

Evaluating the outcome of Voluntary Counselling and Testing for HIV at the Workplace - A Namibian Case Study

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Declaration

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ABSTRACT

In Namibia the HIV prevalence rate in adults (15 to 45 years of age) is estimated at 18.1%. The first HIV infection in Namibia was reported in 1986 and the epidemic constitutes the biggest developmental challenge for Namibia. Approximately 39 new infections occur every day and approximately 28% of deaths in the country are AIDS-related.

The majority of Namibia's workforce is in the age group of 15 years to 45 years and it can be anticipated that HIV and AIDS will have a major disruptive effect on the country's workforce as well as its economy over the next two decades. According to the Namibian government, voluntary counselling and testing (VCT) for HIV is one of the most effective methods to prevent the spread of the epidemic. With this in mind, this study aims to evaluate the outcome of voluntary counselling and testing at one workplace in Windhoek, Namibia, to see whether VCT provides education as well as whether VCT is a vehicle to promote awareness, good attitudes, intentions and behaviour change. The main purpose of this outcome evaluation is to determine to what extent voluntary counselling and testing at the workplace has led to HIV-related changes in knowledge, attitudes, behaviour and practises.

Although the majority of respondents indicated that their knowledge of HIV had increased after their participation in the VCT programme, upon closer analysis it was evident that participants who had a secondary or higher level of education had more knowledge, or had had more of a knowledge increase, than participants with a primary or lower level of education. From the research findings, it appeared that the voluntary counselling and testing had helped participants to identify their individual risks, as their self-reported risk perceptions with regard to becoming infected with HIV and/or a sexually transmitted disease increased after their participation in the VCT. There was also evidence that participants implemented risk reduction plans after the voluntary counselling and testing, as the percentage of participants who had casual sex partners decreased while the

percentage of participants who had not had casual sex partners in the previous six months increased.

It can be concluded that the general attitude amongst employees towards HIV-positive people is relatively non-discriminatory. However, it seems that the VCT was not as successful in transferring information and education on HIV amongst employees with lower education levels than amongst their peers with higher levels of education, and employees with primary or lower education levels appear not to have benefited much from the intervention in terms of an increase in knowledge.

It is recommended that voluntary counselling and testing be provided to the employees at the company on a regular basis, not only because employees have requested it, but also to monitor whether the voluntary counselling and testing for HIV at the company has had the desired effects on the employees, especially with regard to effecting an increase in knowledge, a reduction of stigma and discriminatory attitudes, and the desired behaviour change amongst participants.

OPSOMMING

In Namibië word die MIV voorkomssyfer onder volwassenes (ouderdom 15 tot 45 jaar) op 18,1% geskat. Die eerste MIV-geval in Namibië is in 1986 aangemeld en vertoonwoordig die land se grootste ontwikkelingsuitdaging met ongeveer 39 nuwe infeksies daaglik en ongeveer 28% van sterftes in die land wat VIGS-verwant is.

Die meerderheid van Namibië se werksmag val in die ouderdomsgroep 15 tot 45 jaar en daar kan verwag word dat MIV en VIGS oor die volgende twee dekades grootskaalse ontwigting op die land se werksmag sowel as sy ekonomie gaan veroorsaak. Volgens die Namibiese regering is vrywillige berading en toetsing (VBT) een van die mees doeltreffende metodes om die verspreiding van die epidemie te verhoed. Gedagtig hieraan het hierdie navorsingsprojek dit ten doel om die uitkomste van vrywillige berading en toetsing by een werksplek in Windhoek, Namibië, te evalueer ten einde te bepaal of VBT opvoedkundig is en of dit bewuswording, gesonde houdings, voornemens en gedragsverandering bevorder. Die hoofdoelwit van hierdie uitkomsevaluering is om die mate waartoe vrywillige berading en toetsing tot verandering in kennis, houding, gedrag en praktyke geleik het, te bepaal.

Alhoewel die meerderheid respondente aangedui het dat hulle kennis na VBT verbeter het, het dit by nadere ondersoek geblyk dat deelnemers wat sekondêre of hoërsonderwys gehad het, oor meer kennis beskik het of hul kennis meer uitgebrei het as respondente wat slegs 'n primêre of laer vlak van onderwys gehad het. Uit die navorsingsbevindings blyk dit dat daar onder deelnemers aan vrywillige berading en toetsing 'n toename in die self-aangemelde risiko-persepsie van besmetting met HIV en/of geslagsoordraagbare siektes na hul deelname aan VBT was. Daar was ook bewyse dat deelnemers na die vrywillige berading en toetsing risikoverminderingsplanne geïmplementeer het, omdat daar 'n afname was in die persentasie deelnemers wat informele seksmaats gehad het, sowel as 'n toename in deelnemers wat geen informele seksmaats in die vorige ses maande gehad het nie.

Daar kan tot die slotsom gekom word dat werknemers se houding teenoor MIV-positiewe mense oor die algemeen betreklik nie-diskriminerend is. Dit blyk egter asof VBT ten opsigte van die oordrag

van inligting en opvoeding oor MIV aan werknemers met laer vlakke van onderwys nie so geslaagd was nie omdat werknemers met primêre of 'n laer vlak van opleiding nie veel by die ingrypaksie gebaat het in terme van 'n toename in kennis nie.

Daar word aanbeveel dat vrywillige berading en toetsing op 'n gereelde grondslag aan werknemers by die maatskappy aangebied moet word, nie bloot omdat werknemers daarvoor gevra het nie, maar ook om te bepaal of vrywillige berading en toetsing vir MIV by die maatskappy die gewenste uitwerking op die werknemers gehad het, veral met betrekking tot die uitbou van kennis, 'n afname in stigmatisering en diskriminerende houdings, en 'n toename in die gewenste gedragsverandering onder deelnemers.

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CHAPTER 1: INTRODUCTION

More than twenty five million people globally have died from AIDS-related illnesses since 1981 (UNAIDS, 2009). Of the estimated thirty five million people living with HIV and AIDS worldwide, approximately twenty two million live in sub-Saharan Africa (UNAIDS, 2009). Namibia is a country in sub-Saharan Africa with a relatively small population of approximately two million people, yet the HIV prevalence rate in adults (15 to 45 years of age) is estimated at 18.1% (UNAIDS, 2008:4). The first HIV infection in Namibia was diagnosed in 1986, and since then the epidemic has escalated rapidly (Ministry of Health and Social Services, 2008: 6). According to Dr Richard Kamwi, the Minister of Health and Social Services of Namibia, HIV and AIDS constitute the biggest developmental challenge for Namibia with approximately 39 new infections everyday and approximately 28% of deaths in the country being AIDS-related (Ministry of Health and Social Services, 2008: 5).

The majority of Namibia's workforce is in the age group of 15 years to 49 years and it can be anticipated that HIV and AIDS will have a major disruptive effect on the country's workforce as well as its economy over the next two decades (Figueira and Odendaal, 2001: 1). According to the Namibian government, voluntary counselling and testing (VCT) for HIV is one of the most effective methods to prevent the spread of the epidemic, as VCT is directly linked to promoting behaviour change (Republic of Namibia, 2004: 39). A 2004 study conducted on the factors that affect the uptake of voluntary counselling and testing services at the workplace in South Africa, found that voluntary counselling and testing (VCT) for HIV is the primary access point to HIV/AIDS clinical care and psychological support: if provided at the workplace it can also provide an opportunity for education and motivation to change individual behaviour in order to reduce the risk of HIV transmission (Mundy and Dickinson, 2004: 3). With this in mind, this MPhil thesis in Community and Development aims to evaluate the gap between the provision of voluntary counselling and testing services to the business sector and the effectiveness of the service, at one workplace in Windhoek, Namibia, to see whether VCT provides education as well as whether VCT is a vehicle to promote awareness, good attitudes, intentions and behaviour change.

In this introductory chapter I provide some contextual background on the state response to HIV/AIDS in Namibia and describe briefly how my study is structured. After a brief discussion of the state's response to the epidemic I discuss my research problem and objectives, reflect on the significance of my study and give an overview of Bophelo!, the VCT service provider that is the subject of this evaluation study. The final section of this chapter describes my chapter outline.

1.1 The state's response to HIV and AIDS in Namibia

Since the emergence of the virus in the late 1980's, the Government of Namibia has gone to great lengths to mitigate its impact amongst the population. The first HIV case in Namibia was diagnosed in 1986 (Namibia AIDS Awareness, 2010). According to biannual national sentinel surveys conducted by the Ministry of Health and Social Services, the national HIV prevalence rate in 1992 was 4.2% and peaked in 2002 at 22% (Ministry of Health and Social Services, 2009). Since 2002, the HIV prevalence rate has decreased and stayed relatively stable at 19.7% in 2004, 19.9% in 2006 and 18.1% in 2008 (Ministry of Health and Social Services, 2009). As the available scholarly literature is relatively sparse, most HIV/AIDS-related information about Namibia comes from governmental and international agencies such as UNAIDS. This brief account of the national government's response to the HIV and AIDS epidemic draws on the AIDS in Namibia website (September, 2008) and the Public Service International (PSI) Southern African Project Report (September, 2007).

In response to the then low HIV prevalence rate (4.2%), the first National AIDS Control Programme (NACOP) was established in 1990 and led the national response to the epidemic. As the HIV prevalence rate increased, in 1999 the National AIDS Coordination Programme (NAC) and the National Multisectoral Committee on HIV/AIDS (NAMACOC), chaired by the Minister of Health and Social Services, were formed to further expand the national response. By that stage the prevalence rate was estimated at 19.3% (Ministry of Health and Social Services, 2009). The focus of the NAMACOC is policy and programme implementation and includes all thirteen regional governors, all permanent secretaries, as well as NGO's and representatives from the private sector. These national responses have been guided by three five - year strategic frameworks (Medium Term Plans). A final draft of the fourth National Strategic Framework for HIV and AIDS 2010/11 to 2014/15 is currently being reviewed for approval by the National AIDS Committee before it is officially implemented.

The five main components of the third medium term plan of the National Strategic Plan on HIV/AIDS of the Republic of Namibia are first, an 'enabling environment' for people infected and affected with HIV/AIDS to enjoy equal rights; second, prevention; third, access to care, treatment and support services; fourth, impact mitigation services; and fifth, integrated and coordinated programme management 'at all levels' (Republic of Namibia, 2004: 31). In addition, this third medium term plan supports voluntary counselling and testing (VCT) as one of the most effective methods to prevent the spread of HIV, as the government regards VCT as directly linked to promoting behaviour change:

The third medium term plan emphasises interventions which are known to have a strong influence in promoting behaviour change. Knowing your HIV status is the most important step in changing your behaviour so that you remain HIV-negative or in adopting safe sex practises so that you do not infect others. The expansion of voluntary counselling and testing will also enable those infected to enrol for treatment, care and support programmes. Workplace programmes, with peer educators, have proven to be effective vehicles for promoting awareness, good attitudes, intentions and behaviour change.

(Republic of Namibia, 2004: 39).

In the year 2000, another pivotal response to the HIV and AIDS Epidemic was produced by the Ministry of Health and Social Services, the Namibian HIV/AIDS Charter of Rights. The document stipulates the basic rights that all people should enjoy and which should not be denied to people living with HIV and AIDS. The Namibian HIV/AIDS Charter of Rights was adopted in 2004, and emphasises that 'voluntary and confidential counselling and testing for HIV should be encouraged while the establishment of affordable and accessible voluntary, confidential counselling and testing sites is essential' (Namibian HIV/AIDS Charter of Rights, 2004: 2). Also, 'these facilities should provide quality pre- and post-test counselling by qualified counsellors, and all voluntary counselling and testing should only be done with the informed consent of an individual' (Namibian HIV/AIDS Charter of Rights, 2004: 2).

1.2 Research Objectives

The website of the Legal Assistance Centre (LAC) in Namibia states that HIV/AIDS has become one of Namibia's most pressing social and economic problems over the last decade (LAC, October 2009). As noted above, the estimated HIV prevalence rate in adults (15 to 45 years of age) was 18.1% in 2008, which means that almost one out of every five adults is infected with the virus (UNAIDS, 2008: 4). Apart from the huge toll on individual lives, it is anticipated that this high HIV prevalence rate will have 'a major disruptive effect on Namibia's workforce' (LAC, October 2009), which is the immediate concern of this study. Together with its devastating social impacts, companies are also becoming increasingly aware of the impact that HIV/AIDS has on their workforce and local communities in which they operate (UNAIDS, 2000: 5). In a 2001 Namibian study by Figueira and Odendaal, the authors warn that the 'indirect costs incurred by the HIV and AIDS epidemic' will be felt by economic sectors in terms of loss of productivity, absenteeism, the costs of replacing HIV-positive employees as well as reduced profits for products on the local and international markets (Figueira and Odendaal, 2001: 1).

'There is an increase in the number of corporates worldwide that are implementing HIV/AIDS workplace policies and programmes, not only because it makes good business sense, but also because of corporate social responsibility and a concern for their workforce' (Action Against AIDS in the Workplace, 2005: 6). In a study conducted in Latin America, it has been shown that companies can reduce the risk and mitigate the impact of the epidemic by investing in programmes that promote and include prevention, treatment, non-discrimination, care and support (Action Against AIDS in the Workplace, 2005: 6). Many policy analysts claim that the workplace is one of the most effective platforms for responding to HIV - by promoting and enabling prevention, care and treatment. "The workplace provides an ideal setting to target the highest risk groups susceptible to HIV infection and provides opportunities for building awareness, education, access to VCT and treatment and helps in promoting non-discriminatory attitudes towards HIV and AIDS" (UNAIDS, 2007: 11).

This claim provides the rationale for my research. In this study I set out to evaluate the outcome of a voluntary counselling and testing (VCT) intervention at a workplace in a company located in Windhoek, Namibia which, for ethical reasons, is identified by a pseudonymous name, “Trailer King”. Evaluative research asks questions such as “what has been achieved?” and “what impact has been made?” (IFC Against AIDS, 2006: 6).

Project Bophelo! was launched in Namibia in 2008 in response to the third medium term plan of the National Strategic Plan on HIV/AIDS as well as the Namibian HIV/AIDS Charter of Rights, which emphasises the importance of affordable, accessible and confidential VCT services as being an effective method to prevent the spread of HIV. Bophelo! is a public private partnership between the Namibian Business Coalition on AIDS (NABCOA), PharmAccess Foundation and the Namibia Institute of Pathology (NIP). Bophelo! aims to assist Namibian workplaces in the private and public sector by offering a variety of health and wellness related services such as conducting HIV prevalence surveys, rapid on-site HIV VCT services, wellness screening events and knowledge, attitudes and practises (KAP) surveys to determine the risk profile of employees within an organisation. After the provision of services, Bophelo! provides the company with a detailed report anonymously reporting findings within the participating population of the company and making recommendations on how a workplace programme can either be implemented or improved by the company. (A more detailed description of Bophelo! will be given in chapter 3.)

The objective of this study is to evaluate the outcome of voluntary counselling and testing (VCT) for HIV conducted by Bophelo! at “Trailer King” in Windhoek in terms of how successful it has been in terms of the following:

- Assisting employees who participated in the VCT to identify their individual risk
- Increasing the knowledge of HIV/AIDS of employees who participated in the VCT
- Motivating employees who participated in the VCT to implement risk reduction plans
- Motivating attitude and behaviour change in employees who participated in the VCT

My primary research questions flow from this. Firstly, did the VCT assist employees to identify their individual risk? Secondly, did the VCT increase employees' knowledge of HIV, and finally, did the VCT motivate employees to implement personal health reduction plans and lead to attitude and behaviour change with regard to HIV/AIDS and their personal levels of risk.

It is important to note that I am currently employed as project manager of Bophelo!. I thus have a professional interest in the outcome of this study. The implications of my location in relation to the object of my study are addressed further below.

1.3 Overview of Bophelo! - VCT service provider



Figure 1: One of the Bophelo! mobile testing units (Source: Author)

Bophelo! (meaning “life” in Tswana - one of Namibia’s eleven local languages) is a workplace intervention that was founded in Namibia in 2008 to provide mobile, anonymous, professional, confidential and on-site voluntary counselling and testing for HIV as well as wellness screening, making it possible for employees to know their general wellness and/or HIV status (PharmAccess Foundation Namibia, 2008).

It is a national legal requirement that participation in VCT for HIV is voluntary - employees may not be forced to participate by their employers or by the service providers (Namibia National Code on

HIV/AIDS in Employment, 2002: 2-3). After a company has agreed to make use of the anonymous and confidential on-site VCT for HIV, compulsory sensitisation sessions are arranged for all employees. These sessions are usually conducted two to three weeks before the actual testing so that employees are fully aware of the 'what', 'how', 'when' and 'why' of the VCT. The sensitization sessions last for approximately 30 minutes, and are not a form of education sessions but merely a process of sharing logistical information and conveying the advantages of the VCT to employees for both the individual and the company as a whole. Although participation in the VCT is voluntary, attendance of the sensitisation sessions is compulsory so that employees can make an informed decision on whether to participate in the testing or not.

Two days before the mobile testing unit arrives at the company, employees schedule an hour-long appointment with the testing team (this is usually done through a focal person or employee wellness coordinator at the company who draws up the appointment list). Scheduling appointments in this way makes it possible to avoid long queues and ensures that employees are not removed from their workplace for longer than one hour. When employees arrive at the mobile testing unit on the day/s of the testing (usually two to three weeks after the sensitisation sessions), there are several steps to be followed:

Firstly, employees complete a pre-HIV test knowledge, attitudes and practises (KAP) questionnaire which takes approximately ten minutes. This pre-HIV test KAP questionnaire is available in the four most common local languages, English, Afrikaans, Oshiwambo and Oshihero and covers employees' knowledge about HIV/AIDS, the methods of HIV transmission, the company's workplace programme, employees' attitudes towards people living with HIV/AIDS and employees' practises and beliefs about HIV/AIDS, associated myths and cultural practises. Employees who are illiterate are assisted by counsellors who are fluent in their preferred local language.

After completing the pre-HIV test KAP questionnaire, every employee who has chosen to participate in the HIV testing receives in depth pre-test counselling of approximately fifteen minutes. This pre-test counselling is designed to address employees' queries, fears and concerns and prepare employees emotionally for their HIV test.

After the pre-test counselling, employees who choose to participate in the HIV test are requested to either sign or put their thumbprint on an informed consent form. The informed consent form is fully explained to participating employees so that they understand that they have chosen to voluntarily undergo an HIV test and have given their permission to the Bophelo! staff to conduct the HIV test.

Employees enter the mobile testing unit after they have signed or put their thumbprint on the informed consent form. In the mobile testing unit, the testing process is explained to the employee again. By means of one finger prick, blood is collected to perform the test. In line with the Namibian Rapid Testing Algorithm two parallel tests are performed to ensure that participants receive the correct HIV test result. Should the first two tests be discordant (show different results), a third test will be performed and that result will be given to the participant.

All participants, regardless of whether their test result is HIV-positive or negative, will receive in depth post-test counselling. This post-test counselling also serves as education because all participants are educated on the importance of practising safe sex, being faithful to one partner, living a healthy life and the availability of anti-retroviral (ARV) treatment to prolong the lives of HIV-positive people. Employees whose test results are negative are encouraged to undergo HIV testing every three months especially if they have been exposed to a known risk or if they have engaged in risky behaviour. Participants who have received a positive HIV test result will receive support in dealing with the result, identifying sources of support and disclosing their status to their loved ones. They will also be referred to a health facility for further support, guidance on adopting a healthy lifestyle and information on ARV treatment options if necessary.

The HIV test and post-test counselling takes approximately thirty minutes after which employees return to their workstations. Should employees require more information or have queries that due to time constraints could not be answered in the mobile testing unit, an extra counsellor is available outside the mobile testing unit. No individual names are recorded on any documents to ensure the anonymity and confidentiality of the HIV testing process. All documents are linked by using barcodes which are a set of three stickers with the same number on every sticker. These barcodes

are put on an employee's pre-HIV test KAP questionnaire, informed consent form and employee result form to link the documents.

Babbie and Mouton (2004: 342) state that social interventions such as programmes, policies and projects are often aimed at changing something in the world for the better, and the Bophelo! project can be classified as an intervention of this nature. The main features of an intervention according to Babbie and Mouton (2004: 343) are clearly defined goals and objectives; a target group of intended beneficiaries; explicit measures of success; programme components; a management or implementation system; a human resource base; stakeholders that have a direct or indirect interest in the programme; and a context or setting of the programme. The following features of Bophelo! (in line with the main features of an intervention according to Babbie and Mouton (2004: 343)) have been guided by a Bophelo! document entitled *Manager's Guide to VCT in the workplace* (2008:4) though I have adapted the processes to be in line with the main features of an intervention. The features are listed alphabetically to correspond with a diagram (Figure 1) that follows below that I have drawn up to display the intervention graphically.

