the lowest HIV prevalence rates were managers and administration staff with HIV prevalence not exceeding 1% (Bowen *et al.*, 2008). The highest HIV prevalence (21%) was reported among operators or truck drivers, followed by the skilled construction workers (19%) and labourers (17%).

2.3.3 *Informal labour*

Employment of the industry’s workforce has changed over the years from formal employment to informal employment (CIDB, 2004). The change is as a result of the casualisation of employment, reliance on labour-only contracting, and the growing informal sector (CIDB, 2004). English and Mbuthia (2002:2) define informal labour in construction as “*workers employed by contractors or subcontractors on a casual or temporary basis without any proper form of contract.*” SADC member states, of which South Africa is a member, do not make provision for foreign semi-skilled and unskilled construction workers to obtain valid work permits and therefore construction companies often employ illegal and irregular migrant workers (IOM, 2010). These workers are often not included in StatsSA employment statistics, meaning that the actual informal sector employment could be higher than estimated. An estimated 60% of the construction workforce in South Africa is employed on an informal basis (Haupt *et al.*, 2005).

According to Barnett and Whiteside (2002), the unregulated and informal nature of the construction industry increases its vulnerability to the impact of HIV/AIDS. This informal pool of labour is normally the productive, sexually active and less educated individuals who are likely to be struggling with socio-economic anxieties and are more vulnerable to acquiring and transmitting HIV/AIDS (Barnett and Whiteside, 2002; Meintjes *et al.*, 2007).

2.3.4 *Aging of the workforce*

In South Africa, the construction industry predominantly employs older workers over the age of 40 years. Data reported by Haupt *et al.* (2005) suggest that 60% of skilled workers in the industry are over the age of 40 years and that 69% of plant and machinery operators are over the age of 40 years. With construction as one of the most dangerous lines of work (IOM, 2010), older workers are more vulnerable to health threats and infectious diseases such as TB and Hepatitis B (Haupt *et al.*, 2005). Because of an increased risk of infection among older people, they are more susceptible to HIV infection when exposed to the virus (Meintjes *et al.*, 2007). The greatest threat to the industry when losing workers in this group is the impact on the skills shortage (Dickinson and Versteeg, 2004). Older workers are a valuable asset to the industry because they possess a great amount of skill and knowledge acquired over a number of years (Meintjes *et al.*, 2007). Losing such skills could pose a serious threat to the industry's skills base.

2.4 HIV/AIDS Impact on the Business Sector

AIDS continues to be a growing concern for businesses worldwide. Its impact on the construction industry is felt on both the demand and supply sides of construction. On the demand side, HIV/AIDS diminishes individual and household disposable income as treatment and burial costs consume savings (Barnett and Whiteside, 2002). Individual and state consumption patterns are expected to change as resources are reallocated towards health and welfare. This will have an adverse impact on the demand for infrastructure and housing in South Africa (Development Works, 2001).

On the supply side, if the profitability of the workers' role in delivering construction products is threatened, the likelihood of their continued involvement in construction is questionable (Development Works, 2001). This is so because when a worker becomes infected with the HIV virus and not treated, they can suffer from an HIV/AIDS-related illness resulting in an increase in absenteeism, coupled with reduced productivity (SABCOHA, 2005). The impact further escalates to increasing medical expenses and upon death, companies incur expenditure in increased payout of employee benefits and labour turnover (Isaksen *et al.*, 2002).

According to the report by Development Works (2001), the nature of HIV/AIDS impacts on companies is likely to be felt differently, according to the degree of reliance of a company or industry on its workforce (i.e. ease of replacement of labour), the size and composition of its labour pool, and the institutional arrangements between labour and the company (i.e. contractual, part-time, casual, benefits). A presentation of evidence-based findings on the impact of HIV/AIDS on the business sector provides first-hand experiences of companies.

Evidence-based Findings on the Impact of HIV/AIDS on the Business Sector

Understanding the degree to which HIV/AIDS has impacted South Africa's construction industry has been limited due to a lack of monitoring and evaluation measures (Dickinson and Stevens, 2005). However, studies conducted by various researchers on the impacts of HIV/AIDS at company level in the general business sector in South Africa present the following findings.

Results of the SABCOHA (2005) survey on the impact of HIV/AIDS on business sectors suggested that lower productivity and increased absenteeism, followed by higher employee benefit costs, were the largest impacts on the production level of companies surveyed. Between 45 and 65% of respondents in the mining, manufacturing and transport sectors reported having experienced these impacts. In the construction sector, a significantly smaller percentage of the companies reported being affected by HIV/AIDS (SABCOHA, 2005).

In a case study of three Ekurhuleni manufacturing companies, absenteeism provided the most visible impact of the pandemic (Dickinson, 2004b). Even though there were other causes of absenteeism (family responsibilities, monotonous nature of work, long travel distances, long shifts and overtime), the main reason for associating absenteeism with HIV/AIDS was an observed increase in sickness patterns among most of the absentees, which led to an increase in the amount of leave taken, poor performance at work, and death from AIDS-related illnesses. The visible loss of employees due to HIV/AIDS amongst the companies studied ranged between 0.5% and 2%.

A study in Kenya (Fox *et al.*, 2004) presented some of the first empirical estimates of the impact of HIV/AIDS-related morbidity on labour productivity. The study aimed to examine the individual labour productivity and attendance of tea estate workers who died or were medically retired because of AIDS-related causes. The evidence indicated that 60% of the deaths and medical retirements that occurred between 1997 and 2002 were attributable to AIDS (Fox *et al.*, 2004). As early as 3 years before an AIDS-related termination occurred, the following impacts were observed: notably a higher occurrence of absenteeism of HIV-infected workers, a reduction in output, and a shift to less strenuous and in this case less productive duties, although this is not always the case (Fox *et al.*, 2004).

In a survey of 80 small to medium size enterprises (SMEs) in the KwaZulu-Natal and Gauteng provinces, AIDS accounted for 10% of the 13% overall annual employee turnover (Connelly and Rosen, 2005). In relation to direct costs being felt, few companies reported incurring direct costs in recruiting or training (Connelly and Rosen, 2005). This could be explained by literature which suggests that replacement costs of unskilled workers are not significant to a company, since most unskilled workers are replaceable within a week or so, at little or no cost, and the requisite training is capable of being done over a period of a few days (USAID, 2001). While low-skilled workers, such as labourers on limited duration contracts (LDCs), require limited training and are easy to replace, construction companies cannot afford to lose semi-skilled workers such as equipment operators because of an increase in their shortage (Dickinson and Versteeg, 2004).

The above studies have presented evidence-based findings on the impacts of HIV/AIDS in the workplace. The impacts mostly occurring are: increased absenteeism, lower productivity and high employee turnover. Even though loss of skills was not indicated as a major impact, this is an underlying threat especially in a skills-constrained economy such as South Africa. The loss of skilled workers can narrow the skills base of an industry because it can take between one to four years to train them up to full competency (Dickinson, 2004b).

The discussion on the vulnerability of the construction industry to HIV/AIDS and impact on the business sector highlights possible threats of HIV/AIDS to the construction industry. The available evidence suggests that there is a high HIV prevalence in the construction industry although moderate impacts have been reported in studies across different sectors. The following section will look at the construction industry's response to the pandemic.

2.5 Responses to HIV/AIDS in the South African Construction Industry

Various frameworks and guidelines on HIV/AIDS programme implementation exist for the South African construction industry. At an international level, ILO (2008) developed the '*Code of Practice on HIV/AIDS and the World of Work: Guidelines for the Construction Sector*'. The document provides useful guidelines specifically for the construction industry on workplace policy development and on how the industry can intervene in the fight against HIV/AIDS. The Code of Practice is accompanied by a manual that outlines how it can be used in practice (ILO, 2008). The International Federation of Consulting Engineers (FIDIC) recognises construction sites as potential primary centres of HIV/AIDS in developing countries. A policy statement for FIDIC and FIDIC member firms was developed and approved in 2004. The policy outlines the HIV/AIDS clauses that can be included in contract documents for the provision of HIV/AIDS awareness programmes (FIDIC, 2004).

In South Africa, the Construction Industry Development Board (CIDB) developed an HIV/AIDS intervention specification for the industry, which serves as a guideline for the contractual requirements for HIV/AIDS awareness programmes (CIDB, 2003). In 2004, the Department of Public Works developed an HIV/AIDS Awareness Programme which enforces the implementation of HIV/AIDS programmes in the construction work that it commissions (DPW, 2004). The literature is silent on the effectiveness of these measures in the South African construction industry.

2.5.1 HIV/AIDS workplace policy

When implementing an HIV/AIDS workplace programme, a holistic approach needs to be considered (Fraser *et al.*, 2002). A key step in implementing a comprehensive and effective workplace programme is the development of a workplace policy (USAID, 2001). According to SABCOHA (2005), an HIV/AIDS policy sets out an organisation's position and practices as they relate to combating HIV/AIDS. A comprehensive HIV/AIDS policy defines a company's position, guides and sustains its awareness, prevention, treatment and care programmes (SABCOHA, 2005), as well as safeguarding and enforcing the protection of employees' rights (ILO, 2008). An important factor to consider when formulating a comprehensive workplace HIV policy is to communicate with employees about the policy prior to its implementation (Dickinson, 2003). This ensures effective involvement of all parties that will be affected by the policy.

Studies reveal differences in HIV/AIDS policy implementation among South African companies. In 2004, a study by the South African Business Coalition on HIV/AIDS (SABCOHA) revealed that 262 companies out of 1 006 companies surveyed had established a formal HIV/AIDS policy in the workplace (SABCOHA, 2004). A possible explanation for the low implementation of policies could be the differences in company sizes in the study sample. The majority (75%) of the companies were small (less than 100 employees), with large companies that employed more than 500 employees being represented by less than 10% of the study population. In the same year, Dickinson and Innes (2004) reported a high degree of HIV/AIDS policy implementation by large private sector companies. Of the 38 companies that responded, 92% ($n=35$) reported the presence of an HIV/AIDS policy.

An important aspect of a workplace policy that is often overlooked in its formulation is turning it into a reality. Dickinson (2003) highlights this gap of turning policy into practice through a case study of a large South African corporation. The study revealed that even though policies encouraged voluntary counselling and testing (VCT), openness and disclosure, in reality there was confusion over testing, lack of access to available treatment, and lack of disclosure (Dickinson, 2003). This finding suggests that policies are at times being implemented prematurely with little consideration of their practical applicability. Careful consideration therefore needs to be given when designing a policy because they form the basis for company interventions (Sprague, 2008).

2.5.2 HIV/AIDS workplace interventions

Fraser *et al.* (2002) describe a comprehensive HIV/AIDS workplace programme as one that addresses prevention through education, and mitigation through counselling and testing, as well as treatment and care. These attributes of a comprehensive HIV/AIDS programme are in line with ILO (2003) best practice workplace interventions that were generated from practical experience in the workplace across different sectors. The best practices are: policy and legal frameworks; workplace policies and programmes on prevention; workplace policies and programmes on care, support and treatment; links beyond the formal workplace; knowledge and evidence through data analysis, monitoring and feedback (ILO, 2003).

Specific to the construction industry, McGreevey *et al.* (2003) identified eight interventions for HIV/AIDS prevention, care and treatment that can be implemented in the construction industry.

Prevention interventions include:

- condom distribution to all workers;
- treatment of sexually transmitted infections;
- peer counselling for safe behaviour; and
- voluntary counselling and testing (VCT)

For HIV positive individuals, the treatment and care interventions include:

- palliative care for HIV positive persons showing symptoms of AIDS;
- treatment of opportunistic infections associated with HIV/AIDS;
- opportunistic illness prophylaxis (especially TB); and
- Highly Active Anti-Retroviral Therapy (HAART) and related laboratory services to reduce risk of death from AIDS.

2.5.3 *Government responses to the HIV/AIDS pandemic*

In South Africa, the recognition of HIV/AIDS as a threat to the construction industry dates back to 2002 when the National Department of Public Works (DPW) launched an HIV/AIDS awareness strategy. The HIV/AIDS strategy was driven by the Department of Public Works' social responsibility towards the construction industry and perceptions of high HIV prevalence among the construction workforce (DPW, 2004). The strategy was initiated with three pilot projects, which resulted in the development of an HIV/AIDS awareness programme training manual in 2004 (DPW, 2004).

The training manual provides guidelines on the scope of the HIV/AIDS requirements and implementation process for contractors appointed by the Department on contracts exceeding six months in duration and exceeding a value of ZAR2 million (DPW, 2004). It is a requirement of such contracts that a well-developed awareness programme be included in all Bills of Quantities (BoQ) as part of the formal contract documentation (DPW, 2004). In an effort to encourage compliance, it was proposed that partial or total non-compliance with such requirements should result in withholding the issuing of a progress payment certificate until satisfactory proof of compliance has been provided (DPW, 2004).

The proposed intervention strategies include HIV/AIDS awareness training workshops through a service provider, and preventative measures such as condom distribution, posters, and distribution of booklets. These were designed to raise awareness on HIV/AIDS, and equip the construction workforce with the knowledge to change attitudes and behaviour (DPW, 2004). The parties involved in the implementation of the programme are outlined in Table 2.3, as well as their role in each stage of the implementation process.

Table 2.3 Implementation process of the HIV/AIDS awareness programme

Stages	Contractor	Service Provider	Department's Representative	DPW
Procurement	Draft BoQ, select service provider, submit workshop plan and detailed BoQ		Evaluate and approve service provider, workshop plan and BoQ	Award tender
On-site Programme Implementation		Train awareness champion		
	Identify awareness champion			
		Conduct awareness workshops		
	Provide awareness materials on site; condoms, posters and booklets			
Monitoring and Evaluation		Provide reports to DPW's representative	Programme monitoring and evaluation against HIV/AIDS specifications and workshop plan	Submit checklist and service provider report to CIDP
				Issue or withhold payment certificate

(Source: DPW, 2004)

As shown in Table 2.3, the programme implementation process requires the interaction of four different parties. Each party has a responsibility to carry, with the contractor's main responsibility being to ensure that all the necessary requirements are met in accordance with the workshop plan and BoQ. The HIV/AIDS programme forms part of the contract and their costs of providing the programme becomes the client's responsibility. Based on the pilot projects undertaken, the cost of

providing an HIV/AIDS awareness programme was estimated to be between 0.12% and 0.8% of total project tender value. These costs differ, however, depending on a number of factors such as the number of workers, frequency of workshops, proximity of service provider (travelling costs), and proximity or availability of awareness materials (condoms, posters and booklets).

The initiative by the DPW was a major step towards an action response in the construction industry, but it cannot be construed to constitute a unified response. The goal of the HIV/AIDS strategy was to reduce HIV/AIDS infection rates in the industry and successfully manage the impact of the disease, but the proposed HIV/AIDS awareness intervention falls short on effectively managing the disease. It focuses more on reducing HIV infections among the workforce than managing already existing HIV infections. The DPW requirement is only enforceable under government projects, with the exclusion of contractors engaged in private sector projects. The extent to which the initiative has been enforced is also not known because there have not been any follow-up reports on the implementation and success of the initiative.

2.5.4 Private sector response to the HIV/AIDS pandemic

In the private sector, the South African Business Coalition on HIV and AIDS (SABCOHA) has been playing a key role in addressing the epidemic in the business environment. The organisation has been a leader in coordinating HIV/AIDS prevention and treatment strategies through research they have conducted. Evidence from the SABCOHA (2005) study reported poor responses from the building and construction industry, while at the same time the industry reported experiencing moderate to severe impacts.

Results presented in Figure 2.4 show the construction sector as the least responsive in implementing HIV/AIDS programmes in comparison to the mining, manufacturing and transport sectors (SABCOHA, 2005). In all provinces of South Africa, the Western Cape is the least responsive in implementing HIV/AIDS programmes.

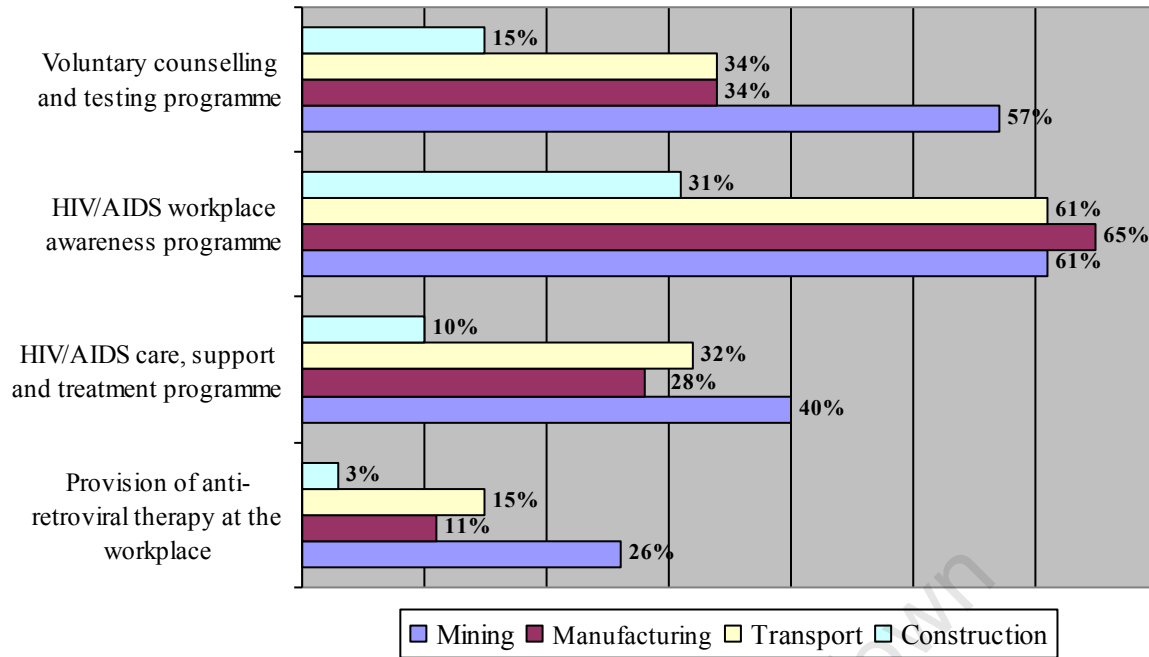


Figure 2.4 Implementation of HIV/AIDS programmes among different industrial sectors
 (Source: SABCOHA, 2005)

As shown in Figure 2.4, the most reported form of intervention in construction is the provision of HIV/AIDS awareness programmes. A review by Smallwood *et al.* (2001) of awareness interventions undertaken by general building contractors relative to HIV/AIDS, STDs and TB, reported the use of posters, awareness education through speakers, distribution of pamphlets and flyers, and the provision of condoms as the most prevalent interventions.

IOM (2010) reported an increase in responses which extend beyond awareness, among large construction companies. These responses were reported to be influenced by the government's HIV/AIDS awareness programme initiative. Companies reportedly make use of the services of CareWorks which is an independent HIV service provider that offers a comprehensive Presidential Plan for AIDS Relief (PEPFAR) funded intervention programme (IOM, 2010). Their programme includes training of peer educators; condom provision; information, education and communication materials on HIV/AIDS; stigma reduction; VCT and managing ART for HIV positive employees (IOM, 2010). A high rate of success was reported with the use of CareWorks, with an uptake rate of VCT reported to be between 55–80% (IOM, 2010).

However, the programme has limitations for temporary and casual employees in anti-retroviral therapy (ART) provision. This is because CareWorks offer treatment to employees on medical aid schemes, with the exclusion of temporary and casual workers who often cannot afford to be enrolled on a medical aid scheme (Dickinson, 2004b). If these workers test HIV positive, CareWorks will help to get them enrolled on governmental or NGO (non-governmental) services (IOM, 2010). Similarly, sub-contractor companies are unlikely to be covered by CareWorks for HIV treatment and care services because they largely employ casual workers (IOM, 2010).

2.6 Implementation of HIV/AIDS Treatment Programmes

The implementation of awareness, education and prevention programmes has been a significant initiative in reducing HIV incidence but these programmes are less effective in controlling the impact of existing infections in the absence of treatment programmes (Versteeg, 2004). Treatment programmes aim to manage existing infections and ensure the welfare of HIV-positive people, by improving medical care and support (George *et al.*, 2009). The following motivations for the observed increase in the provision of treatment services to employees have been identified by McDonald (2004), cited in George (2006: 182):

- *A maturing epidemic* – where employers are experiencing the financial effects of the epidemic, through rising absenteeism and staff turnover.
- *Falling costs of treatment* – falling costs of treating an HIV-infected person encouraging companies to consider providing treatment. As reported by McDonald (2004), the annual cost of treating an HIV-infected individual decreased from R48 000 in 1998 to under R10 000 in 2004.
- *Activist pressure* – civil society, trade unions, and NGOs lobbied governments to provide treatment to HIV-infected individuals. The corporate culture within southern Africa that supports provision of treatment has resulted in more companies developing health or wellness management programmes to treat their HIV-infected employees.
- *Government (ART) programmes* – the public ART programme by the South African Department of Health, announced in 2003 and first implemented in April 2004, prompted more companies to investigate the idea of providing such treatment to infected employees.
- *Corporate social responsibility* – the corporate sector, especially larger companies, encounter greater social expectations about their role in society. Companies are increasingly being held accountable not only to shareholders but also to employees and society at large.

Across different industrial sectors such as the financial, mining and manufacturing sectors, the construction industry lags behind in ART provision (Connelly and Rosen, 2006; Mahajan *et al.*, 2007). Among these, the mining sector took the significant step of large-scale ART provision for employees without medical insurance in 2002 (Dickinson, 2004a). On 6 August 2002, Anglo American announced drug provision to all employees based on the premise that it was cost effective and De Beers followed suit on 12th August 2002 (Dickinson, 2004a).

The mining industry has been a leader in developing innovative strategies, with HIV/AIDS responses extending to mining-houses and partnerships with trade unions, government departments, and other stakeholders (Bowler, 2004). Other HIV/AIDS programmes aim to provide support to employees' sex partners and commercial sex workers (Kelly, 2002). The De Beers programme extended the provision of ARVs to a limited number of the HIV-positive's family members (Dickinson, 2004a).

2.6.1 Models of workplace treatment programmes

The approach by which South African companies make HIV/AIDS care and treatment available to employees has been categorised into four models (Connelly and Rosen, 2006):

- *Employer provider* – where the employer finances and delivers treatment for HIV-positive employees using a 'closed' health insurance service (i.e. one designed only for employees and their dependents) and company clinic facilities.
- *Medical aid scheme* – where employers subsidise health insurance premiums for HIV treatment through 'medical aid schemes'.
- *Independent disease management programme* – where a specialised HIV/AIDS management company is contracted by an employer to manage the costs and treatment of HIV-positive employees: for example, Careworks.
- *Clinic provider* – where an employer contracts a medical NGO or general medical practitioner to provide HIV-related services either at the workplace or at an outside clinic.

In instances where the employer contracts an independent service provider or clinic provider, the employer pays the provider to deliver a set of health services (Zellner and Ilana, 2008). Another system that is increasingly becoming popular is where employers make treatment services available to employees through a referral system. In a study by Zellner and Ilana (2008), the referral system was made available to employees who could not afford medical insurance offered by their companies. Employees were referred to outside providers that can be public facilities or private providers. This method was most common among small companies, who relied on referrals for free or highly-subsidised antiretroviral treatment (Zellner and Ilana, 2008).

Utilisation of treatment models by companies differ. In a study of 52 of the largest South African employers, 10 companies reported the use of an independent disease management programme, 9 made use of the employer provider, and 6 made use of medical aid schemes (Connelly and Rosen, 2006). The remaining 27 companies offered treatment without a programme, but provided services with partial coverage through a medical aid scheme. Reed (2004) reported on mining companies heavily relying on medical aid schemes because of their comprehensive and exhaustive services.

Stein *et al.* (2002) support Reed's (2004) findings on the extensive coverage of HIV/AIDS services by medical aid schemes. These can range from HIV counselling; testing and education and information; treatment, screening and preventive therapy for HIV-related conditions, to beneficiaries having access to triple-therapy treatment which is the optimal anti-retroviral treatment; mother-to-child prevention therapy and post-exposure prophylaxis.

Even though medical aid schemes offer comprehensive services, there is a wide variation in relation to access of medical aid scheme benefits by workers (Bowler, 2004; Reed, 2004; Stevens *et al.*, 2004). In a study of HIV services provided by small to medium enterprises (SMEs), 58% of the companies surveyed offered medical aid benefits and 30% of the employees were enrolled. Of the 30% that were enrolled, 58% were managers, 33% skilled workers and 13% were unskilled workers (Connelly and Rosen, 2005).

While employees may have access to such schemes, it is expensive and unaffordable for lower levels of employees (Dickinson, 2004b; Reed, 2004). Medical aid costs can range between 17% and 18% of the salary for a family of four (Bowler, 2004). On the other hand, senior employees' medical aid benefits are often paid in full by the company (Stevens *et al.*, 2004).

A study of HIV/AIDS services in the workplace conducted in four Sub-Saharan African countries reported on-site services as the most popular form of HIV/AIDS service delivery (Zellner and Ilana, 2008). The described on-site services were similar to the clinic provider model that offered services for opportunistic infections (OIs) management, TB treatment, VCT, and ART treatment. Such services provide workers with immediate and convenient access to HIV/AIDS services but uptake of such services can be low due to fears of being singled out by other employees as HIV-positive when seen seeking these services (Zellner and Ilana, 2008).

2.6.2 *Benefits of treatment provision to workers*

When considering the provision of treatment to employees, companies need to think about the financial implications on the company. Evidence suggests that benefits of investing in treatment and care exceed the costs of paying for the services (Rosen *et al.*, 2000). Company risk assessments conducted show that the provision of ART has significant benefits (Setswe, 2009). Immediate benefits are measured in terms of deaths avoided, infections prevented, additional years of working life gained and retention of skills (Rosen, *et al.*, 2004b; Charalambous *et al.*, 2007).

Evidence from a Cote d'Ivoire study recorded the following benefits over a period of two years, after the implementation of a comprehensive HIV care and ART programme: a five-fold increase in company-based voluntary testing among HIV-infected persons; a 94% decrease in HIV-related absenteeism; an 81% decrease in HIV-related hospitalisations; an 8% decrease in new clinical cases of AIDS; and a 58% decrease in HIV-related mortality (George, 2006). In terms of costs, the savings to an employer associated with each death averted was estimated to pay for six to eight years of ART for an employee (Feeley *et al.*, 2004).

2.6.3 *Motivations for implementing HIV/AIDS workplace programmes*

Literature on motivating factors for implementing workplace programmes to combat HIV/AIDS is drawn from a study by Dickinson and Stevens' (2005) which reports on three case studies of South African companies.

The companies included chemical companies, information technology (IT) firms, and companies related to the health care sectors; each with over 20,000 South African-based employees. By reviewing the data and looking for common patterns and themes, they identified six factors that influence the response of companies to HIV/AIDS. These are, namely:

- **Legal requirements** – the presence of company legislation can govern and enforce responses to HIV/AIDS. Currently there are no legal requirements that force businesses to implement programmes focused on minimising the impact of HIV/AIDS on its workforce (DPW, 2004).
- **Voluntary regulation** – is when companies abide by one of the range of codes of good practice on offer or subscribe to one of the corporate reporting frameworks available, for example, the *ILO Code of Practice on HIV/AIDS and the World of Work*. Conformity is usually in line with expected requirements.
- **Business case** – involves weighing up relative costs of responding or not responding with sufficient managerial capacity and information.
- **Social pressures** – the relationships between business and almost all major social actors and the pressures exerted on business by the response or non-response of other businesses. For example, pressure from external stakeholders such as the Treatment Action Campaign (TAC) forced the government to embark on the national rollout of treatment to HIV-positive people. At a company level, Fakier, (2004) identifies these pressures as company pressure, investor pressure, and moral and social pressure.
- **Visibility of the disease** – the visibility of the disease or lack thereof, is a product of the biological nature of HIV/AIDS (long incubation period) and social and economic divisions within companies. Social (e.g. stigma and discrimination) and economic divisions are impediments to the visibility of the disease.
- **Internal individuals** – perceptions of personnel responsible for a company's response to HIV/AIDS. Financial and production management positions are more influential in deciding company priorities.