- (a) The broad goals of Bophelo! are to provide professional, confidential, on-site VCT for employees to know their HIV status; to provide insight in the health risks of employees; and to report anonymous statistics to the company to improve or implement the workplace programme
- (b) The objectives of Bophelo! also aim to assist employees to identify individual risks; to increase employees' knowledge of HIV; and to motivate employees to implement personal risk reduction plans
- (c) The target group or intended beneficiaries of Bophelo! are the employees of the company and the company as a whole
- (d) For Bophelo!, the explicit measures of success are the percentage of employees who participated in the VCT and know their status. In other words, the higher the proportion of participants who thereby become informed of their status, the more successful the intervention is seen to be. Behaviour change is not listed as an explicit measure of success

though it can be assumed that behaviour change will flow from the information of one's status

- (e) The programme components of Bophelo! are firstly, employee sensitisation; secondly, filling in a knowledge, attitudes and practises/behaviour (KAPB) questionnaire; thirdly, employees give their informed consent; fourthly, conducting and HIV test in line with the Namibian Rapid Testing Algorithm; and lastly, post-test counselling and education to the participants
- (f) The management or implementation system of Bophelo! is a general manager, a project manager, a VCT coordinator, a registered nurse and trained and accredited rapid testers and counsellors
- (g) The human resource base of Bophelo! is a project manager, a VCT coordinator, a registered nurse and trained and accredited rapid testers and counsellors
- (h) The stakeholders in the Bophelo! intervention are NABCOA, PharmAccess, NIP, the Ministry of Health and Social Service, companies and participating employees
- (i) The context/setting of Bophelo! is at the company's premises, or in other words the workplace

The components of the Bophelo! intervention that will influence my research are the goals (a), the objectives (b), the target group (c), the explicit measures of success (d) and the programme components. Figure 2 below shows the different features of Bophelo! as an intervention:

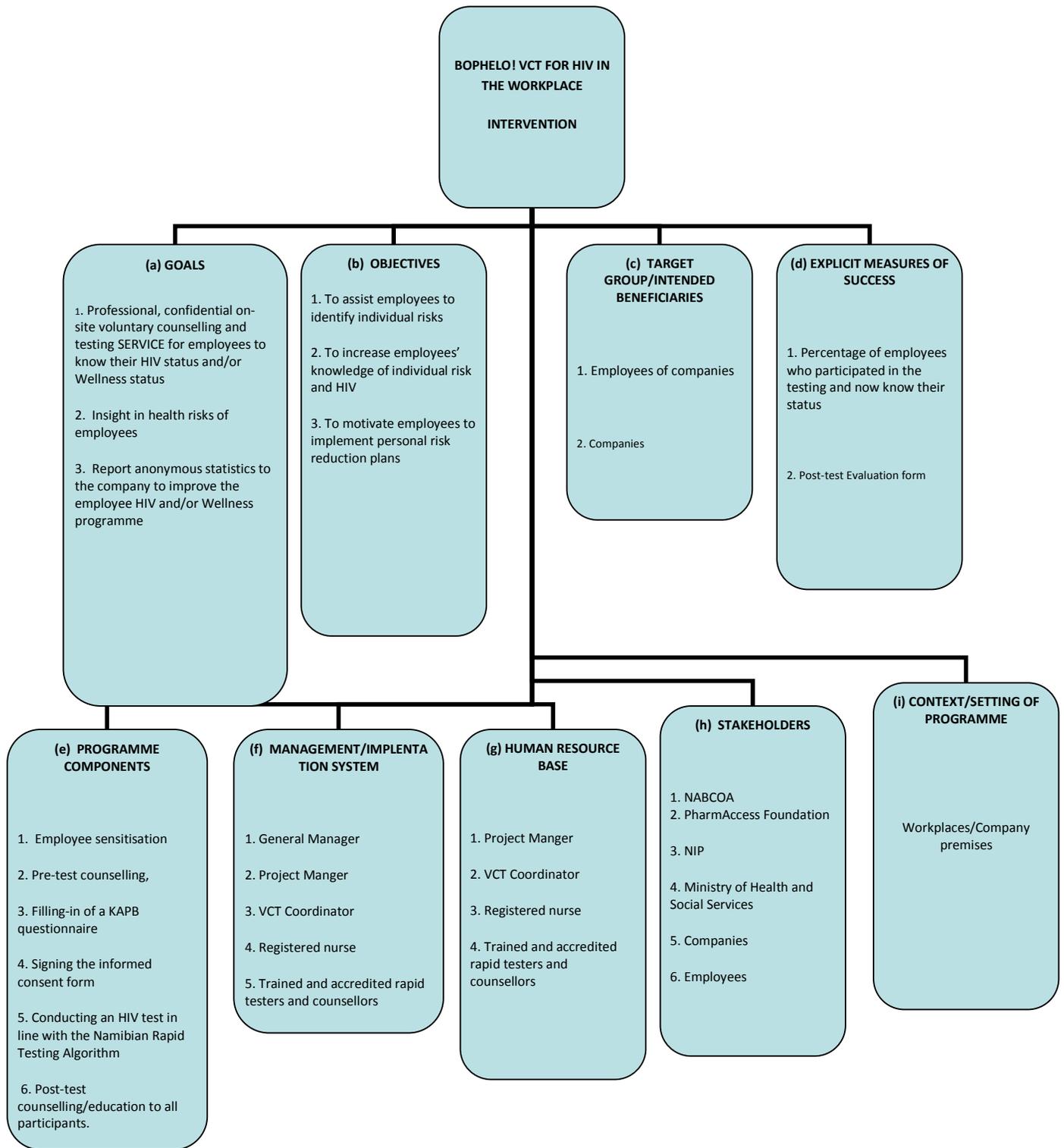


Figure 2: Bophelo! in terms of the main features of an intervention (Source: Author)

1.4 Significance of the study

While the scope of this study is limited to one VCT intervention, this study can be seen to be significant for four main reasons.

The first is with regard to the on-site provision of VCT to the working, adult population in Windhoek. As noted by Rude in a 2004 study, the most sexually active sector of any population is between the ages of 15 to 49 years and it is obviously this age group that is at a greater risk of HIV infection than any other. Rude states, "Unfortunately, these adults are also most likely to have children and families, to be working for a living, and to be playing key roles in economic production and in the functioning of societies in general" (Rude, 2004: 4). In other words, this group is the lifeline of society especially in terms of their contribution to the national economy and raising children. By providing information on how effective the Bophelo! intervention has been in terms of increased knowledge and behaviour change by those it has targeted, this study could contribute valuable information on the effectiveness of workplace-based VCT interventions in terms of the target population.

The second significance of this study is with regard to HIV and AIDS workplace programmes. Since the inception of Bophelo! in 2008, it was noticed that companies do not necessarily implement HIV workplace programmes after VCT was offered at the workplace, or in the case where companies have HIV workplace programmes, VCT at the workplace is not necessarily included as part of the programme. Given Namibia's limited population and resource base, the management of the HIV epidemic by companies with respect to employees is critical. In the final draft of the fourth medium term plan of the National Strategic Framework for HIV and AIDS (2010/11 - 2014/15) there is a concern that:

Most workplaces are still characterised by stigma, fear and silence which has resulted in few organisations that have undertaken HIV prevalence surveys to establish the incidence/prevalence of HIV in their organisation. This information is crucial to develop relevant and appropriate workplace programmes" (Republic of Namibia, 2009c: 92).

The findings of this study could be useful with regard to whether the company has used the information from the VCT to implement a workplace programme to address HIV-related issues and educate employees about HIV at the workplace.

The third significance of this study is with regard to voluntary counselling and testing (VCT) on a national level. Although national policy is clear on the importance of VCT especially with regard to prevention and behaviour change, the final draft of the forth medium term plan of the National Strategic Framework for HIV and AIDS is concerned with the fact that there are still low levels of HIV testing due to the inaccessibility of testing sites to some groups of people. Furthermore, there is a 'continued inability of individuals who have tested HIV-positive to change from high-risk behaviours and adopt key prevention behaviours' (Republic of Namibia, 2009c: 25). The quality and content of post-test counselling must be scaled-up to ensure the inclusion of behaviour change and prevention information to the drivers of the epidemic (Republic of Namibia, 2009c: 26). As the Bophelo! intervention is a mobile testing site which intends to address the problem of employees' inaccessibility to testing sites, as well as the fact that the staff are highly trained in all areas of voluntary counselling and testing, the findings regarding the adoption of key behaviours after mobile VCT was brought to the workplace would be a contribution to the National Strategic Framework.

The fourth significance of this study is with regard to the success of the Bophelo! VCT for HIV intervention itself as well as with regard to its specific objectives of assisting employees to identify their individual risks; increasing employees' knowledge of HIV; and motivating employees to change their behaviour. Given my position in Bophelo!, I am in a position to implement changes to improve or mould the design of the intervention, based on the findings of this study.

1.5 Scope of the study

This study is limited to one workplace intervention, at “Trailer King”, a privately owned Namibian company in Windhoek (the capital city of Namibia) that specialises in truck and trailer body craft. At the time that my research was conducted, the company had a workforce of eighty five employees, while six of the 85 employees occupied managerial positions (Basson¹, interview, 6 July 2009). The majority of the workforce is male labourers.

“Trailer King” is a blue-collar company where more than half of the employees have not had an opportunity to complete their schooling, and some of the workshop staff are not able to read and write (Basson, interview, 6 July 2009). Furthermore, the home languages of the majority of employees are Oshiwambo and Oshihherero. Most are not fluent in English or Afrikaans, nor can they read and write in these languages. Due to this language barrier, much of my research at this company was undertaken with the assistance of Oshiwambo and Oshihherero speaking colleagues who assisted the employees at the company to complete the follow-up questionnaire and conducted informal interviews in the local languages. The implications of this are considered further in my methodology discussion in Chapter 3.

Before 2009, the company did not have any type of HIV workplace intervention or workplace programme for its employees. According to information given by the General Manager in an interview in July 2009, from 2007 the company began to notice a high absenteeism rate amongst their employees, especially in the workshop; at the same time the company had also lost two employees to suspected cases of HIV. The company management therefore decided to make use of the Bophelo! VCT for HIV at the workplace in January 2009 because they wanted firstly, to get a general idea of the HIV prevalence rate within the company, secondly, to give employees an opportunity to get tested for HIV, and thirdly, to lay a foundation upon which to build a workplace programme for the company (Basson, interview, 6 July 2009). Seventy five out of the then 84 (89%) employees participated in the voluntary counselling and testing for HIV. After the VCT at “Trailer

¹ This is a pseudonym. The manager was prepared to be identified but his name has been changed because of the ethical considerations involved in a study of this nature.

King” in January 2009, a report with anonymised results of the VCT together with recommendations was provided to the management. This report showed that eight out of the seventy five employees who underwent the VCT (11%) tested positive for HIV for the first time, while an additional four employees who did not undergo the HIV test, completed a pre-test KAPB questionnaire in which they indicated that they were HIV-positive and on treatment through the government/state. Other important information that was provided in the VCT report showed that although the employees had a fairly good knowledge of HIV and AIDS, there were areas (such as methods of transmission and treatment for HIV) where employees needed more information and education (Basson, interview, 6 July 2009). My research aims to assess whether the VCT intervention of January 2009 assisted employees who participated in the testing to identify their risk with regard HIV, increased their knowledge about HIV, motivated them to change their attitudes and behaviour and motivated the company to address HIV-related problems in the company by implementing an HIV workplace programme in the company (Basson, interview, 6 July 2009).

1.6 Chapter outline

The outline of this thesis is as follows:

The next chapter, chapter two, contains a review of literature pertinent to business and HIV/AIDS, HIV/AIDS stigma, HIV/AIDS workplace programmes, VCT in Namibia and VCT in the workplace in general. Chapter three describes my research methodology and the research design, sampling, data collection, data analysis and ethical considerations. Chapter four presents the research findings and analysis and presents the demographic profile of participants, the findings of change in knowledge of participants, the findings of change in attitudes of participants, the findings of change in practises/behaviours of participants and general comments on the VCT from the participants. In chapter five I discuss the findings according to the changes in knowledge, attitudes and practises/behaviours of the participants, while chapter six presents the conclusion and recommendations for the VCT at the workplace intervention, of the study.

CHAPTER 2: LITERATURE REVIEW

As this thesis aims to assess the outcome of voluntary counselling and testing at a workplace in Namibia, the literature reviewed in this chapter is mainly concerned with addressing the issue of HIV/AIDS in the workplace. Stigma is also addressed, as it has an important bearing on the design and effectiveness of interventions such as VCT.

2.1 HIV in the workplace

No business is immune to HIV/AIDS. The private sector is in a unique position to respond to the epidemic because of its contact with employees and the wider business community and the wealth of experience and skills it has accumulated. There is much that business can do, and the benefits of action go well beyond the workplace (Peter Piot, Executive Director UNAIDS, 2007 Global Staff Meeting, Geneva, Switzerland).

The case for business is grounded in completely enlightened self-interest. We need a healthy workforce (Rejat Gupta, Chairman of the Board of the Global Fund to Fight AIDS, Tuberculosis and Malaria: USAID, 2007).

Cohen (2002: 3) writes that social and economic development will be most negatively affected in countries with a high HIV prevalence rate (such as Namibia) because morbidity and mortality will lead to severe losses of labour, skills and experience. One of the most significant features of the HIV and AIDS epidemic is its concentration in the working age population of 15 to 49 years. Both male and female HIV-positive employees with important economic and social roles are prevented from providing their full contribution to development, while there are further consequences of them being HIV positive on their families, their employment and the longer-term issues of remaining productive (Cohen, 2002: 3). Because of these negative effects of HIV on the working population in general, business have now started to implement and support programmes to combat the spread of HIV. Businesses should be engaged in the global fight against HIV/AIDS because firstly, business are

most likely to be affected by the economic impact of the epidemic, and secondly because businesses can bring unique capabilities to compliment the efforts of other organisations: “The relationship between employer and employee affords companies an opportunity to transfer prevention messages as well as to facilitate delivery of treatment” (Taylor *et al*, 2004: 4). “The workplace can be a central point for prevention and care within its existing human resource development and training programmes, health and safety structures and it is also the place where standards are set for working conditions, labour relations and the protection of workers’ rights” (Sithole, 2007: 11). Lisk (2002: 13) further advises that ‘the workplace is the ideal location for information and education programmes designed to limit the spread of HIV/AIDS and to encourage proper and informed behaviour towards those infected with HIV’ (Lisk, 2002: 13).

Productivity and profitability are issues of major concern to businesses all around the world. HIV and AIDS will increase costs in a number of ways which has a direct impact on profit margins. Phororo (2003: 8) writes that the demand for ‘recruitment and training will rise as a result of increased staff turnover and loss of skills, while company life insurance premiums and pension fund commitments will rise as a result of early retirement and death’. ‘Productivity will be affected in terms of increased absenteeism, organisation disruption and the loss of skills and institutional memory’ (Phororo, 2003:9). Failing to take action to combat HIV and AIDS in the workplace is more expensive to companies in the long run, and it makes sense for companies to embark upon education and prevention strategies before the HIV prevalence rate increases amongst its workforce. A study conducted in 2002 on the global impact of HIV/AIDS has estimated that in countries with a high HIV prevalence rate (such as Namibia), the ‘combined impact of AIDS-related absenteeism, productivity declines, health-care expenditures, and recruitment and training expenses’ could reduce profits of businesses by at least eight to ten percent (UNAIDS, 2002: 108).

More businesses realise that the rapid spread of HIV/AIDS negatively affect their workforce on a social level, market level and ability to earn a profit (Sithole, 2007: 3), thus the past decade has seen an increase in the corporate responses to HIV and AIDS in sub-Saharan Africa. In a study on how HIV affects businesses in Africa by Forsythe (2002: 39), it was found that most African businesses that have more than ten employees have seen at least one employee die of HIV/AIDS or currently employee workers who are HIV-positive. Forsythe (2002: 20) drawing on a number of studies, gives some examples of the impact of HIV-positive employees on companies:

- In a sugar mill in South Africa, 26% of the workforce was infected with HIV. The HIV-positive employees incurred, on average, 55 additional days of sick leave during the last two years of their lives.
- A sugar estate in Kenya had an estimate of approximately 25% HIV-positive employees while the estimate of HIV-positive teachers in Botswana is at 35%. These high prevalence rates had an alarming impact on the absenteeism rates and sick leave days.
- Namwater, the water purification company in Namibia, has reported that HIV and AIDS is crippling the company's operations. During the last five years there has been a high staff turnover due to HIV/AIDS-related deaths, increasing absenteeism and a general loss of productive hours.

Similarly, in two non-agricultural companies in South Africa, it was found that in their last two years of service, employees who ultimately died of AIDS or suspected AIDS were on leave or absent from work approximately 18 to 50 days more than fellow employees - this is equal to roughly one to three months of lost working time (Sithole, 2007: 5).

The examples above give a glimpse of why it is necessary for businesses to invest in HIV workplace programmes and other HIV/AIDS related interventions to curb the spread of the virus in at least the workforce. In an article on the impact of HIV/AIDS on business by Sithole (2007: 4), the three key factors that motivate the business sector to implement HIV/AIDS programmes are economic motivation, the costs of AIDS to companies and corporate social responsibility. With regard to economic motivation, it was found that increased medical costs, decreased productivity and other costs associated with HIV and AIDS accounted for as much as 6% of a company's annual labour costs. Further studies in this regard (UNAIDS, 2000: 18) found that not implementing a workplace programme or HIV/AIDS related intervention could result in medical and absenteeism costs of 3.5 times to 7.5 times the cost of the intervention (had it been implemented). With regard to the costs of AIDS to companies, rising costs to the companies resulted from 'higher insurance costs; higher health care costs; increased absenteeism due to illness or caring for infected family members;

higher recruitment and training costs for new employees; and greater funeral costs whether due to absenteeism or actual funeral costs' (UNAIDS, 2000: 18).

However, HIV workplace programmes in companies are not only implemented due to the issue of profitability. With regard to corporate social responsibility, a number of businesses are becoming involved in HIV/AIDS programmes because of a recognition to contribute to their immediate societies and communities: "Both local and multinational companies that are seen as having a good reputation often reap economic benefits through customer loyalty to their products/services, greater employee satisfaction, a greater involvement with communities and increased profits" (Sithole, 2007: 10).

In Namibia the corporate sector was relatively slow to respond to the HIV/AIDS epidemic up to the year 2000 when some businesses noticed that their profit margins and productivity levels were being affected (Phororo, 2003: 7). The AIDS Care Trust of Namibia (ACT) has led HIV/AIDS workplace intervention programmes with a number of large companies such as Nampower, Namwater, Standard Bank and Bank Windhoek (Phororo, 2003: 10). Also, the Namibia Chamber of Commerce and Industry (NCCI) spearheaded a number of important initiatives for the corporate sector in 2001. Firstly, they launched an HIV/AIDS Assessment Study in the Private Sector to evaluate the involvement of the private sector in HIV/AIDS activities. Secondly an advocacy film entitled *Managing AIDS* was also launched in 2001 which depicts the impacts of HIV and AIDS in Namibia with recommendations for private sector action including training and awareness. Lastly, in 2002 the Chamber launched the Namibia Business Coalition on AIDS ((NABCOA) which is also a partner of the Bophelo! project). The founding members of NABCOA were large corporates such as the Ohlthaver and List Group of Companies, Barloworld Namibia, Namdeb, BP Namibia, City of Windhoek, Sanlam Namibia and Bank Windhoek (Phororo, 2003: 8).

From Phororo's (2003) article it is evident that at that stage it was mostly large companies in Namibia that were undertaking initiatives to combat HIV and AIDS within their workforces, while smaller businesses were lagging behind. One of the main reasons for this lag, is that smaller companies do not have the resources to establish HIV/AIDS programmes because of financial and time constraints, yet, the small businesses in Namibia are a major source of employment and

provide an income for approximately 160 000 thousand people (Phororo, 2003: 8). Since the formation of NABCOA, more small businesses have joined the coalition because they are now able to receive assistance with posters, information materials, condoms as well as training of peer educators in the workplace, counsellors and employees. This is encouraging especially as the company chosen for this study falls into the “smaller business” category and it has joined the coalition after the VCT for HIV. “Given that small businesses play such an important role in Namibia and are also vulnerable to HIV/AIDS, they cannot afford to be unresponsive and complacent in addressing HIV/AIDS issues. It is essential that they get on board to meet the challenge of HIV and AIDS in Namibia” (Phororo, 2003: 9).

2.2 HIV/AIDS and stigma

Complicating the provision of services for HIV testing and care at the workplace is the prevalence of high levels of stigma.

Rights should never be affected by an individual’s HIV-positive status. Stigma and discrimination compromise employee welfare and a safe and healthy working environment. They also undermine HIV prevention efforts, which depend on an atmosphere of openness, trust and respect for basic rights (Action Against AIDS in the Workplace, 2005: 10).

The website of the International HIV and AIDS charity (Avert 2009) defines AIDS-related stigma and discrimination as ‘prejudice, negative attitudes, abuse and maltreatment directed at people who are living with HIV and AIDS’. People living with HIV and AIDS can experience being shunned by family, peers and the wider community. They may also be vulnerable to poor treatment in healthcare and education settings; they may lose rights that they had as HIV negative persons; and their stigmatization could result in psychological damage. Stigma can thus negatively affect the success of testing and treatment as individuals are afraid of the social consequences if they test HIV positive (Avert, October 2009). The reasons why high levels of stigma are associated with HIV and AIDS are complex. According to Avert, factors that contribute to HIV/AIDS-related stigma and discrimination are that HIV/AIDS is a life-threatening disease; HIV infection is often associated with behaviour that

is already stigmatised, such as promiscuity as most HIV infection occurs by having sex; there is still inaccurate information about how HIV is transmitted; HIV infection is often thought to be the result of personal irresponsibility; and some religious or moral beliefs support the notion that being HIV-positive is punishment for immoral behaviour (Avert, 2009). In an article in the Washington Times (2006), Ki- Moon writes that the stigma factor is found almost everywhere in the world while discrimination remains a fact of everyday life for those who are HIV-positive. Furthermore, HIV/AIDS-related stigma remains the 'single most important barrier' to the fight against the epidemic because many people are afraid to undergo an HIV test to determine whether they have the diseases or to seek treatment (Ki-Moon, 2006). Stigma and discrimination are the chief reason why societies are still devastated by the epidemic because infected individuals fear the social disgrace of speaking about it or taking antiretroviral treatment (Ki-Moon, 2006).

Brimlow, Cook and Seaton (2003: 4) define HIV-related stigma as

Stigma that refers to all unfavourable attitudes, beliefs, and policies directed towards people perceived to have HIV/AIDS as well as their significant others and loved ones, close associates, social groups and communities. Patterns of prejudice, which include devaluing, discounting, discrediting, and discriminating against these groups of people, play into and strengthen existing social inequalities - especially those of gender, sexuality, and race - that are at the root of HIV-related stigma.

In the context of HIV/AIDS, stigma is generally associated with "the medical progressions of opportunistic infections, moral transgressions of homosexual and heterosexual relationships, and the transmission of the virus amongst risky groups as opposed to risky behaviour" (De Bruyn, 1999:13). This has led to distinctions between "us" and "they", where "they" are stigmatised through values and attitudes based on judgements amongst fellow human beings rather than the medical considerations of HIV and AIDS (De Bruyn, 1998: 13).

Visser, Makin and Lehoboey, (2007: 44) conducted a study on stigmatising attitudes of a community in South Africa towards people living with HIV. They report that stigma is an associated 'feature of HIV, and many people who are HIV-positive report that their lives are affected by fear of

discrimination and feelings of shame'. Individuals who are infected with HIV and AIDS are stigmatised because their illness is associated with behaviours that are not acceptable to the society in which they live. "The social consequences of stigma are experienced by HIV-positive individuals in terms of their rights, freedom, self-identity and social interactions, that often negatively influence the decision to seek HIV testing and to access prevention and treatment services" (Visser *et al*, 2007: 45). This further emphasises the importance of anonymity and confidentiality when it comes to voluntary counselling and testing for HIV. Stigma and discrimination are such powerful forces that if there is a chance that their conditions are revealed, 'people would rather suffer and die, and have their children suffer and die, rather than seek treatment that could improve their quality of life' (Visser *et al*, 2007: 46). It is a reality that HIV-positive people still hide their status because they fear that they will lose friends, family, jobs, housing and educational opportunities if their condition is made known (Otaala, 2003:9). My study will show that with the correct counseling and education that goes hand in hand with the voluntary counselling and testing at the workplace, this fear and stigma is reduced and individuals are motivated to get tested for HIV.

In a research study conducted in Namibia by Keulder (2007: 27), victims of HIV/AIDS-related stigma reported a number of negative consequences that they suffered as a result of their HIV status being known to the larger community within which they lived. These consequences include 'social isolation, loss of social status, breaking up of families, loss of employment, inability to find or maintain meaningful love relationships, financial hardship and professional neglect' (Keulder, 2007: 27). Related to these consequences is the fact that HIV/AIDS-related stigma delays testing for HIV: "Respondents, well knowing that they will be stigmatised in the same manner as they have stigmatised others, delay getting tested until such time as they can no longer hide their own physical symptoms, or withstand the pressures put on them by others close to them" (Keulder, 2007: 15). However, Keulder also found that stigma in Namibia has become less prevalent because of better information and more accurate knowledge on HIV and AIDS that is shared at workplaces as well as public information campaigns; the availability and effects of antiretroviral treatment have limited and reduced the physical effects of HIV and AIDS thus reducing external stigma; the increased interaction of individuals both infected and affected with HIV and AIDS has promoted better understanding and more empathy; and the increased disclosure of HIV positive individuals has contributed to more people accepting and dealing with HIV and AIDS (Keulder, 2007:33).

Kalichman and Simbayi (2003) conducted a study on HIV testing attitudes, AIDS stigma and voluntary HIV counselling in South Africa, and found that individuals who had chosen not to be tested for HIV held 'significantly greater AIDS-related stigmas than individuals who had been tested'. People who had not been tested were 'significantly more likely to agree that people with HIV and AIDS are dirty, should feel ashamed and should feel guilty' (Kalichman and Simbaye, 2003: 45). Furthermore, it was found that individuals who participated in an HIV test had been tested before thus displaying less stigma than those who refused to undertake an HIV test. Also, the same group was more likely to believe that people living with HIV must have done something wrong and would rather not be friends with somebody who is HIV-positive or encourage these HIV-positive people to be around children. Although HIV/AIDS-related stigma was also prevalent amongst people who had been tested for HIV, it was to a much lesser degree than amongst those who had not been tested (Kalichman and Simbaye, 2003: 445 & 446). It was evident that interventions are needed in societies to change the beliefs surrounding HIV and AIDS, such as information and education campaigns to raise awareness and disseminate correct information about the disease so that more people can undertake VCT to know their status (Kalichman and Simbaye, 2003: 446).

In a 2002 paper on HIV/AIDS-related stigma and discrimination for the Horizons Programme of USAID, Parker and Aggleton (2002) found that HIV/AIDS related stigma and discrimination are manifested at nine different levels. These are policy and legal contexts, education and schools, employment and the workplace, healthcare systems, HIV/AIDS systems, religious institutions, community contexts, family contexts and individual contexts. For purposes of this study, stigmatisation and discrimination at the policy and legal contexts, employment and the workplace contexts; employment and the workplace contexts; HIV/AIDS programmes; and community, family and individual contexts bear reference.

With regard to policy and legal contexts, stigmatising measures such as compulsory HIV testing, compulsory notification of AIDS cases, the prohibition of people living with HIV from certain occupations, medical examination and compulsory treatment of infected persons, and limitations on international travel and migration have been phased out. Since the widespread recognition of the epidemic, most governments today have introduced policies and legislation to protect the rights of HIV-positive people with regard to education, employment, confidentiality, information and treatment (Parker and Aggleton, 2002: 5).

At the workplace, discriminatory practises such as pre-employment screening, denial of employment to individuals who test HIV-positive, termination of employment of individuals who test positive for HIV and the stigmatisation of people who are openly living with HIV have been reported from both developed and developing countries. Parker and Aggleton (2002: 6) found that there have also been instances of co-workers not willing to work with HIV-positive colleagues, while increasing medical aid and pension costs of HIV-positive employees have resulted in some companies using this as a reason to deny employment to people living with HIV. Today companies are developing strategies to combat stigma and discrimination towards HIV-positive employees, as well as implementing policies to strengthen their responsibilities towards employees living with HIV and AIDS.

With regard to HIV/AIDS programmes, although they are advantageous, they may 'inadvertently contribute to stigmatisation by differentiating between general populations and high-risk populations, and prioritising actions to prevent HIV spreading to the general population' (Parker and Aggleton, 2002: 5). This may result in discrimination against marginalised groups since those at the greatest risk do not receive the resources they need (Parker and Aggleton, 2002: 6). It would thus make sense to offer VCT services, education and information to all employees to ensure that there is no segregation made between the 'general' and 'high-risk' groups.

Even in local communities, 'cultural beliefs and explanations about disease and the causes of it may also contribute to HIV/AIDS-related stigma' (Parker and Aggleton, 2002: 7). Individuals could either be blamed for contracting HIV as a result of personal irresponsibility, or they could be blamed for bringing shame on the family and the community. 'Communities often shun or gossip about those perceived to have HIV or AIDS', and in some cases stigma and discrimination could even take the form of violence in the community (Parker and Aggleton, 2002: 7). In support of stigmatising attitudes on communities, a research study conducted on the stigmatising attitudes of the community towards people living with HIV/AIDS in South Africa (Visser *et al*, 2007) found that the view of HIV/AIDS as a 'deadly disease, as horror and human suffering, and as punishment for bad behaviour' (Visser *et al*, 2007: 53) are the main reasons why stigma is still prevalent amongst some members communities. Of a sample of 901 respondents 17% indicated that they still have highly

stigmatising attitudes towards people living with HIV/AIDS, 42% of the respondents thought that the community attached a high level of stigma to HIV and AIDS, while more than a third of respondents were afraid and uncomfortable interacting with HIV positive people, especially where children and intimate behaviour such as dating were involved (Visser *et al*, 2007: 53). It was also found that white respondents were more stigmatising, while black respondents, who were exposed to the HIV epidemic to a much greater extent, were least stigmatising (Visser *et al*, 2007: 53). The study concluded that as the HIV prevalence rate increases, the capacity of communities to care and support those living with HIV and AIDS needs to be strengthened. In addition to the counselling and education of HIV-positive individuals to reduce their own fear of discrimination, 'interventions are also needed on a community level as continued discrimination and stigmatisation will only impede any efforts to prevent, treat and control HIV/AIDS' (Visser *et al*, 2007: 55).

Although the family is the main cause of care and support of HIV-positive individuals, stigma and discrimination have also been displayed by families, neighbours and friends of people living with HIV. Families, neighbours and friends may reject HIV-positive individuals not only because of their HIV status, but also because being infected with HIV is associated with perceived negative behaviours such as promiscuity, homosexuality and drug use (Parker and Aggleton, 2002: 8).

The way in which stigma and discrimination are manifested in HIV-positive individuals is highly dependent on family and social support as well as the degree to which they are able to be open about their status and sexuality. In contexts where HIV and AIDS is highly stigmatised, HIV-positive individuals may isolate themselves to the extent that they are no longer a part of society and the result of this isolation is that they are unable to access the services and support that they need. Even though laws exist to protect people living with HIV's rights and confidentiality, many people may still choose not to know their status or to disclose their HIV status because of the fear of stigmatisation and discrimination (Parker and Aggleton, 2002: 8).

On the other side of the coin however, Keulder (2007: 30) states that stigma has positive consequences as well by providing 'special services and benefits, new social networks and new opportunities for caring and empathy'. If it was not for HIV/AIDS-related stigma, and the recognition thereof by governments and other authorities, those living with HIV would not have had free access

to free antiretroviral treatment, special services such as counselling and testing and new social networks such as support groups, as is the case in Namibia. In his research, Keulder found that HIV-positive individuals reported 'important positive lifestyle and attitudinal changes as a result of participation in these social networks' (Keulder, 2007: 30) especially with regard to antiretroviral treatment which improves physical health and promotes a healthy body image; counselling which provides knowledge about HIV and AIDS and promotes a positive self-esteem; and a new social network that is stigma free and provides new opportunities for building a positive life with new sources of empathy and care (Keulder, 2007: 30).

It is clear that the terms stigma and discrimination are almost synonymous with the terms HIV and AIDS. Unfortunately the negative effects of stigma and discrimination described in the beginning of this section are still key barriers to effectively combating the epidemic. In Namibia, the government has recognised that 'commitment to and the development of strategies aimed at reducing stigma and discrimination are central to any response to HIV and AIDS' (Republic of Namibia, 2007: 5). The Namibia HIV Charter of Rights (2004: 1) supports this commitment to the development of strategies aimed at reducing stigma and discrimination by recognising that all levels of society should implement HIV/AIDS prevention strategies that also prevent discrimination and stigmatisation and encourage openness and transparency regarding the disease.

National governments, civil service and regional and local authorities have the largest role to play in tackling stigma and discrimination in any society by ensuring that legislation protecting HIV-positive individuals is adhered to throughout all sectors of society (Dodds *et al* 2004: 73). For purposes of the workplace, Mnyanda (2006: 42) recommends that at both national and local levels, HIV and AIDS policy analysis should be conducted to assess the extent to which existing policies address and reinforce stigma and discrimination; HIV and AIDS stigma and mitigation policies should be mainstreamed into existing structures at the workplace as well as monitored; employees should be informed of HIV and AIDS stigma mitigation policies and practises; employees who are HIV-positive should be educated about these policies so that they can challenge any situations where stigma and discrimination occur; a more enabling environment needs to be created at workplaces so that HIV-positive individuals are encouraged to disclose their status within a safe, accepting and supportive environment; and support groups should be established for both infected and affected individuals so that experiences, advice and encouragement can be shared (Mnyanda, 2006: 42 & 43).

On a national level, the government of Namibia is also committed to alleviating stigma and discrimination towards HIV positive people. In the third medium term national strategic plan of the Republic of Namibia (2004: 37) the activities to reduce stigma and discrimination range from the 'enactment, implementation and enforcement of laws and policies that address stigma and discrimination in all sectors and institutions to the establishment of a body to investigate cases of discrimination and institute corrective measures'.

2.3 HIV/AIDS workplace programmes

AIDS is not a moral issue; it is a sound business decision we all have to make in our workplaces... The earlier we mainstream our resources to turn the tide against it, the better it will be for tomorrow's business (Olusina Falana, Executive Secretary of the Nigeria Business Coalition Against AIDS: USAID 2007:16).

According to the National Policy on HIV and AIDS in Namibia:

"An enabling environment, free of discrimination and stigma for HIV-positive people, can be achieved through the implementation of sound policies which are driven by strong leadership. The importance of ongoing advocacy by all leaders be they political, traditional, religious, PLHIV, NGO or private sector leaders, is critical to the success of the entire expanded response to the HIV and AIDS epidemic" (Republic of Namibia, 2009c: 80).

As discussed earlier, the effects of HIV and AIDS in workplace "reduces labour supply; causes the loss of skilled and experienced workers; increases absenteeism and early retirement; increases labour costs such as retraining and health insurance; reduces productivity; weakens demands and decreases profit; and causes stigmatisation of and discrimination against employees living with HIV" (Action Against AIDS in the Workplace, 2005: 2). As noted earlier, it is not only the issue of profitability that leads companies to implement workplace programmes. Although communities do have their own social issues, negative effects of HIV in the workplace are carried over into

communities and societies, adding “pressure on social systems and public health services; contributing to the loss of family income and household productivity; increasing the number of female or child-headed households; reducing the transfer of knowledge and skills between generations; and forcing elderly people to remain economically active for longer” (Action Against AIDS in the Workplace, 2005: 2). These impacts of HIV have led more and more businesses to recognise the need for workplaces to take action against HIV and AIDS as either a form of corporate social responsibility and/or realising the cost-benefits of implementing awareness, prevention and treatment programmes. The available information of the uptake of HIV workplace programmes in Namibia shows that in 2009, the Namibia Business Coalition on AIDS (NABCOA) was providing workplace programme services to 139 private companies in Namibia (NABCOA, 2009), while the Walvis Bay Corridor Group (WBCG) was providing workplace programme services to 16 private companies (WBCG, 2009).

Bateesa (2009: 1) states the private sector has a critical responsibility of protecting their workforces and families against the spread of HIV and AIDS, as well as supporting employees infected with the virus in remaining healthy and able to work. An HIV/AIDS workplace policy and workplace programme are key implementations for a company to respond to the epidemic in the workplace mainly because a workplace policy provides the framework of action to control the spread of HIV amongst employees and to mitigate its impact on those who are already infected and the organisation for which they work (Bateesa, 2009: 1). The International Labour Organisation (ILO) Code of Good Practise on HIV/AIDS contains ten key principles that ideally should be used to guide legislators when drawing up policies to combat HIV/AIDS in the workplace. These ten key principles are recognising HIV/AIDS as a workplace issue; non-discrimination based on real or perceived HIV status; gender equality; a healthy work environment; social dialogue; no HIV testing for purposes of exclusion of employment; confidentiality of HIV related data; continuation of employment relationship and adaptation of work; prevention; and care and support (Chartier, 2005: 3). The Bophelo! intervention relates to this Code of Good Practise by recognising HIV/AIDS as a workplace issue and encouraging employees to undergo anonymous and confidential HIV testing, while providing information on prevention and care.

General consensus has been reached (Rau, 2004; Bililies et al 2008; UNAIDS, 2000; Action Against AIDS in the Workplace, 2005; Chartier, 2005 and Sithole, 2007) that the most successful HIV/AIDS

workplace responses and programmes include the creation of a regularly updated company policy on HIV/AIDS that is shared amongst employees while standing HIV/AIDS committees and focal persons are in place. It is essential that peer educators are active in all levels of the workforce who have been trained to counsel, support and raise awareness in the workplace as well as share information on HIV/AIDS such as ways of preventing its transmission, places to seek further information and services and company support. Part and parcel of all HIV workplace programmes is condom distribution at accessible points in the workplace while it is recommended that counselling and testing for HIV on a voluntary and confidential basis with means to provide support employees who are HIV-positive is also offered. Information on sexually transmitted illnesses, their diagnoses and treatment whether within the company or referral to community clinics and centres should be shared, together with information on treatment for HIV and associated diseases such as tuberculosis. Rau (2004: 15) states that the common best practises of workplaces in responding to HIV is to 'maintain committed leadership and understanding at all levels of the workforce', do cost-benefit analysis of the benefits of implementing workplace programmes; consult with a variety of stakeholders especially people living with HIV to ensure that activities are appropriately prioritised; partner with NGO's and other external organisations to provide the necessary expertise to enable the scaling up of responses; use low-cost tools to ensure sustainability and replicability instead of re-inventing the wheel; involve and empower peer educators in the distribution of educational and preventative information; and continually monitor and evaluate the effectiveness of the workplace programme. Of course every business or company is different and the scope of an HIV/AIDS workplace programme does depend on the size and staff capacity of workplaces.

The International Organisation of Employers supports the notion of workplace programmes because the workplace has specific attributes that are ideal to combat HIV and AIDS. As the workplace is a place where employees spend most of their time, it 'exerts a powerful influence on people's social attitudes, values and even sexual behaviour' (International Organisation of Employers, 2002: 16), as well as forming a sense of shared identity. Colleagues interact with one another and in this way information and experiences are shared while influencing one another's opinions and behaviour. Furthermore, in more privileged workforces, there are existing structures such as health and safety committees, workers' representatives and shop stewards that can be mobilised in HIV/AIDS awareness and prevention campaigns; while workplaces that have basic healthcare clinics on site can provide not only information but also high-level care and support to employees with HIV/AIDS (International Organisation of Employers, 2002: 16).

Dickinson and Stevens (2005: 286-293) conducted a study within three large South African companies in order to understand the different responses of companies with regard to HIV and AIDS programmes at the workplace. Their findings were that corporate responses were framed by both internal as well as external drivers. External drivers are legal requirements, voluntary regulation, the business case and social pressures that encourage companies to respond to HIV/AIDS within their workforce. However, the visibility of HIV/AIDS in the company with regard to declining profits and increased absenteeism due to an ill workforce, as well as the pressures of committed individuals in driving companies to respond to the epidemic are the internal drivers. These drivers are essential to ensure that a company programme is effective in providing education, awareness, prevention activities, treatment, care and support (Dickinson and Stevens, 2005: 293). In the company at which my research was conducted for this thesis, the external drivers were legal requirements, the business case as well as social pressures, while the internal drivers, as noted in Chapter 1, were increased absenteeism and the decision from a committed management to do something for the company's employees with regard to HIV (Basson, interview, 6 July 2009).

As HIV/AIDS is one of Namibia's most pressing economic and social problems, the National Code on HIV/AIDS in Employment was adopted in 1998 to guide employers on HIV and AIDS in the workplace in terms of the Labour Act of 1992. The National Code on HIV/AIDS in Employment 'outlaws discrimination in employment on the basis of HIV/AIDS; prohibits direct or indirect HIV testing of workers or job applicants; guarantees confidentiality regarding HIV/AIDS and the workplace; and encourages the implementation of workplace HIV prevention and education programmes' (Republic of Namibia, 1998: 4). Larger companies in Namibia such as NAMDEB and the Ohlthaver and List Group of Companies have taken the lead in implementing workplace programmes by including peer education programmes, the distribution of free condoms in the workplace and providing confidential voluntary counselling and testing services for its employees in their respective workplace programmes. Another documented HIV/AIDS workplace programme in Namibia is that of a large mining company, Rössing Uranium Ltd. Like NAMDEB and the Ohlthaver and List Group of Companies, it has implemented a workplace programme for more than 1000 employees that have qualified professionals who provide information and counselling to employees on HIV/AIDS-related issues, as well as medical facilities where employees have access to voluntary counselling and testing. Because these companies recognised the negative as well as financial impacts that HIV/AIDS

has and will have on their businesses, they invested in workplace programmes and it has been reported that they report much less absenteeism, reduced medical aid expenses as well as a healthier workforce since the inception of the workplace programme (Phororo, 2003:7). Unfortunately, the examples of NAMDEB, the Ohlthaver and List Group of Companies and Rössing Uranium Ltd are evidence of the fact that larger organisations are more aware of the benefits of implementing workplace programmes and also have the financial resources available to provide these programmes (Figuera and Odendaal, 2001: 3). Generally it is a struggle to involve small and medium businesses in the fight against HIV in Namibia because in most cases they do not additional resources, particularly to establish HIV/AIDS workplace programmes (Phororo, 2003: 7).

From the year 2000 until 2007, Family Health International (FHI) together with IMPACT/NAMIBIA supported a comprehensive workplace programme by building capacity of local organisations to provide quality HIV prevention and care programmes. Involved organisations were the AIDS Care Trust, the Chamber of Mines, the multipurpose centre in Walvis Bay and the AIDS Law Unit, that targeted mainly the private, but also parastatals and government sectors of the country. These organisations trained more than 1 100 peer educators in 62 companies, reaching an average of 13 000 workers and their families, while at the same time they distributed more than 250 000 condoms during the life of the project (Family Health International, 2007: 31). The AIDS Law Unit of the Legal Assistance Centre still provides 'assistance to employers and trade unions in developing appropriate HIV/AIDS policies in the workplace' (Family Health International, 2007: 32). 'The development of these policies ensures access by people living with HIV/AIDS to employment and employment benefits, and protects those already employed against stigma and discrimination in the workplace' (Family Health International, 2007: 32).

In 2007, a survey was conducted by the Namibia Business Coalition on AIDS (NABCOA) and PricewaterhouseCoopers amongst 43 companies in Namibia (predominantly in Windhoek) to establish how many organisations were aware of the extent to which HIV and AIDS impacted their businesses, and whether these impacts were being mitigated, monitored and evaluated by the organisations in the survey. This survey was the first of its kind to be conducted in the country and provided very important information to donors, NGO's, the government and the business coalition on HIV and workplace programmes in the corporate sector of the country. The key areas that were assessed are also considered as success factors in an HIV/AIDS workplace programme. These areas

are: HIV prevalence testing or voluntary counselling and testing, the perceived impact of HIV/AIDS on the business, workplace policies and interventions; and the streamlining of HIV and AIDS into daily and key business operations (Business Decision makers' survey on HIV/AIDS, 2007: 10). HIV prevalence testing or VCT enables the management of a company to assess the potential impact of HIV on human resource capacity and plan their response. The study found that only 30% of the participating companies conducted HIV prevalence testing or voluntary counselling and testing, while the most consistent reason for not undertaking these activities were due to a lack of finances. Although there is much room for improvement, 80% of the companies indicated that they would be willing to incorporate HIV prevalence testing and VCT if they had adequate funding (Business Decision makers' survey, 2007: 14).

63% of the companies indicated that HIV and AIDS form a part of their strategic and business planning while the rest of the companies simply stated that it does not. It was the larger corporates that answered yes to this question but surprisingly in most of those companies there was not a budget specifically allocated to the HIV workplace programme. In this regard it was recommended that companies in Namibia, especially the small and medium enterprises, need to scale up their responses to the epidemic. Although larger corporates are responding to the challenge of HIV and AIDS at the workplace, it is obvious that this response 'is still to be mainstreamed into the company operations in a manner that proves that HIV/AIDS is a business concern' (Business Decision makers' survey, 2007:41). One of the findings was that a big challenge is to get the small and medium enterprises on board as well (Business Decision makers' survey, 2007: 41).

The survey found that 72% of the companies had an HIV workplace policy, while 5% were in the process of finalising their policies, and 23% did not have an HIV policy under development or in place. The common components that were covered in these HIV policies were non-discrimination, treatment, VCT, information communication and education (IEC), condom provision, and care and support. Again it was found that the larger and multi-national companies had an HIV workplace policy, while the smaller companies were lagging behind. An important finding was that although most companies indicated that they had an HIV policy, a number of them indicated that their policies were on paper, by not implemented due to the lack of resources. The recommendations made in this regard are that 'management participation and open commitment to HIV and AIDS

interventions' (not only in a document) are a key success factor to continuously enforce workplace programmes (Business Decision makers' survey, 2007: 27).

The majority of companies in the survey recognised the fact that HIV/AIDS has an impact on profitability. Other factors that the respondents were mostly in agreement with were the epidemic's negative influence on productivity, lost working hours, and lost experience, knowledge and skills. An important observation that was made in this survey is that companies that indicated that HIV/AIDS has no effect on profitability, are the companies that did not have a formal workplace programme, nor had they undertaken HIV prevalence testing and/or VCT. On this aspect recommendations were made that more attention and investments are needed towards establishing systems and processes that would enable companies to firstly, implement workplace programmes and secondly, effectively monitor the impacts of HIV within their workforces (Business Decision makers' survey, 2007: 18).

The areas of company interventions with regard to HIV that were assessed by PWC and NABCOA for the Business Decision makers' survey are all relevant to my study. The company at which my research was conducted recognised the need for voluntary counselling and testing, the need to consider the impact that HIV will have on the company, the need to implement a workplace policy and programme, as well as the need to mainstream HIV/AIDS-related interventions into the everyday operations of the company (Basson, interview, 6 July 2009).

To conclude this section on workplace programmes, it is necessary to briefly mention the role of traditional healers in workplace programmes. Namibia is a multi-cultural society with both western and traditional belief systems. With an increased demand for western medicines as well as the costs associated with this, traditional healers play a significant role in providing healthcare and medication, so much so that the Namibian Government has elected a member from the Traditional Healers Profession to sit on the Council for Health and Social Services Professionals (LeBeau, 2009). The Namibia HIV/AIDS Charter of Rights further makes provision for the role of cultural and traditional practises by recognising that 'traditional authorities should play an important role in HIV/AIDS prevention strategies, while traditional and healers and traditional birth attendants should

be provided with appropriated education and information about HIV/AIDS, it's transmission and its' treatment' (Namibia HIV/AIDS Charter of Rights, 2004: 7).

In a paper by David Dickinson (2008) on traditional healers, HIV/AIDS and company workplace programmes in South Africa, it is estimated that 'up to 80% of the African population make use of traditional healers as for many people it is the only health system available to them' (Dickinson, 2008: 3). It is suggested that a partnership that focuses on the strengths of each side (instead of the weaknesses) should be considered as traditional healers, like medical doctors, are also confronted with HIV-positive patients for traditional assistance instead of western medication. Traditional healers therefore play a significant role as a source of advice and care, and there are a number of companies in South Africa that have broadened their relationship with traditional healers linked to their HIV/AIDS programmes (Dickinson, 2008: 12).

The key to the success of such a "partnership" would be to ensure that traditional healers are, as the Namibia HIV/AIDS Charter of Rights states (Namibia HIV/AIDS Charter of Rights, 2004: 7), provided with appropriate education and information on the HIV/AIDS epidemic. Company HIV/AIDS programmes and interventions are in a strong position to initiate these agreements as well as benefit from this compatibility by, for example, 'training traditional healers to conduct voluntary counselling and testing for HIV; agreeing on appropriate services for traditional healers to provide to HIV-positive patients; training traditional healers to professionalise their practises ; and responding to training needs as specified by the traditional healers but also compatible with the companies' HIV/AIDS workplace programme. It is however critical that HIV/AIDS must be embedded with other relevant health concerns in the workplace, while there needs to be a recognised process of referral between traditional and western healthcare systems (Dickinson, 2003: 16).