Voluntary regulation, visibility of the disease and perceptions of internal individuals were classified under internal pressures while legal requirements, economic performance and social pressure were classified as external pressures. The evidence presented in the Dickinson and Stevens (2005) study suggested social pressure as the most significant motivator.

Zellner and Ilana (2008) support these findings by reporting on multinational companies' responses being largely driven by social pressure to undertake corporate social responsibility. For example, a large-sized corporation selling consumer goods will be more vulnerable to damage to its public image than a small-sized company and will therefore be more likely to respond to the HIV/AIDS threat (Versteeg, 2004).

In contrast, Rosen *et al.* (2004a) reported managers' knowledge of the epidemic as a major motivation for action on a study of manufacturing firms in Nigeria. This entailed the managers' exposure to external information about HIV and knowledge of workers who were HIV-positive or had left the workforce because of AIDS (Rosen *et al.*, 2004a). Supporting evidence provided by Dickinson (2004a) revealed managers' lack of knowledge of a company's vulnerability as one of the major reasons for the slow responses to HIV/AIDS in South Africa. This means that if managers were aware of their company's vulnerability to HIV/AIDS, they will be more likely to respond to the disease.

Overall, Dickinson and Stevens (2005) concluded that external pressures have had an influence on workplace responses to some degree, but have generally been weak. An example of such pressure is the Global Reporting Initiative's HIV/AIDS reporting, which was developed to assist organisations in the reporting of their HIV/AIDS policies and programmes for the workplace and beyond the workplace (Fakier, 2004). These initiatives have generally been weak because they are limited to publicly-listed companies and their responses are largely driven by good corporate governance (Fakier, 2004). A more effective approach would be facilitated by the interaction of the internal and external drivers in the workplace environment.

2.6.4 Barriers to the implementation of HIV/AIDS workplace programmes

Several factors hinder efforts to provide HIV/AIDS programmes within organisations. The availability of free services through the government was reported as the major reason for not providing HIV/AIDS services in the workplace (Zellner and Ilana, 2008). This was reported by Zellner and Ilana (2008) in a study of multinational companies' responses in four Sub-Saharan countries. For SMEs, the following factors were identified for their failure to provide HIV/AIDS services to employees: lack of information and access to services, low willingness to pay for HIV/AIDS services, stigma, and lack of pressure to act (Connelly and Rosen, 2005).

A factor of considerable importance is the cost of providing HIV/AIDS services, which is often assumed to be too expensive for companies to realise (Zellner and Ilana, 2008). In construction, the cost of responding was estimated to be low enough to be included among the indirect costs for worker injury protection, insurance and emergency care without substantially increasing the total project costs (McGreevey *et al.*, 2003). The cost of providing a comprehensive HIV/AIDS intervention programme was estimated to range between 0.14–1.00% of the cost of a major construction project for a workforce with an HIV prevalence ranging between 1–10% (McGreevey *et al.*, 2003).

In terms of treatment provision, research has shown that treatment provision is mainly being offered by large companies, with smaller companies lagging behind (SABCOHA, 2006; Connelly and Rosen, 2006). As determined earlier in the chapter, construction has a significant portion of small companies, meaning that the problems being faced by SMEs in responding to HIV/AIDS could also be rife in the construction. Weston *et al.*, (2007) reports on the option for small companies to provide treatment to HIV-positive workers as not being economically viable, even in industries with high HIV prevalence. This is so because smaller companies are faced with competitive demands and therefore have limited time and resources to divert to health programmes (Weston *et al.*, 2007).

However, evidence suggests that the cost of providing ART per patient decreases with time. At Anglo American, the cost to the company of providing ART per patient during the first year was R29 294, but after the first year of the programme and the first year of an employee's treatment, the cost of providing ART decreased by more than half to R10 620 (George, 2006). This is because in the first year the patient had to go through initial treatment of opportunistic infections, pathology tests and frequent monitoring.

In the South African workplace, a high level of access to HIV/AIDS services has been observed but low uptake by employees is prevalent (Connelly and Rosen, 2006). The low uptake of services undermines attempts by companies to provide HIV/AIDS treatment to HIV-positive employees. A small multi-national company in Zambia which was offering on-site ART services highlighted the reluctance of employees to access ART (Zellner and Ilana, 2008). Low uptake of treatment services could be attributed to fears of stigma and discrimination, lack of trust among employees that the employer will not learn their HIV status, lack of trust of the service provider, and the newness of the programme (Day *et al.*, 2003; Connelly and Rosen, 2006; George, 2006; Mahajan *et al.*, 2007). Company managers' lack of sufficient knowledge to effectively ensure confidentiality of employees' status also hinders the implementation of HIV/AIDS workplace programmes (Chillag *et al.*, 2002).

2.7 Challenges faced by the Construction Industry

The challenges associated with implementing comprehensive HIV/AIDS programmes in the construction industry are more extensive than for other industries such as the mining and manufacturing industries. Unlike other industries, the construction industry deals with a constantly changing workforce of limited durations contract (LDC) workers on short-term contracts and permanent employees who move between projects (Dickinson and Versteeg, 2004).

Drawing on studies by the IOM (2010), the following reasons are cited for the industry's failure in implementing effective HIV/AIDS programmes for employees:

- ***Nature of Work*** – as one of the most dangerous lines of work with a high number of job-related accidents and diseases, difficult and dangerous working conditions, occupational hazards and the risk of physical injury renders HIV/AIDS a distant risk compared to these immediate challenges (IOM, 2010).

- ***Discontinuous Employment*** - the very nature of construction projects leads to more complications because most construction projects are once-off projects. This means that workers can either be laid off or be moved to a new project site, encouraging discontinuous employment, resulting in difficulties in managing and monitoring workers on an HIV/AIDS programme (Haupt *et al.*, 2005).
- ***Subcontracting*** - the presence of subcontractors on construction sites increases the complexity of developing effective HIV/AIDS strategies and interventions. It becomes difficult to target everyone employed on a construction project because workers have different types of contracts, employment arrangements, contract durations, remuneration, entitlements and benefits (IOM, 2010). Another problem arising from subcontracting is that it indemnifies the general contractor from the health and safety responsibilities, resulting in a lack of health benefits provision to workers. Subcontractors are unlikely to provide access to HIV prevention and care programmes because they have to compete with other companies to tender for a job. The inclusion of HIV/AIDS services is likely to increase costs and render them less competitive (IOM, 2010).
- ***Migratory Labour*** - the mobile nature of construction workers makes it difficult to implement HIV/AIDS programmes because existing HIV/AIDS programmes are mainly designed for a more settled population (IOM, 2010).

It is widely acknowledged that company responses to HIV/AIDS are shaped by differing motivations that, to some extent, determine the success or failure of an intervention (Dickinson and Stevens, 2005). An understanding of a company's motivations is imperative in making informed decisions towards providing an effective HIV/AIDS programme.

2.8 Conclusion

In order to understand the context of HIV/AIDS in the South African construction industry, an overview of the structure of the industry was first undertaken. It was established that the industry's contribution to the GDP is significant to the country's economic growth and therefore any impact on industry capacity will have an adverse impact on the country's growth. The industry's threat from HIV/AIDS is evident in the nature of its workforce. Construction is a significant employer of semi-skilled workers, migratory and informal labour, who present relatively high HIV prevalence.

Although the industry has presented a relatively high HIV prevalence rate, the reported impacts have been classified as small and moderate. There is a general awareness of the potential threat of HIV/AIDS on the construction industry, with attempts by both the government and private sector being driven by corporate social responsibility. What are most prevalent are awareness and prevention campaigns, with little attention on treatment programmes. One of the perceived impediments to providing treatment programmes is the cost factor, which is assumed to be high. However evidence suggests that the long-term benefits of providing treatment outweigh the costs. Going on further, this research will provide company-specific research to ascertain the availability of HIV/AIDS treatment programmes in a selection of Western Cape construction companies.

CHAPTER 3: An Opinion-Based Survey Research Design

3.1 Introduction

This chapter identifies and details the development of the research method to be used in the collection of data for this research study. A combination of an opinion-based survey and case study approach has been adopted for this research.

The chapter is divided into four sections. Commencing the chapter is a distinction between surveys and case study methods in order to provide a clear definition of what the two methods entail. As a preliminary to establishing and designing the research instruments for this study on HIV/AIDS in the construction industry, a critical analysis of survey-based research on HIV/AIDS in the business sector, for the period 2000-2010 is conducted. The analysis aims to highlight weaknesses that arise from this single-technique approach to research. The critical review leads to a summary of the major issues to be explored. The next section provides a justification for a combined survey and case-based research approach. In the final section is the development of the opinion-based survey research design.

The research design established will address the following research questions posed in Chapter 1:

- a) *What are the perceptions of HIV/AIDS as a threat to the construction industry?*
- b) *What are the responses of construction companies to HIV/AIDS in the Western Cape construction industry?*

The case study research design will follow in Chapter 5, after a presentation and discussion of the survey findings in Chapter 4.

3.2 Distinction between Surveys and Case Studies

According to Gable (1994:2) *“the survey approach refers to a group of methods which emphasise quantitative analysis, where data for a large number of organisations is collected through methods such as mail questionnaires, telephone interviews, or from published statistics, and this data is analysed using statistical techniques.”*

A case study approach, on the other hand, refers to a group of methods that emphasise qualitative analysis (Yin, 2003b). Gable (1994) asserts that data for case studies can be collected from a small number of organisations in the form of structured in-depth interviews or through participant observation.

An important point to understand is that the main purpose for carrying out surveys is to produce quantitative or numerical descriptions about an aspect of a study population, with the intention of generalising statements about the object of study (Fowler, 2002). Surveys ought to describe attitudes, opinions, behaviours as well as the relationships among variables, whereas case studies tend to be more descriptive and are likely to advance knowledge and understanding of a given topic (Yin, 2003a). Conclusions drawn from case studies are specific to the particular organisations studied and cannot be generalised to the study population.

The main distinction between surveys and case studies is in the method of analysis. Surveys rely on comparing cases and describing the characteristics of a set of cases while case studies rely on understanding the ‘wholeness’ of a particular case and understanding particular attributes of the case (De Vaus, 2002: 5). An example provided by De Vaus (2002) states that in a study of the causes of industrial disputes, a survey approach would focus on the attitudes of management and workers and a case study would concentrate on a particular factory or a particular strike.

In this research, the survey focuses on managers’ perceptions regarding the threat of HIV/AIDS to the company, and workplace responses to the pandemic. Case studies on the other hand focus on the implementation or non-implementation of HIV/AIDS treatment programmes within selected construction companies. In essence, the case studies are intended to provide richer, more comprehensive information about the measures being undertaken by construction companies in response to the pandemic.

3.3 Survey-based Approaches

In the following section a critical review of survey-based studies dealing with HIV/AIDS in the workplace published in peer-reviewed journals and reports for the period 2000-2010 is presented.

3.3.1 *A critical review of survey-based approaches*

Stevens *et al.* (2004) reported on results of a baseline and follow-up comparative cross-sectional study in 2002 and 2003, made up of 428 companies with over 50 employees. Telephonic interviews were conducted with managers who were responsible for HIV/AIDS in their respective companies. The study's areas of focus were: company responsibility for HIV policy development, prevention activities, absenteeism, access to medical aid schemes, and knowledge of the impact of HIV/AIDS on the firm. The study relied heavily on self-reports with lack of evidence to assess the accuracy of data, especially with responses regarding workplace policy development, reporting of absenteeism and access to medical aid schemes; all of which requires statistical evidence that was not readily available.

Connelly and Rosen's (2005) study focused on the demand side of the provision of HIV/AIDS services. They identified and evaluated constraints that small to medium enterprises (SMEs) encounter, in order to determine the extent to which these enterprises could be expected to implement HIV/AIDS programmes. Structured interviews were carried out with owners, managers or human resources staff of 80 SMEs located in the KwaZulu Natal and Gauteng provinces. The participants were selected on the basis that their perceptions influenced company decisions on the development of HIV/AIDS policies and programmes. The results obtained were subjective because they largely relied on recall and self-reporting with very few company records. The constraints identified could not be generalised to all the companies surveyed because the companies were not homogeneous. They had differences in terms of HIV risk, cost exposure and capacity. The study recommended a company-specific case study as a more informative approach (Connelly and Rosen, 2005).

In a study by Connelly and Rosen (2006), telephonic interviews were carried out with 52 private-sector and parastatal companies out of the 64 companies that were contacted, yielding a response rate of 81.3%. The aim of the study was to determine employees' access to HIV/AIDS care and treatment, enrolment in disease management programmes, and the companies' approach to financing and delivery of care. Even though a high response rate was achieved, it was reported that at least five of the non-participating companies had active treatment and care programmes in place. The non-respondents could have provided more comprehensive data that could possibly have altered the results of the study. Another limitation of the research was the reliance on anecdotal evidence that was largely based on estimates and guesswork. HIV prevalence figures, uptake figures and service utilisations reported by company representatives were based on estimates and could not be verified.

Cross-sectional surveys were conducted by Colvin *et al.* (2007) in 22 public and private sector organisations to determine the prevalence and distribution of HIV in South African workplaces. A weakness highlighted in the research was the likeliness of non-participation of HIV-positive employees or those who suspected they were HIV-positive. Employees on sick leave could not be included in the study. This meant that the estimates of HIV in the workforce could have been biased downwards. The Colvin *et al.* (2007) study went on to determine the factors affecting HIV prevalence at an individual and company level using multilevel modelling. It was concluded that HIV prevalence within an organisation was not entirely explained by the race, age and gender structure of the workforce but by some other factor associated with an organisation. This factor could not be determined by the study, but was recommended to be determined by a more comprehensive company-level study.

A study of four Sub-Saharan countries, namely, Ethiopia, Kenya, Namibia, and Zambia on HIV/AIDS services provision by 121 companies was administered through an online questionnaire by Zellner and Ilana (2008). The study explored the types of services being offered and how the services were financed. The method of administration of the survey using online questionnaires presents problems (Zellner and Ilana, 2008). There is no guarantee that the e-mails sent will reach the desired destination, or that they are read by the intended participant and therefore results were likely to be more indicative than absolute (Zellner and Ilana, 2008). In this study, a follow-up of in-depth interviews of company representatives was conducted to expand on issues raised in the survey questions.

In the same study, the study population targeted included human resources personnel and health care providers, with no information captured from employees (Zellner and Ilana, 2008). A significant limitation of underreporting could have occurred on questions that would have been more appropriate for other types of respondents. For example, data on the insight into the quality of HIV/AIDS services could have been more appropriately collected from the companies' employees because they are recipients of the services. The use of a single source of data limited further verification of the accuracy of data. No matching or comparing the data for accuracy could be done. The study focused more on companies' perceptions of their own HIV/AIDS services with no actual evidence presented to substantiate these opinions.

Bowen *et al.* (2008) analysed data from a testing programme carried out by CareWorks as part of their HIV/AIDS education programmes for construction companies. The sample of employees consisted of 10243 construction employees from 55 companies operating throughout South Africa. The analysis aimed to establish the degree of association between one or more of the risk factors and the occurrence of HIV/AIDS among construction firms. The sample consisted of large construction firms with the exclusion of small or micro organisations. The South African industry was grossly underrepresented in this study because small and micro organisations comprise 95% of enterprises in the construction sector (Bowen *et al.*, 2008). The findings therefore are not a true representation of the construction industry as a whole.

3.3.2 *Limitations of survey-based research approaches*

The research methods reviewed above made use of basic social science survey techniques. It is evident that not all researchers did so to a consistently rigorous standard, thereby raising several issues of concern. Some of the studies had the following limitations: inadequate sampling frame, sampling errors, and poor measurement and response rates, leading to generalised findings and conclusions which were not sustainable.

Being opinion based, surveys rely on self-reports and recall which are not backed-up by evidence and prone to bias. There is also a possibility of misinterpretation and misunderstanding of questions or of respondents giving socially desirable responses or being intentionally deceptive. Such errors go undetected in the survey results.

When conducting organisational surveys, careful selection of the most appropriate respondents knowledgeable about the subject matter of the research needs to be considered. Some respondents that are part of the population can be excluded and some that are not part of the population can be included in the sampling frame, presenting problems for the generalisation of findings. Underreporting occurred in studies where managers were asked questions that were most suited for employees.

Generally, the work reviewed for HIV/AIDS workplace programmes takes the form of general opinion surveys and lacks reference to specific programmes. Few, if any of the surveys, explored the nature of HIV/AIDS programmes available and participants involved. HIV/AIDS workplace programmes take place in the concrete environment of actual events and participant involvement. To attempt to explore this from an abstract stance, without reference to specific events, is unlikely to progress knowledge in the field of HIV/AIDS in the construction industry.

3.3.3 *Summary of issues*

The critical review of survey-based research into HIV/AIDS in the workplace has contributed to the body of knowledge but the lack of rigor in the research method tends to undermine the value of the findings. Specifically, the surveys have been found wanting in terms of issues such as:

- failure to provide hard evidence on the impacts of and responses to HIV/AIDS in the workplace;
- lack of seeing the workplace as an entity and reliance on a single source of data, usually managers' perceptions; and
- lack of company specificity and consequent lack of data richness.

Based on the recommendations by the researchers of the above studies, it can be concluded that opinion survey research alone cannot serve as an adequate technique for exploring HIV/AIDS in the workplace. Surveys are best suited for problem identification purposes and offering recommendations for solutions that can only be explored by the use of other research methods. This analysis leads to consideration of a combination of opinion survey and case-based study as an appropriate research technique.

3.4 Justification of a Combined Survey and Case Study Approach

Research designs that extensively integrate both fieldwork and survey research were uncommon in earlier years (Gable, 1994). More latterly the use of multiple and independent research methods is regarded as a way to maximise the amount of data collected to generate comprehensive and richer knowledge (Gable, 1994). Surveys and case studies are complementary methods of research that can be integrated to yield “rich” meaningful data (Gable, 1994).

Data that results from surveys usually require refinement to identify new possibilities because the work usually takes the form of general opinion surveys, lacking reference to specific subjects (Malhotra and Grover, 1998). Punch (2003) supports this view, regarding surveys as being provocative and a step on the way to explanation, leading to questions such as “how did this come about? Why are these issues related in this way?” Such questions arising from surveys can be further investigated by the use of a case study (Yin, 2003b).

In this research study, the case study will be used as an explanatory tool to provide a further, in-depth qualitative explanation of data gathered from the opinion survey. The direct experiences of participants, told in the form of stories through extended interviews, should yield more meaningful information than that obtained from survey questionnaires.

To summarise, several methods have been considered to collect the relevant research data. Relevant literature will be gathered from different sources of journal articles to identify the gaps in knowledge regarding the responses to HIV/AIDS in a workplace context. An opinion survey of construction professionals will be conducted to explore the perceptions of HIV/AIDS as a threat to the construction industry and the nature of HIV/AIDS programmes available. An in-depth analysis of case studies will be carried out in order to clear any misconceptions and substantiate perceptions. The methods for collecting data and analysis will be more qualitative than quantitative.

3.5 Survey Instrument Design

An online questionnaire survey was chosen as the survey research instrument. The questionnaires were administered through SurveyMonkey which is an online survey site that facilitates the design of surveys, the collection of responses, and the analysis of the data. The basis for selecting this research instrument was on the simplicity of administration at low cost. The location aspect of the research to be conducted in the Cape Town area was selected based on the researcher's access to construction companies operating within this area, other than a particular theoretical justification. Moreover, the basis for selecting the Western Cape region was not based on HIV prevalence because the region presents the lowest HIV prevalence among the South African provinces. However, the region's construction sector employs a significant number of employees. The Western Cape region emerges as the third largest employer in the construction industry, across all provinces.

3.5.1 Questionnaire design

A sectioned questionnaire was designed utilizing a mixture of closed, dichotomous, declarative and multiple-choice questions. Rating type questions used five-point Likert scales for indicators of importance. Using a seven-part structure, the survey questionnaire sought demographic information from respondents (e.g. category and size of firm, and number of permanent employees); explored company perceptions regarding HIV/AIDS as a long-term threat and the presence of an HIV/AIDS policy within the company; determined the existence and nature of HIV/AIDS awareness, prevention and treatment programmes; explored the relationship between HIV/AIDS and employees (e.g. disclosure of status and participation on treatment programmes); and company involvement in addressing the HIV/AIDS issue within the organization (e.g. support provided to HIV-positive employees, presence of medical aid benefits, perceptions of what constitutes the success of a treatment programme and perceptions regarding the financial viability of HIV/AIDS treatment programmes). The range of issues canvassed by the survey instrument was drawn from the background literature (see SABCOHA, 2004, 2005; Ellis, 2006; George and Quinlan, 2009). A copy of the questionnaire is contained in Appendix A.

3.6 Conclusion

In this chapter, several weaknesses of survey research methods have been highlighted to give a clear justification for a combined survey and case-based methodology. It is apparent that surveys are best suited for problem identification purposes and offering recommendations for solutions that can be explored by the use of other research methods such as case studies. This chapter has highlighted how the survey method and case study method can complement each other to provide more comprehensive data. The survey instrument design has been described. The following chapter deals with the administration of the survey instrument and interpretation of the survey findings.

University of Cape Town

CHAPTER 4: Survey Administration, Data Presentation,

Analysis and Interpretation

4.1 Introduction

The purpose of this chapter is to report and discuss the results of the web-based questionnaire survey. The survey was employed to answer the following research question:

- a) *What are the perceptions of HIV/AIDS as a threat to the construction industry?*
- b) *What are the responses of construction companies to HIV/AIDS in the Western Cape construction industry?*

This chapter is structured in three sections. The first section outlines the method of data collection, describing the sampling method, selection and size of the sample. The next section focuses on the limitations that were experienced in the survey. In the last section, data collected through the survey instrument are analysed and discussed.

4.2 Method of Data Collection

Purposive sampling was used to identify the participants in the survey. This method was considered appropriate for this type of study because the purpose of the survey is to identify and explore issues rather than show the extent of applicability of the results (Babbie, 2010).

The Construction Industry Development Board's (CIDB Western Cape) electronic database and the Western Cape Master Builders' Association (WCMBA) membership lists were used to identify potential respondents. The reason for selecting from these professional bodies was because companies that are members of such professional associations express professionalism by abiding by their duties and obligations. For example, it is required that members of the WCMBA possess the necessary technical qualifications, knowledge and practical experience according to the WCMBA membership 2009 directory. Likewise, CIDB members are required to recognise the dangerous nature of the industry and to give priority to the occupational health and safety of employees and the public (CIDB, 2003).

The aim of the sampling process was thus to identify formal sector professional construction companies who are likely to hold the value that the health and well-being of their workforce is part of their responsibility.

Sample selection and size

Contractors registered in Grades 5 to 9 inclusive on the CIDB electronic database, were considered for selection in the survey. These Grades are determined by the financial capability relating to the turnover history, value of completed contracts and available capital. Contractors registered in the Grade 5 category can tender for public sector contracts of a value not exceeding R6,5 million, Grade 6 not exceeding R13 million, Grade 7 not exceeding R40 million, Grade 8 not exceeding R130 million and Grade 9 has no limit (www.cidb.org.za).

Selected contractors were telephoned at random and asked to participate in the survey. Seventy-one construction participants agreed, 7 at Grade 5 level, 25 at Grade 6 level, 24 at Grade 7 level, 9 at Grade 8 level, and 6 at Grade 9 level. Similarly, members of the WCMBA were telephoned at random and invited to participate. Seventy-one contractors agreed to participate in the study. Various reasons were cited for those not taking part, with the majority citing a lack of time to undertake the survey due to busy schedules. Other individuals cited a lack of relevance of the study to the company.

Once contact with the construction participant was established, a formal invitation to participate was emailed to the potential respondent. The email included a URL link where the questionnaire could be accessed online. Upon emailing the URL link, a follow-up phone call was made to ensure that the e-mail had been received by the appropriate respondent. Constant reminders and follow-up phone calls were made upon receiving agreement from the potential participant.

The response rates were as follows:

	<u>Administered</u>	<u>Received</u>	<u>Response (%)</u>
CIDB	71	25	35%
WCMBA	71	17	24%
TOTAL	142	42	30%

The purposive sample of 142 respondents represents approximately 11% of the total population of relevant contractors in the Western Cape region. It is conceded that the survey respondents constitute a self-selecting sample that may hold strong views (one way or the other) about HIV/AIDS in the workplace. The sample size and issues of representativity of the sample are not thought sufficient enough to invalidate the survey data, because further qualitative research, using a case study-based approach, is intended to enhance validity.

4.3 Limitations of Survey

The process of attaining data commenced in May 2009 and ended in April 2010. The process proved extremely difficult given the sensitivity of the HIV/AIDS issue being explored. A relationship of trust needed to be developed with the participants. Confidentiality and keeping company names and respondents' names anonymous was stressed to the respondents upon initial contact as well as through the formal invitation. Securing company and respondents' names was intended for follow-up purposes only.

Considering that 30% of the companies approached actually responded, a selection bias may have occurred in the sample if the companies that participated were significantly different from the companies that declined to participate. In order to reduce bias, respondents who returned uncompleted questionnaires were urged to complete the questionnaire. Only completed questionnaires were considered in the analysis.

The use of questions that elicited peoples' perceptions has been another limitation of the survey. Such questions are prone to elicit answers that are more indicative than actual because respondents may provide acceptable and 'appropriate' responses in order to protect their company's credibility. The justification for including such questions was based on the subjectivity of the views of the respondents because of their influence on business decisions as management personnel.

4.4 Analysis of the Data and Discussion of the Results

The survey data was analysed using the Statistical Package for the Social Sciences (SPSS V17.0 for Mac) software application. Results were not weighted and therefore percentages stated relate to the responses to individual questions, unless otherwise stated. Where appropriate, cross-tabulation has been used to establish degrees of association between categorical variables; using the Pearson's Chi-Square test (or the Fisher's Exact Test where appropriate) at the 5% ($p=0.050$) level of significance. P values greater than 0.050 indicate no relationship between variables while p values smaller than 0.050 indicate a relationship between variables.

The questions and responses were divided into six categories, namely: demographic profile of company respondents; perceptions of HIV/AIDS as a long-term problem; existence of HIV/AIDS policies, awareness, prevention and treatment programmes; HIV/AIDS and employees, company involvement and HIV/AIDS; and the financial viability of treatment programmes.

4.4.1 Demographic profile of survey respondents

Company representatives completing the survey were varied, including human resources managers, financial managers, health and safety managers, project managers, engineers, managing directors and administration personnel. Out of a total of 42 respondents, 67% ($n=28$) occupied senior management positions and 33% ($n=16$) were administration personnel. In instances where administration personnel completed questionnaires, they solicited information from senior personnel knowledgeable about HIV/AIDS within the company.

In terms of the construction works category, the majority of construction companies surveyed are general building contractors involved in the construction of buildings (55%, $n=23$), followed by civil engineering contractors (26%, $n=11$). The least represented categories were specialist contractors, electrical and site preparation contractors, which were represented by only one respondent for each category.

Respondents were asked to report on the size of the companies that they represented. Size of company was determined in terms of both the number of permanent employees and the gross annual turnover. Using gross annual turnover as a measure, the size groups were divided into four categories as stipulated in the Stats SA business register (Stats SA, 2008). Table 4.1 shows their distribution.

Table 4.1 Size of company by annual turnover

Annual Turnover	Size	Percentage (%)
Less than R6 million	Micro	24%
R6 million to R13 million	Small	10%
R13 million to R26 million	Medium	24%
Exceeding R26 million	Large	43%

The majority of construction companies covered in this study is large companies. Table 4.1 shows that 43% ($n=18$) of the companies reported a turnover exceeding R26 million per annum. Micro and medium sized companies were represented by 24% ($n=10$) of the respondents, and small companies were represented by 10% ($n=4$).