2.4 Voluntary counselling and testing (VCT) for HIV/AIDS

VCT is not only a key component of both HIV prevention and care programmes but is the gateway to both prevention and care. In order to respond effectively to options for each, it is preferable for one to know one's status. The development of increasing numbers of effective and accessible medical and supportive interventions for people living with HIV/AIDS (PLWHA) means that VCT services are being more widely promoted and developed and many developing countries are gradually instituting VCT as part of their primary healthcare package. VCT has also shown to be a cost-effective HIV prevention intervention (Oberzaucher and Baggaley 2002: 7).

In recent years, voluntary counselling and testing (VCT) has become increasingly important in international, national as well as local prevention and care efforts for HIV and AIDS. VCT is a process by which an individual voluntarily presents him or herself for counselling, enabling them to make informed choices about testing for HIV (Oberzaucher and Baggaley, 2002: 8). Once the individual has then decided to undergo an HIV test, he or she also receives post-test counselling to deal with the result, whether HIV-positive or HIV-negative. The benefits of VCT are primarily that knowing one's status can be a 'motivating force for HIV-positive and HIV-negative people to adopt safer sexual behaviour'. VCT can also facilitate 'access to prevention services for HIV-negative individuals and serve as a key entry point to care and support services for those who are infected with the virus' (Oberzaucher and Baggaley, 2002: 9). These services include access to interventions to prevent opportunistic infections, access to antiretroviral treatment to assist HIV-positive individuals to live longer and healthier lives, and access to interventions to reduce mother-to-child-transmission (MTCT) of HIV (Oberzaucher and Baggaley, 2002: 9).

As mentioned in the literature review on HIV/AIDS workplace programmes, voluntary counselling and testing has become an integral and recommended part of HIV workplace programmes in both developed and developing countries (Rau, 2004; Bililies *et al* 2008; UNAIDS, 2000; Action Against AIDS in the Workplace, 2005; Chartier, 2005 and Sithole, 2007). Although businesses are not encouraged to enforce HIV testing of employees, they are motivated to provide voluntary, informed and confidential testing for employees as part of the HIV prevention programme (Action Against

AIDS in the Workplace, 2005: 18). Goodwin (2007: 2) advises that VCT at the workplace is important because it provides an entry point for HIV/AIDS prevention, care and treatment. Furthermore, voluntary counselling and testing at the workplace is an opportunity to promote safe behaviour; to prompt individuals to disclose their status to sexual partners; to teach reproductive health such as family planning and prevention of mother-to-child-transmission (PMTCT); to refer employees to social and peer support networks; for the early diagnosis and management of opportunistic infections; and for timely access to antiretroviral treatment (Goodwin, 2007: 2).

Mundy and Dickinson (2004: 3) write that individuals undertake VCT as a result of increased knowledge (after pre-test counselling). After the HIV test, there is a further increase in knowledge (post-test counselling) that promotes risk reduction in individuals, because they are aware of their HIV status, their risk perceptions have changed and new norms of responsibility have been enforced. Furthermore, they state that managing HIV/AIDS in the workplace is, as well as providing VCT, has become an accepted practise as 'most workplaces offer a stable environment conducive to the effective ongoing provision of information, education and skills development' (Mundy and Dickinson, 2004: 3).

From the above it is clear that VCT is a key component of both HIV care and HIV prevention. In a research study conducted by Corbett *et al* (2006) on the uptake of workplace HIV testing in Zimbabwe, it was found that voluntary counselling and testing offered at the workplace 'offers the potential for a high uptake when offered on site and when linked to basic HIV care' (such as counselling and referral to support networks), while 'VCT has been identified as one of the most cost effective interventions in Africa' (Corbett *et al*, 2006: 6). Participation in the voluntary counselling and testing that was offered at the workplace was much higher than in another company where employees received vouchers to go to a VCT testing site away from the workplace. The researchers recommend that VCT is conducted at the workplace, as the study found that only a minority of the workforce made use of vouchers that they received to go to a free-standing clinic-based VCT centre away from the workplace. This recommendation is further supported by the fact that rapid HIV testing has 'minimal infrastructure requirements and can be performed accurately by non-laboratory staff' if they have had the correct training. Corbett *et al* (2006) conclude that one of the key goals for HIV prevention is to "normalise" knowledge of one's HIV status, or in other words, to make HIV testing a regular occurrence especially in the lives of high risk populations. High accessibility to

voluntary counselling and testing is a key requirement and including this at the workplace will contribute to the realisation of this goal (Corbett *et al*, 2006: 2-7).

In the Blueprint for Business Action on HIV/AIDS (2007: 3) which was compiled by MSD (Merck, Sharp and Dome) HIV Access Programmes for countries and specifically companies in Africa, it is recommended that before companies embark on voluntary counselling and testing for HIV at the workplace, they need to first assess the needs for VCT services, find out what services are already available and what national regulations exist for HIV testing (at the workplace in particular). This assessment may involve assessing the level of HIV infection amongst employees and their dependents by using national data; assessing whether employees want voluntary counselling and testing at the workplace and their preferred service options such as internal or external service providers; understanding the extent to which stigma, denial and fear of mistrust in the workplace could be barriers to the uptake of the VCT; and analysing the existing use of VCT services outside the workplace. It is also recommended that companies conduct internal knowledge, attitudes, practices and behaviours (KAPB) surveys internally amongst its employees to find out what their knowledge, attitudes, practises and behaviours are with regard to HIV/AIDS and voluntary counselling and testing (Goodwin, 2007: 3).

Mundy and Dickinson (2004: 4) identified key factors that influence participation in voluntary counselling and testing at a workplace in South Africa. The key demographic factors associated with VCT participation are increasing age, level of education and also socio-economic status. Key factors with regard to the beliefs of employees are their beliefs about the causes of HIV and beliefs about the consequences of an HIV test. For example, a critical barrier to effective VCT in the workplace is if an individual believes that being HIV-positive will result in him/her being rejected from society, or in other words, stigma. To combat these factors it is essential that workplaces reinforce knowledge and information sharing amongst its employees as well as ensure that policies that address stigmatisation and discrimination are implemented. External factors that could influence the participation in VCT at the workplace include 'perceived levels of stigma and support', confidentiality and the quality of services provided. It is very important for employers to create an environment of trust and confidentiality in which employees will know the benefits of knowing ones status. Including representatives from all stakeholder groups in the workplace to play an active role in the management of the workplace programme 'has been identified as a critical success component in

both the development of the trust and confidence in the benefits of workplace VCT', as well as in the removal of stigma amongst employees (Mundy and Dickinson, 2004: 5).

A significant barrier that was found in the study by Mundy and Dickinson (2004: 13) was 'perceived employer and employee hostility towards one another'. Linked to this were negative impressions of company support and confidentiality of the VCT by employees. Another barrier to participation in VCT at the workplace was the lack of consultation with and involvement of the labour union. The low rating for union support amongst employees who participated in the testing reflected the lack of union support for the intervention, and this again emphasizes the need for employee stakeholder representative involvement as an integral part of the success of workplace programmes. Overall, the authors (Mundy and Dickinson, 2004: 20) concluded that the workplace is an effective environment for voluntary counselling and testing, as long as workplaces establish an environment in which employees feel comfortable to undergo an HIV test, while fully knowing the benefit of being aware of their status. Peer pressure played an important role in the participation of the employees, as employees who tested influenced their colleagues who did not test to participate and thus overcome the barriers mentioned earlier. It was also found that a high level of knowledge is not always sufficient to change behaviour and encourage regular HIV testing. Of crucial importance to the success of VCT in workplace programmes is the 'development of knowledge, and the establishment of trust and confidence in workplace interventions' (Mundy and Dickinson, 2004: 20). Also, the benefits after voluntary counselling and testing (such as ongoing support, counselling and access to antiretroviral treatment) need to be understood by all employees (Mundy and Dickinson, 2004: 20 & 21).

However, in a critical review and analysis of VCT literature by Solomon *et al* (2004 for the Health Systems Trust), it was found that there could also be general internal and external barriers to the effective implementation of voluntary counselling and testing. Internal barriers could be access to VCT; demand of VCT versus the quality of VCT; human and emotional factors associated with counselling; service delivery factors; and the challenge of having inadequate resources. The external barriers associated with VCT could be survival factors, especially within poorer populations; discrimination and stigmatisation; the fear of an HIV-positive test result; and cultural factors such as preferring to make use of the services of a traditional healer instead of a medical doctor. Nevertheless, the authors conclude that voluntary counselling and testing is a fundamental HIV

prevention and health promotion tool and individuals should be encouraged, whether ill or not, to 'receive adequate information to make an informed voluntary choice to be tested for HIV. In this way the spread of the epidemic can be curbed and populations can be educated in prevention and behaviour change methods'. (Solomon *et al*, 2004: 61-67).

In a 2007 study on behaviour change in clients of health care centres for voluntary counselling and testing in Kenya by Arthur *et al*, the authors found that there was a 'significant reduction in high-risk sexual behaviours' before the clients underwent VCT compared to a follow-up six months after the VCT. This is an interesting finding as it would seem that knowledge of one's status (after an HIV test) leads to an increase in high-risk behaviour rather than a decrease in high-risk behaviour. However, although condom use of the participants only increased slightly, it was still low after clients underwent voluntary counselling and testing and there was not a higher rate of status disclosure amongst HIV-positive clients after they underwent voluntary counselling and testing. Furthermore, it was found that behaviour change in the participants was mainly visible in the reduction of casual sex partners but not by an increase in condom use. Still, it was concluded that VCT is essential in terms of further HIV prevention strategies as clients who participated in voluntary counselling and testing planned risk-reduction behaviour and showed significant changes in sexual behaviour at the follow-up study (Arthur *et al*, 2007: 11). In a similar study conducted on voluntary counselling and testing and sexual behaviour in Zimbabwe (Sher *et al*, 2007) and contrary to the norm, the authors found an 'unintended effect of the VCT' (Sher *et al*, 2007: 858) whereby individuals who tested HIV-negative practised more high-risk behaviour after the VCT specifically by an increase in their number of casual sex partners. The authors concluded that the findings of this study are evident of the importance of scaling-up education and information sharing during post-test counselling as well as ensuring that behaviour change communication is included in post-VCT interventions (Sher *et al*, 2007: 859).

The education and schooling levels of individuals who undergo VCT are further factors that play a role in the after-effects of voluntary counselling and testing. On the one hand, schooling is generally considered as a factor that increases access to information campaigns and health promotion interventions, yet on the other hand higher education levels is also associated with more wealth and mobility thus 'behaviour that potentially increases exposure to HIV infection' (de Walque *et al*, 2005). In a research study conducted on schooling levels and HIV infection in Uganda by de Walque

et al (2005: 998), the aforementioned is supported by the study as it was found that there is a significant association between higher education and less HIV infection in Africa. When information on the HIV and AIDS epidemic and the prevention thereof is distributed, it is usually more educated individuals that are able to understand and adapt more quickly and thus change their behaviour, specifically with regard to an increase in condom use and a reduction in casual sex partners. The authors conclude that “the findings of this paper are consistent with the hypothesis that education helps individuals in accessing and processing health related information. By suggesting that more educated people benefit most from HIV information campaigns further reinforces that behavioural changes drive the decline of HIV prevalence” (de Walque *et al*, 2005: 999).

A study conducted by Nyblade *et al* (2000) on HIV risk behaviour change in Uganda had contrasting findings to the Kenya study conducted by Arthur *et al* (2007). The authors examined behaviour change after participants received voluntary counselling and testing by comparing behaviours over a period of twenty months. The behaviour change amongst participants was evaluated by their reported number of casual sex partners as well as their condom use. The findings of the study showed that there were no statistically significant differences in risk behaviours amongst those who received voluntary counselling and testing and those who did not receive voluntary counselling and testing, specifically in terms of condom use and number and type of casual sex partners. Although there was a slight increase in condom use amongst HIV-positive participants, the authors concluded that voluntary counselling and testing had minimal effects on HIV risk reduction behaviours (Nyblade, 2000:1). Although this finding is vastly different from most claimed advantages and theories of voluntary counseling and testing, it is very important to my study, as the findings of my research support this notion that VCT has minimal effects on HIV risk reduction behaviours. However, in a summary of a meta-analysis conducted by Denison *et al* (2008) on HIV voluntary counselling and testing and behavioural risk reduction in developing countries, the authors found that participants who underwent voluntary counselling and testing were less likely to engage in unprotected sex after VCT. However, the study concluded that ‘although the findings provided only moderate evidence to support voluntary counselling and testing as an effective behaviour change strategy, there remains a need to expand access to voluntary counselling and testing for HIV in developing countries so that individuals are aware of their HIV status’ (Denison, *et al* 2008: 2).

There are a number of service delivery models for voluntary counselling and testing but for the purposes of this thesis, mobile testing is most relevant. Family health international (FHI) (2005: 4) describes mobile counselling and testing as taking services to the community and offering voluntary counselling and testing either out of a van (as with Bophelo!) or from designated places such as tents or caravans set up at strategic locations within communities. A temporary testing site is set up where testing is offered to either the general population or to defined groups. The benefits in this regard are clear: mobile voluntary counselling and testing 'improves access for hard-to-reach and rural populations, and it brings the service to the beneficiaries' instead of clients having to seek for a testing site. However, mobile voluntary counselling and testing is not without its challenges. Firstly, mobile testing is in most instances expensive and requires intensive resources such as equipment and staff; secondly, it is difficult to follow-up with clients after post-test counselling; thirdly; it is challenging to ensure the quality of counselling and testing at temporary sites; and fourthly, it can be difficult to prioritise HIV testing where individuals have other pressing commitments or health needs (FHI, 2005: 4). It must be mentioned that the challenge of ensuring the quality of counselling and testing in mobile testing sites is not significant in Bophelo!, as quality assurance of the HIV testing is conducted monthly by the National Institute of Pathology, while the quality of counselling is assessed by the clients themselves (in a service evaluation form), and the counsellors are monitored every three months through refresher training courses and practical evaluations. This ensures that services are of a high quality, services provided meet the national requirements and procedures are regularly updated according to changing protocols.

Ramnarain (2008: 67) conducted research on workplace VCT in the mining sector in South Africa and summarised the benefits of voluntary counselling and testing that he found through his study in the workplace. VCT at the workplace contributes to sustainable economic value for organisations in implementing HIV workplace programmes especially because early detection of HIV infection in employees can be effectively addressed. This in turn allows the provision of treatment to be introduced at the appropriate time in terms of disease progression. VCT is an effective strategy in preventing further HIV infection and providing support, while it is also intended to encourage employees who participate in HIV testing to engage in safer sexual practises. Furthermore, employees who test HIV-positive will be given more appropriate counselling, and appropriate information on how to live positively, join support groups and networks and access antiretroviral treatment (Ramnarain, 2008: 67).

2.5 Voluntary counselling and testing in Namibia

The Namibian Demographic Health Survey of 2006/2007 indicates that 32% of men and 50% of women have ever tested for HIV to know their status. This analysis of available data indicates that HIV testing and counselling remain low. Namibia has held two successful multi-sectoral national HIV counselling and testing events to date. The first event was held in 2008. During the three-day event, 30 000 people were tested and received their results. The second event took place in 2009. During this five-day event, 80 000 people were tested and received their results. These have become national events that have proven to be effective in extending counselling and testing services to people throughout the country (Republic of Namibia, 2009c: 24).

Although there is not much literature on voluntary counselling and testing at the workplace in Namibia, the national policies, guidelines and strategic frameworks on HIV/AIDS are clear on the importance of VCT. Regarding counselling and testing, the Namibian HIV/AIDS Charter of Rights (2004: 2) states that 'voluntary and confidential counselling and testing for HIV should be encouraged while the establishment of affordable and accessible voluntary, confidential counselling and testing is essential' (Namibian HIV/AIDS Charter of Rights, 2004: 2). 'These HIV voluntary counselling and testing facilities should provide quality pre-and post-test and ongoing counselling by qualified and competent counsellors, and HIV testing should only be done with informed consent'. (Namibian HIV/AIDS Charter of Rights, 2004: 2).

The AIDSMark Association, previously known as the Social Marketing Association (SMA) is an important VCT initiator in Namibia, as they are the umbrella organisation of the New Start HIV testing centres around the country (AIDSMark website, 2009). AIDSMark promotes VCT as 'one of the most powerful weapons' to curb the spread of HIV because VCT 'induces sustainable and positive behaviour change in both infected and uninfected people' (AIDSMark website, October 2009). "People who test negative for HIV and undergo quality risk reduction counselling are more likely to change their behaviour and to maintain their negative status, while those who test positive and receive counselling are motivated to protect themselves and others from HIV infection, and to

seek medical, social and psychosocial support” (AIDSMark website, October 2009). The New Start brand that is used in countries such as Namibia, Zambia, Lesotho, Zimbabwe and South Africa, is promoted by using ‘proven social marketing techniques to increase demand and reduce stigma’ around the use of voluntary counselling and testing services. New Start ensures that high quality VCT services are assured through standardised protocols and training, as well as constant compliance monitoring (AIDSMark website, October 2009).

The two main voluntary counselling and testing for HIV service providers in Namibia are the Ministry of Health and Social Services (MoHSS) (health facilities such clinics, hospitals and community clinics in partnership with the Red Cross Society), and New Start Centres which are located in most urban areas throughout the country. Due to a lack of human resources and infrastructure availability, these two institutions do not have the required capacity to offer VCT services to all populations most at risk and other vulnerable groups. Other non-governmental organisations that sporadically offer socially marketed voluntary counselling and testing services include the Namibia Red Cross Society, the Council of Churches in Namibia and Catholic AIDS Action, but they are not readily available in all regions of the country. As mentioned in the PSI HIV/AIDS Southern Africa Project Report (2007: 3), the availability of voluntary counselling and testing facilities are in a problem in Namibia and need to be expanded further.

In 2002, it was estimated that at least twenty three voluntary counselling and testing for HIV centres need to be established. However in 2005, voluntary counselling and testing services remained in a bottleneck regarding the provision of services both in terms of human resources and infrastructure availability (PSI HIV/AIDS Southern Africa Project Report: HIV/AIDS in Namibia, 2007:4). In 2009, the third medium term national strategic plan on HIV/AIDS of Namibia responded to this situation by aiming to increase access and use by vulnerable groups, young people and the general population to quality voluntary counselling and testing for HIV at at least forty five VCT centres in Namibia. The planned activities to achieve this outcome were:

- To conduct a needs assessment for mobile site planning
- To establish static VCT centres

- To establish quality VCT services in public hospitals
- To establish mobile VCT services to reach mobile and vulnerable communities
- To conduct social marketing events and disseminate educational materials on VCT
- To train field officer and community volunteers to do door-to-door mobilisation for HIV testing
- To increase the number of trained peer educators in the workplace
- To encourage individuals infected with tuberculosis to go for VCT
- To roll-out VCT services and rapid HIV testing
- To refer individuals who have undergone an HIV test to other services such as clinics and social services

(Republic of Namibia, 2004: 51)

In a collection of best practises of regional and local responses to HIV and AIDS in Namibia (Republic of Namibia, 2008: 12), twenty two regional and local organisations were used to show that a multi-sectoral response is required to ensure firstly, the prevention of HIV/AIDS; secondly, access to treatment care and support; and thirdly impact mitigation. In all three these areas, the importance of voluntary counselling and testing for HIV was highlighted as an integral part of the fight against HIV. There are a number of factors contributing to the high-levels of HIV and AIDS in Namibia, and these need to be taken into account when promoting voluntary counselling and testing. These factors are multiple and concurrent partnerships; intergenerational sex; alcohol abuse and low levels of HIV risk-perception which may discourage consistent condom use; transactional sex; and population mobility. It is essential that in regions where the above factors are prevalent, voluntary counselling and testing should be available, whether static or mobile (Republic of Namibia, 2009b: 10).

Voluntary counselling and testing for HIV is offered for two main reasons: firstly, as a prevention strategy for individuals who want to know their status, and secondly as an entry point for treatment, care and support (Republic of Namibia, 2009c: 24). To date, Namibia has 123 voluntary counselling

and testing sites under the Ministry of Health and Social Services and 19 Social Marketing Association (now known as AIDSMark) voluntary counselling and testing centres, while all government hospitals and health facilities provide rapid testing (Republic of Namibia, 2009c: 25).

Currently Namibia provides both provider initiated testing and counselling (PITC) as well as client initiated counselling and testing more commonly known as voluntary counselling and testing (VCT). PITC is provided in general health facilities to increase the number of people who receive HIV counselling and testing, and to identify those in need of care and treatment. VCT is provided in community based stand alone sites, outreach as well as health facilities. In 2005 the Namibian government approved a policy which allowed the task shifting of HIV counselling and testing to lay counsellors. With proper training and supervision the lay community counsellors have proven to be more than effective in delivering counselling and testing for HIV. This was instrumental in integrating voluntary counselling and testing into health care settings as it reduced the workload on already over-burdened health workers (Republic of Namibia, 2009c: 24).

Although Namibia has made significant strides in implementing and providing voluntary counselling and testing through the country, there are gaps and challenges that need to be overcome. These are low levels of testing due to inadequate demand in some communities and groups of people for HIV testing; the inability of individuals having known their HIV status to change from risk behaviours and adopt key prevention behaviours; the inadequate linkages between counselling and testing and care and treatment; inadequate stand alone voluntary counselling and testing sites including mobile units; less men are tested compared to women; the inadequate accessibility to counselling and testing by sex workers, men-having-sex-with-men and prisoners; and the regional variations of voluntary counselling and testing (Republic of Namibia, 2009c: 25).

To respond to these gaps and challenges, the National Strategic Framework for HIV and AIDS (2010/11 - 2014/15) has identified the following priority actions for all voluntary counselling and testing service providers: to scale up the implementation of PITC in all health facilities both public and private; to expand community and work place sites for VCT services; to implement outreach and mobile counselling and testing and home-based door-to-door testing to reach more vulnerable populations; to prioritise voluntary counselling and testing in regions where testing uptake is low; to

update counselling materials to ensure the inclusion of behaviour change prevention messages; to extend VCT services to outside normal working hours; to further strengthen HIV prevention through the promotion of couples counselling and testing; to strengthen the referral system between service providers; to enhance the availability of test kits at all VCT facilities; and to improve the quality assurance systems for both counselling and testing in the country (Republic of Namibia, 2009c: 26).

CHAPTER 3: RESEARCH METHODOLOGY

In this chapter I discuss the research methodology in terms of the research design, population and sample used for this study.

3.1 Design of the study

The research objective of this thesis is to evaluate the outcome of voluntary counselling and testing for HIV in the workplace especially with regard to changes in HIV/AIDS knowledge, attitudes and practices/behaviour of the employees who participated in the testing. The research design that is adopted for this thesis is that of evaluative research. Evaluation asks questions such as “what has been achieved?” and “what impact has been made?” (IFC Against AIDS, 2006: 6). Evaluation is defined as the “systematic assessment of the operation and/or the outcomes of a programme or policy, compared to a set of implicit or explicit standards, as a means of contributing to the improvement of the programme or policy” (Weiss, 1998: 4). Babbie and Mouton (2004: 341) write that once a programme has been implemented (as the Bophelo! VCT for HIV at the workplace has), attention shifts to the outcomes of such a programme or intervention. These outcomes could entail behavioural changes, attitudinal changes, more knowledge, better services and so on (Babbie and Mouton, 2004: 341).