The number of permanent employees was also used as a measure of company size because HIV/AIDS affects companies through the workforce. It is therefore arguably more appropriate to look at the relationship between the number of employees and HIV-related factors. Almost half (48%, $n=20$) of the companies employ less than 50 permanent employees and 24% ($n=10$) employed permanent staff exceeding 250. Companies employing staff in the intervening ranges (51-100; 101-150; 151-200; 201-250) were each represented by 5% - 10% of the sample size.

In view of the seriousness of the implications of HIV/AIDS on company profits and growth, the following section presents and discusses survey questions and responses pertaining to the perceptions of HIV/AIDS and responses employed.

4.4.2 *Perceptions of HIV/AIDS as a long term problem*

Respondents were asked to rate the perceived threat of HIV/AIDS as a long-term problem in the construction industry using the 5-point Likert scale question (1=not a problem; 5=a significant problem). A slight majority (55%; $n=23$) of the respondents perceived HIV/AIDS as a long-term problem in the construction industry. This finding is encouraging given the high prevalence of HIV in the South African construction industry (CIDB, 2003).

However, 10% of the company representatives were unaware that a problem exists even when it may already be having a negative impact on their company's profits and growth. Twenty-one percent of respondents were indifferent about whether HIV/AIDS is a long-term problem or not.

Relating the size of firm (by either measure) and perceptions of HIV/AIDS as a long-term threat to the industry did not show any association between the two factors ($p>0.050$) meaning that company size and number of employees does not influence perceptions of HIV/AIDS.

4.4.3 *Implementation of HIV/AIDS policies*

The literature highlights the importance of developing a formal HIV/AIDS policy when implementing a comprehensive response. In this study, 67% ($n=28$) of the respondents had developed an HIV/AIDS company policy of some sort or another. This finding contradicts the findings from the SABCOHA study which reported the implementation of an HIV/AIDS policy by less than a third of construction companies (SABCOHA, 2005). Interestingly, three out of the nine respondents who professed indifference about the threat of HIV/AIDS claim the presence of an HIV/AIDS policy.

As depicted in the literature, a comprehensive policy provides a framework for a company's response and should entail all aspects of HIV/AIDS which includes awareness, prevention and treatment. In this study, inconsistency in adopting a comprehensive workplace policy was reported, with few companies reporting the inclusion of prevention and treatment components in their policies. Table 4.2 presents results on the presence of an HIV/AIDS policy and its relationship with perceptions and size.

Table 4.2 Existence of an HIV/AIDS policy within companies

HIV/AIDS Policy	Overall Policy	Perceptions of HIV/AIDS as a threat	Size of firm (turnover)	Number of permanent employees
Overall policy (n=28)		$p=0.018$	$p=0.103$	$p=0.247$
Awareness policy (n=28)	$p<0.001^*$	$p=0.018$	$p=0.103$	$p=0.247$
Prevention policy (n=17)	$p<0.001^*$	$p=0.031$	$p=0.123$	$p=0.525$
Treatment policy (n=13)	$p=0.002^*$	$p=0.025$	$p=0.352$	$p=0.069$

Note: Pearson's chi-square test p -test value was used for cross tabulation analysis

* denotes Fisher's exact test being the most appropriate test.

With reference to Table 4.2, all of the respondents with an HIV/AIDS policy ($n=28$) reported that their policy entailed awareness. Sixty-one percent ($n=17$) of the policies entailed prevention and 46% ($n=13$) entailed treatment. It emerged that there is an association ($p<0.050$) between perceptions of HIV/AIDS as a threat and the implementation of an overall HIV/AIDS policy including all the components of a policy: awareness, prevention and treatment. This means that the perceived threat of HIV/AIDS to companies has most likely influenced the adoption of HIV/AIDS workplace policies. Company representatives that do not generally perceive HIV/AIDS as a long-term threat have not implemented an HIV/AIDS workplace policy. The results of this study support the findings of other studies which report on company responses being influenced by a representative's view of HIV/AIDS as a company problem (see Rosen *et al.*, 2004b; Dickinson, 2004a).

The results show a highly significant relationship between the presence of an overall HIV/AIDS policy and an awareness and prevention policy. The relationship between the adoption of an overall policy and a treatment policy is also significant at $p=0.002$. With respect to the degree of association between company size and the implementation of HIV/AIDS policies, there is no association between the two variables ($p>0.050$). This contradicts findings from previous studies (see SABCOHA, 2004; Dickinson and Innes, 2004) that showed a positive relationship between company size and the implementation of policies. Evidence from previous studies has indicated that large companies are more likely to implement company HIV policies than small companies (SABCOHA, 2004; Dickinson and Innes, 2004).

4.4.4 Implementation of awareness, prevention and treatment programmes

An HIV/AIDS workplace policy provides a good basis for programme implementation. Their successful implementation and continued communication to employees is a major driver of workplace programmes (SABCOHA, 2005). However, the implementation of a workplace HIV/AIDS policy does not always guarantee the adoption of HIV/AIDS awareness, prevention and treatment programmes.

Respondents were asked to report on the company's involvement in the implementation of HIV/AIDS programmes. The questions posed aimed to establish if the company had implemented awareness, prevention and treatment programmes, what the programmes entailed, or their reasons for non-implementation.

Table 4.3 shows the existence of these programmes in respondents' companies, and their relationships with other factors.

Table 4.3 Existence of awareness and prevention campaigns and treatment programmes

HIV/AIDS programmes	Percentage response	Perceptions of HIV/AIDS as a threat	Size of firm (turnover)	Number of permanent employees	Presence of overall policy
Awareness ($n=22$)	52%	$p=0.103$	$p=0.458$	$p=0.068$	$p=0.008^*$
Prevention ($n=14$)	33%	$p=0.200$	$p=0.261$	$p=0.315$	$p=0.015^*$
Treatment ($n=8$)	19%	$p=0.222$	$p=0.784$	$p=0.103$	$p=0.037^*$

Note: Pearson's chi-square test p -test value was used for cross tabulation analysis.

* denotes Fisher's exact test being the most appropriate test.

Interestingly, the results show no relationship between the perception of HIV/AIDS as a threat and the implementation of HIV/AIDS programmes. However, a significant relationship exists between the presence of an overall policy and the implementation of all three HIV/AIDS programmes ($p<0.050$), indicating that the adoption of HIV/AIDS programmes has been influenced by the presence of an HIV/AIDS policy.

Among the three forms of interventions investigated in this study, the most prevalent were awareness campaigns. Fifty-two percent ($n=22$) of the companies surveyed report their presence, followed by prevention campaigns that had been implemented by 33% ($n=14$) of the companies. Treatment programmes were the least prevalent, with only 8 companies (19%) reporting their presence.

With regard to HIV/AIDS policies, there seems to be little association between company size (of either measure) and the implementation of HIV/AIDS programmes. This contradicts findings from the SABCOHA studies, which shows a strong link between company size and the implementation of HIV/AIDS programmes.

The section below briefly describes the findings of in relation to each of the three intervention programmes, reasons for non-implementation and their relationships with other variables. Reference is made to Table 4.3.

Awareness campaigns

Various awareness campaigns exist in the various companies, which include: a one day course in safe sex and HIV/AIDS awareness for all employees and those on new contracts; annual workshops by CareWorks for all employees; confidential testing and counselling; monthly tool box talks, awareness posters displayed every second month and counselling and testing every 2-3 years; placards, pamphlets and condoms on site; once off campaigns by request from the principal agent; flyers and red ribbons handed out each year; and monthly sessions by health and safety officers as well as on-site training courses run by a local clinic. These awareness campaigns are similar to the ones identified by Smallwood *et al.* (2001).

With regards to the period when these campaigns were implemented, a reported 45% ($n=10$) were implemented after 2005 and 23% ($n=6$) were implemented in the period 2001-2005. This could have been spurred by the drive towards HIV/AIDS action in South Africa in the early 2000s. Twenty-seven percent ($n=6$) of the respondents were not aware of when the awareness campaigns were implemented. For companies that were not running any form of awareness campaigns, the most prominent reasons for not doing so were the absence of reported cases of HIV positive employees and the small size of the companies.

The absence of reported HIV/AIDS cases can be attributed to the invisibility of HIV/AIDS and fears of stigmatisation. Invisibility makes it difficult for employers to be certain that an employee is in fact suffering from the disease and fear of stigmatisation makes it difficult for employees to disclose their HIV status in fear of victimisation. Size of the companies in terms of number of permanent employees was considered a hindrance to the implementation of awareness campaigns. One respondent reported employing only two permanent employees and relying largely on subcontracted labour.

Prevention campaigns

There was a general belief shared by the respondents that their employees are well informed about HIV/AIDS and likely to prevent themselves from contracting the disease. This reflected on the provision of prevention campaigns that was reported by 33% ($n=14$) of the companies. Various open responses were given regarding the nature of prevention campaigns, which included: the availability of male and female condoms on all sites; education on safe sexual practices; confidential counselling and testing; training on condom use, post exposure, prophylaxis and the effects of alcohol abuse and smoking. The majority of these campaigns (5 out of 11) were implemented after 2005.

Besides the similar reasons that were cited for not implementing awareness campaigns, the following reasons were given for not implementing a prevention campaign: a belief that it is not necessary; lack of initiation; the sensitivity of the subject in the African culture; the presence of a link between the awareness campaign and prevention campaign; and lack of cooperation from employees when an HIV/AIDS survey was conducted. One respondent reported lack of cooperation by stating that '*you can lead a horse to water but you cannot make it drink.*' Some respondents simply highlighted their intentions of being pro-active in this regard in the near future.

Treatment programmes

The implementation of treatment programmes was reported by 19% ($n=8$) of the companies. This confirms the literature that highlights the construction industry's slow response in implementing treatment programmes. The SABCOHA (2005) study reported ART provision by 3% of the construction companies surveyed and a study by Connelly and Rosen (2006) of treatment at large

South African companies reported no ART provision by all 3 construction companies surveyed. In contrast, the SABCOHA (2010) study of the Western Cape business sector reported ART provision by 63% ($n=9$) of the construction companies surveyed.

Respondents' treatment programmes entailed the following: payment of AZT drugs (Azidothymidine – a type of antiretroviral drug); counselling and monitoring of HIV positive employees; a supply of antiretroviral drugs for 3 months to infected employees and thereafter a referral to enrol in the state programme and contracting out to CareWorks which is an external HIV/AIDS service provider.

According to results presented in Table 4.3, there is no association ($p>0.100$) between company size in terms of both the turnover and number of employees and the implementation of treatment programmes, nor to the perceptions of HIV/AIDS as a long-term threat (see Table 4.3). Table 4.4 shows the relationships between treatment programmes and the implementation of policies and other programmes.

Table 4.4 Relationship between presence of a treatment programme and policy implementation and other HIV/AIDS programmes

	Treatment Programme ($n=22$)
Awareness Policy	$p=0.037^*$
Prevention Policy	$p=0.004^*$
Treatment Policy	$P<0.001^*$
Awareness Campaign	$p=0.004^*$
Prevention Campaign	$p=0.010^*$

Note: * denotes Fisher's exact test being the most appropriate test.

As shown in Table 4.4, a relationship exists between the presence of a treatment programme and all components of an HIV/AIDS policy ($p<0.050$), with treatment policy presenting the strongest link ($p<0.001$). This finding reinforces the need for a policy to govern responses. Likewise, the implementation of awareness and prevention campaigns is related to the implementation of a treatment programme.

Different models of offering treatment services have been described in the literature, that include: the employer provider model, medical aid scheme model, independent disease management model; and the clinic provider model. Three percent of the respondents with treatment programmes reported managing the treatment programmes in-house. In this study, the in-house treatment programme is similar to the employer provider model.

The prominent reasons given for providing an in-house treatment programme was to keep the HIV positive employees healthy and productive for as long as possible and to retain the skills of the workforce. Other reasons include, creating a culture of goodwill to loyal employees, assisting with monitoring abuse of sick leave, creating a sense of social responsibility and reducing potential financial implications of HIV/AIDS on companies.

Various open ended responses for not having treatment programmes included: time constraints; lack of need; lack of employees coming forward; cost implications and lack of resources; small company; a change in management and therefore a change in thought process around HIV/AIDS; fear of stigmatisation of HIV positive people and lack of knowledge. One respondent from a small company reported an open door policy that provided referrals for treatment and advice on lifestyle choices. Another reported that they would be happy if someone introduced a programme. A health and safety officer reported having difficulties in getting management's involvement as their focus was on production. Contrary to management's lack of interest, one respondent reported that their efforts to offer assistance received little cooperation from employees.

4.4.5 *HIV/AIDS and employees*

Management's involvement and commitment is important in encouraging employees to engage with HIV/AIDS programmes and empowering them to know their HIV status (Rajak, 2010). In this study, only 33% of the respondents encouraged employees to know their HIV status. Questions were posed on the percentage of employees that respondents suspect of being HIV positive. The results are shown in Table 4.5.

Table 4.5 Respondents' assumption of HIV positive employees

Percentage of assumed HIV positive employees (%)	Respondents (% response)
None	24%
1 – 5%	26%
6 – 10%	10%
11 – 15%	10%
16 – 20%	2%
21 – 25%	0%
26 – 30%	0%
31 – 35%	0%
36 – 40%	2%
41 – 45%	0%
46 – 50%	0%
>50%	0%
Don't know	26%

As depicted in Table 4.5, the majority (26%) of the respondents suspected between 1-5% of their employees as being HIV positive and the other 26% of respondents claimed they had no idea. Only 4% of the respondents suspected more than 15% to be HIV positive. The reasons for their suspicions have been influenced by previous HIV tests that were carried out in the workplace and to some extent on the disclosure of HIV positive employees. One respondent commented “*I suspect 10% but I'm sure that there is more. We have seen an increase in deaths over the past two years due to natural causes. Prior to the deaths of these employees, their immediate supervisor and/or co-workers have witnessed weight losses.*”

4.4.6 Disclosure of HIV status

Disclosure of HIV status is an important aspect in the prevention, care, treatment and support for people living with HIV/AIDS (PLWHAs) (Ncama, 2007). It facilitates access to treatment and support services, but due to fears of discrimination and stigmatisation in the workplace, HIV positive employees seldom disclose their HIV status.

This is evident in this study which reports on a low level of disclosure by employees confidentially or publicly. Regarding confidential disclosure, 10 respondents (24%) reported that such disclosure has taken place, 31 respondents (74%) reported that none of their employees have disclosed their status, even confidentially, and 1 respondent claimed not knowing whether it happens or not. Out of 10 respondents that claimed disclosure, 6 reported disclosure by less than 5% of the employees and 2 reported disclosure by more than 50% of employees.

With regards to public disclosure, five respondents (12%) reported public disclosure having taken place. Three respondents claimed disclosure by less than 5% of the employees and two respondents claimed disclosure to be between 6% and 10%. Thirty-three respondents (79%) reported that none of the employees had disclosed their HIV status publicly and four respondents (9%) did not know whether it happens or not.

4.4.7 *Participation of HIV positive staff on company treatment programmes*

Compared to other treatment models, the in-house (employer) disease management model has been reported to be the best treatment enrolment at large companies (Feeley *et al.*, 2007). In-house treatment and independent disease management models achieved high uptake by employees in a study of treatment services of South Africa's largest employers (Connelly and Rosen, 2006).

The majority of the respondents (81%) reported non-participation of employees in treatment programmes and 5% reported not knowing of anyone participating. Another 5% of the respondents claimed participation of employees in the following percentage ranges: 1–5% and exceeding 50%. Two percent of the respondents reported participation to be between 36–40% and 46–50%, respectively.

Respondents were asked to rate the level of participation of HIV positive staff, on a 5-point Likert scale with 1=very low and 5=very high. Seven out of eight respondents that reported the presence of a treatment programme answered this question. Three respondents (43%) reported a high level of participation of HIV positive staff on company treatment programmes. Each of the remaining respondents reported very low, low, average and very high levels of participation.

Table 4.6 shows the relationship between disclosure and other factors such as the presence of awareness, prevention and treatment programmes and the participation of HIV positive staff on treatment programmes.

Table 4.6 Relationship between disclosure and other related factors

	Awareness Campaign	Prevention Campaign	Treatment Programme	Participation in Treatment Programme
Confidential Disclosure	$p=0.102$	$p=0.202$	$p=0.001$	$P<0.001$
Public Disclosure	$p=0.083$	$p=0.065$	$p=0.017$	$P<0.001$

Note: Pearson's chi-square test p -test value was used for cross tabulation analysis

A significant relationship exists between confidential disclosure and the presence of a treatment programme. Likewise there is an association between public disclosure and the presence of a treatment programme. Highly significant relationships ($p<0.001$) are observed between disclosure and the participation of HIV positive staff on a treatment programme. These results validate literature that looks at disclosure as a way of accessing treatment and support. Employees are likely to disclose their status either confidentially or publicly when seeking treatment. On the other hand, there is no association between the presence of either awareness or prevention campaigns and disclosure of HIV status as shown by $p>0.050$. This means that awareness and prevention campaigns do not facilitate or encourage disclosure.

4.4.8 HIV-positive staff remaining on treatment programmes

Successful ART treatment requires long-term adherence to prescribed regimens (Page-Shipp *et al.*, 2007). Contrary to other studies of ART uptake in the workplace that report on low levels of adherence (Dahab *et al.*, 2008; Miller *et al.*, 2010), this study reports a high level of adherence. Nineteen percent ($n=8$) of the respondents claim that more than 50% of HIV-positive employees remain on the treatment programme long term. Six percent claim adherence by 26-30% and 1-5% of HIV-positive employees, respectively. Fifty-six percent do not have staff remaining on the programme and 13% do not know.

4.4.9 Company involvement and HIV/AIDS

This section presents findings on the involvement of companies in HIV/AIDS interventions. The findings presented here outline the level of support that the companies offer to HIV-positive employees, the availability of medical scheme contribution policies, the allocation of responsibility of HIV/AIDS programmes, the level of commitment of a company towards the treatment programmes and the perceptions of the financial viability of running a treatment programme.

Support for HIV positive employees

Companies offer different support for HIV positive employees. These have been found in this study to include financial support, subsidised HIV treatment or therapy and nutrition or dietary supplements. The results shown in Table 4.7 indicate that the majority (14%) of the respondents offer financial support.

Table 4.7 Support for HIV positive employees

Form of Support	Yes (%)	No (%)
Financial Support	14%	86%
Subsidised HIV Treatment/Therapy	12%	88%
Nutrition/dietary supplements	10%	90%

Other forms of support include: promotion of a change in lifestyle, 50% subsidised medical aid with a treatment programme, providing time off to go for treatment, arranging for proper medical treatment and transportation to medical centres. One respondent made an interesting comment saying ‘*This survey has made us realise how negatively we are approaching the problem and we intend to appoint a dedicated psychologist to re-investigate our position.*’

4.4.10 Medical aid provision

Medical aid schemes are capable of offering HIV/AIDS services. The various options they offer range from HIV counselling; testing, education and information; treatment, screening and preventative therapy for HIV-related conditions; mother-to-child prevention therapy to post-exposure prophylaxis (Reed, 2004). Twenty respondents (48%) reported the presence of a medical scheme contribution policy and a similar number of respondents reported not having one. Four percent were unsure and did not know of the existence of a medical scheme contribution policy within the company.

Out of the 20 respondents that have a medical scheme contribution policy, 15 claim it to be mandatory and 5 claim it to be voluntary. Company representatives have no knowledge of employees receiving ART treatment through a medical aid scheme. This is because medical aid schemes are required by law to protect the rights of their members not to disclose employee's HIV/AIDS status (Department of Labour, Unknown). Likewise in this study there is no knowledge, by any of the respondents, of a medical insurer reporting anonymously to management on the number of personnel on HIV treatment.

4.4.11 Responsibility of HIV/AIDS programmes

In this study, it was revealed that the major responsibility of HIV/AIDS programmes lies with the health and safety officer, followed by human resources directors, managing directors and chief executive officers - see Table 4.8.

Table 4.8 Responsibility of HIV/AIDS programmes

Responsibility of HIV/AIDS Programme	Percentage (%)
Chief Executive Officer	12%
Managing Director	12%
Human Resources Director	21%
Health and Safety Officer	41%

Apart from the above-mentioned personnel, other personnel were also given the responsibility of HIV/AIDS programmes which included the company secretary, the financial manager, managing member, HR manager and general manager.

4.4.12 Commitment of company to HIV/AIDS treatment programme

The question posed on the level of commitment of the companies to HIV/AIDS treatment programmes, was based on a 5-point Likert scale questionnaire (1=very low and 5=very high). None of the respondents reported a very low or low level of commitment and therefore results given are for the three levels that the respondents answered. A total of nine respondents answered this question. Out of the nine, 3 claimed their commitment to be average, 4 reported a high level of commitment and 2 respondents claimed it to be very high.

4.4.13 Measure of success of treatment programmes

Monitoring and evaluation are important aspects of an HIV treatment programme in order to assess if the programme is having the desired effects. Respondents in this study measured the success of treatment programmes through various methods by: monitoring the CD4 count, assessing feedback from VCT, observing the health of staff members, monitoring absenteeism, receiving monthly reports and assessing the wellness and productivity of HIV positive employees. One respondent reported measuring success by recording the number of new cases of HIV/AIDS every year. Based on reports from the previous year, they had not had any new cases, indicating a measure of success. Another respondent reported on the positive impact of success stories and shared these at quarterly HIV facilitator meetings.

4.4.14 Financial viability of treatment programmes

Respondents were asked to give their opinions on the financial viability of their organisation to run an HIV/AIDS treatment programme.

Twelve respondents (30%) perceived the provision of a treatment programme to be financially viable. However, 14 respondents (35%) did not consider it viable and another 14 were indifferent and did not know.

The various reasons given regarding respondents' opinions on financial viability are presented in Table 4.9 as quoted.

Table 4.9 Reasons given for the financial viability of a treatment programme

Reasons for financial viability	Reasons against financial viability
<i>'Because of value added by our workforce.'</i>	<i>'Because ARVs, vitamins, lab tests all cost money.'</i>
<i>'It helps the company prevent skilled people from dying if treatment is taken adequately. The company can save money if they do not have to train new employees.'</i>	<i>'At the moment considering our size (20 employees), I am not convinced that it is a viable option until the economy improves leading to growth.'</i>
<i>'Our company employ skilled labour. It takes a few years to develop such a person. If he should become ill, then the company loses that skill.'</i>	<i>'It is of no value to the company. It depends on the size of the company and number of employees involved in the programme because if the numbers are very small it can be costly.'</i>
<i>'The less infections we have in our country, the fewer mortality we experience and the less we would have to spend on hiring and training replacement individuals.'</i>	<i>'It would not be financially viable according to management as the company would then instead of making money they would be spending money.'</i>
<i>'Knowledge of employee infection, motivation, employee wellness.'</i>	

4.5 Conclusions

The findings of this opinion-based survey research have revealed much of interest in the construction industry's response to HIV/AIDS. Most of the findings are based on opinions and claims by participants in construction and have been valuable in providing data on the nature and availability of HIV/AIDS programmes. Differences have been observed between construction respondents' perceptions of the HIV/AIDS threat and their responses in trying to manage the disease. What is apparent in this study is the focus of construction companies on HIV/AIDS awareness programmes. This serves as a confirmation of the literature with regards to the low availability of treatment programmes among construction companies. The data also revealed inconsistencies in construction respondents' perceptions of the financial viability of running a treatment programme.

Generally, the findings indicate a lack of comprehensiveness and immaturity regarding the implementation of HIV/AIDS programmes. This shortcoming highlights several issues of concern as to why this is so. A case-based company-specific investigation is appropriate in order to examine issues such as: the nature of treatment programmes and how they are implemented and why some companies have not implemented them. The following chapter describes the protocol framework for such case studies.

CHAPTER 5: Case-Study Approach

5.1 Introduction

In this chapter, the purpose and relevance of adopting a case study approach is established and the development of case-based research design is explained. The research questions to be addressed by the case study are looked at in greater detail, as noted in Chapter 1;

- a) *What are the barriers to the implementation of treatment programmes within construction companies?*
- b) *What are the benefits of implementing treatment programmes within construction companies?*

Impacting on the research questions are some of the issues identified through the discussion in Chapter 2 and the findings of the survey research reported in Chapter 4. This chapter first presents the main issues arising from the survey research that are to be further analysed by a case study, followed by a justification of adopting the case study as an appropriate technique. Concluding this chapter is the case study design that looks at the definition of the cases, selection of the construction companies, sources of data and the data interview requirements.

5.2 The Survey Issues to be Explored

The analysis of the survey data in Chapter 4 produced findings from which the following questions were identified for further exploration:

- a) What is the actual nature of available HIV/AIDS treatment programmes?
- b) How are treatment programmes being implemented by construction companies?
- c) Do the benefits of providing a treatment programme outweigh the costs?
- d) Why treatment programmes are the least implemented intervention?

Each of the issues described above have been discussed in the literature review in Chapter 2. The literature review identified the models available for implementing treatment programmes in the workplace in South Africa. It was established that the availability of treatment programmes was most evident in large companies who made use of an independent disease management company.

However, the survey was not sufficient enough to explore the actual nature of the treatment programmes implemented among construction companies and how the programmes were managed.

With regards to reasons for non-implementation of treatment programmes, costs were regarded as the major barrier hindering the provision of ART in the workplace. However, evidence from the literature suggests that the long-term benefits of providing treatment to employees outweigh the costs. In this regard, the case study attempts to establish first hand practices and experiences of construction participants regarding the costs and potential benefits of providing these programmes. The potential barriers to implementing treatment programmes will also be established.

5.3 Justification of a Case Study Approach

Thus far, this research has explored a theoretical understanding of the rationale behind HIV/AIDS responses in the workplace, the nature that these responses can take and their general application to the construction industry (Chapter 2). This has been followed by the consideration of a combined survey and case study research approach to collect the relevant data in Chapter 3. The results of the opinion-based survey on the perceptions of HIV/AIDS as a threat and the nature of HIV/AIDS responses of construction firms have been presented (Chapter 4).

Based on the issues arising from the earlier parts of the study, the literature review and the survey, the next step is to carry out a more company-specific investigation, in order to gain a more in depth of how available treatment programmes are being implemented and why they are the least implemented intervention. Looking at the insights gained from case studies by Schramm (1971), cited in Yin (2003a, p. 12), the essence of the case study is to illuminate a decision: why it was taken, how it was implemented and what the outcomes were.

The justification for using a case study approach is based on three components identified by Yin (2003b);

- a. The form of research question posed.
- b. The control of the investigator on behavioural events.
- c. The degree of focus on contemporary 'real-life' events.

In terms of the form or research question, Yin (2003a:9) proposes that a case study technique is relevant when a 'how' or 'why' question is being asked about a contemporary set of events over which the investigator has little or no control. Compared to other research strategies such as experiments or surveys, case studies provide the opportunity to focus on contemporary events, particularly in terms of organisational and management studies in "real life" situations (Yin, 2003b). Further, they do not require the researcher to have any control over behavioural situations, leaving the investigator free to act as an observer. The researcher therefore has a passive, rather than active role and is freed of the danger of imposing his or her influence on the case.

A case-study approach can also be justified on the grounds of data validity and the reliability of the data collection procedures. Yin (2003b) proposes the use of logical tests that have commonly been used to establish the quality of empirical social research. These are namely construct validity, internal validity, external validity and reliability.

Construct validity can be achieved by utilising multiple sources of data in order to establish correct operational measures for the concepts being studied (Yin, 2003a). Generally, case studies are perceived to be subjective because researchers can have close, personal contact with the research participants (Riege, 2003). Efforts therefore need to be made by the researcher to refrain from subjective judgements in order to enhance construct validity. This research study has made use of existing literature, survey instruments, cases study interviews and documents in order to facilitate construct validity throughout the process.