One could also classify the research conducted for this study as judgement-oriented research. Babbie and Mouton define judgement-oriented research evaluations as evaluations which are aimed at

...establishing the intrinsic value, merit or worth of a programme. Questions of pivotal importance to ask when conducting a judgement-oriented evaluation are: *Was the programme successful? Did it achieve its objectives? Was it effective? Did the programme attain its goals? Was the intended target group reached? Did the intended beneficiaries receive the intervention in the most effective and efficient manner?* (Babbie and Mouton, 2004:337).

To evaluate the outcomes of the VCT for HIV at “Trailer King”, the research design of the study is outcome evaluation. The IFC Against AIDS (2006:7) defines outcome evaluation as evaluation that examines specific outcomes and accomplishments. What changes were observed, what does it mean and if there are any changes, are these changes as the result of the VCT for HIV intervention at the workplace? The main purpose of this outcome evaluation is to find out to what extent the intervention has led to changes in knowledge, attitudes, behaviour and practises. Has the desired change been achieved and is the VCT for HIV in the workplace making a difference in terms of changes in the target population (i.e. the employees who participated in the VCT)? In order to conduct an outcome evaluation, there is usually data for a period prior to the intervention (also known as baseline data) which is then compared with data gathered after the intervention (IFC Against Aids, 2006: 12). Targets or individuals who receive the intervention are compared with themselves before and after the intervention (Rossi *et al*, 1999: 258). Figure 2 represents a diagrammatic overview of the research design - as I am interested in the impact of the VCT intervention, the areas highlighted in yellow indicate where the research is located (baseline data compared to the post-intervention survey data):

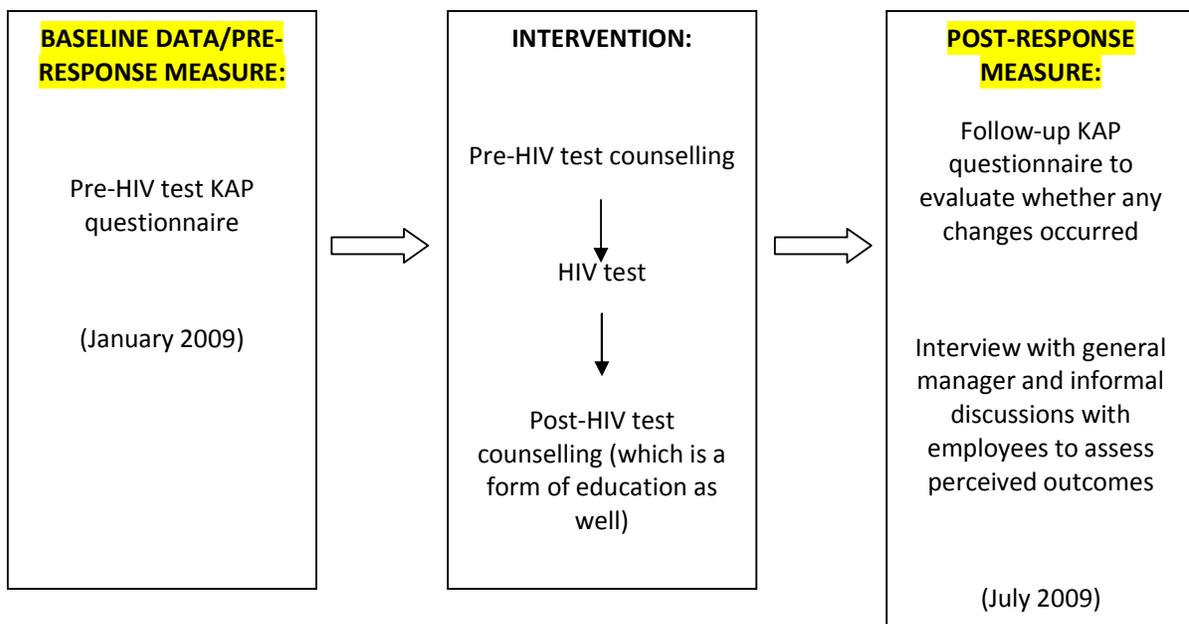


Figure 3: Overview of research design

For the outcome evaluation of VCT for HIV at “Trailer King”, the pre-HIV test KAP (knowledge, attitudes and practises) questionnaire that was administered by Bophelo! staff to employees before the pre-HIV test counselling (either in the form of an interview if employees were illiterate or completed by the employee him/herself) has been compared with my follow-up questionnaire (see Annexure A) that was administered six months after the intervention (pre-HIV test, HIV test, and post-HIV test counselling). The pre-HIV test questionnaire is not attached as an annexure because I have not received permission to insert it as this questionnaire is the property of PharmAccess in Amsterdam. Ideally, the pre-intervention KAP questionnaire and the post-intervention KAP questionnaire should be exactly the same. The IFA Against AIDS states that, “For example, a knowledge, attitudes, practises and behaviour (KAPB) survey could be used at the start of a programme and then again twelve months after the programme implementation to see if knowledge about HIV and AIDS has increased as a result of the intervention” (IFC Against AIDS, 2006: 12). The majority of the questions that were asked in my follow-up questionnaire are a replica of the first pre-HIV test KAP questionnaire, although I had to add a number of questions to further determine whether employees’ knowledge, attitudes and behaviour had changed as a result of the VCT intervention. The follow-up questionnaire was only available in English hence the assistance from my Oshiwambo and Otjiherero colleagues. This will be discussed in more detail under quantitative data collection later on in this chapter.

The research methodology that was used for this research was mainly quantitative data collection as a questionnaire was applied before and after the voluntary counselling and testing. The ‘quantitative research paradigm’ refers to the research approach that defines a study as “an enquiry into a social or human intervention based on testing a theory composed of variables, measured with numbers and analysed with statistical procedures” (Fouché and Delpont, 2005: 74). Similarly Babbie and Mouton (2004: 49) state that the quantitative paradigm includes “an emphasis on the quantification of constructs, and that the best way to measure the properties of phenomena (such as the attitudes of individuals towards certain topics) is through quantitative measurement, in other words assigning numbers to the perceived quality of things” (Babbie and Mouton, 2004: 49).

The ‘qualitative research paradigm’ refers to the research approach in social research according to which the most important part of the research would be the insider’s perspective. “Qualitative analysis would be the non-numerical examination and interpretation of observations for the purpose

of discovering underlying meanings” (Babbie and Mouton, 2004: 53). Qualitative research is thus defined as describing and understanding, which would include observational methods such as unstructured interviewing and participant observation (Babbie and Mouton 2004: 53). The qualitative part of this study entailed one semi-structured interview the General Manager of “Trailer King” and informal discussions with the participants to determine whether the VCT intervention within the workplace was successful in terms of the general objectives of Bophelo!: Was a professional, confidential on-site voluntary counselling and testing service provided to employees to know their HIV status?; Did the intervention provide insight in the health risks of employees who participated?; were anonymous statistics reported to the company to implement the employee HIV and/or Wellness programme? The interview questions were a combination of both open and closed-ended questions and served as a platform to determine whether the information provided to the company assisted it to implement an HIV/AIDS workplace programme (See Annexure B for a list of interview questions).

Directly after administering the follow-up survey questionnaire, informal discussions were held with participating employees. My colleagues assisted employees who were not fluent in English and/or Afrikaans to complete the follow-up questionnaires (KAP survey), they also asked them additional questions regarding their experience of the voluntary counselling and testing, and whether they felt that the intervention had any impact on their lives, and if so, in what ways. On the last page of the questionnaire (see Annexure A) there was an open space where any additional comments from the participants were recorded, and this section was discussed informally to gather these additional opinions from the participants.

Results from the two surveys were compared to assess whether there were any differences in the answers that employees gave in the first pre-HIV test questionnaire compared to the answers that employees gave in the follow-up post HIV test questionnaire, or in other words, to study the impact of the VCT intervention. As mentioned in the overview of Bophelo!, one component of the intervention was that employees needed to anonymously complete a KAP questionnaire before they underwent the pre-HIV test counselling. The aim of this pre-test questionnaire was to assess their knowledge about HIV/AIDS and its methods of transmission, knowledge on the workplace programme (if any), attitudes towards people living with HIV/AIDS, beliefs about HIV/AIDS, associated myths and misconceptions and practises associated with the transmission of HIV. The

questionnaire was designed by the PharmAccess Foundation Namibia office, with the assistance of a multi-disciplinary team from PharmAccess International in Amsterdam. Components of the pre-HIV test KAP questionnaire covered demographics, knowledge, attitudes, practises and personal experiences and perceptions.

Because the majority of the employees are not fluent and not comfortable with English and Afrikaans (my mother tongues), I made use of the assistance of two colleagues (one male and one female) who are fluent in both Oshiwambo and Otjiherero, the more common languages amongst employees of “Trailer King”, to assist employees who cannot read and write English to complete the follow-up questionnaires. Although all the females were assisted by my female colleague, due to the large number of male employees at the company, it was not possible to have the males assisted only by my male colleague - this may have influenced the responses of the male participants as well. The two colleagues were fully briefed on the contents of the questionnaire so as to be sure that they understood all questions as well as the type of information that I wanted to gather. A standard translation was agreed amongst the three of us so that there would be no confusion or different translations of questions to the participating employees.

The baseline survey was administered by Bophelo! in January 2009. Literate employees completed the questionnaire by themselves, while employees who were either illiterate or unable to understand English were assisted (interviewed) by the Bophelo! staff to complete the questionnaire. It is important to mention that although the data from this pre-HIV test questionnaire was available to me due to my position in Bophelo!, this survey was not conducted by me with the intention of using it as a baseline for an impact assessment after the VCT was conducted. When deciding on a company at which to conduct my research for my studies, “Trailer King” was a viable option as, in my professional capacity of as project manager, the KAPB survey and VCT intervention was recently completed, and my employer gave me permission to use the data from the first questionnaire in January 2009 as a baseline for my proposed research at the time.

The follow-up KAP questionnaire which was completed by employees six months after the VCT for HIV was conducted by Bophelo! at the company, is the key instrument with which to evaluate the outcome of the intervention. For participants fluent and able to read and write in English,

questionnaires were individually distributed - completed questionnaires were collected by myself a day later. Participants who were not able to read and write in English were assisted by my two Oshiwambo and Otjiherero colleagues to complete the questionnaire. Each assistant individually assisted the employees, by means of asking the questions and recording the corresponding answer on the questionnaire (similar to a formal structured interview). It is important to note that for both the pre and post-HIV test questionnaires, questionnaires were not administered in the same way to all participants which could have produced different results. Answers given by the employees should be indicative of whether the VCT had resulted in any changes in the participating employees with regard to knowledge, attitudes and practises. This follow-up questionnaire included questions which were also included in the pre-HIV test KAP questionnaire six months before. The initial pre-HIV test KAP questionnaire was administered from the 21st to the 23rd of January 2009, while the follow-up KAP questionnaire was administered on the 4th and 5th of July 2009 - the time lapse between the pre-HIV test KAP questionnaire, the VCT for HIV intervention and the follow-up KAP questionnaire is approximately six months. The six months period was not a chosen time lapse between the VCT and my follow-up research, July 2009 was simply the time at which my research within the company commenced. See Annexure A for the follow-up (post voluntary counseling and testing) questionnaire.

3.2 Population and sample

Sampling is the process of selecting observations. Social research is often conducted in situations where you cannot select the kinds of probability samples used in large-scale surveys. (Babbie and Mouton, 2004:166). For the purposes of this study, I have used a non-probability sampling technique: reliance on available subjects. Babbie and Mouton state that this method of sampling is a risky method and that one must exercise great caution in generalising from the data (Babbie and Mouton, 2004: 166). However, for this study I had no other choice than to rely on the number of employees who were willing to complete the questionnaires and be interviewed, as the process was voluntary.

In the baseline study at "Trailer King" in January 2009, 75 out of 84 (89%) employees participated in the VCT. In the follow-up study, the sample comprised 58 employees out of 85 employees (68%).

Initially, 73 employees completed my follow-up post-VCT questionnaire, though only questionnaires from the 58 employees who indicated that they participated in the VCT of January 2009 were used for the study. Fifteen employees did not participate in the VCT intervention in January 2009, thus their exclusion from my research. As both the VCT intervention as well as the post-VCT questionnaire was voluntary, no assumptions can be made with regard to the reasons why some employees chose not to participate in the VCT that was offered in January 2009, as well as with regard to the employees who chose not to participate in the follow-up research. Possible reasons could be that employees were not on duty on the days that either the VCT or the post-VCT questionnaire were conducted, employees were afraid to participate in the interventions, employees already knew that they were HIV-positive (this is with regard to the voluntary counselling and testing in January 2009), or it could be that they simply did not want to participate in any intervention.

Participants in the follow-up study were aged from under 20 years of age to over 50 years of age, while 58% of the participants were 34 years old or younger. The median age of participants was 32 years and the mean age was 34 years. Participants were not chosen according to specific age categories as I had no other choice than to rely on employees who were willing to participate in the follow-up research within the company. The level of education of the participants is relatively low, with 17.5% who did not attend school, 51% who attended some primary and some secondary school and 16% who completed secondary school. 16% of the participants completed secondary school and/or had some vocational training. When comparing the profiles of respondents from the baseline and post-VCT questionnaire, there is no significant difference in the gender composition of the participants, although participants in the post-VCT study seem to have somewhat lower levels of education (see Chapter 4 for the demographic profile of the participants).

3.3 Research limitations

As mentioned earlier, the time lapse between the voluntary counselling and testing for HIV intervention and my outcome evaluation is approximately six months. There is a possibility that at the time of the administration of the follow-up KAP questionnaire, employees could already have forgotten about the intervention or that the information that they received in January 2009 had no

significance in certain areas of their lives anymore (thus indicating a lack of impact and a need for follow-up). Another possibility could be that what participants' said or answered on the second questionnaire is different from what they actually do, and thus an underreporting of risky behaviour is possible and it may be partly due to knowledge they attained during the intervention and even more so in the presence of an interviewer. At the time that the research was conducted, there had been no further HIV related interventions for the employees at the workplace during the previous six months (Basson, interview, 6 July 2009), though it is not known whether they were exposed to additional HIV/AIDS-related interventions outside the workplace. Another limitation to this study could be that the questions or statements (or how they were phrased) in the questionnaire intended to measure the knowledge, attitudes and practises of the participants were not sufficient to measure the change. To address this limitation, all questionnaires that were administered to employees individually who were not fluent in English or Afrikaans with the assistance of my colleagues, were combined with semi-structured or informal interviews/discussions to gain more in-depth information to try to understand differences between employees' perceptions, behaviour and context. These findings are reported in Chapter 4 under additional comments and opinions from participants.

Another potential limitation to the study is that there was no way of ensuring that the exact same group of employees who participated in the VCT in January 2009 participated in the follow-up study in July 2009. The ideal would have been to be able to link specific employees to their before and after scores, but as both processes were voluntary as well as anonymous, no names were asked from the employees, and thus responses to the questionnaires before and after the VCT intervention cannot not be linked to specific individuals to measure whether there was any change. Any changes or differences in responses were measured according to changes in percentages. Although only the responses of employees who participated in the VCT in January 2009 were used in the follow-up survey, it must be kept in mind that this group could differ from the group of employees who participated in the VCT in January 2009, especially in terms of age groups and level of education. To overcome this limitation, cross-tabulations have been run on the July 2009 responses to ascertain differences in responses in terms of level of education to explain variation in knowledge, attitudes and practises. Cross-tabulations have not been run on gender as there were only five females versus fifty two males thus it would be difficult to arrive at any conclusions (one employee did not stipulate his/her gender). These results are discussed together with the findings from my study in Chapter 5.

As mentioned, questionnaires were administered with the assistance of two Oshiwambo and Otjiherero-speaking colleagues due to the language barrier amongst most of the respondents who are not able to read and fully understand English, the language that the follow-up questionnaire was in. This could have influenced the responses of the participants, especially with regard to more personal questions such as sexual behaviour, as participants could have been shy, uncomfortable or simply not willing to share this personal information with a person that they do not know. The participants could also have given answers to questions that they thought would have been “correct”, or the right thing to do or say, so as not to seem uninformed or ignorant. For example, with regard to questions about knowing what a sexually transmitted disease is, or changing sexual behaviour after the voluntary counselling and testing intervention, there is the possibility that participants could simply have answered what they thought would have been the favourable or desired answer (social desirability). To overcome this limitation, participants were reassured that their names would not be recorded anywhere and that it would be impossible to link the information that they shared with their identities. Furthermore, they were reassured that the information they shared would not be provided to their employers.

3.4 Data analysis

Notes were taken by the researchers during both the interview with the General Manager of “Trailer King” as well as the informal discussions with the participants.

Data from the pre-HIV test questionnaire as well as the post-HIV test questionnaire was entered into excel and SPSS for analysis. In order to ascertain whether there were any differences between the responses of participants in the two questionnaires, the before (January 2009) and after (July 2009) scores will be compared either in excel tables and/or graphs, or where necessary, responses for the July 2009 survey were further analysed by running cross-tabulations in SPSS. While I did not do a random selection of employees, but rather had to rely on those who volunteered, probability statistics was not used.

3.5 Research Ethics

“Researchers - in every relationship in which they may become involved with subjects and objects in the course of scholarly and scientific research - are faced with ethical responsibilities which they have to meet in ways that comply with relevant ethical norms” (University of Stellenbosch, 1996:1). Given the sensitive nature of HIV and AIDS as well as the levels of stigma still associated with it, it was very important that I comply with these research ethics, firstly, in terms of the rights of participants to their privacy and that anonymity is maintained; and secondly in terms of the anonymity of the company - hence the pseudonym. It must be noted that my position in Bophelo! does not jeopardise these research ethics, as any breach of confidentiality by company employees is subject to dismissal. The following steps were taken to ensure that the above ethical considerations were respected:

- Consultation: The managing partners (managing director and general manager) at the company where my research was conducted as well as the partners (general managers of PharmAccess Foundation, NABCOA and NIP) of Bophelo! were consulted so that the purpose of the research, methods of research and guiding principles of the research could be approved
- Informed consent: all employees were verbally informed of the nature of the research prior to the interviews and distribution of the questionnaires. Completion of the questionnaire was voluntary and employees who did not wish to take part in the administration of the questionnaire were not forced to do so
- Privacy, anonymity and confidentiality: apart from age, gender and level of schooling, participants were not asked to provide personal details. Their names were not recorded on any documents and unless participants who were assisted to complete a questionnaire voluntarily disclosed their name to my colleagues, the interviewers did not know their names
- Protection from harm: Participants were informed that they need not answer questions which made them feel uncomfortable. Also, participants were reassured that their

anonymity would be guaranteed, should there be any negative comments or opinions raised concerning the HIV/AIDS workplace programme of the company.

CHAPTER 4: RESEARCH FINDINGS

This chapter presents the findings of the research at “Trailer King”. The first part of the chapter will present a comparison of participants’ responses in January 2009 to their responses in July 2009 - to questions with regard to their knowledge, attitudes and behaviour; the second part of this chapter will present the findings from my interview with the general manager of the company; while the last part of the chapter will report the findings from additional questions that I added in the post-VCT questionnaire as well as additional comments from the participants with regard to the VCT that was conducted at their workplace.

Seventy three out of 85 employees (86%) participated in the follow-up questionnaire in July 2009, while 58 of these participants participated in the VCT intervention that was conducted at the company in January 2009. Questions on knowledge, attitudes, practises and behaviour that were asked in the initial VCT intervention in January 2009 were asked again in the follow-up questionnaire of July 2009 in order to determine whether there were any changes as a result of the voluntary counselling and testing for HIV at the workplace intervention amongst employees who participated in the VCT. The findings of the follow-up questionnaire of July 2009 will be presented together with the findings of the initial pre-HIV test questionnaire of January 2009, or, in other words, the results from similar items from the baseline and follow-up studies will be compared. As mentioned in my research methodology chapter, I included a few additional questions that were not asked in the initial pre-HIV test questionnaire. These findings will be reported separately. While there were only five females compared to 52 males who participated in the post-intervention survey, it will not make sense to analyse gender differences. Percentages of participants’ responses have been rounded in the text. Further discussion of the findings will follow in Chapter 5.

4.1 Demographic profile of participants

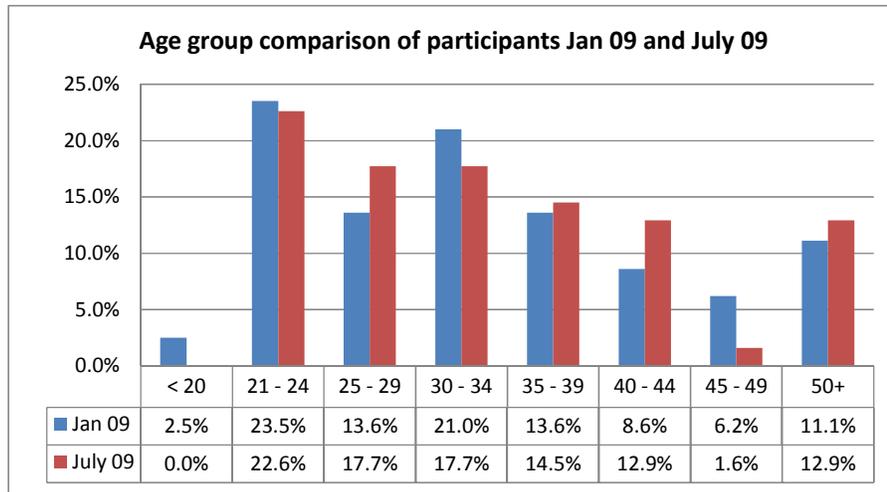


Figure 4: Age

As shown by Figure 4, the median age of the participants in the follow-up survey was 32 years of age, while the majority of participants were 34 years old or younger. It would seem that the participants in the follow-up survey are slightly older than the participants of January 2009.

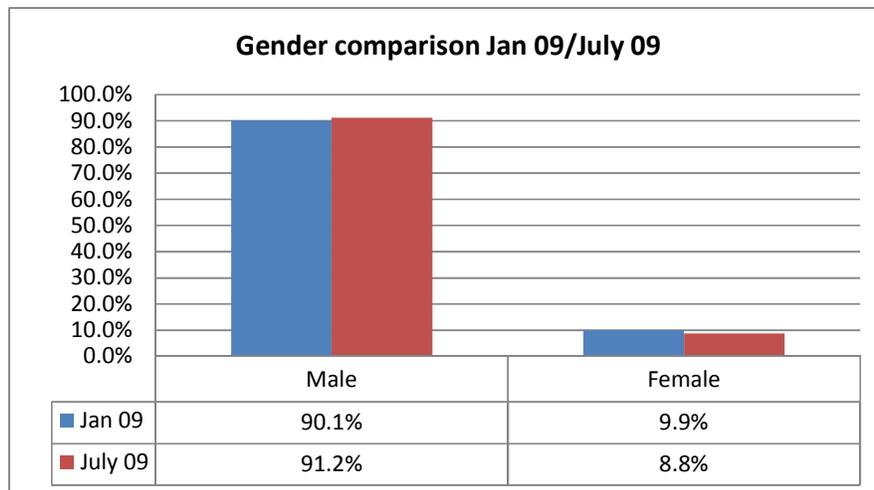


Figure 5: Gender comparison

As shown by Figure 5 there is no significant difference in the gender composition of participants in the first and second surveys: compared to the gender profile of the participants of the VCT in January 2009, 1% more males and 1% less females participated in my follow-up study. During the post-intervention survey, 91% of the participants were male, while 9% were female. This gender breakdown is representative of the workforce of the company as the majority of the labour/production staff is male, while the females make up a smaller part of the workforce in the roles of receptionists, office administrators, office assistants, accountants and cleaners (Basson, Interview, 6 July 2009).

Eighteen percent of participants did not attend school, 37% attended some school, or have completed the primary level, 14% have some secondary school education and 32% of participants completed secondary school and/or have some vocational training.

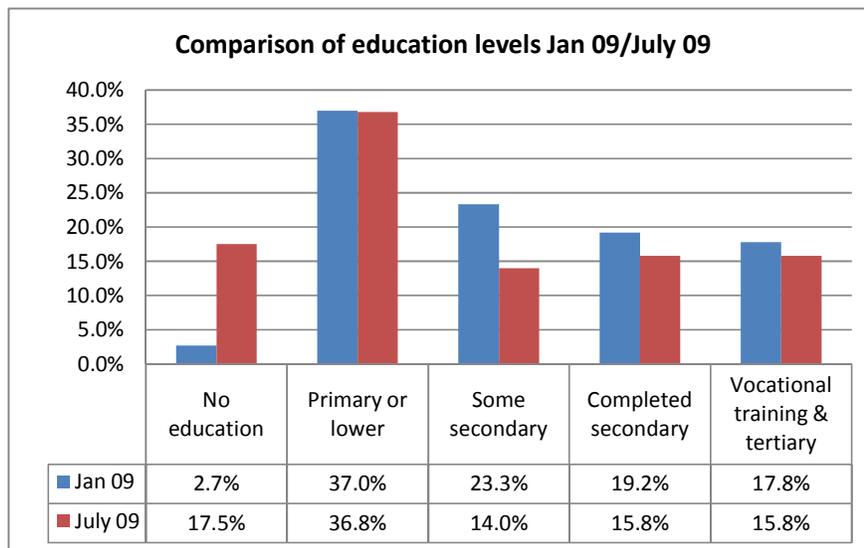


Figure 6: Comparison of level of education

The level of education of the participants is relatively low (Figure 6). When compared to the education level of participants of baseline survey, the participants of the follow-up study in July 2009

seem to have lower levels of education as there was a higher percentage of no or lower levels of education in July 2009 while higher levels of education were more prominent in the January 2009 respondents.

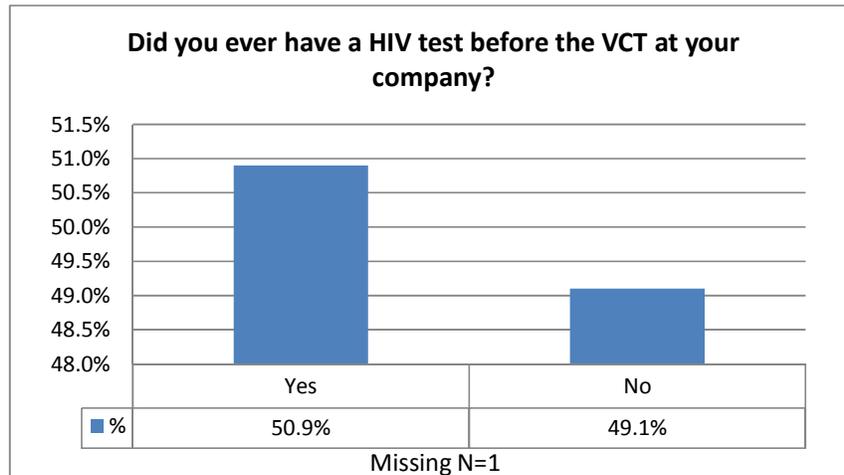


Figure 7: Participants who had undergone an HIV test before it was offered at the company

As shown in Figure 7, in the follow-up survey 49% of participants indicated that they had never been tested for HIV before the VCT was offered at the company, while 51% of participants indicated that they had.

4.2 Findings with regard to knowledge

The following graphs and tables represent participants’ answers with regard to questions relating to their knowledge on HIV and AIDS. January 2009 refers to the questionnaire that was administered with the voluntary counselling and testing intervention, while July 2009 refers to the follow-up questionnaire at the company.

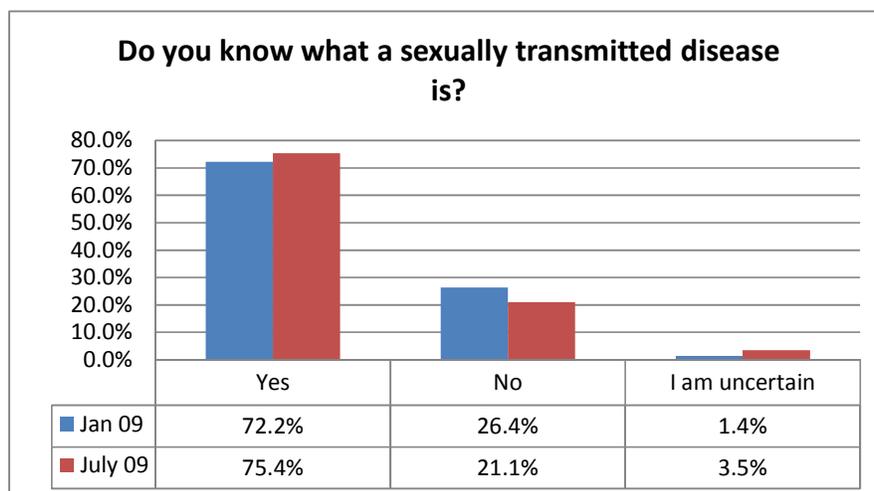


Figure 8: Knowledge on sexually transmitted diseases

Figure 8 shows that in January 2009, 72% of participants claimed to know what a sexually transmitted disease was while in the follow-up questionnaire of July 2009, it appears that the percentage of participants who claimed to know what a sexually transmitted disease is had increased slightly to 75%.

Table 1: Knowledge on prevention of mother to child transmission

What can an HIV-positive pregnant woman do to reduce the risk of transmission of HIV to her unborn child?				
	January 2009		July 2009	
	N	%	N	%
Nothing	4	5.1	2	3.6
Take medicine	40	51.3	48	85.7
Don't know	34	43.6	6	10.7
Total	78	100.0	56	100.0

From Table 1 it is evident that after the intervention in January 2009, the percentage of participants who claimed to know that an HIV-positive woman can take medicine to reduce the risk of

transmission of HIV to her unborn child had increased significantly from 51% in January 2009 to 86% in July 2009, thus indicating an increase in knowledge.

Table 2: Cross-tabulation: Knowledge on prevention of mother to child transmission by level of education (July 2009)

What can an HIV positive pregnant woman do to reduce the risk of transmission of HIV to her unborn child?	Level of education					
	Primary or none		Secondary or higher		Total	
	N	%	N	%	N	%
Nothing	1	3.2	1	4.2	2	3.6
Take medicine	25	80.6	22	91.7	47	85.5
Don't know	5	16.1	1	4.2	6	10.9
Total	31	100.0	24	100.0	55	100.0

For the cross-tabulations education levels of participants have been combined into two categories: primary or none and secondary or higher. From the follow-up survey, a larger percentage of respondents with a higher educational level (92%) than those with a lower educational level (81%) correctly indicated that an HIV-positive woman can take medicine to reduce the risk of transmission to her unborn child.

Table 3: Knowledge on treatment for HIV-positive people

Is there treatment that can enable HIV-positive people to live longer?				
	January 2009		July 2009	
	N	%	N	%
Yes	62	81.6	53	91.4
No	2	2.6	3	5.2
Don't know	12	15.8	2	3.4
Total	76	100.0	58	100.0

Table 3 shows that there was a 9% increase in the percentage of participants who indicated to know that there is treatment for HIV-positive people from 82% in January 2009, to 91% in July 2009. These participants are probably those who did not know that there is treatment for HIV positive people, as the number of participants that did not know that there is treatment for HIV-positive people decreased from 16% in January 2009 to 3% in July 2009.

Table 4: Cross-tabulation: Knowledge on treatment for HIV-positive people by level of education (July 2009)

Is there treatment that can enable HIV positive people to live longer?	Level of education					
	Primary or none		Secondary or higher		Total	
	N	%	N	%	N	%
Yes	28	90.3	24	92.3	52	91.2
No	3	9.7	0	.0	3	5.3
Don't know	0	.0	2	7.7	2	3.5
Total	31	100.0	26	100.0	57	100.0

There is not a significant difference in the responses of participants in terms of their level of education for this statement. More than 90% of participants in the follow-up survey correctly indicated that there is treatment that can enable HIV-positive people to live longer.

Table 5: General knowledge about HIV and AIDS

STATEMENTS	CORRECT ANSWER			
	Jan 09		Jul 09	
	N	%	N	%
A healthy looking person can have HIV/AIDS	54	73.0	46	79.3
A pregnant woman infected with HIV can transmit HIV to her unborn baby	46	61.3	42	76.4
One can reduce your chances of getting HIV by using a condom every time you have sex	60	81.1	52	91.2

Table 5: General knowledge about HIV and AIDS (continued)

STATEMENTS	CORRECT ANSWER			
	Jan 09		Jul 09	
	N	%	N	%
One can get infected with HIV by sharing food with an HIV positive person	57	76.0	36	62.1
One can get infected with HIV if he/she has sex without a condom with an HIV positive person	66	88.0	35	63.6
One can get infected with HIV through mosquito bites	34	46.6	34	59.6

Table 5 presents results on general knowledge questions about HIV and AIDS. Although the responses to these statements were offered as ‘true’, ‘false’ and ‘don’t know’ in the questionnaire, when the data was analysed, the categories were converted to ‘correct answer’, ‘wrong answer’ and ‘don’t know’. Only the responses of the correct answers before and after the intervention have been presented.

In response to the correct statement “a healthy looking person can have HIV/AIDS”, there was a 6% increase in the number of participants who answered correctly from 73% in January 2009 to 79% in July 2009. In response to the correct statement “a pregnant woman infected with HIV can transmit HIV to her unborn baby”, there was a 16% increase in the number of participants who answered correctly from 61% in January 2009 to 77% in July 2009.

In response to the correct statement “people can reduce their chances of getting HIV by using a condom every time they have sex”, there was a 10% increase in the number of participants who answered correctly from 81% in January 2009, to 91% in July 2009. However, in response to the incorrect statement “one can get infected with HIV by sharing food with an HIV-positive person”, the percentage of participants who correctly answered this statement decreased by 14% from 76% in January 2009 to 62% in July 2009. This is unusual as one would expect the knowledge of the participants would have increased after the VCT, yet the opposite is shown by the respondents in this statement. There is the possibility that respondents misunderstood the statement, though no assumptions can be made in this regard.

Similarly, in response to the correct statement “one can be infected with HIV if he/she has sex without a condom with an HIV-positive person” there was a decrease in the percentage of participants who answered correctly from 88% in January 2009 to 64% in July 2009, which again indicates a decrease in knowledge and, is the opposite outcome of what one would have expected after the VCT. However, in response to the incorrect statement “one can get infected with HIV through mosquito bites”, there was an increase of 13% in the percentage of participants who answered correctly in January 2009 (47%) to July 2009 (60%).

Table 6: Cross-tabulation: General knowledge about HIV/AIDS and level of education (July 2009)

Statement	Answers	Level of education				Total	
		Primary or none		Secondary or higher		N	%
		N	%	N	%		
A healthy looking person can have HIV/AIDS	Correct	24	77.4	21	80.8	45	78.9
	Incorrect	6	19.4	5	19.2	11	19.3
	Don't know	1	3.2	0	.0	1	1.8
	Total	31	100.0	26	100.0	57	100.0
A pregnant woman infected with HIV can transmit HIV to her unborn baby	Correct	23	74.2	18	78.3	41	75.9
	Incorrect	0	.0	4	17.4	4	7.4
	Don't know	8	25.8	1	4.3	9	16.7
	Total	31	100.0	23	100.0	54	100.0
People can reduce their chances of getting HIV by using a condom every time they have sex	Correct	29	93.5	23	92.0	52	92.9
	Incorrect	1	3.2	2	8.0	3	5.4
	Don't know	1	3.2	0	.0	1	1.8
	Total	31	100.0	25	100.0	56	100.0

Table 6: Cross-tabulation: General knowledge about HIV/AIDS and level of education (July 2009)
(continued)

Statement	Answers	Level of education				Total	
		Primary or none		Secondary or higher			
		N	%	N	%	N	%
A person can get infected with HIV by sharing food with a person who has AIDS	Correct	14	45.2	21	80.8	35	61.4
	Incorrect	15	48.4	5	19.2	20	35.1
	Don't know	2	6.5	0	.0	2	3.5
	Total	31	100.0	26	100.0	57	100.0
A person can get infected with HIV if he/she has sex without a condom with an HIV infected person	Correct	14	50.0	21	80.8	35	64.8
	Incorrect	11	39.3	3	11.5	14	25.9
	Don't know	3	10.7	2	7.7	5	9.3
	Total	28	100.0	26	100.0	54	100.0
A person can get infected with HIV through mosquito bites	Correct	11	36.7	22	84.6	33	58.9
	Incorrect	14	46.7	2	7.7	16	28.6
	Don't know	5	16.7	2	7.7	7	12.5
	Total	30	100.0	26	100.0	56	100.0

Table 6 shows the responses of participants with regard to general knowledge about HIV/AIDS by their level of education. Educational level does not appear to play a role in responses to the statements “a healthy looking person can have HIV/AIDS”, “a pregnant woman infected with HIV can transmit HIV to her unborn baby”, and “people can reduce their chances of getting HIV by using a condom every time they have sex”. For the above statements, the difference in the correct responses amongst participants with a lower and a higher level of education was less than 5%.

However, for the statements a person can get infected with HIV by sharing food with an HIV-positive person”, “a person can get infected with HIV if he/she has sex without a condom with an HIV infected person” and “a person can get infected with HIV through mosquito bites” it appears as if

the education level of participants definitely influences the responses as the difference in the correct responses in terms of level of education was more than 30%. Only between 37% and 45% of participants with primary or no education answered these statements correctly, compared to more than 80% of participants with secondary or higher education that answered these statements correctly.

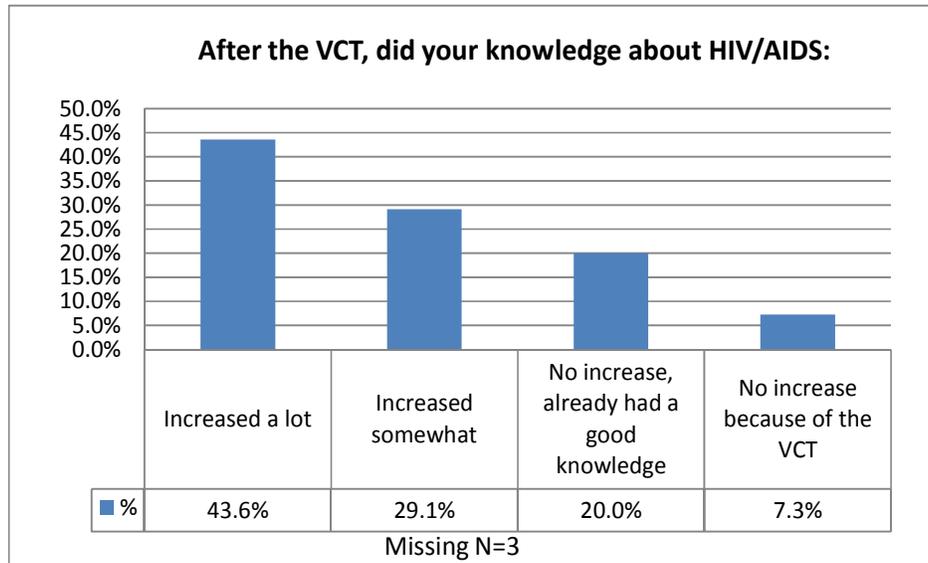


Figure 9: Indication of change in knowledge after the VCT

Figure 10 presents the participants' perceptions of their change in knowledge after the voluntary counselling and testing for HIV at their workplace. In addition to the previous section to assess the level of knowledge of participants, this question was only asked in the follow-up questionnaire of July 2009 to get an indication of whether the employees perceived that their knowledge had changed after the VCT intervention. Forty four percent of participants indicated that their knowledge increased a lot, 29% of participants indicated that their knowledge increased somewhat, 20% of participants indicated that they did not have any increase because of the VCT as they already have a good knowledge, and 7% of participants indicated that they had no increase in knowledge because of the VCT.

The following question was only asked in the follow-up questionnaire of July 2009 as an additional question to test attitudes of the participants towards HIV-positive people, although the answers given by participants could also be an indication of their level of knowledge with regard to the transmission of HIV/AIDS. As this was an additional question, it can thus not be compared to information from the pre-HIV test questionnaire of January 2009.

Table 7: Participants attitudes towards HIV positive people

For each of the following statements please indicate if you are willing to do the following:								
STATEMENT	YES		NO		DON'T KNOW		TOTAL	
	N	%	N	%	N	%	N	%
Use the same toilet as an HIV positive colleague	49	86.0	6	10.5	2	3.5	57	100.0
Buy food prepared or sold by an HIV positive person	47	81.0	10	17.2	1	1.7	58	100.0
Shake hands with an HIV positive person	52	91.2	4	7.0	1	1.8	57	100.0
Kiss an HIV positive person	35	61.4	20	35.1	2	3.5	57	100.0
Live with an HIV positive person	49	84.5	7	12.1	2	3.4	58	100.0
Dress the wounds of an HIV positive person	36	63.2	20	35.1	1	1.8	57	100.0
Allow your children to play with HIV positive children	47	82.5	8	14.0	2	3.5	57	100.0
Drink from the same glass as an HIV positive colleague	45	80.4	9	16.1	2	3.6	56	100.0

Table 7 shows the additional questions with regard to the attitudes of participants towards HIV-positive people. All of these questions relate to stigma and discrimination and it is unfortunate that they were not included in the baseline questionnaire. This is a limitation to my study as the information would have been more valuable if attitudes of the employees before the voluntary counselling and testing intervention could have been compared to attitudes after the intervention.

In general, more than 80% of participants indicated that they would be willing to use the same toilet as an HIV-positive colleague, buy food prepared or sold by an HIV-positive person, shake hands with an HIV-positive person, live with an HIV-positive person, allow their children to play with HIV-positive children and drink from the same glass as an HIV-positive person. The lowest responses of participants were recorded on the following: willingness to kiss an HIV-positive person (61%) and willingness to dress the wounds of an HIV-positive person (63%).

Table 8: Cross-tabulation: Attitudes towards HIV positive people by level of education (July 2009)

Statement	Category	Level of education				Total	
		Primary or none		Secondary or higher		N	%
		N	%	N	%		
Use the same toilet with a HIV positive colleague	Yes	26	83.9	23	92.0	49	87.5
	No	4	12.9	1	4.0	5	8.9
	Total	30	96.8	24	96.0	54	96.4
Buy food prepared or sold by someone who is HIV positive	Yes	26	83.9	21	80.8	47	82.5
	No	4	12.9	5	19.2	9	15.8
	Total	30	96.8	26	100.0	56	98.3
Shake hands with someone who is HIV positive	Yes	30	96.8	22	88.0	52	92.9
	No	0	.0	3	12.0	3	5.4
	Total	30	96.8	25	100.0	55	98.3
Kiss someone who is HIV positive	Yes	21	67.7	14	56.0	35	62.5
	No	10	32.3	9	36.0	19	33.9
	Total	31	100.0	25	100.0	55	96.4
Live with somebody who is HIV positive	Yes	25	80.6	24	92.3	49	86.0
	No	5	16.1	1	3.8	6	10.5
	Total	30	96.7	25	96.1	55	96.5

Table 8: Cross-tabulation: Attitudes towards HIV positive people by level of education (continued)

Statement	Category	Level of education				Total	
		Primary or none		Secondary or higher		N	%
		N	%	N	%		
Dress the wounds of somebody who is HIV positive	Yes	21	67.7	15	57.7	36	63.2
	No	10	32.3	10	38.5	20	35.1
	Total	31	100.0	25	96.2	56	98.3
Allow your children to play with HIV positive children	Yes	25	80.6	22	88.0	47	83.9
	No	5	16.1	2	8.0	7	12.5
	Total	30	96.7	24	96.0	54	96.4
Drink from the same glass as an HIV positive colleague	Yes	26	83.9	19	79.2	45	81.8
	No	4	12.9	4	16.7	8	14.5
	Total	30	96.8	23	95.9	53	96.3

Table 8 shows the responses of participants with regard to their attitudes towards HIV-positive people by their level of education. In response to the statement “use the same toilet as an HIV-positive person” 84% of participants with primary or no education answered “yes”, compared to 92% of participants with secondary or higher education who answered “yes”.

In response to the statement “buy food prepared or sold by someone who is HIV positive” 84% of participants with primary or no education answered “yes” in comparison with 81% of participants with secondary or higher education answered who “yes”. In response to the statement “shake hands with an HIV-positive person”, 97% of participants with primary or no education answered “yes” while a slightly lower percentage of 88% of participants with secondary or higher education answered “yes”.

In response to the statement “kiss someone who is HIV-positive” 68% of participants with lower education answered “yes” compared to 56% of participants with secondary or higher education who

answered “yes”. Eighty one percent of participants with primary or no education answered “yes” to the statement “live with somebody who is HIV-positive”, while 92% of participants with secondary or higher education answered “yes” to the same statement.

Sixty eight percent of participants with primary or no education indicated that they would “dress the wounds of an HIV-positive person” while 58% of participants with secondary or higher education answered “yes” to this statement. Eighty one percent of participants with primary or no education indicated that they would allow their children to play with HIV-positive children, while 88% of participants with secondary or higher education would allow their children to play with HIV positive children.

In response to the statement “drink from the same glass as an HIV-positive colleague”, 84% of participants with primary or no education answered “yes” compared to 80% of participants with secondary or higher education answered who answered “yes” to the same statement.

As mentioned before, there is no data from the VCT in January 2009 to measure these alleged attitudes of the participants against meaning that it is not possible to determine whether the relatively non-discriminatory attitudes came about as a result of the voluntary counselling and testing at the company or are due to other factors as well. This will be further discussed in Chapter 5.

4.3 Findings with regard to attitudes

The following tables present the attitudes of respondents at the company specifically with regard to whether participants would work with an HIV-positive colleague and whether they would want the HIV-positive status of a family member to remain a secret. As both these statements were in the January 2009 and the July 2009 follow-up questionnaire, answers to questions that were given by participants in the pre-HIV test questionnaire in January 2009 have been compared with answers given by participants in the follow-up questionnaire of July 2009.

Table 9: Attitudes towards HIV-positive persons and people living with HIV

STATEMENTS	YES			
	Jan 09		Jul 09	
	N	%	N	%
Would you be willing to work with an HIV positive colleague?	62	82.7	52	89.7
If a family member had HIV, would you want it to remain a secret?	21	28.4	32	56.1

When asked whether they would be willing to work with an HIV-positive person, the percentage of participants who indicated that they would be increased by 7% from January 2009 (83%) to July 2009 (90%). One could assume that participants have more information on the disease's methods of transmission and thus a more positive attitude towards people living with HIV. However, when participants were asked whether they would want the HIV status of a family member to remain a secret, there was a large increase in the percentage of participants who answered "yes" from 28% in January 2009 to 56% in July 2009 (Table 9).