Internal validity on the other hand aims to establish a causal relationship, where a certain condition is shown to lead to another condition (Yin, 2003a). However, this does not mean merely reporting on the patterns of similarities and differences between respondents' experiences or beliefs. It requires exploring further to identify significant components for the examined patterns and the elements that produced them (Riege, 2003). This has been achieved through an inter-case analysis and pattern-matching of the findings. Internal validity was also assisted by ensuring that interview transcript summaries were subsequently checked for factual accuracy by the interviewees.

According to Riege (2003:81), “*external validity is concerned with the extrapolation of particular research findings beyond the immediate form of enquiry to the general.*” The case study approach on the other hand does not form a good basis for generalisation and has been criticised on this (Tellis, 1997).

In order to ensure external validity, this study will rely on the heterogeneity of construction companies within the various “size” levels. The relevance of this study will therefore be limited to other enterprises of similar size and structure in the construction industry (analytic generalisations).

Reliability refers to the extent to which findings can be replicated by other researchers using similar techniques and procedures (Riege, 2003). This is often a problem with case study research due to the lack of a systematic procedure to follow. The reliability of this study documented in this thesis is sought from designing and making use of a case study protocol and the triangulation of the construct validity, internal validity and the external validity.

5.4 Case Study Research Design

This section describes a protocol design for the collection of data from the case studies. It discusses aspects of the case units, the case selection, the nature of the information sought and the preferred analytical strategy.

5.4.1 Units of analysis

Yin (1994) stresses the importance within case study research of deciding upon the unit(s) of analysis. In this study, the definition of the case is a case study of construction companies in Cape Town and the units of analysis are the construction companies and company representatives. Company representatives in management positions provide the context within which decision-making regarding any HIV/AIDS intervention activities are made.

5.4.2 *Concerns of case selection*

Several points of concern have been addressed in the selection of cases. Among these are:

- Heterogeneity versus homogeneity of cases;
- Company location;
- Participants spread;
- Study approach;

Heterogeneity versus homogeneity of cases

The point of concern is whether the case study companies should be homogenous in nature, i.e., of similar type and size, or whether a heterogeneous approach should be adopted. The argument for homogeneity is the possibility of controlled comparisons i.e., small companies would be compared with similar companies of the same size and type. A counter argument for homogeneity would be whether the comparisons would be valid.

Justifying a homogenous approach to this case study research would be more appropriate using a deductive argument with an appropriate hypothesis, as suggested by Edwards (2001). For example, the selection of a particular company might be based upon a hypothesis which postulates that "...small companies are not likely to implement treatment programmes because of the presence of x and y factors." To test such a hypothesis, would require not only a representative sample of small construction companies, but a sample also representative in terms of similarities of other factors such as the scope of work, location, nature of employment, methods of operation, etc. The uniqueness of each company would be a confounding variable that might prove difficult to control.

This research explores HIV/AIDS intervention programmes in a construction environment, and is not concerned with practices of particular *types* of companies. This part of the research seeks data "richness" in terms of the personal stories, experiences and practices of construction participants and will then attempt to draw meaning from them through inductive reasoning. To that end it is not concerned with homogenous comparisons.

For these reasons, project heterogeneity is preferred. No attempt is made to limit the nature and scope of the case studies to any pre-determined characteristics of company size or scope of works. This allows a measure of randomness to occur in case selection, in that, individual building participants can be approached in their professional capacities and asked to take part in the study.

Company location

While the randomness referred to above is desirable, it is constrained by the researcher's ease of access to the head offices of the construction participants. For practical and logistical reasons, the companies to be investigated will be limited to the greater Cape Town area.

Participants spread

To attempt to include every participant in each case study would be impractical from a research point of view. In any event it is not part of the objectives of this research, which focus on the HIV/AIDS intervention programmes of construction companies. The participants were identified in Chapter 4 as including management personnel responsible for addressing HIV/AIDS. The case study interviews are therefore generally targeted at these participants, and any exceptions are noted in the analysis.

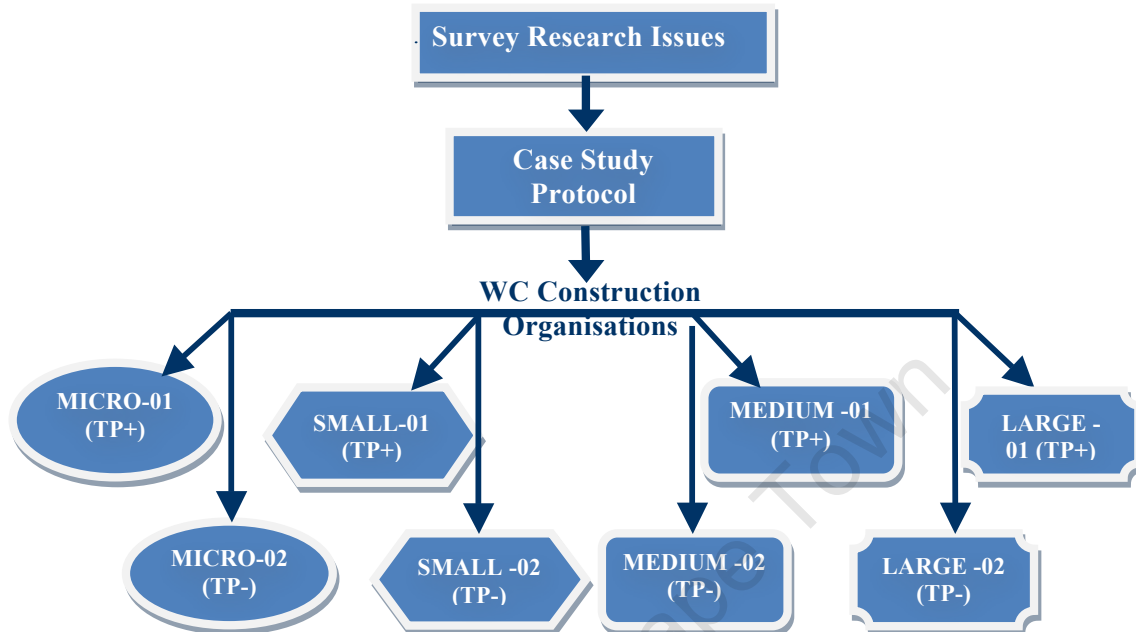
Study approach

The anticipated study approach will be that of recording of construction participant's "HIV/AIDS stories" through personal interviews. A well-structured and flexible question framework will be used to elicit information and the researcher will try to be impartial. Structure ensures that participants' perceptions are not overlooked while flexibility allows for sought-after data "richness".

5.4.3 Case selection

Little guidance exists regarding the number of cases required. Yin, (2003a) suggests that more than one is necessary, in order to provide adequate triangulation in terms of data validity. The most valuable advice offered was that the number should be sufficient not only to triangulate the data, but also to "saturate" the issues to be explored.

In the research described in this thesis, the researcher sought to maintain a balance in selecting cases to accommodate both homogeneous and heterogeneous groups of companies. The initial proposed selection of case studies was as follows;



Organisation size – based on gross annual turnover

TP+ = Presence of a Treatment Programme

TP- = No Treatment Programme

Figure 5.1 Case study design concept

The proposed selection of cases was designed to choose two construction companies from each of the four size categories (large, medium, small and micro), one with a treatment programme and the other without a treatment programme. Following the pilot survey conducted, selection was made on the basis of availability of participants and their willingness to be interviewed, which distorted the initial case study design. The final selection thus incorporated a degree of "accidental" randomness and as a result twelve case studies were selected.

5.4.4 Case interview data requirements

Much of the required data was collected through semi-structured face-to-face interviews with the key construction participants. The choice of selecting face-to-face interviews as the preferred method of data collection was because it offers flexibility in terms of question content and target population, and also generates higher response rates (Gubrium and Holstein, 2001). In the interview process, flexibility is likely to be a key factor in successfully capturing participants' HIV/AIDS stories.

The case study protocol was designed to provide a guideline for the material to be discussed in the interview in order to prevent any deviation from the main purpose. The nature of the questions was largely generic and addressed to all participants as set out in the Table 5.1 (See Appendix B for the detailed case study protocol). Each question was rationalised in terms of the research questions and issues noted in earlier chapters.

Table 5. 1 Case study interview design protocol

Organisational Element	Issues
Demographics	Size, gross annual , interviewee status, organisational structure
HIV/AIDS policies	Formal and informal policies adopted
HIV/AIDS campaigns (<i>awareness, prevention and treatment</i>) Prevention/Treatment programme benefits	Nature, employee involvement, effectiveness and cost assessments Organisational benefits, programme responsibility
Employee HIV status disclosure	Level of disclosure, confidentiality measures
HIV/AIDS stigmatization	Nature, effects, consequences, responses
Medical aid scheme data	Management data provision
Innovative approaches	Creative approaches

5.5 Analytical Strategies

According to Yin (1994), analytical strategies are methods employed to examine evidence collected in order to address the initial proposition of a study. These include:

- Illustration
- Agreement/difference
- Domain analysis
- Ideal types
- Content analysis
- Pattern matching
- Explanation building
- Time series analysis

Three strategies have been identified to be appropriate for case study analysis. A simple content analysis of the answers to interview questions was done, followed by pattern matching of the data in order to facilitate comparisons on an *intra-* and *inter-* company basis. This leads to explanation building, which informed the conclusions to be drawn. The other strategies were considered inappropriate. Illustration and ideal types of analysis intend to typify cases against a given norm, while domain analysis is appropriate for homogeneous groups of cases. Time series analysis requires data to be temporally linked on an inter-company basis. Any documentation provided has been incorporated into the case study analysis in Chapter 6.

5.6 Conclusion

This chapter critically looked at the case-based approach as an appropriate method to further clarify survey issues. Justification for using this methodology was undertaken along with the development of a case study-based research design. Furthermore, interviews were identified as the best method of data collection, using a structured, open-ended questionnaire. The main units of analysis were the appropriate construction participants identified through the survey. The strategy of case analysis comprised simple content analysis, pattern matching and explanation building, with inter-project comparisons. In the following chapter, the findings of the case studies that have been conducted will be discussed.

CHAPTER 6: Case Study Analysis

6.1 Introduction

This chapter presents the analysis of the primary data collected through the case study companies, together with an interpretation of the data and a discussion of the findings. The case study interviews were digitally recorded and transcribed. As noted in Chapter 5, the individual companies and company representatives form the main units of analysis, in the context of their organisational environments. After careful consideration of all 12 case study interviews undertaken, it was considered that 6 case studies would be sufficient to “saturate” the issues to be explored. Three companies offering treatment programmes and three companies without treatment programmes were considered. The selection was based on the quality of information provided.

The analytical strategies adopted include simple content analysis of the transcribed answers to interview questions. This involves analysing the case studies individually, commencing with a description of the company, followed by summaries of the interview responses of company representatives. The interview summaries follow the case study protocol, which looks at the presence of HIV/AIDS policies and provision or non-provision of HIV/AIDS awareness, prevention and treatment programmes. Other aspects of HIV/AIDS such as disclosure and stigma are presented, including challenges faced by companies and possible innovative approaches initiated. In some instances, company representatives provided useful information that did not follow the case study protocol. This information has been presented in the form of a “story”, explicitly highlighting their experiences.

Pattern matching of the data follows, in order to facilitate comparisons on an *intra-* and *inter-*company basis. All documentation provided by the company representatives has been included in the discussions.

6.2 CareWorks HIV Management Consultants

CareWorks, as described in the literature review, was included as an exploratory case study that was conducted to obtain an understanding of how an external service provider approaches the HIV/AIDS epidemic.

6.2.1 Company Description

CareWorks can be classified as a large company as it averages a gross annual turnover exceeding R25 million and employs between 51-100 permanent employees. The company's head office is based in Cape Town, with sub-regional offices in Johannesburg and Durban. The company has attracted a lot of international interest and owns an 80% share in subsidiary CareWorks Africa. The other 20% is held by EDFI, an organisation representing Development Finance Institutions of 15 European Union countries, which has provided funding for establishment costs. CareWorks Africa provides similar programs in five African countries.

CareWorks HIV Management is a South African healthcare company which was established in 2004. Its primary focus is on managing HIV/AIDS in the workplace and treating HIV-positive people on behalf of employers and medical insurers. The company exists to combat the spread of HIV/AIDS effectively by ensuring that those who test HIV-negative remain negative; by keeping those who test HIV-positive healthy and productive for as long as possible; and by positively influencing attitudes to break down the stigma surrounding the disease.

CareWorks operates as a "for profit organisation", offering the following products: a workplace based educational programme including usage of their InterACTIVE™ KAPture™ Tool (which is an IT-based system developed to automate, regulate and record activities conducted in the field), a treatment programme and a long term prevention strategy built around on-going management of peer educators. The programmes include various training interventions, each directed at the different stakeholders within an organisation, such as the unions, supervisory staff and senior management; counselling and testing; policy formulation; knowledge, attitudes and practices (KAP) surveys and communications strategies.

The treatment programme is designed to provide excellent and accessible HIV positive patient management using state-of the-art technology and expertise. CareWorks treatment programme offers drug and therapy management, pathology monitoring, outreach counselling, extensive administrative support and reporting (see www.careworks.co.za).

6.2.2 Interview Summary

An interview was conducted on the 10th of February 2011 at the head office in Newlands, Cape Town with Dr Kim Teversham as the company representative. The interview lasted one and a half hours. Dr Teversham is a medical director of CareWorks. His responsibilities in the company include overseeing the treatment programme, managing the clinical process, monthly reporting to clients, floor management and data management.

HIV/AIDS Awareness-to-Action Training, Counselling and Voluntary Testing (ACT)

The company has for the last 10 years been running their Awareness-to-Action Training, Counselling and Voluntary Testing (ACT) programme. The objective of the ACT programme is to create an environment through a number of focused activities, so that a high percentage of the employees of a client company can volunteer to have an HIV test and thereafter, to assist all of those who are HIV infected to register on an ARV treatment programme.

This programme provides essential HIV related training to all levels of staff within an organisation, ensures that appropriate policies are in place and provides all staff with an opportunity to have an HIV test. CareWorks realises the importance of management's support and therefore it is compulsory for all personnel, including those in management positions, to attend. In the field, dates are booked and confirmed and each site or office is given advance warning in preparation for the down time.

CareWorks deploys field teams which consist of a day manager, a medical sister and 3 counsellors to conduct the awareness workshop. The awareness workshop is a four and a half hour long process which consists of a 2 hour session on HIV/AIDS education for all employees. One team can process a maximum of 25 people at a time for the four and half hour session, meaning that they can process 50 people per day, 25 in the morning and 25 in the afternoon. Depending on the number of employees, the process can take a number of days.

Following the educational session is a one-on-one pre-test counselling session which enables participants to ask any unanswered or sensitive questions which could not be raised in a group context. This also helps in preparing for testing for those who choose to do so. After this, all participants are given an opportunity to go for testing. Participation in HIV testing is voluntary and confidential and as such CareWorks has adopted a bar-code system that has no direct links to any employee in order to ensure full anonymity of participants.

Dr Teversham reported challenges in earlier years, during the process of screening HIV positive people to get their CD4 counts. Earlier, the probability of collecting blood for a CD4 test was limited because of the potential of compromising confidentiality. This was because, after getting a finger prick HIV test, an HIV positive employee would have needed to have blood drawn from their arm for the CD4 count. The HIV positive employees could therefore have been easily identified because of a mark on their arm. In more recent years, an advance in technology allows for a CD4 count to be taken upfront, in conjunction with the HIV test, using a simple finger prick test.

Dr Teversham reports on the high rate of success achieved by the ACT workshops. This has been reflected by the high rate of HIV testing which has been reported to be an average of 85% of all participants attending the workshop. To date approximately 100 000 people have been tested, out of the 118 000 that have attended these ACT workshops.

After completing the ACT process, CareWorks provides a detailed report to the company managers on the number of participants and percentage of HIV positive workers per site and employment category, as well as suggested next steps for an HIV/AIDS Workplace Programme. The HIV status of employees is kept confidential on all reports to company managers. Only statistics are provided. Employees who test positive can provide counsellors during the post-counselling session, with details which will enable CareWorks to provide follow up counselling

and support. CareWorks also assists workers in accessing treatment through whatever disease management option that might be available to them (i.e. medical aid, company sponsored treatment, state clinic, etc). The bridging process of moving people from testing to treatment is initiated in less than 48 hours.

According to consolidated data from August 2007 to January 2011 provided by CareWorks, the skilled construction workers or technicians recorded the second highest HIV prevalence (16%) among the different job categories across all sectors. In the construction sector alone, the general workers presented the highest HIV prevalence at 21%, followed by the operators or drivers with a prevalence of 20% and the skilled construction workers with an HIV prevalence of 18%. The job categories presenting the lowest HIV prevalence were directors and senior management at 3%. These statistics present evidence of HIV levels in the construction workforce and especially among the relatively skilled workers.

CareWorks, in some instances, provides the education and testing services free of charge, made possible by the (US) Presidential Plan for AIDS Relief (PEPFAR). CareWorks was allocated a sub-award in terms of the PEPFAR Programme for the provision of various HIV-related services to vulnerable populations in the Construction and Mining Industries, in South Africa. The funding covers the CareWorks ACT programme, but was said to be available until January 2011.

HIV/AIDS Treatment Programme

CareWorks also offers HIV/AIDS treatment services to corporate clients as well as workers who are on medical aid. The CD4 upfront approach has been reported to achieve a far higher yield, in some instances as high as 75% of the workers take up the treatment services offered when counselled on their CD4 results at the time of their HIV test. However it has been sadly reported that for most HIV infected people with ready access to ARV treatment through private health facilities or the state, they only get to register on a treatment programme when they start to feel sick, which is often too late.

Dr Teversham pointed out that access to treatment services differs based on the financial capability of the company. Management personnel normally have a medical aid scheme and if treatment should be required, they are referred to their medical service providers. For permanent employees without medical aid, if the employees cannot afford to pay for treatment or the

companies are not willing to pay, they are often referred to the state programme. Dr Teversham reports that employees on limited duration contracts are seldom put on a private programme, but are referred to the state programme. At the time of the interview, no limited duration contract employees were registered on the private programme.

The average cost of providing treatment programmes was reported at R1 000 per employee per month for those receiving ARVs and R200 per month per employee for those not receiving ARV therapy. Using an example of a hypothetical company with 1000 employees, an estimated cost to a company can be calculated as follows;

If 85% employees get tested and an estimated 10% have HIV, it is therefore presumed that 85 people within the company will be confirmed as being HIV infected. If, for various reasons, 60% (n=51) of HIV positive employees are enrolled on the treatment programme and only 40% require immediate ARV treatment, the company ends up having 20 people receiving ARV treatment. The total cost such a company can expect to pay for running a treatment programme with 20 employees receiving ARV treatment and 31 receiving on-going monitoring (regular GP visits, pathology and counselling) can hypothetically be calculated at around R26 200 per month.

Regarding administration of ARV drugs, CareWorks courier the drugs to the employees. In cases where employees have openly disclosed to company representatives, the drugs might be sent to their company. CareWorks emphasises the importance of adherence to medication. They are fully involved in taking measures to ensure that adherence is practised. CareWorks operates a call centre of trained consultants in different South African languages in order to accommodate differences in ethnicity. Continued support and follow-up is provided telephonically in the employee's home language. Assistance such as sending transportation money through mobile phone banking and receiving it from the doctor is another way to ensure that drugs are collected.

An HIV steering company committee consisting of peer educators and management personnel is formed in every company to offer continued support and education. The HIV steering committee provides direction to the corporate HIV program. A high adherence level of up to 80% has been reported with employees on the private programme, which stems from the provision of good education and on-going support to those people receiving ARV's. However, no feedback is provided for employees on the state programme due to issues of confidentiality in the public sector.

Dr Teversham reported on the observed success of HIV/AIDS treatment services through reduced deaths, high rates of uptake of treatment, disclosure to fellow employees, compliance in taking of drugs and viral load suppression. A major deterrent regarding uptake of treatment services that was highlighted in this interview was the fear of job losses especially for those on the state programme. For workers receiving treatment through the state programme, they have to take time off to collect drugs and because of the poor service delivery at the public health centres, it may take a full day to collect drugs thereby compromising their job security. Employees on the CareWorks programme are offered convenience as their medication is delivered directly to them.

The CareWorks programme offers flexible services where an employee can request to get tested at any time. If the employee tests positive for HIV, CareWorks provides them with access to and support from a trained counsellor. CareWorks also facilitates sessions for HIV positive employees to receive counselling and advice along with their partners, to resolve issues such as fear of rejection from their partner.

CareWorks suggests that companies can readily assess the effectiveness of their own HIV programmes by asking themselves the following six questions:

- a. How many employees have received HIV training?
- b. How many employees have taken an HIV test and know their status?
- c. Of the employees who have tested HIV positive, how many are on ARV treatment programmes?
- d. Of employees who are getting treatment, how many are adhering to the medication?
- e. How many employees within the company have disclosed their status?
- f. Over a period of time, is there a reduction in the number of new HIV infections? i.e. is there evidence that the companies prevention strategy is working?

The answers provide a quick assessment of the adequacy of a corporate HIV programme.

Challenges faced by CareWorks

The construction sector faces a significant challenge when contemplating offering HIV/AIDS treatment services to their employees. Because it is a project-based industry, a high percentage of limited duration workers, and high mobility all impact on the cost/benefit of subsidising treatment.

For this reason, Dr Teversham described the construction industry's involvement to be more focused on prevention than treatment. He reported that some of the largest construction companies whilst very concerned about HIV/AIDS worry about the long term sustainability of the provision of ARVs. This reluctance for companies to offer treatment is mainly because of the anticipated high costs of treatment and the returns not being financially rewarding due to the factors noted above.

On the other hand, for some companies, the major incentive for providing these services might have been corporate social responsibility. It has also been recognised that many companies in the construction industry have incurred significant expenses in providing HIV related training and testing to employees who are only working for the company for a month or two and in situations where the company has no immediate benefit other than through their contribution to fighting the national pandemic. However there are a number of construction companies that do fund the provision of a comprehensive HIV program, including ARVs, for their permanent staff.

Another challenge that CareWorks currently faces is the loss of funding from PEPFAR. The national reduction in PEPFAR funding has had a negative impact on HIV management companies. By losing funding, it means CareWorks will have to offer the ACT workshop at a cost to companies. Since companies are reluctant to pay for HIV/AIDS services where up to $\frac{3}{4}$ of staff are employed on limited duration contracts, this could lead to a reduction of the provision of HIV/AIDS services within the construction industry.

6.2.3 Conclusion of Supplementary Case Study: CareWorks

The interview with CareWorks has provided information on the provision of HIV/AIDS services in the workplace. The company offers a comprehensive workplace programme from the discovery of HIV status to patient-management care and support. CareWorks emphasises the importance of HIV/AIDS education, and the importance of involvement of all employees at different levels within the company. Their observed high uptake of HIV testing has been attributed to these factors.

Statistics on HIV infection rates, drawn from the ACT workshop, provide a good starting point for companies to consider offering treatment services. Since CareWorks operates as a profit-making organisation, it allows them to provide good quality service and remain sustainable whilst still affording free ACT workshops. Information gathered from this interview provides a basis for the analysis of services offered in the construction case studies that follow.

University of Cape Town

6.3 Case Study 1

6.3.1 Case details

Name: Company A

Size: Large-scale construction company

Programmes: Provides awareness campaigns and a treatment programme

6.3.2 Company description

Company A is a Cape Town based company with an average gross annual turnover exceeding ZAR26 million. The company trades as a civil engineering contractor, employing over 1 000 employees. An estimated 60% ($n=600$) of these employees are contract employees.

6.3.3 Interview summary

Company representative

The company representative (CRA1) was interviewed and digitally recorded on the 15th of February 2011. The interview lasted approximately fifty minutes. CRA1 is currently employed as a company director and oversees Human Resources and wellness of employees. On the human resources side, the job entails overseeing and facilitating training, recruitment, selection and placement of employees, as well as being responsible for bursaries. With regards to the wellness of employees, CRA1's job is to manage the occupational health aspect and oversee the HIV/AIDS programme.

HIV/AIDS policy

The company has a formal HIV/AIDS policy which has been in existence since the period 1996/1997. The policy is reviewed annually. In terms of policy implementation, the company has a top-down, bottom-up approach. This means that top management draws up the policy with input from the employee representatives belonging to different forums (shop stewardship forum, employee representative forum and employment equity forum). The employees' concerns and issues are taken into consideration in the policy development.

The policy commences with a definition of HIV/AIDS and its implications on the workplace. It sets out its objectives which entail the following;

Promotion of a non-discriminatory work environment – the policy speaks against employees or a job applicant being prejudiced against, victimised or discriminated against based on their HIV/AIDS status. It ensures that all workers receive training and understand the realities and misconceptions of working with an HIV/AIDS-positive co-worker. The policy also advocates against unfair discrimination of HIV-positive employees on termination of employment, retrenchment, demotion, transfer or allocation of employee benefits.

Provision of HIV/AIDS awareness, counselling and testing – the policy sets out compulsory HIV/AIDS awareness training to be provided biannually to all employees by an accredited provider. Regarding HIV testing, an employee with HIV/AIDS is entitled to a legal right to privacy and is not required to disclose their HIV status to the company or other employees. However, if a person wishes to disclose his/her status to the company, this information may not be disclosed to others without the employee's express consent.

Provision of education and training – it is a requirement that education workshops be conducted to inform employees about HIV/AIDS and its transmission; company and employee rights; encouragement towards openness, acceptance and support for employees who voluntarily disclose their HIV status. The company ensures that management and first-aiders receive training on dealing with risks of occupational transmission of HIV and exposure to HIV. Company A encourages the use of employees who are openly living with HIV/AIDS in education, prevention and awareness programmes.

Promotion of a safe working environment – the policy ensures that the company provides a safe working environment without risk to the health of its employees. However, compensation will be granted to an employee who becomes infected with HIV as a result of an occupational accident.

Managing HIV/AIDS employees – the policy stresses the importance of treating HIV/AIDS like any other life threatening illness. Therefore, HIV-infected employees should continue to work under normal conditions for as long as they are medically fit to do so.

Workplace HIV/AIDS programme

The key elements of the HIV/AIDS Workplace Programme include the following:

- An impact assessment of HIV/AIDS on the company;
- HIV/AIDS awareness programmes;
- Voluntary HIV testing and counselling programmes;
- HIV/AIDS education and training;
- Condom distribution;
- Encouraging treatment for STI's and TB;
- Universal infection control procedures;
- Creating an open accepting environment;
- Wellness programmes for employees affected by HIV/AIDS;
- The provision of antiretrovirals;
- Education and awareness about antiretroviral and treatment literacy programmes;
- Counselling and other forms of social support for infected employees; and
- Monitoring, evaluation and review of the programme.

HIV/AIDS awareness and prevention campaigns

CareWorks initiated their ACT programme with the company in 2003. These have been conducted once every two years, to all employees, both permanent and temporary. Apart from CareWorks, the company conducts its own HIV/AIDS education campaigns on HIV/AIDS transmission, prevention of mother-to-child transmission (PMTCT), education on treatment and how the immune system works, opportunistic infections (OIs), disclosure and precautionary measures (they have Post Exposure Prophylaxis (PEP) kits which is an emergency medical response used to protect individuals exposed to the HIV virus).

CRA1 describes their approach to HIV/AIDS as proactive and fun, but at the same time highlighting the seriousness of the disease. They strongly emphasise the importance of looking after oneself and knowing one's HIV/AIDS status. As a form of an awareness campaign, they display HIV/AIDS posters provided by CareWorks and by the company on site. Every month they have a talk which covers different themes related to HIV/AIDS, such as STIs and TB.