Table 10: Cross-tabulation: Attitudes towards HIV-positive people by level of education (July 2009)

Statement	Category	Level of education				Total	
		Primary or none		Secondary or higher		N	%
		N	%	N	%		
Work with a colleague who is HIV positive?	Yes	28	90.3	24	92.3	52	91.2
	No	2	6.5	2	7.7	4	7.0
	Don't know	1	3.2	0	.0	1	1.8
	Total	31	100.0	26	100.0	57	100.0
If a family member had HIV would you want it to remain a secret?	Yes	23	74.2	9	34.6	32	56.1
	No	8	25.8	16	61.5	24	42.1
	Don't know	0	.0	1	3.8	1	1.8

Statement	Category	Level of education				Total	
		Primary or none		Secondary or higher			
		N	%	N	%	N	%
Work with a colleague who is HIV positive?	Yes	28	90.3	24	92.3	52	91.2
	No	2	6.5	2	7.7	4	7.0
	Don't know	1	3.2	0	.0	1	1.8
	Total	31	100.0	26	100.0	57	100.0
If a family member had HIV would you want it to remain a secret?	Yes	23	74.2	9	34.6	32	56.1
	No	8	25.8	16	61.5	24	42.1
	Don't know	0	.0	1	3.8	1	1.8
	Total	31	100.0	26	100.0	57	100.0

Table 10 shows the cross-tabulated results of participants' attitudes towards HIV-positive people and their level of education. The level of education does not seem to play a role with regard to participants' willingness to work with an HIV-positive person. 90% of participants with primary or no education indicated that they would work with an HIV-positive colleague, while 92% of participants with secondary or higher education answered "yes".

However, it appears as if level of education plays a role in the attitudes of participants with regard to the HIV-positive status of a family member. Seventy four percent of participants with primary or lower education indicated that they would want the HIV-positive status of a family member to remain a secret. Contrastingly, only 35% of participants who had primary or no education answered "yes", they would want the HIV-positive status of a family member to remain a secret.

Table 11: Perceptions of chance of getting infected with HIV

What do you think your chances are of becoming infected with HIV?				
	January 2009		July 2009	
	N	%	N	%
No risk at all	11	21.1	15	26.8
Small	31	59.6		
Moderate	6	11.5	15	26.8
High	3	5.8	11	19.6
I am infected with HIV	1	1.9	1	1.8
Refuse to answer/ I am uncertain			14	25.0
Total	52	100.0	56	100.0

Note: 5 cases refused to answer in January 2009 and were not included in the calculation

It must be noted that my follow-up questionnaire in July 2009 did neither include the option “small”, nor the January 2009 option of “refuse to answer”, which I replaced with the option “I am uncertain”. This hampers comparison and I will therefore only look at the ‘no risk’ and ‘high risk’ categories. Regarding the participants’ perceptions of becoming infected with HIV, there was an increase in the percentage of participants who indicated they have no risk at all from 19% in January 2009 to 27% in July 2009. The percentage of participants who indicated that they had a moderate risk of increased from 11% in January 2009 to 27% in July 2009, while the percentage of participants who indicated that they have a high risk of becoming infected with HIV increased from 5% in January 2009 to 20% in July 2009. This increase in participants’ perception of their risk could reflect an increase in knowledge although no change in behaviour or perhaps the participants are aware that they are practising unsafe sex or have numerous sexual partners. Only one participant indicated that he/she is HIV-positive in January 2009 as well as in July 2009 although the VCT report that was provided to the company after January 2009 showed that eight employees are HIV-positive. There is a possibility that not all HIV-positive employees participated in the follow-up questionnaire, or the HIV-positive employees were not willing to disclose their status in this questionnaire.

Table 12: Cross-tabulation: Perceptions of becoming infected with HIV by casual sex partners (July 2009)

What do you think your chances are of getting HIV/AIDS?	In the past six months, did you have any casual sex partners?					
	Yes		No		Total	
	N	%	N	%	N	%
No risk at all	0	0	15	30.6	15	26.8
Don't know, I am uncertain	4	57.1	10	20.4	14	25.0
Moderate	1	14.3	14	28.6	15	26.8
High	2	28.6	9	18.4	11	19.6
I am infected with HIV	0	0	1	2.0	1	1.8
Total	7	100.0	49	100.0	56	100.0

Table 12 shows the cross tabulated findings of July 2009 participants' perceptions of becoming infected with HIV by casual sex partners. Of the participants who indicated that they did have casual sex partners, 57% were uncertain about their chances of getting HIV/AIDS and 43% perceived their chances as being either moderate (14%) or high (29%). Amongst the participants who had not engaged in casual sex in the past six months, 31% reported to be at no risk at all, 20% were uncertain about their risk status, while nearly half of these participants recorded that they might be at a moderate (29%) or high risk (29%). One participant in this group reported his/ her HIV/AIDS positive status.

Table 13: Perceptions of becoming infected with a sexually transmitted disease

What do you think your chances are of becoming infected with a sexually transmitted infection?	In the past six months, did you have any casual sex partners?			
	January 2009		July 2009	
	N	%	N	%
No risk at all	23	31.1	16	28.1
Small	17	23.0	14	24.6
Moderate	7	9.5	17	29.8

High	6	8.1	6	10.5
I have an STD	0	0.0	2	3.5
I don't know what an STD is	21	28.4	2	3.5
Total	74	100.0	57	100.0

Regarding the participants' perceptions of becoming infected with a STD, there were no significant changes amongst participants who indicated that they had no risk at all (31% in January 2009 and 28% in July 2009) nor amongst those who indicated that they had a small risk (23% in January 2009 and 25% in July 2009). However, the percentage of participants who indicated that they have a moderate risk of becoming infected with a STD increased significantly by 20% from 10% in January 2009 to 30% in July 2009. There was also a significant decrease in the percentage of participants who did not know what an STD is from 28% in January 2009 to 4% in July 2009.

Table 14: Cross-tabulation: Perceptions of becoming infected with a STD by casual sex partners (July 2009)

What do you think your chances are of getting a sexually transmitted infection?	In the past six months, did you have any casual sex partners?					
	Yes		No		Total	
	N	%	N	%	N	%
No risk at all	1	12.5	15	31.9	16	29.1
Small	4	50.0	10	21.3	14	25.5
Moderate	1	12.5	16	34.0	17	30.9
High	2	25.0	4	8.5	6	10.9
I have a sexually transmitted infection	0	0.0	2	4.3	2	3.6
Total	8	100.0	47	100.0	55	100.0

Table 14 shows the perceptions of participants of becoming infected with a sexually transmitted disease cross tabulated by casual sex partners (July 2009 data only). Of the participants who indicated that they did have casual sex partners in the past six months, 13% perceived themselves to be at no risk at all and 50% thought themselves to be at a small risk of contracting an STI. In contrast, a much higher percentage (32%) of those who had not engaged in casual sex, reported being at not risk at all and only 21% indicated that their risk of contracting an STI was small. The perception of being at a moderate risk was higher amongst this latter group (34%) than it was for those who did have casual sexual encounters (13%). However, a greater number of these participants (25%) regarded themselves as having a high chance of contracting an STI, in contrast to those who did not have casual sex partners in the past six months (9%). Two participants in this latter group reported having a sexually transmitted infection.

Table 15: HIV/AIDS-related interventions that employees would like the company to provide

Type of intervention	January 2009		July 2009	
	N	%	N	%
More HIV education	65	87.8	30	51.7
Supply of condoms	60	83.3	52	89.7
Information about VCT	63	88.7	43	76.8
Information about HIV treatment	65	87.8	28	49.1
VCT for employees	67	91.8	36	62.1
VCT for dependants	57	81.4	17	29.8
HIV treatment for employees	58	81.7	32	55.2
HIV treatment for dependants	56	81.2	16	28.1

The findings from Table 15 show that in January 2009, most (over 80%) of the participants indicated that they wanted the company to provide particular HIV/AIDS related interventions. However, in the follow-up questionnaire in July 2009, the percentage of employees who indicated that they wanted the company to provide HIV/AIDS related services decreased substantially in the following services:

- More HIV/AIDS education: decreased from 88% in January 2009 to 52% in July 2009
- Information about VCT: decreased from 89% in January 2009 to 77% in July 2009
- Information about HIV/AIDS treatment: decreased from 88% in January to 49% in July 2009
- VCT for employees: decreased from 92% in January 2009 to 62% in July 2009
- VCT for dependents: decreased from 81% in January to 30% in July 2009
- HIV treatment for employees: decreased from 82% in January 2009 to 55% in July 2009
- HIV treatment for dependents: decreased from 82% in January 2009 to 28% in July 2009

The only service in which there was an increase in the percentage of employees who indicated that they wanted the company to provide this service was with regard to the provision of condoms, where the percentage increased from 83% in January 2009 to 90% in July 2009. These findings are further discussed in Chapter 5.

Table 16: Preferred HIV/AIDS service provider

If you need to talk about HIV related issues, would you prefer to use:				
	January 2009		July 2009	
	N	%	N	%
Internal coordinator	15	23.1	13	23.2
External coordinator	29	44.6	35	62.5
No preference	21	32.3	8	14.3
Total	65	100.0	56	100.0

Table 16 shows the participants' preferences for an HIV/AIDS service provider. There was an increase in the percentage of participants who preferred an external HIV/AIDS service provider from 45% in January 2009 to 63% in July 2009. The percentage of participants who have no preference regarding an internal or external HIV/AIDS service provider decreased from 32% in January 2009 to 14% in July 2009. One could assume that after the voluntary counselling and testing was provided

by an external service provider, employees trust the service and would prefer any further HIV/AIDS interventions to be provided by an external service provider.

Another additional question in the follow-up questionnaire of July 2009 that was not in the pre-HIV test questionnaire of January 2009 was whether the employees would voluntarily disclose their HIV status. Their answers are presented in Table 17 below:

Table 17: Attitudes towards disclosing HIV status

If you were HIV positive would you voluntarily disclose your status to your fellow colleagues if they asked you?		
	N	%
Yes	33	58.9
No	11	19.6
I am uncertain	12	21.4
Total	56	100.0

More than half of the participants (59%) indicated that they would voluntarily disclose their HIV status to their colleagues, while 20% of participants indicated that they would not voluntarily disclose their status, and 21% were uncertain.

4.4 Findings with regard to practices

For this section, there is only one question with regard to participants' practises and behaviour that was asked in both the baseline and follow-up surveys.

Table 18: Responses to casual sex partners

In the past six months, have you had any casual sex partners?				
	January 2009		July 2009	
	N	%	N	%
Yes	29	38.2	9	15.5
No	46	60.5	49	84.5
Never had sexual intercourse	1	1.3	0	0.0
Total	76	100.0	58	100.0

The percentage of participants who reported to have had casual sex partners in the previous six months decreased from 38% in January 2009 to 16% in July 2009. It is encouraging that the percentage of employees who reported that they had not had casual sex partners in the previous six months increased by 24% from 61% in January 2009 to 85% in July 2009.

The following questions were only asked in the follow-up questionnaire of July 2009 as additional questions to get an idea of the practises of employees at the company, and can thus not be compared to information from the pre-HIV test questionnaire of January 2009.

Table 19: Condom use

How often did you and your partner use condoms during sexual intercourse?		
	N	%
All the time	6	66.7
Most of the time	0	0.0
Sometimes	2	22.2
Never	1	11.1
Total	9	100.0

This question was very poorly answered by the participants (Table 19). Only nine employees indicated their condom use in the questionnaire: six respondents indicated that they use condoms all the time, two respondents indicated that they only use condoms sometimes and one respondent indicated that he/she never uses condoms. A possible reason for this poor response to this question could be that the questionnaire was largely completed with the assistance of my Oshiwambo and Otjiherero speaking colleagues (due to the fact that many of the employees at the company are not literate in English) and participants may have been shy or uncomfortable to share this information with them. There is also the possibility that gender differences between the interviewers and employees could have influenced the responses of participants too. Another possible reason could be that the interviewers and/or participants thought that this question should only be answered if they had answered “yes” to the previous question (i.e. if they have had casual sex partners), because the number of participants who answered that they have casual sex partners is also nine. This is a limitation to the research, as the information given by this question is not reliable or representative of the workforce. However, it is reassuring that 92% of participants indicated that they would like the company to provide condoms in Table 15.

Table 20: Source of assistance for a sexually transmitted disease

Where would you go for assistance if you had a sexually transmitted disease?						
SOURCE OF ASSISTANCE	YES		NO		TOTAL	
	N	%	N	%	N	%
A clinic, hospital or doctor	54	93.1	4	6.9	58	100.0
Consult a traditional healer	13	25.5	38	74.5	51	100.0
Seek advice from a shop or pharmacy	31	60.8	20	39.2	51	100.0
Ask advice from friends or relatives	34	64.2	19	35.8	53	100.0
Other source of assistance	0	.0	0	.0	0	.0

Table 20 illustrates participants' source of assistance for a sexually transmitted disease (participants could indicate more than one source). From the information given in this table, the most frequently mentioned source of assistance for a sexually transmitted disease was a clinic, hospital or a doctor (93%) followed by advice from friends or relatives (64%).

The last two questions seek to gain information on the behaviour of the respondents after the voluntary counselling and testing, specifically with regard to sharing their HIV test results with their partners, changing their lifestyle or behaviour after the voluntary counselling and testing, and personal realisations.

Table 21: Post-VCT behaviour and realisations

BEHAVIOUR	I DID		I DID NOT		NOT APPLICABLE		TOTAL	
	N	%	N	%	N	%	N	%
Discussed the results of my HIV test with my spouse or partner	47	81.0	7	12.1	4	6.9	58	100.0
Went to the doctor as a result of the VCT	20	35.1	31	54.4	6	10.5	57	100.0

Table 21: Post-VCT behaviour and realisations (continued)

BEHAVIOUR	I DID		I DID NOT		NOT APPLICABLE		TOTAL	
	N	%	N	%		N	%	N
Realised that my risk of becoming infected with HIV was much higher than I previously thought	32	56.1	25	43.9	0	.0	57	100.0
Realised that my risk of becoming infected with a sexually transmitted disease was much higher than I previously thought	34	59.6	23	40.4	0	.0	57	100.0
Changed my sexual behaviour	43	76.8	13	23.2	0	.0	56	100.0

After the voluntary counselling and testing, 81% of the participants indicated that they discussed the results of their HIV test with their spouse or partner, while 12% participants indicated that they did not. Thirty five percent of the participants indicated that they had gone to a clinic, hospital or doctor as a result of the voluntary counselling and testing and 54% participants indicated that they did not. Fifty six percent of the participants responded that they realised that their risk of becoming infected with HIV was higher than they thought before the voluntary counselling and testing, while 60% of the participants indicated that they realised that their risk of becoming infected with a sexually transmitted disease was higher after they participated in the voluntary counselling and testing. Seventy seven percent of participants indicated that they changed their sexual behaviour after the voluntary counselling and testing for HIV while 23% of the participants indicated that they did not change their sexual behaviour after the voluntary counselling and testing.

Table 22: Cross-tabulation: 'After the VCT, I realised that my risk of becoming infected with a sexually transmitted disease was much higher than I previously thought' BY 'After the VCT, I changed my sexual behaviour' (July 2009)

After the VCT, I realised that my risk of becoming infected with a sexually transmitted disease was much higher than I previously thought	After the VCT, I changed my sexual behaviour					
	I did		I did not		Total	
	N	%	N	%	N	%
I did	30	93.8	2	6.3	32	100.0
I did not	13	54.2	11	45.8	24	100.0
Total	43	76.8	13	23.2	56	100.0

Table 22 shows that 94% of the participants who indicated that after the VCT they realised that their risk of becoming infected with HIV was higher than they thought also indicated that they changed their sexual behaviour. Also, those participants who did not realise that their risk of becoming infected with an STD was higher than they previously thought indicated that they did not change their sexual behaviour.

4.5 Interview with the general manager

On 6 July 2009, one day before my follow-up questionnaires were administered at the company, I conducted a formal interview with the general manager of the company in order to gather background information on the company, ascertain his opinion of the VCT that was conducted in January 2009, as well as gain insight into what the findings were from the VCT and how the company has used the information provided from the VCT intervention. The management began to notice a high absenteeism rate amongst the employees, especially in the workshop from 2007. During this time they also lost two employees to suspected cases of HIV/AIDS. As the company specialises in building and modifying trucks and trailers, production time is the most important part of the business in order to meet deadlines for deliveries to clients and to make space in the workshop for

new incoming trucks and trailers that need to be built or modified. The general manager was supportive of the VCT intervention at the workplace for a number of reasons such as the company is not able to send employees to testing centres because this would mean that employees would be away from the workshop for at least half a day and employees shared with him that they were reluctant to go the state testing centre in their community because they did not want members of the community to see them at the clinic, as they will gossip that he/she has HIV. The company decided to make use of the Bophelo! voluntary counselling and testing for HIV service at the workplace in January 2009 because they wanted firstly, to get a general idea of the HIV prevalence rate within the company, secondly, to give employees an opportunity to get tested for HIV, and thirdly, to lay a foundation upon which to build a workplace programme for the company. The management of the company also participated in the voluntary counselling and testing to be an example to the rest of the employees.

Another reason why the general manager was supportive of the VCT was that after the voluntary counselling and testing for HIV at the company in January 2009, a report with anonymised results of the VCT together with recommendations was provided to the management. This report showed that 8 out of the 75 employees who underwent an HIV test, tested positive for HIV for the first time. An additional four employees who did not undergo the HIV test completed the pre-test questionnaire in which they indicated that they were HIV-positive and on treatment with the state anti-retroviral programme. Other important information that was provided in the report showed that although the employees had a fairly good knowledge of HIV and AIDS, there were areas (such as methods of transmission and treatment for HIV) where employees needed more information and education (this finding is further discussed in Chapter 5). In 2007, the company offered its employees the option of a low-cost medical aid where the company would pay 50% of the monthly instalment and the employee the remaining 50%. However the employees were reluctant to make a contribution from their already low wages, so a medical aid scheme is not available to the employees nor is a treatment programme for HIV-positive employees. After the report on the voluntary counselling and testing for HIV was discussed amongst the other members of management, the company decided to re-investigate negotiations with medical aid companies for at least a treatment programme for its HIV-positive employees.

When asked about his opinion of the general standard of the voluntary counselling and testing service, the general manager stated that he was very impressed with the professionalism of the counsellors and testers, and also in the manner in which the service was provided. Employees were not kept away from the workshop for more than one hour and the feedback that he has received from the staff through informal discussions in the workshop after the testing, was that the service was very good, and that they are happy that the company provided this service to them. The general manager added that the confidentiality of the voluntary counselling and testing for HIV at the workplace was definitely a contributing factor to the high participation rate, because after the first testing day the employees felt more comfortable when they saw that names were not asked and their colleagues and supervisors could not know the result of their HIV test. At the time of the interview with him, the employees had already started asking their supervisors when the mobile testing units would come to the company again, as almost six months had passed by then and some of the employees wanted to get tested again.

When asked what additional information the company would have wanted from the report and the voluntary counselling and testing intervention, the general manager stated that it would have been useful to know whether the employees who tested HIV-positive for the first time and were referred to the clinic for follow-up testing and treatment actually went to the clinic. Unless employees are willing to tell him whether they went to the clinic, there is no way in which the company can know this information. Although employees were asked in my follow-up questionnaire whether they went to the clinic or a health facility after the VCT, the general manager recommended that implementing a monitoring or follow-up system with regard to referred employees would be ideal for both the service provider as well as the company, as this information would be a definite indicator of the success of the intervention.

As a result of the information in the report from the VCT service provider, the management had also decided to implement an HIV/AIDS workplace programme within the company, where a number of focal employees would be trained as peer educators and monthly information sharing sessions would be held amongst staff. NABCOA (the Namibia Business Coalition on AIDS) is one of the partners in Bophelo! and is the body for peer educator training, dissemination of information and education, the provision of condoms, and workplace programmes in the private sector (NABCOA, 2009). After the voluntary counselling and testing intervention in January 2009, the company joined

as members of NABCOA. The planned date to start the workplace programme was September 2009, but at the time of my interview with the general manager they had not yet implemented any workplace programme interventions.

4.6 Additional comments and opinions from the participants

At the end of the follow-up questionnaire, respondents were asked to share their general impressions of the voluntary counselling and testing that was offered at the company. A summary of the respondents' comments and opinions are given below. Similar comments have been grouped together, and spelling and grammatical errors have been corrected.

Table 23: Additional comments and opinions from participants

Response	Nr
<i>It was good.</i>	4
<i>VCT was nice. It helped me to manage my life and know my status. Your service is good because you visit the companies where employees are.</i>	3
<i>It is very important so that we employees can know our status.</i>	3
<i>We were very happy for this. Please continue giving this service to the people.</i>	2
<i>It was important because we don't have to travel long distances to the New Start centre. Continue with the service please and keep up the national standard so that Namibians can know their status.</i>	4
<i>Some Namibians don't understand HIV/AIDS, so please continue to help the people.</i>	1
<i>I think it was a good thing because the people are willing to go freely for testing. The people got more educated about HIV. It must be done every year if possible or maybe even every six months.</i>	2
<i>It was a good thing so that employees can know their status. It was also quick and efficient.</i>	2
<i>Yes, we need more services to be brought to our workplace.</i>	3
<i>It is useful because you came to the community and we know our status. Sometimes it is not easy to go to the clinics. It is my first time to get tested.</i>	1

<i>It is the first time I took a test and I am not afraid anymore. In my house we know more about HIV now and my colleagues and friends who are HIV-positive can know they must get treatment.</i>	1
<i>Thank you for helping me to know my status. Now I can practice safe sex. Come again so that we can test regularly.</i>	3
<i>I was very satisfied after the VCT and I encourage you to come and test us again after a year. Please come and give us more information about HIV before the end of the year.</i>	1
<i>Usually when you go for VCT at the New Start centres you are uncomfortable and shy but when I received VCT at work the mood between me and my colleagues was more comfortable. I felt better to share my results with my partner who also does the same every three months.</i>	1
<i>It was good. They are very open and friendly people and I learnt how to take better care of myself. I learnt alot so please continue to come and test us so that we can know more about HIV and how to take care of ourselves.</i>	3
<i>Your service is very useful because I know my status and you gave us good information. But you still need to come and give us more information, and please add a private space where we can discuss if I want to discuss more questions.</i>	2
<i>It was a good idea because you are teaching us to stay healthy, and if I am infected I know where I can get help. It is very good for me to know my status.</i>	2
<i>Since the VCT was here I know my status and some colleagues could start treatment. This time I shared my results with my partner because you gave me good information about HIV and I could change my sex behaviour.</i>	1
<i>You need to always visit employees every six months so that you can give us more information about HIV and transmitted diseases. It is very excellent and you need to continue to visit companies in Namibia.</i>	3
<i>It was good but you also need to test us for TB</i>	1
<i>The VCT was good and important because we don't have stigma to go to New Start anymore. It is important that you continue to give the service to us.</i>	2
<i>I must say thank you for the counselling and testing. It was a very good service and I am proud about it.</i>	2
<i>It is the first time that I was tested at this company. At the beginning of the year it is even better because I knew my status and it was negative and now I know that I must stay negative and have safe sex. I can also share my status with my husband.</i>	1

<i>The VCT was good and important in today's life. The most important thing to do is to close the shops that sell alcohol. This will reduce irresponsible sex and also reduce HIV.</i>	1
<i>I support the HIV test at the workplace because it helps the people. Many of us cannot even get a chance to go to the clinic. We got more information than at the clinic, and we have strength and power to talk to each other and to share information. I support and encourage this system to test at the work places.</i>	1
Total number of responses	50

Table 23 presents a summary of the additional comments and opinions from the participants. In total, 50 participants shared their additional comments and opinions on the follow-up questionnaire, while 23 participants did not complete this section. Overall, the comments and opinions of the employees regarding the voluntary counselling and testing at the workplace were positive. Some participants requested that more information about HIV should be shared, while two participants advised that the service providers need to add a private space or area for if employees want to ask additional questions or who need further counselling. One participant advised that testing for tuberculosis needs to be included as well.