Peer education is seen as an important part of HIV/AIDS education. As part of the CareWorks programme, the company has employees who were trained as peer educators. These are nominated and selected on the sites. CRA1 described them as the “*go to guys*” because they are well respected and trusted.

Effectiveness of HIV/AIDS awareness and prevention is measured using the feedback reports from CareWorks on HIV infection rates. The uptake of VCT has increased since the start of the programme. In 2010, 134 infected employees were reported, out of 801 employees who volunteered for testing. Among these, the majority ($n=95$) were limited duration contract employees. CRA1 reported that the new rates of infections have been below 1% for the past 3 or 4 years. In 2010, 3 new infections were reported. The company not only relies on CareWorks statistics, but also conducts their own in-house monitoring.

HIV/AIDS treatment programme

CareWorks is only involved until testing, after which the company takes over. The company has an independent supplier of ARVs and company doctors on each site. They approach a doctor, explain their programme and open an account with them. The benefits are explained to the employees in order to avoid them taking advantage of the system to get treatment for what they are not covered for. The company's treatment programme covers the majority (80%) of employees that are not on medical aid.

Having been diagnosed with HIV, employees who intend to receive treatment through the company's programme approach the director or the HIV/AIDS facilitator and express their intention to register. They then get tested for their CD4 count and viral load and depending on the combination of CD4 count and viral load, a decision is made along with the medical doctor as to whether the employees should take ARVs or not. If a decision is made to go on treatment, education on the use of ARVs is provided, including lifestyle changes.

Medication is delivered by hand to the sites, meaning that workers do not have to miss work while collecting medication at the clinics. This process takes about a month in order to deliver medication to all the sites, which is one of the reasons why they are provided with a 3 month supply of drugs. Each employee receives a box of tablets and a book for CD4 count recording and a doctor's or a pathologist's appointment. The company supplies Selenium which is an immune booster, and a gel for shingles and marks. A spread sheet of appointments is kept by the HIV management team, and when they deliver medication to the sites, they make follow-up appointments and take employees who are due for tests to the doctors. Employees are taken for check-ups every 3-4 months to check if they are complying with medication. The company receives scripts and records from the doctors to check on the progress of participants.

The number of employees who were on the programme as at October 2010 was 66, which amounted to 14.8% of employees on the payroll. The majority ($n=62$) who tested HIV positive were permanent waged employees. At the time of the interview, 65 employees were on the treatment programme out of 450 permanent employees. Seventeen percent of employees on limited duration contracts (LDCs) who are HIV positive were offered counselling and assistance to get enrolled onto the national ARV programme.

CRA1 reported on an upgrade of medication that was being administered, from 3 tablets to 1 tablet per day. Liver tests and other tests were carried out in order to assess compliance to the new ARVs. Employees who failed to comply remained on the old regime of ARVs. Employees administering ARVs are strongly recommended to comply with medication. Non-compliance to treatment is usually picked up from the CD4 count and viral load monitoring and warning signs of alcohol abuse. Their incentive for compliance is to keep the employees on the payroll, although there have not been any cases where an employee was dismissed due to non-compliance. Termination from the programme occurs when employees resign, die, retire or are dismissed. The programme offers flexible entry for new employees, who can request for testing to be arranged.

Disclosure of HIV status

Regarding disclosure of HIV status to fellow employees and management, this has been reported as one of their major accomplishments. When the programme started in 2003, out of 50 who tested HIV positive, 3 people came for treatment. Currently, disclosure of HIV-positive people

stands at 100%. About 80% of the managers know the people who are HIV-positive by their own disclosure. CRA1 feels that it is important for employees to be aware of HIV-positive people in order to look out for them. For example, if they operate machinery and have started a new regime of medication that can affect their performance, someone will need to be aware of it.

Benefits of providing HIV/AIDS services to employees

CRA1 stresses the importance of keeping the employees healthy and productive for as long as they can. Besides the benefits of a healthy workforce, CRA1 highlighted that it also makes sense in terms of costs. They have a fixed budget of between R300 000 and R500 000 per year, calculated against real costs of the programme's needs. It has been highlighted that offering an in-house programme is convenient and prevents employees taking time off to visit the doctors and waiting in queues for medication. Also noted is the change in attitude of employees towards the company and management. The employees are more trusting and do not question the company's intentions.

The company offers full commitment which extends immediately after an employee leaves the company for whatever reasons. An employee is supplied with 3 months stock of medication and reference letters from doctors regarding their treatment, with the intention of continuing treatment. If problems are encountered in enrolling on another programme, the company personnel assist in getting employees onto a programme. The success of the HIV/AIDS programme has been reported to be largely driven by management.

Innovative approaches to HIV/AIDS programmes

The company aims to keep the programme alive and has been coming up with innovative approaches. Due to emerging problems of young, educated people being HIV-positive, the company has launched an HIV/AIDS awareness initiative with CareWorks at a local university for aspiring construction professionals to get tested. The aim is to have a compulsory course on HIV/AIDS and attain a certificate after completion of the course. This is a drive for institutions to take a proactive approach to HIV/AIDS.

The company has been involved with education on HIV/AIDS in schools, communities and farms. They have been approached by schools and communities expressing their interest of becoming part of the company's programme but CRA1 highlights that there are problems when dealing with communities because of the large number of people involved. Management is involved in HIV/AIDS, attend HIV/AIDS seminars and are well informed on any developments in HIV/AIDS.

6.3.4 Conclusion of case study on company A

Based on the information drawn from the interview it can be concluded that Company A has a well-established HIV/AIDS workplace programme. The company has a comprehensive HIV/AIDS policy which facilitates the provision of awareness and prevention campaigns as well as treatment programmes. All aspects of the policy have been well translated into the HIV/AIDS intervention programme. Besides relying on an external service provider, company A also takes a proactive role in the education and training of employees. The company took a significant step of providing in-house treatment programme although these services are only provided to permanent employees.

Disclosure has been reported as the biggest success of the programme as it creates a culture of non-discrimination and acceptance of HIV/AIDS among the workforce. The company strongly acknowledges the involvement of management as an important factor which drives the HIV/AIDS programme. The company shows commitment and intends to extend their programme beyond the workplace to education institutions.

6.4 Case Study 2

6.4.1 Case details

Name: Company B

Size: Large-scale construction company

Programmes: Provides awareness campaigns and no treatment programme

6.4.2 Company description

Company B is a large company with the head office located in Johannesburg and regional offices operating in other provinces including Cape Town. The Cape Town office employs over 250 permanent employees, with an estimated gross annual turnover exceeding ZAR26 million. Their work category is mainly general building construction.

6.4.3 Interview summary

Company representative

The company representative (CRB1) was interviewed on the 23rd of February 2011. The interview lasted approximately fifty minutes. The CRB1 is employed as a human resources manager.

HIV/AIDS policy

The company has an employee wellness policy which covers dread disease, work performance, incapacity, education and prevention of HIV/AIDS and other dread diseases, confidentiality, grievance procedure, smoking policy and health and safety, among other things. On HIV/AIDS aspects, the policy acknowledges education as one of the most effective ways of reducing the spread of the disease. The company commits itself to providing on-going HIV/AIDS and dread disease awareness and prevention programme to all its employees, which involves distribution of informative posters and pamphlets.

Company B has a confidentiality clause in the policy, which provides persons with the right to privacy and confidentiality concerning their health and HIV/AIDS status. Furthermore, it states that employees with HIV/AIDS are under no obligation to disclose their HIV/AIDS status. However, if they choose to do so, precautions should be taken to ensure confidentiality and the employees' right to disclosure.

Policy development in this company takes a top down approach where executive directors develop the policy with no input from employees. Policy formulation is done by the head office in Johannesburg and adopted by the subsidiary offices in other provinces. The most recent revision of the policy was in 2010 after the merger of Company B with another company. The policy had last been revised in 2009.

HIV/AIDS awareness and prevention campaigns

As a response to the government's requirement, the company got involved in HIV/AIDS interventions in 2007 when it was required on government projects to have monthly reports on HIV/AIDS training and awareness, employees' attendance, cost budget and monthly cost reports. On a once-off basis, the company contracted an external service provider to conduct HIV/AIDS awareness and testing at the cost of about R55 000. Out of 360 employees who got tested, 8.9% ($n=32$) tested HIV positive. During that time, there was no budget allowance in an HIV/AIDS programmes but only on employee wellness.

Since then, the company has been conducting HIV/AIDS awareness workshops every 2 years for all employees through CareWorks free of charge. For the gap year that the company goes without an HIV/AIDS workshop, they conduct TB awareness campaigns. Depending on the number of sites and number of employees, the company sets aside 1 or 2 weeks for CareWorks to conduct the workshops on all construction sites. CRB1 describes the uptake of testing to exceed 90%. In 2010, out of 157 employees that attended, 150 received counselling and 135 volunteered to get tested.

As a requirement by the company's wellness policy, the company takes responsibility in issuing condoms on all sites, have posters displayed on the sites and brochures and pamphlets available in locker rooms. CRB1 expressed a problem they have been facing in outsourcing posters on HIV/AIDS. There has been a shortage in getting posters specifically for HIV/AIDS, as most of

the available posters have been for TB and STIs. The company had a site administrator who was a trained peer educator, whose job included going to the sites to encourage HIV positive people to come forward. He is no longer working for the company and they have no intention of replacing him.

A lack of interest in discussing HIV/AIDS in toolbox talks has been highlighted. The talks generally cover construction regulations and risk assessment issues. At times they also cover topics on sexual harassment. CRB1 highlighted that the personnel conducting the toolbox talks are junior foreman or cadets who are not qualified to talk about HIV/AIDS and are not well equipped to answer certain questions regarding HIV/AIDS. With this in mind, the CareWorks peer education training programme has encouraged the company to consider training all health and safety officers to become peer educators.

HIV/AIDS treatment programmes

After the testing in 2007, management had a debate about offering ARVs to employees because of different contracts of employees. It was going to be difficult to determine to whom to give medication because salaried employees have medical insurance while artisans register with the Building Industry Bargaining Council which does not cover HIV/AIDS. Another possible difficulty that management identified was how they were going to manage the process. Based on these challenges, a decision was made not to offer ARVs. The company has also not taken on the option of CareWorks offering ARVs to employees. Instead, CareWorks made arrangements to deal with the HIV positive employees directly at the employees' cost.

In terms of disclosure, CRB1 has knowledge of two employees that have openly disclosed their HIV status. One of the two advocates for other employees to know their status. CRB1 identified a lack of trust and fear of discrimination as being the major barriers to disclosure. Employees' not trusting management was identified as a hindrance by management because employees perceive that the company has a hidden agenda. The company's new drive is to try and change this perception.

No form of support is available for HIV-positive employees because of the confidentiality clause outlined in the policy. It would be difficult to keep the identity of the employee from other employees, especially the accounting department, because they account for all company's

expenses. CRB1 described it as '*opening a can of worms*,' which the company is not prepared to venture into. However, they are willing to offer assistance if someone comes forward. They advised CareWorks to inform them if any of their employees was having problems in paying for drugs or any other issues they can help with.

CRB1 emphasised confidentiality as a big hurdle in the company trying to offer assistance. The initial service provider had proposed to deliver drugs to the sites but there was a risk of everyone knowing and identifying the employees on treatment. Another proposal was for the company to pick the employees up at a secret location and take them to collect the drugs. The proposal was not realised because the other employees would notice a pattern of certain employees coming to work late with no complaints from management. With the current employee on HIV treatment, she puts in sick leave because she is a salaried employee. CRB1 highlighted that if it was an hourly paid employee it would present problems because hourly paid employees are paid per hour.

CRB1 suspects that a number of hourly-paid employees are missing work while collecting medication and seeking treatment. As indicated on the time sheets, they have been reported to be regularly taking time off work to seek medical attention from the clinics. However, HIV/AIDS cannot be ruled out as the cause as it could be other diseases such as TB or a chronic illness. A high rate of absenteeism has however been reported. Out of a total of 360 employees, 350 have been reported to have been absent from work throughout the year. They have been monitoring the level of absenteeism and if an employee is regularly absent, they call them in to further investigate the cause. If no valid reason is provided, they are taken for a disciplinary hearing. The company had an experience where one employee passed away after he got very ill. He had moved to the Eastern Cape. It was not confirmed that he had died of AIDS, but other employees merely suspected.

CRB1 perceives that offering HIV treatment to contract employees would not be financially viable because they move when the contract ends. There is also a lot of credibility with the service provider because they do not disclose the names of people on the treatment programme that the company is paying for.

Innovative approaches to HIV/AIDS programmes

Going forward, the company intends to involve health and safety officers on HIV/AIDS training which will form part of an induction programme. The induction programme, which is currently a work in progress intended for all new employees would also involve HIV/AIDS. This will be to ensure that they get a start-up in respect of the HIV/AIDS awareness and prevention programme.

6.4.4 Conclusion of case study on company B

Company B acknowledges HIV/AIDS as a business problem as highlighted by the inclusion of HIV/AIDS aspects in their employee wellness programme. However, a comprehensive response is lacking because there is no commitment to provide management and care for HIV-positive employees. Currently the company offers HIV/AIDS awareness and prevention through CareWorks free of charge. Costs which the company incurs are on the provision of condoms and educational material. The main reasons for not providing treatment services were the difficulty in managing the process, ensuring complete confidentiality from other employees, and also the difficulty in selecting which employees to offer medication to.

There is evidence of high absenteeism from weekly time sheets which the company uses for monitoring purposes. Employees who are regularly absent have also been noted, possibly suggesting that they could be missing work while collecting medication or for some other reasons. Offering treatment services is not considered viable by CRB1, due to the mobility nature of the workforce. This could also be another reason for the company not providing treatment services although CRB1 did not state it directly.

6.5 Case Study 3

6.5.1 Case details

Name: Company C

Size: Large-scale construction company

Programmes: Provides awareness campaigns and a treatment programme

6.5.2 Company description

Company C is a large company employing over 250 employees and earning a turnover exceeding ZAR26 million per annum. The company's head office is located in Cape Town and it has 3 subsidiary offices in Gauteng, KwaZulu-Natal and Port Elizabeth. The company has a department that is solely dedicated to the health and another to the safety of employees. They have an HIV/AIDS programme which has been integrated into the occupational health and safety initiative.

6.5.3 Interview summary

Company representative

The company representative (CRC1) was interviewed on the 22nd of February 2011. The interview lasted approximately one and a half hours. CRC1 has been a senior manager since 2006. The company representative expressed a great passion in including occupational health as part of the human resource responsibility and part of the CRC1's job is to oversee the HIV/AIDS programme.

CRC1 reported having gained experience from a previous employer where they were running a clinic. When CRC1 joined the company, they already had a service provider but it was not comprehensive. A proposal was put forward, which included a budget proposal to run a comprehensive occupational health programme, including HIV/AIDS.

The proposal was presented as a business case with projected costs of providing treatment against the current losses on absenteeism. The company accepted the proposal and settled on a budget which currently sits at R70 000 per year. CRC1 describes the company as having an employee-focused business model, which aims to keep them healthy for as long as possible so they can be productive.

HIV/AIDS policy

The company representative reported the presence of an HIV/AIDS policy. Formulation of the policy takes a top down, bottom-up approach, meaning that there is also input from employees in lower levels of employment. An employee unity forum which meets once every month provides a good communication platform between employees and management. A representative from each forum on each site brings forward issues and concerns from sites which are further analysed and discussed by management for consideration.

HIV/AIDS awareness and prevention campaigns

The company has combined HIV/AIDS education together with the annual medical examinations which are conducted every year for all construction employees. Medical examinations are conducted on an individual basis by a nurse, and therefore provide a platform for basic education on HIV. During the one-on-one examinations, the nurse can detect symptoms that could suggest that an employee is HIV-positive. In such cases, the nurse offers counselling and encourages employees to get tested or if they already know their HIV status, she encourages them to disclose their HIV status in order to receive assistance from the company. The nurse is qualified on life skills and safe sex education.

CareWorks has been contracted to offer HIV/AIDS awareness and VCT services. These are conducted once every 2 years. CRC1 reported that the ACT workshop conducted by CareWorks two years back achieved a high uptake rate of HIV testing. All employees from top management to labourers took up HIV testing. Although the workshop was successful, it was considered as time consuming as 20 employees were attended to per day at the head office. This meant that employees from the sites had to be brought to the head office.

The group training session was reported to have taken one and a half hours whilst testing was conducted individually. If an employee tested HIV-positive, they were informed about the CareWorks treatment programme and the extent of the company's cover. CareWorks was prepared to test all employees' spouses who were not in their employment. CRC1 reported that two girlfriends of their employees disclosed their HIV status and received assistance.

HIV/AIDS treatment programmes

CRC1 reported that the company currently pays for ARVs, which are posted directly by CareWorks to the employees. Monthly-paid employees who have comprehensive cover from their medical aid schemes are not included under the CareWorks treatment programme.

Providing ARVs through CareWorks has been reported to offer convenience for employees. As the CR describes as quoted "*there is no point for an employee to sit in a queue for 2 days for drugs that can be posted to him whilst sitting at home.*" In terms of costs, CRC1 reported that the monthly costs for ARVs which is currently at R900 per person per month does not compare to the daily cost that the company ought to lose if not offering treatment. An example was provided where the company can lose R520 per day for a supervisor waiting in a queue for medication. This amount can pay for almost half the medication. Besides that, the quality of drugs from the state programme causes serious side effects which can cause the employee to stay at home and cost the company even more.

CD4 count tests are conducted every 3 months and support provided through phone calls every month by CareWorks. The doctor's visits are done once every two years, unless the CD4 count is less than 200 and not in sync with the viral load. CareWorks provides the company a detailed breakdown of the CD4 count and viral load which can be traced to see if employees are adhering to treatment or not. The CRC1 is responsible for checking the reports and contacting CareWorks to follow-up on an employee if there is no improvement on CD4 count and viral load.

A nurse is responsible for lifestyle management of HIV-positive employees because constant monitoring is required. The company pays for her to conduct health check-ups on all employees on a monthly basis. These check-ups are necessary because of the high quality drugs which CareWorks administers, which have minimum side effects. CRC1 claims that when a person starts taking ARVs, their body weight starts picking up and on some instances there are problems

of weight gain and high cholesterol which will need to be managed. In one instance, an employee had to be asked to lose weight because he was getting overweight. Frequently they also need to be reminded of how their behaviour affects their lives when it comes to alcohol abuse and sexual behaviour.

In cases of transfers, CareWorks either posts the medication or the company organises to receive the medication, depending on whether the employee has disclosed their HIV status or not. If undisclosed to the company, CareWorks deals with them directly. In cases of resignation, the company offers 3 months' supply of medication until the employee can be placed on another programme. The company has an arrangement with CareWorks for employees that have disclosed their HIV-positive status to the company. If an employee is unavailable, CareWorks can ask the office to check on him. If an employee is uncontactable for 3 months, the employee will be taken off the programme and not receive treatment.

For the other offices, CareWorks does not offer treatment but makes referrals to the state clinics. It has been reported that in regions such as the KZN where employees have difficulties enrolling on the state program, CareWorks facilitates employees to get enrolled.

Disclosure of HIV status

Cases have been reported where employees have disclosed their HIV status confidentially to the nurse, and in turn disclosed to the human resources officer for assistance to get onto the CareWorks HIV/AIDS programme. It is known to the human resources manager that only 4 employees refused to disclose their HIV/AIDS status. Some HIV-positive employees have disclosed their HIV status to CareWorks and do not want the company to know. It is known that out of the 4 undisclosed employees, 1 is on treatment. CRC1 suspects that the reason for non-disclosure of 2 of them could be that they are in complete denial and 1 could be as a result of resistance to lifestyle change such as stopping drinking alcohol.

CRC1 was willing to share three different experiences which the company encountered. These have been reported below:

CRC1 reported an incident where an employee disclosed his HIV positive status to a fellow employee who is a manager. The manager in turn disclosed to the personnel responsible for HIV management. The manager did not take it well and was having a difficult time trying to deal with the situation to the extent that he had to receive counselling from Careworks.

Another reported incident was when an employee was in denial of his pregnant girlfriend's HIV status. The girlfriend had tested HIV-positive at the site clinic and he had tested HIV negative. After consulting with CareWorks, a full blood test was done which presented similar results. The couple received two sessions of counselling in order to help them accept and deal with the situation. CRC1 commends the work that CareWorks has done. The relationship they have created is one such that if they suspect any trouble with the employee, they can contact CareWorks to do a follow-up.

In the third incident, a site manager called CRC1 to have a word with an employee who was showing signs of illness. The employee had missed his medical examinations because of illness and therefore the company had not picked up any warning signs. CRC1 consulted with the employee, informed him about the programme and assured him that if he reveals his HIV status it shall be kept confidential. The employee was well known to CRC1 because he had been in their employment for a long time. He was informed about the importance of achieving a certain level of trust with the company. CRC1 described their approach as "*upfront and straight-up*". The employee took the decision to disclose his HIV-positive status and entered the programme. Upon testing his CD4 count, it was very low and he had to be placed on ARVs.

Benefits of providing HIV/AIDS services to employees

CRC1 feels that the HIV/AIDS programme is paying for itself because of the returns they are receiving. CRC1 states that if they had to replace some of the employees they would have to spend more than double the hourly rate than they are currently paying. The company has invested 5 years in training and patient management and care.

In terms of costs, the company pays a reported R900 per person per month including support for employees who are on ARVs, R200 per person per month for those not on ARVs for support only. Their biggest motivation has been purely business, to retain skills and keeping employees productive for as long as possible. Retaining skills is important due to the nature of the industry which does not attract the younger generation. As the interviewee puts it “*they do not want to get their hands dirty.*”

CRC1 is of the opinion that the provision of an HIV/AIDS programme is dependent on the company size, but believes that even with a limited budget there is something that under-resourced companies can do. They just need to explore their options.

Challenges faced by company C

The company is due to conduct their HIV/AIDS awareness workshop but with the recent news on the possibility of CareWorks losing funding for free voluntary counselling and testing, the company has planned to leave it until late this year to see if CareWorks can or will be able to get funding. CareWorks is looking to run an ACT at R450 per person and this is something the company had not budgeted for. A possible avenue would be to get the nurse to do the testing and get CareWorks to do the training process for employees. Another alternative would be to use the employees who were trained intensively by CareWorks to provide in-depth training for young upcoming employees and have refresher courses for existing employees.

CRC1 highlights that it is always a challenge to find ways to deal with employees who are not compliant with their medication. There is usually an overlap between the nurse and CareWorks on monitoring and that is when it is discovered that employees are non-complaint. They have an employee who has been openly HIV-positive for about 6 or 7 years. CRC1 reports that he drinks alcohol and does not adhere to treatment. He sometimes takes his medication when he is feeling sick. The company has threatened take him off treatment but he has not stopped his behaviour.

Another challenge is how to protect other employees from the potential risks of contracting HIV in the case of an accident, while maintaining confidentiality. CRC1 reported an incident where an HIV-positive employee got injured and had to be taken to the hospital by an ambulance. CRC1 reported that they actually did not know how to handle the situation but the safety manager secretly disclosed the employee’s HIV status to the paramedic.

CRC1 feels that no matter how many times people are educated about HIV/AIDS, behavioural change is difficult to manage. Television was highlighted as a great source of influence of certain kinds of behaviours such as multiple sexual partners which conflicts with AIDS education. Despite these challenges, what motivates the company to keep offering treatment is the physical transformation that they see from an employee being very ill to regaining their strength after getting treatment.

Innovative approaches to HIV/AIDS programmes

The company has connected CareWorks with their business school in order to provide HIV/AIDS education as part of life skills. The interviewee feels that HIV should be treated like any other disease, but that society has shaped it to be a special disease. CRC1 advocates that the government gets more involved in getting people enrolled on the state programme.

CRC1 organised for the researcher to have an interview with one of their employees who is currently on the treatment programme. This interview was done upon the employee's consent and it was kept confidential from the other employees. This has been reported below.

Report by an HIV positive employee (conducted through an interpreter)

The interview commenced with employee's general information, progressing to aspects of HIV/AIDS. It lasted for 15 minutes.

The employee has been employed by the company for 6 years. When he started, he was a general worker, but is now working as a forklift operator. He went through training and holds a certificate which is renewed annually and is now classified as a skilled worker. He discovered that he was HIV-positive 4 years ago after he fell ill and went to one of the public hospitals where he was tested. When asked about his feelings after discovering his HIV status, he described that he did not know what was happening or how he was going to deal with it. He however was not angry or upset. He disclosed his HIV status to his family which accepted and took it well. His wife also went for testing and the results came out HIV-positive.

Within the workplace, he disclosed his HIV status confidentially to senior management after the CareWorks testing and education workshop in 2009. In the same year, he joined the CareWorks treatment programme and has been receiving medication through the post at his house. He has regular check-ups with the nurse who provides advice on lifestyle changes, and reports that he has not changed his diet but has reduced his drinking habits. The employee feels that the company is being good and helping a lot because there has been improvement. Previously when he was receiving treatment through the state clinics, he had to wait for long to get medication. He hopes to continue with treatment even after he retires.

6.5.5 Conclusion of case study on company C

Company C provides a comprehensive HIV/AIDS workplace programme through CareWorks. Their services range from education, awareness and testing to patient management and care. HIV/AIDS forms part of the companies' primary focus because they have dedicated people managing the programme in-house. The proposal to have an HIV/AIDS programme was presented as a purely business case highlighting the costs of providing treatment against their current losses on absenteeism. The company acknowledges the financial viability of the programme and confirms that after years of providing treatment, benefits of implementing a programme outweigh the costs.

The way they administer ARVs is more on a needs basis because they are available to contract hourly-paid employees who generally do not have medical aid and cannot afford to pay for medication. Their main motivation for offering an HIV/AIDS programme was to keep employees productive for as long as possible. Another motivation was to offer the most convenience, while at the same time saving on absenteeism costs.

6.6 Case Study 4

6.6.1 Case details

Name: Company D

Size: Large-scale construction company

Programmes: Provides awareness campaigns and no treatment programme

6.6.2 Company description

Company D is a large company employing permanent employees in the range 165-170 in the Western Cape region. The company is currently employing 110 contract hourly-paid employees, out of whom 35 are general workers and the remaining employees are artisans, team leaders or cadets. The company employs subcontractors for specialised work. Their average gross annual turnover exceeds ZAR26 million, making it a large company. The general structure of the company includes the managing director and 4 executive coordinators in senior management positions, operations managers (site-based personnel) and a support team which includes human resources, estimating and procurement, and health and safety departments. The company has other offices in other provinces of South Africa, with the head office in Johannesburg.

6.6.3 Interview summary

Company representative

The company representative (CRD1) was interviewed on the 21st of February 2011. The interview lasted approximately forty minutes. The position held by CRD1 is that of a human resources manager which includes recruiting and retrenchment among general human resources responsibilities. CRD1 has been employed with the company for 6 years.

HIV/AIDS policy

CRD1 reported the presence of an HIV/AIDS policy, but has no knowledge of what the policy entails. Policy development takes place at the Johannesburg head office. It takes a top down approach with no input from the employees.

HIV/AIDS awareness and prevention campaigns

CRD1, reported employing a once-off HIV/AIDS awareness campaigns on World AIDS Day. On this day, posters and banners are displayed on all construction sites. Currently they have TB posters on site and no AIDS posters. Free condoms are issued on the sites by the health and safety officer who is responsible for sourcing them out from an external service provider.

The company once initiated an awareness workshop that was conducted about 4 or 5 years ago. The company had an AIDS week campaign which involved an industrial theatre showcase on HIV/AIDS on all the construction sites. Voluntary HIV testing was also conducted for employees, including subcontractors working on the site. The results were sent to Johannesburg and treated as confidential. No statistics were provided to offices in other regions. CRD1 describes the motivation behind this workshop as a reaction to the general drive for companies to act against HIV/AIDS at the time. The company which conducted the workshop had approached them (*the interviewee does not recall the name*).

CRD1 described their workforce as AIDS 'naïve' because they seem to be relatively healthy. The company is aware of their employees on site such that if anyone is missing work or drastically losing weight, they will be quick to notice it. CRD1 reports that they do not have employees dying or getting ill. CRD1 attributes this to the stable nature of their employees. It has been reported that they are not transient. They reside in Cape Town with their families because most of the work is concentrated in the great Cape Town area. Besides that, the interviewee highlights that their employees are artisans and cadets who are either averagely educated or studying and working.

In response to not having an HIV/AIDS programme, the interviewee highlighted that the company has a different focus and that no need has arisen yet. They currently have no future plans for retesting. The reason for their initial testing was because of the drive for companies to take action but that has since not been an issue.

CRD1 reported never having any requests from an employee for any support regarding ARVs, counselling or financial support. However, employees receive support through ICAS, which is a provider of employee assistance, wellness and wellbeing, as well as behavioural risk management services and critical incident support (see www.icas.co.za). Their services for employees include psychological counselling for employees and their dependants; life management which offers telephone information and assistance on legal problems, financial concerns and family matters; eCare online services which provides employees access to health and wellbeing information. They offer free telephone counselling and emotional support and if a consultant feels that the employee needs to have a one-on-one consultation, a referral will be made. The first few sessions are free after which the employee would have to bear the costs.

ICAS also offers a wide range of in-house programmes which include HIV/AIDS, training interventions and healthy living programme. Their HIV/AIDS services include policy development, VCT campaigns, assessment services, employee and managerial training as well as peer educator training. The company has not taken the option of making use of these services in order to provide an HIV/AIDS programme. Information received by the support staff is not reverted back to the offices, meaning that if an HIV-positive individual is receiving assistance, on ARV treatment or CD4 count tests, the company has no knowledge of this because it is strictly confidential.

CRD1 believes that if they had HIV-positive employees who needed their assistance, they would support them. CRD1 has knowledge of 1 employee with TB who receives support from the company through getting time off to collect medication and not being penalised for it. The company has a contracted company clinic where all employees get their entry and exit medical check-ups as company policy. The company has a budget for the medical examinations, which is included in the work which they tender for. However, there is no inclusion of HIV/AIDS education or testing offered by the clinic.

6.6.4 Conclusion of case study on company D

Company D is a well-established large company operating in all provinces of South Africa. HIV/AIDS is not considered as a threat to the company as indicated by the reluctance to implement an HIV/AIDS workplace programme. The primary reasons for not providing HIV/AIDS services is the lack of visibility of the disease as no HIV/AIDS cases have been reported. The company's response has been a reactive rather than a proactive approach, with a once-off awareness campaign. However, the company could be indirectly providing support for HIV-positive employees through ICAS.

University of Cape Town

6.7 Case Study 5

6.7.1 Case details

Name: Company E

Size: Large-scale construction company

Programmes: Provides awareness campaigns and a treatment programme

6.7.2 Company description

Company E employs over 250 employees in Cape Town, with an estimated 1 600 employees across South Africa. Of the 1 600 employees, 800 are permanent and the other 800 are contract workers. Among the permanent, 500 are monthly-paid skilled workers and 300 are hourly-paid semi-skilled labourers who move between sites. The majority of the contract workers are unskilled or semi-skilled workers who are employed from the local areas in the sites. The gross annual turnover exceeds ZAR26 million, making it a large-sized company. The head office is situated in Cape Town. The company embarks on both public and private projects nationally in other provinces, with the majority of the projects being civil structures. They are also involved in commercial as well as industrial building projects.

6.7.3 Interview summary

Company representative

The company representative (CRE1) was interviewed on the 24th of February 2011. The interview lasted approximately 1 hour. CRE1 is employed as a director who is responsible for organisational development. About 80% of the work includes human resources management.

HIV/AIDS policy

CRE1 reported the presence of an HIV/AIDS policy which was implemented in 2002. The last revision was done in 2009. CRE1 was involved in the reviewing process of the policy. The nature of the policy formulation and development has been reported to take a top-down approach where top management develops the policy without input from the lower level employees.

The policy acknowledges the seriousness of HIV/AIDS, highlighting the implications it has on individuals, families, business, managers as well as the co-workers of those affected. The policy was drawn up with the intention of providing positive strategies to address HIV/AIDS in the workplace. Company E commits itself to addressing HIV/AIDS in a positive, supportive and non-discriminatory manner with the cooperation and participation of all members of the board of directors and employees.

Objectives of the HIV/AIDS programmes are summarised as follows:

- Education and prevention – basic knowledge of HIV/AIDS and prevention;
- De-stigmatisation – eliminating discrimination against people with HIV/AIDS;
- Empowerment – provision of information on rights of and services available to affected employees; and
- Occupational education – protection of employees potentially exposed to HIV/AIDS.

The HIV/AIDS policy sets out that all HIV/AIDS positive persons have the right to confidentiality and privacy concerning their health and HIV/AIDS status. Additionally, the policy states that an employee is not required to disclose his/her HIV/AIDS status to the company. However, if such an employee decides to disclose his/her HIV status to a colleague, supervisor or manager within the company, it is expected that the principle of confidentiality of such disclosure be adhered to.

Concerning support and assistance, the company sets out to provide counselling, testing and treatment services to all employees with HIV/AIDS. Employees belonging to a medical aid scheme are required to utilize the medical aid services and for employees without medical aid, an external service provider will be contracted to offer these services.

The company is committed to fair, sound and non-discriminatory employment practices. The policy states that an employee's HIV status should not justify termination of employment, retrenchment, demotion, transfer or discrimination in employment.

The policy describes that the company will issue information on HIV/AIDS and the realities, misconceptions and circumstances of working with HIV positive co-workers. The company sets out to ensure ways to alleviate fears and concerns of co-workers who are likely to become reluctant, unwilling or resist working with an HIV-positive individual. The policy clearly states that employees who are HIV-positive will be subject to the same contractual obligations, practices and performance measurements as other employees.

HIV/AIDS awareness and prevention programme

CRE1 reported that the HIV/AIDS programme was initiated about 6 years ago with three issues in mind; knowledge of HIV status of employees, prevention of new HIV infections and for HIV positive employees to be provided with treatment. At the time considerable debate arose around the issue, in terms of not being able to manage and maintain the programme and the costs involved in paying for treatment. CRE1 reported that the company's culture of caring for employees, and the increased awareness of HIV/AIDS at the time eventually prompted the company to provide HIV/AIDS services.

The programme was initiated with CareWorks which provided testing, education and treatment services. When the company was approached by CareWorks, they already had a strategy because they were struggling with AIDS. AIDS was recognised as a real company problem and the programme received support from the top management right from the beginning. Another factor that prompted action was the need to alleviate some of the problems faced in society. The company felt it as the right thing to do.

CareWorks has been their service provider since then and have been conducting awareness and prevention campaigns every 2 years. The programme has been reported to be flexible because it also caters for new sites that are established. The company can request for an ACT workshop to be conducted on the new sites for the new workforce.

In terms of education, HIV/AIDS awareness posters are available in 4 different languages (English, Xhosa, Zulu and Afrikaans) in order to cater for all employees on the sites. The company receives basic posters which they customise to include their company logo. Peer educators trained by CareWorks are available on all sites to offer education on HIV/AIDS and encourage employees to engage in safe sex practices. Regarding prevention, the company issues free condoms on the sites which they outsource independent of CareWorks. On World AIDS Day, the company gets involved in the celebrations by providing red arm bands, water bottles and AIDS banners. CRE1 prepares a presentation for the site agents to read out to the employees.

HIV treatment programme

CareWorks has been contracted to provide treatment services to employees. The company pays for HIV treatment for permanent hourly paid employees who are not on medical aid. Monthly paid employees who are HIV-positive receive treatment through their medical aid schemes. Contract workers are assisted by CareWorks to receive treatment from public health centres.

On a monthly basis, CRE1 receives reports from CareWorks on the number of people on the treatment programme. According to the latest report for January 2011, out of the 900 people who got tested, 8% ($n=72$) are HIV-positive. Out of the 72 HIV-positive employees, 58 have been enrolled onto the CareWorks treatment programme. The uptake gap of 14 people who are infected but are not enrolled can be assumed to be on medical aid or getting treatment from the state clinics or are still in fear of disclosure. Out of the 58 that are active on the programme, 60% ($n=35$) are on ARVs and the remaining 40% ($n=23$) are not yet receiving treatment. For HIV-infected employees on ARVs, 30 are receiving medication from CareWorks, 3 are enrolled on the state programme and 2 are receiving from other programmes (occupational health or private).

Since the beginning of the programme, a total of 86 employees have registered with CareWorks. This is according to CareWorks consolidated data provided by the CRE1 for January 2011. A reported 16 employees have resigned either from CareWorks or the company and 12 employees have died. The company reported not having taken anyone off the programme. After resignation, the company pays for treatment for 6 months, and afterwards CareWorks will assist to get them enrolled on the state programme.

An adherence level of up to 75% has been reported by CareWorks, with 3 employees having been reported to be non-adherent based on their viral suppression. CRE1 suspects non-compliance with 1 or 2 employees who take alcohol whilst on treatment. Employees who are not yet receiving treatment are provided with dietary supplements by the company. The company also offers other forms of assistance such as financial support. In cases where an employee is very sick and has to seek medical attention, the company can assist by paying an advance to cater for medical expenses. This advance will be paid when the employee returns to work.

Running the day-to-day duties of the programme is a permanent HIV/AIDS facilitator who is employed by the company. Assisting the facilitator are temporary HIV/AIDS facilitators. Their responsibilities include taking HIV-positive employees to collect their medications, for routine tests and check-ups. The AIDS facilitator is also responsible for ordering supplements upon CareWorks' recommendation and administering them. If at any time an employee is concerned about their HIV status, the facilitator can assist by taking the employee to CareWorks for testing. The facilitator receives training every 2nd or 3rd year. An HIV/AIDS facilitator committee meets with CRE1 on a quarterly basis to provide feedback. The facilitator initially started by collecting and distributing drugs but, with time, the system improved and was administered directly from CareWorks and some by the facilitator.

Disclosure of HIV status

The level of disclosure has been reported to be high. About 80% ($n=46$) of HIV-positive employees are known to the facilitator and 20% ($n=12$) have disclosed to CareWorks.

Benefits of providing HIV/AIDS services to employees

Currently, testing has been done for free and the company pays for patient management and care. CRE1 admitted that the programme is much cheaper than they had initially projected. The current budget is set at R600 000 per year, including salary and operational costs of the AIDS facilitator. The average cost of providing treatment and supplements is estimated at R620 per person per month. With 58 employees on the programme, the total cost is estimated at R35 960 per month. CRE1 reported paying CareWorks between R30 000 – R40 000 per month for patient management and care. The interviewee declares that the benefits of offering a programme outweigh the costs. CRE1 states that because most of their employees are machine operators and

therefore semi-skilled, they are considered a vital part of the operation on the sites which the company cannot afford to lose. Indirect benefits include trust and loyalty of employees towards the company. Physical change is also visible as most of the employees on treatment are very healthy.

Concerning absenteeism, the company has managed to curb it by minimising downtime on machines. The CRE1 stated that they have a great arrangement with CareWorks which does not result in the employees missing work. Because the majority of employees are operators, the company cannot afford to have machines standing idle while employees go to collect drugs. Even though the company has reportedly lowered absenteeism of HIV-positive employees, CRE1 reported absenteeism for HIV-positive employees to be lower than for HIV-negative employees.

Challenges faced by company E

CRE1 reported disclosure as a challenge because there is nothing the company can do if an individual does not want to disclose their HIV status. An instance was reported where an employee was suspected to have died from AIDS without disclosing. Disclosure is seen as a way of helping the company to be more proactive in helping employees. They have had some employees on the treatment programme volunteer to give testimonies on World AIDS Day. Looking back from when they started, the company has been successful in getting more and more employees on the programme. In 2004 there were only 8 people on the programme, but the trust has grown and the numbers have increased over the years to 58 in 2011.

With regards to offering an HIV/AIDS programme, one of the major challenges reported is the mobility of the employees. Mobility creates a problem when an HIV positive employee receiving medication has to leave his/her place of residents to work on a project. Other arrangements will have to be made to deliver medication and it will be difficult to monitor adherence to medication.

The possibility of CareWorks losing its funding for free ACT presents difficulties for the company. It means an increase in their current budgetary allowance. A proposition would be to get the company that is currently subcontracted for the medicals to do the testing at a fee and also to get them to work together with CareWorks.

Innovative approaches to HIV/AIDS programmes

As a form of an incentive, the company offers AIDS awards every year to people who are actively involved in promoting the programme. Recognition is also given to the best AIDS facilitator. Employees who have gone through HIV/AIDS training are sent out into the communities to teach about HIV/AIDS and encourage people to know their HIV status. Another form of encouragement comes from testimonials of HIV-positive employees.

CRE1 has conducted presentations to other companies, upon CareWorks request, in order to encourage them to respond to HIV/AIDS. CRE1 reported that it was well received by other companies but some showed a lack of interest. With regards to this, CRE1's opinion was that companies listed on the Johannesburg Stock Exchange (JSE) are unlikely to respond because they are shareholder driven whilst non-listed companies are dependent on their employees and therefore likely to respond.

6.7.4 Conclusion of case study on company E

The company has been offering an HIV/AIDS programme for a number of years and therefore has a great appreciation of the benefits it brings. They have a well-developed comprehensive HIV/AIDS policy which has been translated well into the programme. Aspects of awareness, testing and treatment highlighted in the policy, have been well adopted into the policy.

6.8 Case Study 6

6.8.1 Case details

Name: Company F

Size: Medium-scale construction company

Programmes: No awareness campaigns and no treatment programme

6.8.2 Company description

Company F has been in existence since the 1980's. The company is a registered member of the Western Cape Masters Builders and Allied Trades Association and is the recipient of a 20 year continuous membership award.

The average gross annual turnover falls between ZAR13 million and ZAR26 million, making it a medium-sized company. The company employs between 45-60 employees, with an estimated 57 permanent employees at the time of the interview. Their permanent workforce consists of 12 highly skilled workers, 5 trainee artisans or operators, 27 general workers and 4 general administrative office assistants. CRF1 briefly described most of their general workers to constitute long standing employees who have been with their company since their late teens (16-20 years). He further pointed out that even though the workers are functionally illiterate they are highly productive and valuable employees. After years of training, they have acquired a number of skills and are regarded as artisans.

The company relies on its own in-house labour for wet trades such as concrete work, brickwork, plastering, skimming, ceilings, roof construction and roof carpentry. Subcontractors are employed for specialist trades. The company trades as general contractors, undertaking a broad range of works in the residential, commercial and industrial markets. They can take up to 5 or 6 building projects at a time.

6.8.3 *Interview summary*

Company representative

The company representative (CRF1) was interviewed on the 23rd of February 2011. The interview lasted approximately 1 hour 15 minutes. The representative is employed as the managing member who is responsible for organisational development of the company.

HIV/AIDS policy

CRF1 reported that they have not implemented an HIV/AIDS policy, but that they have in their possession one that has been instigated by the Master Builders South Africa (MBSA) which they will adopt and put into practice. The policy was still in the drafting stage at the time of the interview. The draft policy sets out the MBSA's objectives, which have been highlighted to include clarity on MBSA's views and commitment to HIV/AIDS and the management of HIV-positive employees in the building industry. It is clearly stated that the MBSA recognises the seriousness and implications of HIV/AIDS for individual employees, co-workers and the impact on specialist skills in the construction industry. The policy acknowledges the implementation of proactive HIV/AIDS workplace programmes as a way of minimising the consequences of the disease to the industry.

The MBSA commits itself to protect employees, create awareness, encourage behaviour changes and ensure that all employees are treated with dignity, fairness and equality. Aspects of HIV/AIDS which the policy outlines include: confidentiality, testing, non-discrimination and employees at risk. It also recognises the legal right of HIV-positive employees to confidentiality and privacy concerning their health and HIV status. The policy sets out that the MBSA will encourage member's employees to undergo HIV testing, but asserts that no one is legally compelled to get tested. Regarding non-discrimination, it is stated that HIV/AIDS must be treated like any other illness and therefore HIV-positive employees should not be subjected to victimisation or discrimination. The policy identifies safety representatives and first-aiders as employees at risk of contracting the disease. In order to avoid this risk, the MBSA will promote the use of infection control procedures.

HIV/AIDS awareness and prevention programme

Company F has no HIV/AIDS workplace programme in place. CRF1 reported that no incidences of HIV/AIDS had been reported until 3 or 4 years ago. These have so far been dealt with on an individual basis. What follows is a report on 2 incidences of employees with HIV/AIDS which the CRF1 experienced and how they dealt with it.

HIV/AIDS case 1

This incident started 3 or 4 years ago with an employee who had been in their employment for 20 years. CRF1 started noticing an extreme loss of weight, accompanied by a loss of energy. After sometime, the employee became noticeably ill and was progressively getting weaker. CRF1 reported that other employees were covering up for him by letting him do the less physically challenging work. After consulting with the employee and discovering that he had not been to the doctor, CRF1 took him to his personal medical practitioner. An HIV test was conducted, which confirmed their suspicions that he could be HIV-positive.

At the time of the test, the employee was at the threshold of having full blown AIDS because his immunity was very low. He was suffering from respiratory tract infections and other complications. The doctor advised that the employee was not fit to work on a construction site and needed to be put on HIV treatment. Because of lack of experience of dealing directly with an AIDS patient, CRF1 was under the impression that the government's ARV rollout was easily accessible. The doctor's comment to this regard was (as quoted) "*the kind thing you can do for this guy is to take him and shoot him.*" This comment was made with regard to the struggles that one has to go through in order to be enrolled on the state programme.

CRF1 was informed that the state program requires that an individual be booked at a clinic or hospital near to their area of residence. The employee was living in one of the townships and therefore had to be booked at the local clinic in that area. Based on experience and knowledge, the doctor advised that they would not receive the assistance they needed from the clinic because they are under-resourced and only offer testing services and no treatment services. In order to avoid these obstacles, a decision was made in order to assist him quickly. The employee also worked as a watchman at the CRF1s house and therefore could be placed in that geographical location and register at a nearby hospital to receive treatment.

The interviewee stated that it was the most disappointing and frustrating experience. They sent one of the company vehicles to fetch him from his house and took him to the hospital early in the morning. When they checked on him about 12 hours later, he had not been attended to. Eventually when he was attended to, he was sent off with a packet of pain killers. The interviewer was baffled by this because it is in contrast with what the media portrays regarding the national rollout of ARVs. After persistence, he was referred to a day hospital where he was given pain killers as well. Prior to this, the doctor had suggested that it would be difficult to receive ARVs because of the stage of his illness.

CRF1 reported that the employee knew the nature of his illness. He described him as being anxious and not understanding the process. The employee and his spouse were counselled in the presence of CRF1. CRF1 recommended that the spouse get tested and the results came out negative. The employee was eventually admitted into hospital where he was receiving terminal treatment until he eventually passed away. During the final days, his family and friends distanced themselves and were not visiting him in the hospital.

HIV/AIDS case 2

Another case that the company experienced 6 months back from the time of the interview was with an employee in his 40s. He had been with the company since the age of 16. CRF1 described him as phenomenal in his ability to learn, exceptional, with an entrepreneurial mind.

It started when the employee approached CRF1 explaining to him that he was not feeling well and did not have energy. The employee was taken to the doctor where he got an HIV test which came out positive. His CD4 count was relatively high, and in fear of losing this employee, the CRF1 asked the doctor to assist them. The employee moved from the townships to a better living area where he would receive better health services. The employee consulted the day hospital where he got his CD4 count tested and prescription of supplements due to him. CRF1 was frustrated that the employee was not receiving treatment. The reason was because of the national policy for ARV rollout which states that ARVs will not be administered until the CD4 count has dropped below 200. The employees' CD4 count was 600. At the moment the employee has been receiving immune boosters and supplements from the pharmaceutical samples that the medical practitioner receives.

CRF1 reports that the employee has been going for regular CD4 count check-ups, is in good health and has not fallen ill. The CRF1 stated that without the help from the medical practitioner the employee would be at the mercy of local hospitals who do not offer much help.

Regarding general employee wellness, the company pays for workers insurance and makes use of the private medical practitioner if any employee needs medical attention. A number of the employees have been reported to be on TB treatment however it is not known how many are HIV-positive.

CRF1 reports that the idea of having an HIV/AIDS awareness and prevention campaign has crossed their minds even before the HIV/AIDS cases. Currently the mobile caravan that goes on all the sites conducting medical examinations on all employees enquires if employees have been tested for HIV or are showing any symptoms for HIV/AIDS. In an informal way they discuss HIV/AIDS among themselves and the CRF1 encourages them to look after themselves. The talks around HIV/AIDS are not regular but are normally brought up after something has happened, for example, if someone has been diagnosed with TB. CRF1 stated that the talks help because at times employees suggest going for HIV testing.

Challenges arise in getting the AIDS message across because the company employs 3 levels of generations, for example, from grandfather to father to son. When these discussions are held, the employers acknowledge the culture of the employees and the younger employees speak through the older employees. The older employees (>70 years) command more respect and therefore it becomes difficult for the younger employees to speak to them regarding engaging in safe sexual practices. CRF1 feels that the forum they use is not appropriate to put the AIDS precaution message across because of who they will be doing it through. In terms of teaching lifestyle changes, the interviewee feels that it is difficult to interfere in the personal lives of their employees.

Disclosure of HIV status

CRF1 reported that their workforce is stable and if anything happens to any one of them, everyone will be informed. There is also a high level of trust, which presented no problems of disclosure with these two employees. The interviewee strongly feels that his most success has been disclosure because as he points out, most large companies have been struggling with

ensuring that employees disclose. He attributes this disclosure to the culture of the company as top management have personal relationships with employees. He highlights that large companies have far more impersonal relationships.

The interviewee reported that when the other employees saw their fellow worker deteriorating, they never ostracised him but instead covered up for him. CRF1 saw it as a social or culture response mainly because the employees might have been exposed to the disease through relatives and family. He affirms that they have a good understanding of the seriousness of the disease.

Benefits of providing HIV/AIDS services to employees

CRF1 acknowledged that he has been well informed about HIV/AIDS through these experiences. He feels that it is imperative to assist employees because they are an important asset to the company and are highly reliable. After working with a company for a while, employees build a certain level of trust with the company and integrity. He points out that in a small company, the impacts of HIV/AIDS are felt very strongly because in some instances, one person can be responsible for a certain job that is highly skilled. An economic consideration would therefore be required to keep the employees who are valuable to the company.

6.8.4 Conclusion of case study on company F

Company F holds strong values of employee wellbeing as evidenced by the two scenarios described above. The company does not have an HIV/AIDS policy and HIV/AIDS programme in place and had to deal with each situation as it occurred. A family culture and a culture of openness among the employees and management proved to be a good quality which the company holds. Because of these attributes, employees felt at ease to disclose their HIV status to management and fellow employees. The experiences incurred have been a learning curve for the company and highlight the importance of having an existing system in place. Since the general perception is that large companies are the most affected by HIV/AIDS, this illustrates the extent to which HIV/AIDS is also affecting medium-sized companies.

6.9 Conclusions Based on an Inter-Case Study Analysis of the Findings

The case study findings have revealed different opinions concerning the provision of HIV/AIDS workplace programmes by large and medium sized construction companies. The findings provide a basis for an inter-case study to determine the reasons for provision of HIV/AIDS programmes and the non-provision by some companies. The findings of the HIV/AIDS factors under investigation have been summarised in Table 6.1, for each case study. These factors are, namely: HIV/AIDS policies, HIV/AIDS awareness and prevention campaigns, HIV/AIDS treatment programmes, disclosure, financial viability of treatment programmes, challenges encountered and innovative approaches.

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The following discussion is made with reference to Table 6.1.

6.9.1 HIV/AIDS policy

The findings have revealed HIV/AIDS policy implementation by five companies. Three of these policies are independent HIV/AIDS policies. They can be considered to be comprehensive as they cover all aspects of HIV/AIDS, clearly stipulating the approach and methods that these companies should follow in the provision of their HIV/AIDS-related programmes. Two of the policies follow a top-down, bottom-up approach and one follows a top-down approach in their implementation. All companies have, in turn, translated their policies well into their HIV/AIDS programmes as illustrated by their comprehensive HIV/AIDS workplace programmes, which range from awareness to patient management and care. These findings agree with the literature which suggests that the implementation of a good HIV/AIDS policy facilitates a comprehensive workplace HIV/AIDS programme.

Out of the five companies that have HIV/AIDS policies, the remaining two do not constitute comprehensive policies. One company reported incorporating HIV/AIDS aspects into an existing policy and the other company had no knowledge of what the policy entails as it was formulated at the head office and not communicated to the other offices. The two companies in turn did not provide comprehensive HIV/AIDS programmes, but merely provide HIV/AIDS workshops through CareWorks. The only company which has not implemented an HIV/AIDS policy informed us of their intention to adopt the MBSA HIV/AIDS policy which was still at the formulation stage at the time of the interview. Following on the reports by company respondents, it can be noted that no relationship exists between policy reviewing and the presence of a treatment programme. Company A reported an annual review of their policy while the other two companies offering treatment programmes reported that their policies are not reviewed on a regular basis.

6.9.2 HIV/AIDS awareness campaigns

It was determined that four of the companies that reported the presence of awareness campaigns utilise CareWorks as their service provider. Of these four companies, three have been making use of these services since 2003, 2005 and 2007. CareWorks awareness workshops have been reported to be effective in getting workers educated and achieving high rates of VCT uptake over the years. This has been reported especially for large scale

companies because of the size of the companies' workforce. Their continued use of CareWorks as a service provider has been attributed to the comprehensiveness of their services and because they offer these services free of charge. The HIV/AIDS education session provided by CareWorks was commended by the representatives. It was the most preferred medium to get the HIV/AIDS message across to employees. Some companies have gone beyond the CareWorks HIV/AIDS awareness campaigns and provide in-house HIV/AIDS education on prevention, provision of condoms and posters on site. Despite the threat of CareWorks possibly losing funding and looking to offer these services at a fee, the companies highlighted an interest in continuing to utilise them.

6.9.3 HIV/AIDS treatment programmes

In this case study analysis, it was revealed that the implementation of an in-house treatment programme is less desirable than treatment provision through an external service provider. Of the three companies that reported the presence of a treatment programme, one company provides an in-house treatment programme. The other two companies provide treatment through CareWorks.

The reason stated for providing an in-house treatment programme is that of convenience and reducing absenteeism from employees taking time off to wait in queues for medication. Other reasons for offering treatment were to retain skills and to keep employees healthy and productive for as long as possible. Interestingly, not all large companies share similar perspectives regarding the provision of treatment programmes. Company B's decision not to provide treatment services rested upon the possible challenges of who to offer treatment to because of the different contracts that employees have and the difficulty in managing the process. Company D cited the non-visibility of HIV/AIDS among its workforce.

The case study analysis revealed that administration of treatment by employees varied depending on level of disclosure and employees' work category. Company A provides a comprehensive in-house treatment programme by providing workers with a three month's supply of ARV drugs delivered to them personally on site or at the company's head office. The company is able to undertake this because of the high level of disclosure within the company. A low level of disclosure does not allow the flexibility of delivering medication to the sites as HIV positive workers fear being identified as HIV-positive by co-workers.

In Company C, CareWorks is responsible for administering treatment directly to the employees. Company E has facilitated workers to receive medication through an HIV/AIDS facilitator, because of the high level of disclosure reported. Although Company F does not have an HIV/AIDS treatment programme, it reported utilising a private general practitioner (GP) in their HIV/AIDS consultations for the two cases they have experienced. Regarding employees' work category, companies have revealed that they do not offer treatment services to all HIV-positive employees. Company A and C administer treatment to employees that are not on medical aid. Company E administers to permanent hourly-paid employees who are not on medical aid and assist contract workers to receive treatment from public health centres.

6.9.4 Disclosure of HIV status

As presented in the case study analysis, companies provided strict policies regarding disclosure of HIV/AIDS status to the companies. The policies make provision for the utmost confidentiality and protection of HIV-positive employees against discrimination and stigmatisation. In this regard, no companies reported HIV-positive employees being ostracised by other employees. Company F reported co-workers covering up for the sick employee. In the event that discrimination happens, the policies highlighted the specific action that the company would follow. Company policies have stringent measures in place to prevent employees being dismissed on the grounds of their HIV/AIDS status. From all the companies studied, it was reported that no employee had been dismissed as a result of their disclosing their HIV/AIDS status.

Companies regard disclosure as a potential impediment to the effective provision of treatment to HIV-positive employees, due to fears of being stigmatised. In an effort to promote disclosure, one company allows for openly-disclosed HIV-positive employees to provide testimonials in order to encourage other employees to disclose their status in order to get access to treatment. For another company, a high level of trust was considered as a significant factor to encourage disclosure.

In Company B, disclosure has been seen as a success of the programme and acceptance of HIV/AIDS-infected persons. This has been attributed to the culture of the company to treat HIV/AIDS like any other disease. Suspected reasons for non-disclosure of a few individuals was denial in accepting one's HIV status and resistance to lifestyle changes. The case study analysis revealed a high level of confidential disclosure towards management, and reluctance towards public disclosure of HIV-positive individuals. A lack of disclosure was noted as a

challenge in bridging the gap between discovery of HIV status and uptake of treatment services. This transition from being tested to the worker actually receiving treatment depends on the ability of the company to uphold the anonymity of the employees. Over the years, companies providing treatment have devised ways of effectively managing the process and this has reflected on their reports on increased uptake of treatment services. Company E provided statistics which shows an increased uptake of HIV treatment over the years.

6.9.5 *Financial viability of HIV/AIDS treatment programmes*

All companies offering treatment programmes assert the financial viability of providing them. They reported that the benefits outweigh the costs. In this regard, Company A reported on spending within the budget; Company C feels that the costs are negligible and are absorbed by the returns, and Company E reported on spending within the budget and on the actual costs being cheaper than the anticipated costs. An important point to note is that the cost of offering a treatment programme depends on the number of employees receiving ARVs and the number of employees receiving supplements. Since it is more expensive to offer ARV's than supplements, the more employees on ARVs, the more the company pays.

Companies that do not provide treatment programmes had not conducted any financial analysis as to the costs of providing treatment to their workers and therefore are unaware of the true financial implications of providing a programme. However, Company B held a strong perception *against* the financial viability of a treatment programme. This claim was made specifically with regard to offering treatment to contract workers. This is because contract workers are employed for a certain period of time and therefore are likely to leave the company when the contract ends, meaning that they will either not stay on treatment for long or the company will not benefit from providing treatment. Companies offering treatment services have also justified this perception by not offering treatment services to contract workers. The companies merely facilitate contract workers to receive treatment from government clinics in order to minimise the direct costs to the company.

6.9.6 *Challenges in the provision of HIV/AIDS programmes*

Two companies reported facing challenges in the provision of HIV/AIDS programmes. A challenge facing Company C is the resistance of HIV-positive employees on treatment to change risky behaviour such as alcohol abuse. This was reported in terms of non-compliance to ARV treatment due to alcohol abuse. Another challenge identified is the difficulty in protecting employees at risk of contracting HIV/AIDS, without breaking the confidentiality of HIV-positive employees. Company E cited the mobility of employees from site to site as a major challenge which affects administration of medication and in turn adherence to treatment.

6.9.7 *Innovative approaches to HIV/AIDS programmes*

Two companies have reported extending their workplace programmes to include the wider communities and schools in HIV/AIDS education. This has been done with the aim of increasing awareness in the communities and amongst the younger generation. No consideration has been made to include treatment services because of the lack of resources and capacity for companies to manage large numbers of people. One company reported that a nearby community requested that the company open their HIV treatment services to the community.

6.9.8 *HIV/AIDS “stories”*

The recounting of HIV/AIDS experiences reported by the company representatives was one of the most satisfactory aspects of the case study investigation. The company representatives were forthcoming and provided rich data which was sought after in these case studies. They provided in great detail, their personal experiences and feelings regarding dealing with HIV-positive employees.

The assumption made by CRE1 regarding companies listed on the JSE not being proactive was investigated further by checking which case study companies were registered on the JSE website (see www.jse.co.za). On the face of it, the assumption was confirmed to be true for the case studies under investigation. Out of the 5 large companies investigated, 3 companies that were providing treatment services were not listed on the JSE and 2 companies not providing treatment services were listed on the JSE.

6.10 Conclusion

This chapter has documented the findings of each individual case study, followed by an inter-case analysis. The study has established that a well-developed HIV/AIDS policy can be translated into a comprehensive HIV/AIDS workplace programme. It is evident in this study that education is a significant component of a comprehensive HIV/AIDS workplace programme as it can effect change in perceptions and behaviour. The most common form of HIV/AIDS workplace interventions are awareness campaigns, which have currently been offered free of charge by an external service provider. Despite the similarity in sizes of the large scale case study companies, the availability of treatment programmes differs because of differences in perceptions of costs and visibility of the disease. Reasons provided for offering treatment services range from retaining skills, keeping employees healthy for as long as they can be productive and offering convenience to employees. What has also emerged from this study is the tendency of some companies to deal with HIV/AIDS on a case-by-case basis. In the next chapter the conclusions of the overall findings of the study are presented.

CHAPTER 7: Conclusions and Recommendations

7.1 Introduction

This study has explored HIV/AIDS in the construction industry, focusing on the way in which HIV/AIDS is perceived and how construction companies in the Western Cape region in South Africa have responded to the disease. The problem statement as presented in Chapter One was as follows:

The construction industry's response to HIV/AIDS lacks comprehensive intervention programmes, with the majority of the programmes focusing largely on awareness and prevention with little emphasis on treatment programmes.

The research questions that were the focus of this study were stated as:

- a) What are the perceptions of HIV/AIDS as a threat to the construction industry?
- b) What are the responses of construction companies to HIV/AIDS in the Western Cape construction industry?
- c) What are the barriers to the implementation of treatment programmes within construction companies?
- d) What are the benefits of implementing treatment programmes within construction companies?

The proposition tested by the research is as follows:

The benefits of implementing treatment programmes outweigh those of non-implementation, rendering the implementation of treatment programmes an effective response.

The approach to this study was largely qualitative in nature, comprising a critical review of the pertinent literature on HIV/AIDS in the construction industry, a survey on perceptions of HIV/AIDS as a threat and responses to HIV/AIDS among construction companies, as well as a case-study based research examining the implementation of treatment programmes in the Western Cape construction industry. This chapter discusses the findings of the research questions posed, evaluates and validates the research proposition formulated for the research. Conclusions are drawn from the research findings, and recommendations made for future research and for practice. A discussion on the achievement of the research aims and objectives concludes the chapter.

7.2 Findings of the Research Questions

The opinion survey instrument was designed (Chapter 3) and administered to explore the perceptions of HIV/AIDS as a potential threat to the construction industry and responses to HIV/AIDS. The survey aimed to substantiate issues identified in the literature review and expose any additional issues.

What are the perceptions of HIV/AIDS as a threat to the construction industry?

The findings of the survey indicate differences in the perceptions of HIV/AIDS as a threat by company representatives. A slight majority of the surveyed construction participants consider HIV/AIDS as a threat, followed by indifferences regarding these perceptions. The survey revealed that a few construction participants perceived HIV/AIDS as a slight problem or no problem at all. The perception of HIV/AIDS as a long term threat to the industry is not universally held.

What are the responses of construction companies to HIV/AIDS in the Western Cape construction industry?

The survey reveals differences in the implementation of HIV/AIDS policies and HIV intervention programmes. There is a lack of maturity and comprehensiveness in the response to HIV/AIDS. Much of the intervention programmes take the form of HIV/AIDS education, awareness and discovery of HIV status. There is a lack of provision of HIV/AIDS treatment programmes.

What has other research in this field revealed?

A review of the relevant literature (Chapter 2) revealed a comparative dearth of research in the field of HIV/AIDS in the construction industry. The available survey-based research conducted shows little practical applications of the theoretical aspects of the topic into the construction industry. Other researchers have revealed the need for the construction industry to take action against HIV/AIDS, but there has been no enforcement to ensure a universal adoption of HIV/AIDS programmes.

Other issues revealed by the survey include the nature of treatment programmes employed and how they were implemented, management of HIV-positive employees and perceptions of financial viability of treatment programmes.

Case studies were employed for more in-depth exploration of the research questions and issues. The case study protocol allowed for the collection of the primary data (Chapter 5). Six construction companies were investigated, out of which three were offering treatment and three were not offering treatment. The main findings from this investigation (Chapter 6) show that:

- While construction respondents have slightly stronger perceptions of HIV/AIDS as a threat to companies, these are not related to the company's responses in the provision of HIV/AIDS treatment programmes. If there is no uniform understanding of the potential threats of HIV/AIDS to company profits and productivity, then company representatives are likely to view the provision of HIV/AIDS treatment differently (as confirmed in the survey research discussed in Chapter 4).
- The implementation of HIV/AIDS programmes in construction companies has largely been driven by CareWorks. Awareness campaigns and treatment programmes have been led by the service provider.

In terms of current HIV/AIDS treatment programmes, the three relevant case studies showed that:

- CareWorks is playing a major role in encouraging companies to offer treatment services
- the formulation of an HIV/AIDS policy forms the basis of a treatment programme
- the approach is proactive than reactive
- top management involvement is essential to ensure employees involvement and participation
- the provision of treatment is driven by productivity concerns
- benefits outweigh costs of provision
- treatment access is limited to permanent employees
- disclosure concerns and fear of stigmatisation are impediments to the effectiveness of treatment programmes

The organisational structures of the case study companies and their company representatives revealed that:

- the involvement of top management in HIV/AIDS awareness workshops ensures participation and uptake of HIV testing services;
- the relationships between top management and employees contribute towards ease of disclosure of HIV status; and

- The involvement of employees in HIV/AIDS policy implementation yields a positive response from employees.

These findings validate the problem statement by indicating that the implementation of treatment programmes is still lacking among construction companies. Among the different HIV/AIDS intervention programmes available, the most adopted are HIV/AIDS awareness and prevention programmes which do not translate into an effective response considering the threat HIV/AIDS poses.

7.3 Validation of the Research Proposition

The research has tested the following proposition:

The benefits of implementing treatment programmes outweigh those of non-implementation, rendering the implementation of treatment programmes an effective response.

The findings of Chapter 6 support the above proposition for the companies under review that have implemented an HIV/AIDS treatment programme. The company representatives report on treatment programmes giving returns of employee wellbeing that exceed beyond monetary value. The costs of providing treatment programmes have been regarded as negligible compared to the costs that the companies had initially envisaged. The offering of treatment programmes constitutes an effective response by prolonging the lives of HIV-positive employees.

7.4 Conclusions

The construction industry has been identified as being particularly vulnerable to the HIV/AIDS epidemic due to migratory nature of the workforce which promotes poor lifestyle choices, the tendency to employ semi-skilled labour which has a relatively high HIV prevalence, and the aging of the workforce. Furthermore, it has been established that the construction industry is labour intensive, making use of mass informal labour. These workers are usually in their prime productive years, and more vulnerable to acquiring and transmitting HIV/AIDS.

The research has shown that the construction industry still has a considerable way to go in ensuring effective responses in the management and care of HIV/AIDS positive employees. CareWorks has been a major driver in implementing HIV/AIDS programmes among construction companies. They offer a comprehensive HIV/AIDS programme, with the facet most adopted being the HIV/AIDS awareness workshops. These were noted to be funded through PEPFAR from the US Global Health Initiative. Treatment programmes on the other hand have no supporting grants and therefore were a direct cost to construction companies and not always likely to be implemented.

Despite the fact that CareWorks provides a comprehensive HIV/AIDS awareness workshop that yields a high uptake of HIV testing, the underlying threat of the industry lies in its failure to manage existing infections. The lack of a formal systematic approach to manage the disease works against adopting an effective approach. There is lack of promotion for construction companies to engage in HIV/AIDS treatment programmes and no standardised approach to assess HIV/AIDS risk within companies.

For companies that have implemented treatment programmes, their main reason for offering treatment services has largely been a business case, to keep employees healthy and productive for as long as possible. What has emerged in this research to ensure survival of these programmes is continued support and commitment from top management in HIV/AIDS programmes and the participation of HIV/AIDS-positive employees. It has been established that non-disclosure of HIV/AIDS positive employees hinders efforts for companies willing to offer treatment services.

Perceptions regarding the costs of providing treatment services have emerged as a major barrier to implementing treatment programmes. Companies are unaware as to the exact costs of these programmes and therefore unlikely to implement treatment programmes. However, testimonies from companies actually offering treatment reveal that paying for treatment is negligible compared to the returns that the company is receiving. While the consequences of a lack of a comprehensive response may not currently be felt by the companies, its absence is likely to be felt in companies with a high HIV prevalence among its workforce.

7.5 Recommendations

In practice, professional associations for construction companies can play a proactive role in raising awareness through education and career development strategies and programmes. It has been recommended that they contribute towards an HIV/AIDS treatment campaign by providing guidelines based on examples of successful companies.

Since the future of the construction industry lies with the younger generation, it is strongly recommended that HIV/AIDS education and training be included in the curriculum of tertiary institutions for construction disciplines. This will expose students more fully to the risks of HIV/AIDS towards themselves and the industry.

Future research effort might be usefully directed towards developing a better *theory of practice of HIV/AIDS management* for construction companies and guidelines that can be adopted by companies of any size and category. These guidelines can be derived from well-developed HIV/AIDS management programmes from the mining industry, whose HIV/AIDS risk is relatively similar to that of the construction industry.

Future research should also investigate ways in which comprehensive HIV/AIDS management practices can be applied more effectively. In particular, the research should focus on a detailed step-by-step preliminary assessment of HIV/AIDS risk, the implementation of HIV/AIDS awareness, prevention and treatment programmes, and measurement of their effectiveness. Another recommendation for future research would be to establish a cost-benefit analysis model based on the actual costs and benefits of providing a treatment programme.

7.6 Achievement of the Research Aims and Objectives

The objectives for this research were to:

- a. *establish the perceptions of construction companies regarding the extent of the HIV/AIDS threat to the industry.*
- b. *establish the nature of existing HIV/AIDS programmes among construction companies.*
- c. *examine how construction companies have implemented treatment programmes.*
- d. *establish the benefits of, and barriers to, implementing treatment programmes.*

The first objective has been achieved through the opinion-based survey of construction companies undertaken in Chapter 4. The perceptions of HIV/AIDS as a long-term threat have been clearly stated, with the majority of the company representatives acknowledging it as a potential problem.

The second objective has been achieved through the literature review, survey research findings, and case study analysis presented in Chapters 2, 4 and 6 respectively. Examination of the nature of existing HIV/AIDS programmes has been undertaken, highlighting the theoretical aspects of HIV programmes and their practical applicability.

The third objective has been achieved through the findings drawn from the primary data collection from the case studies discussed in Chapter 6. The case studies have provided a detailed account of how HIV/AIDS treatment programmes are implemented and managed by the individual companies. An account of the administration of drugs has been provided, together with measure that the companies adopt to ensure confidentiality and to deal with the social effects of the disease on the employees.

The fourth objective has been achieved through the literature review in Chapter 2 and findings drawn from the primary case study data collection as reported in Chapters 6. The benefits of providing treatment programmes have been clearly cited, including challenges that companies are facing. The prevailing hindrance to the implementation of treatment programmes was identified to be: the perceived negative financial impact that these treatment programmes have on certain companies.

The aim of this research was to establish the response to the HIV/AIDS pandemic by selected Western Cape construction companies. This aim has been achieved by providing a more informed understanding of the experiences that companies are going through in dealing with HIV/AIDS. The research has contributed first hand experiences of construction companies to the limited body of knowledge of HIV/AIDS in the construction industry.

8.0 References

- Ashforth, A. (2001) *AIDS, witchcraft and the problem of power in post-apartheid South Africa*. In: Princeton, NJ: Institute of Advanced Study, School of Social Science, 1-35.
- Auerbach, J. D. (2004) Principles of Positive Prevention. *JAIDS Journal of Acquired Immune Deficiency Syndromes*, **37**, S122-S125.
- Babbie, E. (2010) *The Practice of Social Research*. Twelfth Edition. California: Wadsworth Cengage Learning.
- Barnett, T. and Whiteside, A. (2002) *AIDS in the Twenty-First Century: Disease and Globalisation*, Palgrave Macmillan, New York.
- Bingham, K. (1999) The impact of HIV/AIDS on building types in selected areas of the Kwazulu-Natal Province of South Africa, University of Natal. In: COBRA 1999, St John's College, University of Cambridge RICS.
- Bowen, P.A., Dorrington, R., Distiller, G., Lake, H. and Besesar, S. (2008) HIV/AIDS in the South African construction industry: an empirical study. *Construction Management and Economics*, **26**(8), 827-839.
- Bowler, J. (2004) A pilot study into the impact of and response to HIV/AIDS by workplaces in the Nelson Mandela Metropolitan Municipal Area. In, HIV/AIDS in the Workplace Research Symposium, 29 June 2004, University of Witwatersrand, Johannesburg. Centre for health policy pp. 11-32.
- Burman, W. J. and Jones, B. E. (2001) Treatment of HIV-related Tuberculosis in the Era of Effective Antiretroviral Therapy. *Am. J. Respir. Crit. Care Med.*, **164**(1), 7-12.
- Charalambous, S., Innes, C., Muirhead, D., Kumaranayake, L., Fielding, K., Pemba, L, Hamilton, R., Grant, A. D. and Churchyard, G. J. (2007) Evaluation of a workplace HIV treatment programme in South Africa. *AIDS*, **21**(s3), S73-S78
- Chigwedere, P., Seage, G. R., Gruskin, S., Lee, T. H. and Essex, M. (2008) Estimating the lost benefits of Antiretroviral drug use in South Africa. *Journal of Acquired Immune Deficiency Syndromes*, **49**(4), 1-6.
- Chillag, K., Bartholow, K., Cordeiro, J., Swanson, S., Patterson, J., Stebbins, S., Woodside, C. and Sy, F. (2002) Factors Affecting the Delivery of HIV/AIDS Prevention Programs by Community-Based Organizations. *AIDS Education and Prevention*, **14**(Supplement A), 27-37.
- Colvin, M., Connolly, C. and Madurai, L. (2007) The epidemiology of HIV in South African workplaces. *AIDS*, **21**(s3), S13-S19.

- Connelly, P. and Rosen, S. (2005) Will small and medium enterprises provide HIV/AIDS services to employees? An analysis of market demand. *South African Journal of Economics*, **73**(s1), 613-626.
- Connelly, P. and Rosen, S. (2006) Treatment for HIV/AIDS at South Africa's largest employers: myth and reality. *South African Medical Journal*, **96**(2), 128-133.
- CIDB (2003) *Specification for HIV/AIDS awareness - generic specification issued for public comment*, Construction Industry Development Board, Pretoria.
- CIDB (2004) *South African Construction Industry Status Report - Synthesis review on the South African construction industry and its development*, Construction Industry Development Board, Pretoria.
- CIDB database (www.cidb.org.za) [accessed 07 July 2010].
- Dahab, M., Charalambous, S., Hamilton, R., Fielding, K., Kielmann, K., Churchyard, G. J. and Grant, A. D. (2008) "That is why I stopped the ART": Patients' & providers' perspectives on barriers to and enablers of HIV treatment adherence in a South African workplace programme. *BMC Public Health*, **8**(1), 1-6.
- Day, J. H., Miyamura, K., Grant, A. D., Leeuw, A., Munsamy, J., Baggaley, R. and Churchyard, G. J. (2003) Attitudes to HIV voluntary counselling and testing among mineworkers in South Africa: Will availability of antiretroviral therapy encourage testing? *AIDS Care*, **15**(5), 665 - 672.
- Davies, R. and Thurlow, J. (2009) *Formal-Informal Economy Linkages and Unemployment in South Africa*. Human Sciences Research Council (HSRC), available at: www.hsrc.ac.za/research/ [accessed 03 July 2011].
- Department of Labour (n.d) *HIV/AIDS Technical Assistance Guidelines*. Department of Labour, available at: www.labourprotect.co.za/TAG.pdf [accessed 03 August 2011].
- De Vaus, D. (2002) *Surveys in Social Research*. Fifth edition, Allen and Unwin, 83 Alexander St, Crows Nest NSW 2065.
- Development Works (2001) *Economic impact of HIV/AIDS on the construction sector and implications for the Housing Policy*. Draft Report 1-Literature Review Development.
- DPW (2004) *HIV/AIDS awareness programme training manual*. Department of Public Works (DPW), available at: www.publicworks.gov.za [accessed 3 February 2009].
- Dickinson, D. (2003) Managing HIV/AIDS in the South African Workplace: Just another duty? *South African Journal of Economic and Management Sciences*, **6**(1), 1-31.
- Dickinson, D. (2004a) Corporate South Africa's response to HIV/AIDS: why so slow? *Journal of Southern African Studies*, **30**(3), 627-649.

- Dickinson, D. (2004b) Medium-sized companies, many stakeholders: the sociology, psychology and political economy of HIV/AIDS responses in three manufacturing companies. In, HIV/AIDS in the Workplace Research Symposium, 29 June 2004, University of Witwatersrand, Johannesburg. Centre for health policy pp. 35-63.
- Dickinson, D. and Innes, D. (2004) Fronts or front-lines? HIV/AIDS and big business in South Africa, *55*, 28-54.
- Dickinson, D. and Stevens, M. (2005) Understanding the response of large South African companies to HIV/AIDS. *SAHARA J*, *2*(2), 286-295.
- Dickinson, D. and Versteeg, M. (2004) HIV/AIDS and the Construction Industry. *South African Labour Bulletin*, *28*(5), 5.
- Drimie, S. (2002) *The Impact of HIV/AIDS on Rural Households and Land Issues in Southern and Eastern Africa*. A Background Paper prepared for the Food and Agricultural Organization, Sub-Regional Office for Southern and Eastern Africa, Human Sciences Research Council, Pretoria.
- Edwards, P.J. (2001) *A study of risk perceptions and communication in risk management for construction projects*. Unpublished PhD thesis, University of Cape Town, Cape Town, South Africa.
- Ellis, L.L. (2006) The Economic Impact of HIV/AIDS on Small, Medium and Large Enterprises. *South Africa Journal of Economics*, *74*(4), 682-701.
- English, J. and Mbutia, G. (2002) *The construction labour force in South Africa - a study of informal labour in the Western Cape*. Working Paper 188. ILO, Geneva.
- Evian, C., Fox, M., MacLeod, W., Slotow, S. J. and Rosen, S. (2004) Prevalence of HIV in workforces in southern Africa, 2000 - 2001. *South African Medical Journal*, *94*(2), 125-130.
- Fakier, A. (2004) The Global Reporting Initiative's HIV/AIDS reporting guidelines in South Africa: Perceptions, uses and possible outcomes. In, HIV/AIDS in the Workplace Research Symposium, 29 June 2004, University of Witwatersrand, Johannesburg. Centre for health policy pp. 87-105.
- Feeley, F., Rosen, S., Fox, M., Macwan'gi, M. and Mazimba, A. (2004) *The cost of HIV/AIDS among professional staff in the Zambian public health sector*. Boston: Center for International Health and Development.
- Feeley, J. D., Connelly P., and Rosen, S. (2007) Private Sector Provision and Financing of AIDS Treatment in Africa: Current Developments. *Current HIV/AIDS Reports*, *4*, 192-200.
- FIDIC (2004) *HIV/AIDS in Construction - FIDIC Policy Statement*. International Federation For Consulting Engineers (FIDIC), available at: www.fidic.org/policies [accessed 29 November 2010].

- Fourie, P. and Schonteich, M. (2002) Die, the beloved countries: human security and HIV/AIDS in Africa *Politeia*, **21**(2), 6-30.
- Fowler, F. J. (2002) *Survey Research Methods* Third edition. Vol. 1. Applied Social Research Methods Series, California, SAGE Publications.
- Fox, M. P., Rosen, S., MacLeod, W. B., Wasunna, M., Bii, M., Foglia, G. and Simon, J. L. (2004) The impact of HIV/AIDS on labour productivity in Kenya. *Tropical Medicine & International Health*, **9**(3), 318-324.
- Fraser, F. K., Grant, W. J., Mwanza, P. and Naidoo, V. (2002) The Impact of HIV/AIDS on Small and Medium Enterprises in South Africa. *South African Journal of Economics*, **70**(7), 575-583.
- Gable, G. G. (1994) Integrating case study and survey research methods: an example in information systems. *European Journal of Information Systems*, **3**(2), 112-126.
- Gauri, V. and Lieberman, E. S. (2004) AIDS and the state-The Politics of Government Responses to the Epidemic in Brazil and South Africa. In: Annual Meetings of the American Political Science Association, Chicago, IL September 2-5, 2004, Chicago.
- George, G. (2006) Workplace ART programmes: why do companies invest in them and are they working? *African journal of AIDS research*, **5**(2), 179.
- George, G. and Quinlan, T. (2009) Health management in the private sector in the context of HIV/AIDS: progress and challenges faced by company programmes in South Africa. *Sustainable Development*, **17**(1), 19-29.
- George, G., Gow, J. and Whiteside, A. (2009) HIV/AIDS in private sector companies: cost impacts and responses in Southern Africa. *HIV Therapy*, **3**(3), 293.
- Gow, J. (2009) The adequacy of policy responses to the treatment needs of South Africans living with HIV (1999-2008): a case study. *Journal of the International AIDS Society*, **12**(1), 37.
- Gubrium, J. F. and Holstein, A. (2001) *Handbook of Interview Research – Context and Method*. Sage Publications Ltd.
- Haupt, T. C. and Smallwood, J. (2002) *HIV/AIDS - construction employers can do more*, Eastern Cape: Peninsula Tecknikon, University of Port Elizabeth.
- Haupt, T. C., Munshi, M. and Smallwood, J. (2005) HIV and AIDS in South African construction: is age nothing but a number? *Construction Management and Economics*, **23**(1), 107.
- Hope, R. and Israel, E. (2007) *The Essentials of Antiretroviral Therapy for Health Care and Program Managers*. Pathfinder International, available at: www.pathfind.org [accessed 20 May 2011].

- HSRC (2008) *Human Resources Development Review - Education, Employment and Skills in South Africa*. Human Sciences Research Council (HSRC), available at: www.hsrcpress.ac.za [accessed 02 March 2011].
- IFC (2002) *HIV/AIDS in the Workplace*. Good Practice Note. International Finance Corporation (IFC) (Paper Number 2), 24.
- ILO (2003) *Workplace action on HIV/AIDS - Identifying and sharing best practice*, International Labour Organisation (ILO) Geneva.
- ILO (2007) *Guidelines For Management of Opportunistic Infections and Anti-Retroviral Treatment in Adolescents and Adults in Ethiopia*, available at: www.ilo.org [accessed 18 April 2011].
- ILO (2008) *HIV + work - Using the ILO code of practice on HIV/AIDS and the world of work - guidelines for the construction sector*, International Labour Organisation (ILO) Geneva.
- IOM (2010) *Construction Sector Report*. International Organisation for Migration (IOM), available at: www.iom.org.za [accessed 01 July 2010].
- Isaksen, J., Songstad, N. G. and Spissoy, A. (2002) *Socio-economic effects of HIV/AIDS in African countries*, available at www.cmi.no/public/pub2002 [accessed 21 June 2010].
- Kelly, K. (2002) Behavioural and social responses to HIV/AIDS: value for money? In: *HIV/AIDS, economics and governance in South Africa: Key issues in understanding response: A literature review*. Centre for AIDS Development, Research and Evaluation (CADRE), 100-122, Johannesburg.
- Lurie, M. N., Williams, B. G., Zuma, K., Mkaya-Mwamburi, D., Garnett, G. P., Sturm, A. W., Sweat, M. D., Gittelsohn, J. and Abdool Karim, S. S. (2003) The Impact of Migration on HIV-1 Transmission in South Africa: A Study of Migrant and Nonmigrant Men and Their Partners. *Sexually Transmitted Diseases*, **30**(2), 149-156.
- Mahajan, P. A., Colvin, M., Rudatsikira, J. and Ettl, D. (2007) An overview of HIV/AIDS workplace policies and programmes in southern Africa. *AIDS*, **21**, S1-S9.
- Malhotra, M. K. and Grover, V. (1998) An assessment of survey research in POM: from constructs to theory. *Journal of Operations Management*, **16**(4), 407-425.
- Mapolisa, S., Schneider, H. and Stevens, M. (2004) Labour response to HIV/AIDS in the workplace: can HIV/AIDS compete with bread and butter issues? In, *HIV/AIDS in the Workplace Research Symposium*, 29 June 2004, University of Witwatersrand, Johannesburg. Centre for health policy pp. 159-171.
- McGreevey, W., Alkenbrack, S. and Stover, J. (2003) Construction workplace interventions for prevention, care, support and treatment of HIV/AIDS, 347-363.

- Meintjes, I., Bowen, P. A., and Root, D. (2007) HIV/AIDS in the South African construction industry: understanding the HIV/AIDS discourse for a sector-specific response. *Construction Management and Economics*, **25**(3), 255-266.
- Miller, C. M., Kethapile, M., Rybasack-Smith, H. and Rosen, S. (2010) Why are antiretroviral treatment patients lost to follow-up? A qualitative study from South Africa. *Tropical Medicine and International Health*, **15**(s1), 48-54.
- Natrass, N. (2004) *The Moral Economy of AIDS in South Africa*. Cambridge: Cambridge University Press, 2004.
- Natrass, N. (2006) South Africa's "Rollout" of Highly Active Antiretroviral Therapy: A Critical Assessment. *JAIDS Journal of Acquired Immune Deficiency Syndromes*, **43**(5), 618-623.
- Ncama, B. P. (2007) Acceptance and disclosure of HIV status through an integrated community/home-based care program in South Africa. *International Nursing Review*, **54**(4), 391-397.
- Page-Shipp, L. S., Charalambous, S., Roux, S., Dias, B., Sefuti, C., Churchyard, G. J. and Grant, A. D. (2007) Attitudes to directly observed antiretroviral treatment in a workplace HIV care programme in South Africa. *Sexually Transmitted Infections*, **83**, 383-386.
- Patterson, A. S. (2008) *The New Globalisation and HIV/AIDS in Africa*. In: George Klay Kieh, J (Ed.), *Africa and the new globalisation*, pp. 155-176. Cornwall: Ashgate Publishing Limited.
- Punch, K. F. (2003) *Survey Research: The basics*. London: SAGE Publications Ltd.
- Quantec database (www.quantec.co.za) [accessed 27 February 2011].
- Rajak, D. (2010) 'HIV/AIDS is our business': the moral economy of treatment in a transnational mining company. *Journal of the Royal Anthropological Institute*, **16**(3), 551-571.
- Rau, B., Forsythe, S. and Dallabetta, G. (2002) *Workplace HIV Programs - An Action Guide For Managers*, Family Health International (FHI) United States Agency for International Development (USAID).
- Reed, C. (2004) Workplace interventions in multinational companies: a case study approach. In, *HIV/AIDS in the Workplace Research Symposium*, 29 June 2004, University of the Witwatersrand, Johannesburg. Centre for health policy pp. 236-258.
- Riege, A. M. (2003) Validity and reliability tests in case study research: a literature review with "hands-on" applications for each research phase. *Qualitative Market Research: An International Journal*, **6**(2), 75-86.

- Rosen, S., Simon, J. L., Thea, D. M. and Vincent, J. R. (2000) Care and treatment to extend the working lives of HIV-positive employees: calculating the benefits to business. *South African Journal of Science*, **96**(6), 300.
- Rosen, S., MacLeod, W., Vincent, J. R., Thea, D. M. and Simon, J. (2004a) Why do firms take action on HIV/AIDS? Evidence from Nigeria. *The Journal of Business in Developing Nations*, **8**, 1-38.
- Rosen, S., Vincent, J. R., MacLeod, W., Fox, M. P., Thea, D. M. and Simon, J. L. (2004b) The cost of HIV/AIDS to businesses in Southern Africa. *Official Journal of the International AIDS Society*, **18**(2), 317-324.
- Rosen, S., Kethlhapile, M., Sanne, I. and DeSilva, M. B. (2007) Cost to patients of obtaining treatment for HIV/AIDS in South Africa. *South African Medical Journal*, **97**(7), 524-529.
- SABCOHA (2004) *The impact of HIV/AIDS on selected business sectors in South Africa*. South African Business Coalition on HIV/AIDS (SABCOHA), available at: www.ber.ac.za [accessed 7 August 2009].
- SABCOHA (2005) *The impact of HIV/AIDS on selected business sectors in South Africa*. South African Business Coalition on HIV/AIDS (SABCOHA), available at: www.ber.ac.za [accessed 12 November 2009].
- SABCOHA (2006) *The Macro-economic impact of HIV/AIDS under alternative intervention scenarios (with specific reference to ART) on the South African economy*. South African Business Coalition on HIV/AIDS (SABCOHA), available at: www.ber.ac.za [accessed 12 November 2009].
- SABCOHA (2010) *Western Cape Business Sector Survey on HIV and AIDS*, Cape Town: South African Business Coalition on HIV/AIDS.
- Setswe, G. K. G. (2009) Best practice workplace HIV/AIDS programmes in South Africa: a review of case studies and lessons learned. *African Journal of Primary Health Care & Family Medicine*, **1**(1), 6.
- Shisana, O., Simbayi, L. C., Rehle, T., Zungu, N. P., Zuma, K., Ngogo, N., Jooste, S., Pillay-Van Wyk, V., Parker, W., Pezi, S., Davids, A., Nwanyanwu, O. and Dinh, T. H. (2008) *South African National HIV Prevalence, Incidence, Behaviour and Communication Survey, 2008*, Cape Town, HSRC Press.
- Smallwood, J. J., Godfrey, C. and Venter, D. (2001) *HIV/AIDS, STDs and TB in Construction*. CSIR, available at: www.buildnet.csir.co.za [accessed 4 November 2010].
- Sprague, C. (2008) Women's health, HIV/AIDS and the workplace in South Africa. *African journal of AIDS research*, **7**(3), 341-352.

- Stats SA (2008) *Construction industry (P5002)*. Statistics South Africa, Pretoria, available at: www.statssa.gov.za [accessed 20 July 2010].
- Stats SA (2009a) *Construction Industry Report, Report No. 50-02-01*. Statistics South Africa, Pretoria, available at: www.statssa.gov.za [accessed 02 March 2011].
- Stats SA (2009b) *Quarterly Labour Force Survey (P0211)*. Statistics South Africa, Pretoria, available at: www.statssa.gov.za [accessed 17 September 2010].
- Stein, A. McLeod, H. and Achmat, Z. (2002) *The cover provided for HIV/AIDS benefits in medical schemes in 2002*, Cape Town: University of Cape Town.
- Stevens, M., Blaauw, D. and Mapolisa, S. (2004) Comparisons over time: managing HIV/AIDS in the workplace. In, HIV/AIDS in the Workplace Research Symposium, 29 June 2004, University of Witwatersrand: Johannesburg. Centre for Health Policy pp. 291-304.
- Tellis, W. (1997) Application of a Case Study Methodology, *The Qualitative Report*, **3** (3).
- UNAIDS, The Prince of Wales Business Leaders Forum (PWBLF) and Global Business Council on HIV/AIDS (GBC) (2000) *The business response to HIV/AIDS - impact and lessons learned*, UNAIDS, Geneva and London.
- UNAIDS (2002) *Report on the global HIV/AIDS epidemic - The mounting impact*. UNAIDS, available at: http://whqlibdoc.who.int/publications/2002/9219731854_ch3.pdf [accessed 28 February 2011].
- UNAIDS (2004) *Report on the global AIDS epidemic*. UNAIDS available at: www.unaids.org/bangkok2004/GAR2004_html/ExecSummary_en/Execsumm_en.pdf [accessed 20 September 2009].
- UNAIDS (2008a) *Report on the global AIDS epidemic*. UNAIDS, available at: <http://data.unaids.org/> [accessed 22 September 2009].
- UNAIDS (2008b) *Business coalitions tackling AIDS - A Worldwide Review*, UNAIDS.
- UNAIDS (2009) *Annual report*. UNAIDS, available at: www.unaids.org. [accessed 19 July 2010].
- UNAIDS and WHO (2009) *AIDS epidemic update*, UNAIDS, Geneva.
- USAID (2001) *The HIV/AIDS Crisis: How Are African Businesses Responding*, United States Agency for International Development (USAID), Washington DC.
- USAID (2008) *HIV/AIDS Health Profile - Africa Region*. United States Agency for International Development (USAID), available at: www.usaid.gov [accessed 21 October 2010].
- Versteeg, M. (2004) A licence to choose? HIV/AIDS workplace responses from South African profit-making companies in context. In, HIV/AIDS in the Workplace Research Symposium, 29 June 2004, University of Witwatersrand, Johannesburg. Centre for health policy pp. 329-349.

- Walensky, R. P., Paltiel, A. D., Losina, E., Mercincavage, L. M., Schackman, B. R., Sax, P. E., Weinstein, M. C. and Freedberg, K. A. (2006) The Survival Benefits of AIDS Treatment in the United States. *Journal of Infectious Diseases*, **194**(1), 11-19.
- Weston, M. D., Churchyard, G. J., Mametja, D., McIntyre, J. A. and Rander, F. (2007) Business and AIDS: sectoral challenges and opportunities. *AIDS*, **21**(s3), S85-S89
- WHO (2004) *The Global Burden of Disease: 2004 Update*, World Health Organisation (WHO) available at: www.who.int/evidence/bod [accessed 17 February 2011].
- WHO (2005) *Interim WHO clinical staging of HIV/AIDS and HIV/AIDS case definitions for Surveillance*. World Health Organisation, (WHO), available at: www.who.int/hiv/pub/guidelines/clinicalstaging.pdf [accessed 31 August 2011].
- WHO (2007) *WHO case definitions of HIV for surveillance and revised clinical staging and immunological classification of HIV-related*. World Health Organisation, (WHO), available at: www.who.int/hiv/pub/guidelines/HIVstaging150307.pdf [accessed 01 September 2011].
- WHO (2009) *Rapid Advice Antiretroviral therapy for HIV infection in Adults and Adolescents*. World Health Organisation (WHO), available at: www.who.int/hiv/pub/arv/rapid_advice_art.pdf [accessed 31 August 2011].
- World Bank (2008) *The World Bank's commitment to HIV/AIDS in Africa: Our Agenda for Action, 2007-2011*, World Bank, Washington DC.
- Yin, R. K. (1994) *Case Study Research - Design and Methods* Second edition. Beverly Hills, CA: Sage Publications Ltd.
- Yin, R. K. (2003a) *Case Study Research - Design and Methods* Third edition. London: Sage Publications Ltd.
- Yin, R. K. (2003b) *Applications of Case Study Research*, Second Edition Vol. 34. Applied Social Research Methods Series, London: Sage Publications.
- Zellner, S. and Ilana, R. (2008) *HIV/AIDS services through the workplace: A survey in four Sub-Saharan African countries*, Bethesda, MD: Private Sector Partnerships-One project, Abt Associates Inc.

Appendix A: Survey Questionnaire

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Appendix B: Case Study Interview Questions

HIV / AIDS research case study protocol (Western Cape Construction Organisations)

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Table 6.1 Summary of case study analysis findings

Case Study Company	Factors							
	Company size	HIV/AIDS policies	HIV/AIDS awareness and prevention campaigns	HIV/AIDS treatment programmes	Disclosure	Financial viability of treatment programmes	Challenges	Innovative approaches
Company A	Large	Implemented independent policy. Top-down, bottom-up approach	Provides CareWorks workshops and in-house HIV/AIDS education	Provides an in-house managed treatment programme	High level of disclosure, considered a driver for effective treatment provision	Costs considered negligible as they fall within the expected budget	None reported	HIV/AIDS education in schools, communities and farms. Proposes to extend to academic institutions
Company B	Large	HIV/AIDS aspects incorporated into an existing employee wellness policy. Top-down approach	Provides CareWorks workshops	Does not provide any treatment programme, citing difficulties in managing the programme as a major barrier	Considered a barrier to the provision of a treatment programme	Costs considered a possible barrier to the implementation of treatment programmes	None reported	Proposes to involve health and safety officers in HIV/AIDS training
Company C	Large	Implemented independent policy. Top-down, bottom-up approach	Provides CareWorks workshops and in-house HIV/AIDS education	Provides a treatment programme through CareWorks	Low level of disclosure, considered a barrier to effective provision of a treatment programme	Costs considered negligible as returns outweigh the costs	Changing employees' attitudes towards behaviour, non-compliance, protecting employees at risk	None reported
Company D	Large	Implemented policy but centralised at the head office	Provides once-off awareness campaigns on World AIDS Day	Does not provide any treatment programme, citing no HIV/AIDS cases reported as the reason	No disclosure	Costs considered a possible barrier to the implementation of treatment programmes	None reported	None reported
Company E	Large	Implemented independent policy. Top-down approach	Provides CareWorks workshops and in-house HIV/AIDS awareness	Provides a treatment programme through CareWorks	High level of disclosure, considered a driver for effective treatment provision	Costs considered negligible as they fall within the expected budget	None reported	Provides incentives such as AIDS awards. Involved in community outreach and stakeholder outreach
Company F	Medium	No HIV/AIDS policy but intends to adopt the MBSA HIV/AIDS policy	Provides informal discussions on HIV/AIDS, on an irregular basis	Does not provide any treatment programme, citing cost implications as a major barrier	High level of disclosure, considered a driver for accessing treatment	Costs considered a possible barrier to the implementation of treatment programmes	Mobility of employees affects adherence to medication	None reported

HIV/AIDS Interventions Survey - June 2009

1. Welcome

Dear Construction Industry Colleague

As part of a UCT-based research project into the nature and effect of HIV/AIDS treatment programmes in the Construction Industry, we are undertaking a pilot study of randomly-selected construction firms. We would greatly value your contribution to the survey.

Your responses are HIGHLY CONFIDENTIAL. While we ask for the name of your organization, this is merely to track who has responded rather than to link specific answers to specific companies. The results will be published in aggregate form only and responding organisations will remain anonymous.

Should you have any questions or comments with respect to this survey, please feel free to contact the primary researchers at the University of Cape Town; details are given below.

Professor Paul Bowen (paul.bowen@uct.ac.za)

Jonathan Marks (jonathan.marks@uct.ac.za)

NB: The starred (*) questions require to be answered before you can proceed.

* 1. Company Name

* 2. Position/Job Title

* 3. Which construction works category do you primarily belong to? (tick all applicable)

- Site preparation
- Construction of buildings
- Construction of civil engineering structures
- Construction of other structures
- Construction by specialist trade contractors
- Plumbing
- Electrical contractors
- Shopfitting
- Other building installation
- Painting and decorating
- Other building completion

HIV/AIDS Interventions Survey - June 2009

* 4. How many permanent employees do you have?

<50

51-100

101-150

151-200

201-250

251-300

>300

* 5. What is the annual average turnover for your firm?

Less than R6 million per annum (Micro)

R6 million to R13 million per annum (Small)

R13 million to R26 million per annum (Medium)

Exceeding R26 million per annum (Large)

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HIV/AIDS Interventions Survey - June 2009

2. Company Perceptions and Policy

* 1. How does your company rate (perceive) the threat of HIV/AIDS as a long term problem in the Construction Industry?

	Significant problem	Problem	Neutral	Slight problem	Not a problem
Perception of HIV/AIDS	jn	jn	jn	jn	jn

* 2. Does your company have an HIV/AIDS policy?

Yes

No

3. If YES to Question 2; which of the following does the policy entail? (tick all applicable)

Awareness

Prevention

Treatment

Other (please specify)

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HIV/AIDS Interventions Survey - June 2009

3. Awareness

* 1. Does your company have an HIV/AIDS AWARENESS campaign?

Yes

No

2. If YES to Question 1; when was it implemented in your company and what does it involve?

3. If NO to Question 1; why have you not implemented such a campaign?

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HIV/AIDS Interventions Survey - June 2009

4. Prevention

* 1. Does your company have an HIV/AIDS PREVENTION programme?

Yes

No

2. If YES to Question 1; when was it implemented and what does it involve?

3. If NO to Question 1; why have you not implemented such a programme?

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HIV/AIDS Interventions Survey - June 2009

5. Treatment

* 1. Does your company have an HIV/AIDS TREATMENT programme?

Yes

No

2. If YES to Question 1; when was it implemented and what does it involve?

3. If YES to Question 1; is the treatment programme managed in-house?

Yes

No

4. What are the reasons for having a company-sponsored HIV/AIDS treatment programme?

5. If NO to Question 1; why have you not implemented such a programme?

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HIV/AIDS Interventions Survey - June 2009

6. HIV/AIDS and Employees

* 1. Do you encourage employees to know their HIV status?

Yes

No

* 2. In your opinion, what percentage of the permanent (site) staff are HIV positive and why do you think so?

* 3. What percentage of HIV positive permanent staff have disclosed their status?

a. Confidentially to the
company or their
manager

b. Publicly

4. What percentage of HIV positive permanent staff are known to be on a company treatment programme?

5. Rate the level of participation of your HIV positive permanent staff in the company HIV treatment programme

	Very low	Low	Average	High	Very high
Level of participation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. Of those who embark on HIV treatment programmes in your organisation, approximately what percentage of participants remain on the programme long-term?

HIV/AIDS Interventions Survey - June 2009

7. Company Involvement & HIV/AIDS

1. Which of the following types of support does your company provide to HIV positive permanent employees? (tick all applicable)

- Financial support
- Subsidised HIV treatment/ Anti-Retroviral Therapy
- Additional nutrition/ dietary supplements

Other (please specify)

* 2. Does your company have a medical scheme contribution policy?

- Yes
- No
- Don't know

3. If YES to Question 2; is the policy

- Voluntary
- Mandatory

4. If voluntary, what percentage of the permanent employees belong to this medical scheme?

* 5. Does the company's medical insurer report to management on the number and prognosis (on an anonymous basis) of company personnel registered on the HIV treatment programme?

- Yes
- No
- Don't Know

HIV/AIDS Interventions Survey - June 2009

6. Within the organisation, who holds responsibility for the HIV/AIDS programme? (tick all applicable)

CEO

MD

HR Director

Health and Safety Officer

Other (please specify)

7. Rate the level of commitment of your company to the HIV/AIDS treatment programme?

	Very low	Low	Average	High	Very high
Commitment to HIV treatment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. How is success measured with respect to your HIV/AIDS treatment programme?

* 9. In your opinion, is it financially viable for the organisation to run an HIV/AIDS treatment programme?

Yes

No

Don't know

10. If YES to Question 9; why do you think it is financially viable?

HIV/AIDS Interventions Survey - June 2009

8. Thank You

Thank you for participating in this survey; your information will be highly valued in our on-going research study into HIV/AIDS in the construction industry.

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ORGANISATION ELEMENT	ISSUE	QUESTION	DATA SOUGHT
A. DEMOGRAPHICS	1. Organisation Size	a) <50 employees b) 51-100 c) 101-150 d) 151-200 e) 201-250 f) >250	Ordinal
	2. Gross Annual Turnover	a) Micro <R6m b) Small >R6m <R13m c) Medium >R13m < R26m d) Large >R26m	Ordinal
	3. Interviewee Status	a) Director b) Senior Manager c) Manager d) Other (describe)	Nominal
	4. Organisation structure	1. Draft an organisational structure diagram	Diagrammatic
B. HIV / AIDS POLICIES	1. Policies	1. Describe any formal HIV/AIDS awareness, prevention or treatment policies adopted by your organisation.	Descriptive

		2. Describe any informal policies known to employees?	
	2. Supplementary questions	<ol style="list-style-type: none"> 1. Explain reasons if no policies adopted? 2. Describe how policies were formulated? 3. Explain any external influences to encourage policy development (e.g. Union / government pressure). 4. Explain any internal influences on policy development (e.g. CSR, HR department). 5. Show on the Org. Struct. Diagram where policy development responsibility is situated. 6. Explain how policies are implemented and show responsibilities on the Org. Struct. Diagram. 7. Are staff members at all levels involved in policy development and implementation? 8. How frequently are policies reviewed? 	Descriptive
C. HIV / AIDS CAMPAIGNS	1. Awareness and /or prevention campaigns	<ol style="list-style-type: none"> 1. Describe any HIV/AIDS awareness and/or prevention campaigns run by your organisation: <ol style="list-style-type: none"> a) Presented by third party external organisation? b) Short internal course on safe sex and HIV/AIDS awareness. c) Short external course on safe sex and HIV/AIDS awareness. d) Awareness posters and leaflets. 	Descriptive + Frequency count

		<ul style="list-style-type: none"> e) Information about voluntary counselling and testing (VCT). f) Information leaflets / counselling about abstinence, faithfulness, the use of condoms, and the importance of support groups. g) Information about availability of internal HIV/AIDS counsellors. h) Information about availability of external HIV/AIDS counsellors. Placement of condom dispensers. i) Free issue of male and female condoms on all sites and at all offices. j) HIV testing. k) Other campaign features (describe). 	
	<p>2. Non-implementation</p>	<ul style="list-style-type: none"> 1. Explain any reasons for NOT implementing HIV/AIDS awareness and /or prevention campaigns. <ul style="list-style-type: none"> a) High start-up cost. b) High ongoing costs. c) Small firm size. d) Not urgent yet (HIV/AIDS prevalence perceived as not significant). e) Potential HIV/AIDS impacts cushioned by current staff numbers. 	<p>Descriptive + Frequency count</p>

		<p>f) Not sure how to do this.</p> <p>g) Issues too sensitive for organisation and employees.</p> <p>h) Cannot guarantee confidentiality.</p> <p>i) Insufficient co-operation from employees.</p> <p>j) Responsibility delegated to external consultants / contractors.</p> <p>k) Other reasons?</p>	
	3. Peer involvement	1. Describe the nature and extent of any “peer education” (involvement of employees) in awareness and prevention campaigns.	Descriptive
	2. Campaign evaluation	<p>1. Describe the nature and frequency of any measures used to assess the effectiveness of awareness and prevention campaigns.</p> <p>2. Feedback by external organisation (if involved)?</p>	Descriptive + Cardinal
	3. Cost	<p>1. Describe any budgetary considerations and cost assessments for awareness and prevention campaigns.</p> <p>2. Approximately what % of gross annual turnover do awareness and prevention campaigns cost your organisation?</p>	Descriptive + Cardinal
	4. Campaign responsibility	<p>1. Show on the Org. Struct. Diagram;</p> <p>a) How campaign development responsibility is assigned.</p>	Diagram

		b) How campaigns are managed.	
<p>D. HIV / AIDS PROGRAMMES</p>	<p>1. Treatment programmes</p>	<p>1. Describe any HIV/AIDS treatment programmes run by your organisation:</p> <ul style="list-style-type: none"> a) Part of package offered by external organisation? b) Financial support offered c) Treatment subsidy d) Company clinic e) Contracted clinic services f) Subsidised mandatory medical aid scheme (closed company scheme) g) Subsidised voluntary medical aid scheme h) Disease management programme (DMP) required by medical insurer i) Time off to attend treatment j) Transport to /from clinics k) ARV therapy l) Nutritional / dietary supplements m) Limited support for infected family members <p>Other (explain)</p>	<p>Descriptive + Frequency count</p>

	<p>2. Non-implementation</p>	<p>1. Explain any reasons for NOT implementing HIV/AIDS treatment programmes:</p> <ul style="list-style-type: none"> a) High start-up cost. b) High ongoing costs c) Small firm size. d) Not urgent yet (HIV/AIDS prevalence perceived as not significant). e) Potential HIV/AIDS impacts cushioned by current staff numbers. f) Not sure how to do this. g) Issue too sensitive for organisation and employees. h) Cannot guarantee confidentiality. i) Insufficient co-operation from employees. j) Responsibility delegated to external consultants / contractors (e.g. NGO, CareWorks) k) Other reasons? 	<p>Descriptive+ Frequency count</p>
	<p>3. Programme entry / exit</p>	<ul style="list-style-type: none"> 1. How can employees enter a treatment programme? 2. How long do employees normally remain on treatment programmes? 3. How do employees normally leave a treatment programme? 	<p>Descriptive</p>

		<p>4. Why do employees leave treatment programmes?</p> <p>What are the impacts of late entry by employees into treatment programmes?</p>	
	4. Substitution	1. Describe any evidence to suggest that fellow employees might work harder to cover the gaps left by workmates undertaking treatment programmes.	Descriptive
	5. Programme evaluation	<p>1. Describe the nature and frequency of any measures used to assess treatment programme effectiveness.</p> <p>2. Feedback from external organisation (if involved)?</p>	Descriptive
	6. Programme costs	<p>1. Describe any budgetary considerations and cost assessments for treatment programmes.</p> <p>2. Approximately what % of gross annual turnover do treatment programmes cost your organisation?</p>	Descriptive + Cardinal
	7. Programme responsibility	<p>1. Show on the Org. Struct. Diagram;</p> <p>a) How treatment programme development responsibility is assigned.</p> <p>b) How treatment programmes are managed.</p>	OS Diagram

<p>E. TREATMENT PROGRAMME BENEFITS</p>	<p>1. Treatment programme benefits</p>	<p>1. Identify any organisational benefits from the implementation of HIV / AIDS treatment programmes:</p> <ul style="list-style-type: none"> a) Retention of skilled staff b) Motivation of staff c) Improved staff morale d) Visible sign of CSR e) Other? 	<p>Descriptive + Frequency count</p>
<p>F. EMPLOYEE HIV STATUS DISCOVERY / DISCLOSURE</p>	<p>1. Encouragement and response</p>	<ul style="list-style-type: none"> 1. What steps are taken to encourage employees to discover their HIV status? 2. What level of discovery occurs among employees? 3. What steps are taken to encourage employees to disclose their HIV status? 4. What level of disclosure by employees actually occurs? 	<p>Descriptive</p>

	2. Data confidentiality	<ol style="list-style-type: none"> 1. What measures are used to maintain employee confidentiality about HIV status? 2. How is responsibility for HIV status data assigned? 	Descriptive
G. HIV/AIDS STIGMATISATION	1. Presence	<ol style="list-style-type: none"> 1. Describe any HIV/AIDS stigmatisation that occurs in your organisation. 2. Describe any effects / consequences of stigmatisation. <ol style="list-style-type: none"> a) For the employee b) For the organisation 	Descriptive
	2. Mitigation response	<ol style="list-style-type: none"> 1. Describe any measures used to mitigate stigmatisation. 2. Describe a specific response to an employee who has been stigmatised. 	Descriptive

I. MEDICAL AID SCHEME DATA	1.Management data provision	1. Describe the nature and extent of any HIV / AIDS management data provided by medical aid scheme insurers.	Descriptive
J. INNOVATIVE APPROACHES	1. Alternative ideas/incentives	1. Describe any creative or innovative approaches (e.g. application of VM techniques) used in your organisation to address HIV / AIDS policy, campaign or programme issues. 2. Describe any incentives (e.g. lucky draw prizes) used in your organisation to encourage employees to enter HIV/AIDS treatment programmes.	Descriptive
K. ADDITIONAL INFORMATION	1. Additional information	1. Please provide any additional information or comment that you believe is relevant to the Issue of HIV / AIDS in your organisation or the construction industry generally.	Descriptive