Further discussion of these findings will be presented in chapter 5.

CHAPTER 5: DISCUSSION OF FINDINGS

This chapter discusses the findings from Chapter 4 specifically with regard to changes in the knowledge, attitudes and practises of the employees who participated both in the VCT in January 2009 and the follow-up research of July 2009.

To determine change, the ideal would have been to be able to link specific employees to their before and after responses, but due to the fact that the interventions of January and July 2009 were voluntary and anonymous, the pairing of responses was not possible. Therefore it must be kept in mind that the group of employees who participated in the VCT of January 2009 will not share the exact same dynamics (in terms of level of education and age) as the group of employees who participated in my follow-research of July 2009. To try to address this limitation, the responses of participants have also been cross-tabulated by their level of education where possible to determine whether responses could be as a result of participants having a lower or higher level of education. It will also be difficult to establish whether any changes in knowledge, attitudes and behaviour were as a result of the VCT intervention, or due to the effect of other public HIV information campaigns outside the workplace. Although my Oshiwambo and Otjiherero colleagues were fully trained and briefed on my follow-up questionnaire before they interviewed the employees, it is important to keep in mind that employees could have either misinterpreted questions, or given responses that are not entirely true so as not to seem ignorant or dumb (socially desirable answers). Where possible, the findings will be presented together with available contrasting or supportive literature.

5.1 Knowledge

Mundy and Dickinson (2004: 3) write that individuals undertake voluntary counselling and testing as a result of increased knowledge after pre-test counselling, and after the HIV test there is a further increase in knowledge that promotes risk reduction in individuals, because they are aware of their HIV status, their risk perceptions have changed and new norms of responsibility have been taught (Mundy and Dickinson, 2004: 3). Furthermore, Oberzaucher and Baggaley (2002: 9) also state that once individuals know their HIV status, they have access to services such as interventions to prevent

opportunistic infections, access to antiretroviral treatment and access to interventions to reduce mother-to-child-transmission of HIV. All these services contribute to increasing knowledge while at the same time enabling individuals to make plans for the future (Oberzaucher and Baggaley 2002: 9). Questions that were asked to ascertain the knowledge and/or changes in the knowledge of participants were with regard to sexually transmitted diseases, prevention of mother to child transmission, treatment for people living with HIV/AIDS, as well as general HIV/AIDS statements with 'true', 'false' and 'don't know' response options.

There was no significant increase in knowledge with regard to knowing what a sexually transmitted disease is (4%), yet the social desirability of this question must be kept in mind as participants may have answered "yes" to this question so as to not appear ignorant. However, it is encouraging that a smaller percentage of participants (5%) indicated that they do not know what a sexually transmitted disease is when compared to January 2009.

It appears that there was a definite increase with regard to participants' knowledge on what an HIV-positive woman can do to reduce the risk of transmission of HIV to her unborn child as there was a 35% increase in the percentage of participants who correctly indicated that an HIV-positive pregnant woman can take medicine. 81% of participants from the primary or lower education group correctly indicated that an HIV-positive pregnant woman can take medicine, while 92% of participants from the secondary or higher education group answered correctly. This finding in terms of knowledge and education levels is in line with the research findings of de Walque *et al* (2005: 999) that educated people seem to benefit more from information campaigns than individuals who do not have high levels of education.

It appears that there was also a small increase in knowledge with regard to participants' responses on whether there is treatment that can enable HIV-positive people to live longer. 9% more participants answered "yes" when asked whether there is treatment that can enable HIV-positive people to live longer in the follow-up questionnaire in July, while there was a 13% decrease in the percentage of participants who indicated that they do not know. When these responses were cross-tabulated with participants' level of education, 90% of participants from the primary or lower education groups and 92% of participants from the secondary or higher education group indicated

that there is treatment to prolong the lives of HIV-positive people. However, the 8% of participants who indicated that they do not know whether there is treatment that can prolong the lives of HIV-positive people had secondary or higher education. It does not appear that the level of education has an influence in the knowledge of participants with regard to this question as correct responses were almost equal in both education groups. Although the incorrect responses (10%) were only from the primary and lower education group, the only participants who indicated that they do not know (8%) fell into the secondary or higher education group.

Concerning the overall level of knowledge of participants with regard to general statements on HIV and AIDS, it appears as if there was both a knowledge increase as well as a knowledge decrease amongst participants. In response to the correct statement “a healthy looking person can have HIV/AIDS”, there was a 6% increase in the percentage of correct responses. With regard to the correct statement “a pregnant woman infected with HIV can transmit HIV to her unborn baby”, it also seems as if there was a knowledge increase as there was a 15% increase in correct responses. Also, with regard to the correct statement “one can reduce your chances of getting HIV by using a condom every time you have sex”, there was a 10% increase in correct responses, 10% decrease in the percentage of participants who indicated that they do not know and in response to the incorrect statement “one can get infected with HIV through mosquito bites”, there was a 13% increase in correct responses.

These positive responses were then further cross-tabulated by the education levels of participants and it appears that the percentage of correct responses was almost equal in both the lower and higher education groups for the first three statements. Interestingly, the incorrect responses with regard to the statement “a pregnant woman infected with HIV can transmit HIV to her unborn baby” (17%) were only from participants with secondary or higher education. It may be that these participants with a higher level of education know that there is medication that a pregnant HIV-positive mother can take to prevent the transmission of the virus to her unborn baby, but as this was not explicitly asked, it remains an assumption. In support of de Walque *et al's* 2002 study, almost 26% of participants who indicated that they do not know whether a pregnant HIV-positive woman can transmit the virus to her baby fell into the primary or lower education group, compared to 4% of participants from the secondary or higher education group who indicated that they do not know. The responses of participants to the statement “a person can get infected with HIV through

mosquito bites” greatly support de Walque *et al*'s (2002: 999) conclusion that educated people benefit more from HIV information campaigns, as 85% of participants who had secondary or higher education answered this statement correctly. In contrast, 37% of participants who had primary or lower education answered this statement correctly. It is evident from these responses that participants who had a higher level of education displayed more “correct” knowledge than the participants who had a lower level of education.

The responses of participants to the statements “one can get infected with HIV by sharing food with an HIV-positive person” and “one can get infected if he/she has sex without a condom with an HIV-positive person” did not display a knowledge increase after participation in the voluntary counseling and testing. On the contrary, the percentage of correct responses to the statement “one can get infected with HIV by sharing food with an HIV-positive person” decreased by 14%, while the incorrect responses increased by 27%. Similarly the percentage of correct responses to the statement “one can get infected with HIV if he/she has sex without a condom with an HIV-positive person” decreased by 24%, while the incorrect responses increased by 22%. However, when these responses were cross-tabulated by participants’ level of education it was evident that participants who had secondary or higher education had more correct knowledge than participants with primary or lower education. 81% of participants who had secondary or higher education answered correctly to both statements, compared to 48% and 50% respectively of participants with primary or lower education. Also, 39% of participants with primary or lower education answered the statement “a person can get infected with HIV if he/she has sex without a condom with an HIV infected person” incorrectly, compared to 12% of participants with secondary or higher education; while 11% of participants with primary or lower education indicated that they do not know compared to 8% of participants with secondary or higher education. This is again in support of the literature that individuals that have higher education benefit more from HIV information campaigns than those with lower education (de Walque *et al*, 2002: 999).

When asked whether they thought that their knowledge had increased after the voluntary counselling and testing at the workplace, 71% of participants indicated that they had a knowledge increase, though the findings sketch a different picture specifically amongst participants with primary or lower education. In general, the findings with regard to knowledge seem to show that there was both a knowledge increase as well as decrease amongst participants after the VCT, but it is

important to note that knowledge did appear lower in participants who had primary or lower levels of education.

5.2 Attitudes

Kalichman and Simbaye (2003: 445) conducted a study in South Africa on HIV attitudes, HIV/AIDS stigma and HIV counselling and found that individuals who had not been tested for HIV held significantly greater HIV/AIDS related stigma's and discriminatory attitudes than individuals who had not been tested (Kalichman and Simbaye, 2003: 445). Similarly, another study found that voluntary counselling and testing contributes to HIV prevention by increasing individuals' knowledge, while at the same time contributing to the alleviation of stigma and discrimination towards people living with HIV due to the sharing of correct information regarding the illness and its methods of transmission (Corbett *et al*, 2003: 3). This section will discuss the findings from my follow-up research with regard to the attitudes of employees who participated in the voluntary counselling and testing at the workplace and it will be assessed whether the findings are similar or contrasting to the findings of the literature mentioned above.

Participants were asked to respond "yes", "no" and "don't know" to a number of statements with regard to their attitudes towards people living with HIV and AIDS. As mentioned in Chapter 4, this question was not included in the VCT questionnaire so the responses of participants in July 2009 after the VCT cannot be compared to their responses before the VCT in January 2009. The findings of this question was reported under the knowledge section in Chapter 4, as the level of knowledge, specifically with regard to knowledge of the methods of HIV transmission, would influence participants' responses towards people living with HIV and AIDS. In general, the findings of this question reflected a non-discriminatory attitude amongst the participants (which supports a higher knowledge with regard to the transmission of HIV/AIDS) as more than 80% of participants indicated that they would be willing to use the same toilet as an HIV-positive colleague, buy food prepared or sold by an HIV-positive person, shake hands with an HIV-positive person, live with an HIV-positive person, allow their children to play with HIV-positive children and drink from the same glass as an HIV positive person.

These responses were further cross-tabulated with the level of education of participants. In response to the statement “use the same toilet as an HIV-positive colleague”, 84% of participants with primary or lower education responded “yes” compared to 92% of participants with secondary or higher education who also responded “yes”. It appears as if participants with secondary or higher education (more knowledge) were more willing to use the same toilet with an HIV-positive colleague than participants with primary or lower education. In response to the statement “buy food prepared or sold by someone who is HIV-positive” 84% of participants with primary or lower education indicated that they would, compared to 81% of participants with secondary or higher education. In this instance it seems as if participants with a higher level of education were less willing to buy food from an HIV-positive person, although they should know that HIV cannot be transmitted in food. Similarly, in response to the statement “shake hands with an HIV positive person”, 97% of participants with primary or lower education indicated “yes” while 88% of participants with secondary or higher education indicated “yes”. Only participants (12%) with secondary or higher education indicated that they would not be willing to shake hands with an HIV-positive person, which again is the opposite of what one would expect from participants who have more education. In response to the statement “live with somebody who is HIV-positive” 81% of participants with primary or lower education answered “yes” compared to 92% of participants with secondary or higher education. Also, 16% of participants with primary or lower education indicated that they would not, compared to only 4% of participants with secondary or higher education. In response to this statement participants with a higher education were more willing to live with an HIV-positive person (which reflects more knowledge) than participants with lower education. The responses of participants to the statement “allow your children to play with HIV-positive children” show similar findings as 81% of participants with primary or lower education answered “yes” compared to 88% of participants with secondary or higher education. Also 16% of participants with primary or lower education responded “no” to this statement compared to 8% of participants with secondary or higher education. Contrastingly, participants with secondary or higher education were less willing to drink from the same glass as an HIV-positive person (79%) than participants with primary or lower education (84%), which is again the opposite that one would expect from individuals who should have more knowledge.

The participants were less willing to kiss an HIV-positive person (61%) as well as dress the wounds of an HIV-positive person (64%) which could reflect a high knowledge of the methods of transmission of HIV/AIDS as both these statements involve close contact with body fluids. When cross-tabulated with the level of education of participants, 68% of participants with primary or lower education responded “yes” to the statement “kiss an HIV-positive person” compared to 56% of participants with secondary or higher education. Similarly, 68% of participants with primary or lower education answered “yes” to the statement “dress the wounds of an HIV-positive person” compared to 58% of participants with secondary or higher education. 32% of participants with primary or lower education indicated that they would not in comparison with 39% of participants with secondary or higher education. It is evident that participants with more education were less willing to kiss and dress the wounds of an HIV-positive person which could reflect more knowledge as both these activities involve body fluid contact. However, it should not be assumed that these responses of participants towards the statements with regard to people living with HIV/AIDS are reflective of their actual behaviour should they be called upon to do these activities. It is a limitation that these responses of the employees after the VCT cannot be compared to responses before the VCT. Although there are some areas where the participating employees displayed reluctance towards people living with HIV, it is encouraging that in general the attitudes are non-discriminating amongst the participants, which supports the literature that voluntary counselling and testing contributes to HIV prevention by increasing individuals’ knowledge, while at the same time contributing to the alleviation of stigma and discrimination towards people living with HIV due to the sharing of correct information regarding the illness and its methods of transmission (Corbett *et al*, 2006: 3).

Two statements with regard to participants’ attitudes that were asked both in January as well as July 2009 are “would you be willing to work with an HIV-positive colleague” as well as “if a family member had HIV, would you want it to remain a secret?” For the aforementioned, there was a 7% increase in the percentage of participants who answered “yes”. Of the participants with primary or lower education 90% answered “yes” compared to 92% of participants with secondary or higher education. It appears that the responses of participants in terms of their level of education does not differ much, thus reflecting a general willingness amongst the employees to work with an HIV-positive colleague. Furthermore, there was a 28% increase in the percentage of participants who answered “yes” they would want the HIV-positive status of a family member to remain a secret, while there was a 22% decrease in the percentage of participants who indicated “no. The level of education with regard to wanting to keep the HIV-positive status of a family member a secret

definitely had an influence on the responses of the employees. It seems that participants with a higher level of education had less stigma and discriminatory attitudes towards people living with HIV and AIDS and had more knowledge in terms of understanding that disclosure to family and friends is an important part of living positively. Parker and Aggleton (2002: 8) write that the family is the main cause of care and support of HIV-positive individuals, and the way in which stigma and discrimination are manifested in HIV-positive individuals is highly dependent on family and social support as well as the degree to which they are able to be open about their status. It appears that the employees with primary or lower education levels need further information with regard to HIV, its methods of transmission as well as stigma and discrimination as it is evident that even after the VCT there is still room for an improvement in their attitudes (and knowledge) especially in the primary or lower education groups.

Mundy and Dickinson (2004:3) found that after participation in an HIV test, there is a further increase in knowledge that promotes risk reduction in individuals because they are aware of their HIV status and their risk perceptions have changed. Compared to the risk perceptions of participants in January 2009, there was a 8% increase in the percentage of participants who indicated that they have no risk at all of getting infected with HIV, while there was an increase of 16% in participants who indicated that they have a moderate risk, and a 15% increase in the percentage of participants who indicated that have a high risk. In line with the literature, these findings reflect that the risk perceptions of participants have changed since the voluntary counselling and testing which goes hand in hand with an increase in knowledge. However, it is concerning that almost 47% of participants' perceptions of becoming infected with HIV have increased (except for the 8% increase in those who indicated that they have no risk at all), plus 25% of participants are uncertain of what their chances are of becoming infected with HIV, when one would expect all risk perceptions to have decreased after the VCT. These findings were cross-tabulated with whether the participants had any casual sex partners in the past six months. Sher *et al* (2007: 858) found that individuals who tested HIV-negative after participation in VCT practised more high-risk behaviour after the VCT specifically by an increase in their number of casual sex partners. However, this is not supported by my findings because it appears that the majority of the participants who indicated that they have a higher risk perception have not had casual sex partners in the past six months. There is a possibility that perhaps participants are aware that their partner may be practising unsafe sex, thus an increase in risk perception. Although it appears that there has been an increase in knowledge, it does not seem

as if there has been an overall change in behaviour - participants are still practising unsafe sex or have more than one sexual partner.

Compared to the risk perceptions of participants with regard to becoming infected with a sexually transmitted disease before the VCT, there was a 3% decrease in the percentage of participants who indicated that they have not risk at all. It would be expected that after the VCT there would instead have been an increase in the percentage of participants who have no risk at all. Furthermore, there was a 20% increase in the percentage of participants who indicated that they have a moderate risk, and a 3% increase in the percentage of participants who indicated that they have a high risk. Again it is concerning that there has been an overall increase in the risk perceptions of the participants, although it is encouraging that the percentage of participants who indicated that they do not know what a STD is decreased by 24%. Also, while no participants indicated that they have a STD in January 2009, 4% of participants indicated that they have an STD in July 2009; this is also encouraging as it can be assumed that these participants have been tested and now know that they are infected with a STD and on treatment. These findings were cross-tabulated with whether the participants had any casual sex partners in the past six months. Again, Sher *et al's* (2007: 858) finding that individuals who tested HIV-negative after participation in VCT practised more high-risk behaviour after the VCT specifically by an increase in their number of casual sex partners is not supported by my findings because it seems as if the participants who indicated that they have a higher risk perception have not had casual sex partners in the past six months. However, there is a possibility that participants know that their partner may be practising unsafe sex, thus an increase in risk perception. As in the case of the risk perceptions of becoming infected with HIV, it seems as if there has been an increase in knowledge, although there has not been an overall change in behaviour - participants are still practising unsafe sex or have more than one sexual partner.

With regard to the HIV/AIDS-related information that the employees would like the company to provide, there was a general decrease in the demand for the provision of services. More HIV/AIDS education decreased by 36%; information about VCT decreased by 11%; information about HIV/AIDS treatment decreased by 39%; VCT for employees decreased by 30%; VCT for dependents decreased by 51%; HIV treatment for employees decreased by 27% and HIV treatment for dependents decreased by 53%. These findings suggest that employees who have been tested for HIV and know their status, no longer see the need for the other additional services any longer and thus the general

decline in what they would like the company to provide to them. However, there was a 7% increase in participants who indicated that they would like the company to provide condoms at the workplace. This is encouraging as it could mean that after being tested for HIV, it could be that practising safe sex has become very important to the employees and thus the increase in the demand for condom provision by the company. This finding is supported by literature from Arthur *et al* (2007: 11) where the authors found that although there was no significant behaviour change, there was an increase in condom use after individuals participated in voluntary counselling and testing for HIV/AIDS. The employees could also feel that they have received enough information yet condom provision is still important so that they can practise safe sex.

There was also a change in the attitudes of employees for their preferred HIV/AIDS service provider in January 2009 and July 2009. There was no change with regard to their preference for an internal coordinator (23% in January and July 2009), but there was an 18% increase in the percentage of participants who preferred an external coordinator for HIV/AIDS-related issues. This increase in the employees' preference for an external service provider could also explain the decrease in the attitudes of participants with regard to the provision of certain HIV/AIDS related services by the company, as it might be that they would prefer these services to be provided by an external service provider. Although the high participation rate in the VCT of January 2009 (89%) does not reflect mistrust and hostility between the employees and their employers, the possibility remains that employees may be concerned about the level of confidentiality and company support at the workplace, their job security if anybody would find out about an employees' HIV-positive status or any negative consequences from their employers, thus their preference for an external service provider. This is in line with the recommendations made by the Blueprint for Business Action on HIV/AIDS (2007: 3) that employers need to assess whether employees want VCT at the workplace and whether their preferred service options are internal or external service providers.

Another area where it seems as if the employees at the company have a relatively low level of stigma and discriminatory attitudes is with regard to whether they would voluntarily disclose their HIV status to their colleagues. This question was not asked in the January questionnaire and participant responses before and after the VCT can thus not be compared. 59% of participants indicated that they would voluntarily disclose their HIV-positive status to their colleagues. Mundy and Dickinson (2004: 4) identified that it is very important for employers to create an environment

of trust and confidentiality in which employees would feel comfortable. Of crucial importance to the success of VCT and workplace programmes is the establishment of trust and confidence in workplace interventions (Mundy and Dickinson, 2004: 20). It seems as if the literature recommendations are in place at this workplace as more than half of the participants indicated that they would be willing to disclose their status to a fellow colleague.

5.3 Practises

Voluntary counselling and testing can be a motivating force for both HIV-positive and HIV-negative people to adopt safer sexual behaviour - it facilitates access to prevention services for HIV-negative individuals and is a key entry point to care and support services for those who are infected with the virus. Once knowing one's status, these services contribute to an increase in knowledge while at the same time enabling individuals to make plans for the future (Oberzaucher and Baggaley, 2002: 9). Participants' responses in January 2009 with regard to whether they have had any casual sex partners in the past six months were compared to their responses in July (after the voluntary counselling and testing). There was 22% decrease in the percentage of participants who indicated that they had casual sex partners, while there was a 24% increase in the percentage of participants who indicated that they had not had casual sex partners in the past six months. It would appear that the findings of Oberzaucher and Baggaley (2002: 9) are in line with this change in behaviour amongst VCT participants while it is also encouraging as it seems as if the participants have adopted safer sexual behaviour after the voluntary counselling and testing.

Together with Oberzaucher and Baggaley's (2002: 9) research on VCT and behaviour change, Mundy and Dickinson (2004: 9) write that after an HIV test, there is a further increase in knowledge through post-test counselling that promotes risk reduction in individuals because they are aware of their HIV status, their risk perceptions have changed and new norms of responsibility have changed. Similarly, research conducted by Arthur *et al* (2007: 11) concluded that there was a significant reduction in high-risk sexual behaviours amongst clients who underwent VCT. However condom use was still low and there was a low rate of disclosure amongst HIV-positive clients after the VCT (Arthur *et al*, 2007: 11). In contrast, a study conducted by Nyblade *et al* (2000: 1) showed that there were no statistically significant differences in risk behaviours amongst those who received VCT and those

who did not and concluded that voluntary counselling and testing had minimal effects on HIV risk reduction behaviours. Also, in research conducted by Denison *et al* (2008: 2) on VCT behavioural risk reduction, the authors concluded that there is only moderate evidence to support VCT as an effective behaviour change study. The rest of the questions to determine the practices of participants after the voluntary counselling and testing were with regard to condom use, the source of assistance for sexually transmitted diseases and the actions and realisations of employees after the voluntary counselling and testing. Unfortunately these questions were not asked in the pre-VCT questionnaire in January 2009 and can thus not be compared to the responses of participants after the VCT.

When asked how often participants and their sexual partners used condoms, 67% of participants indicated they used condoms all the time, 22% of participants indicated that they use condoms sometimes and 11% of participants indicated that they never use condoms. It must be noted that responses to this question cannot be interpreted as a finding in my study because it was only answered by nine employees. A possible reason for this could be that interviewers and/or participants may have thought that this question should only be answered if they had answered “yes” to the previous question (i.e. if they have had casual sex partners). Nevertheless, this is a limitation to my findings as the low response to this question is neither reliable nor representative of the workforce and an increase in condom use after voluntary counseling and testing is an important indicator of an increase in safer sex behaviour (Arthur *et al* 2007: 11).

Participants’ were presented with different sources of assistance with regard to where they would go if they had a sexually transmitted disease. Employees could indicate more than one source of assistance: 93% of participants indicated that they would visit a clinic, hospital or doctor; 64% of participants indicated that they would seek advice from friends or relatives; and 61% of participants indicated that they would seek advice from a shop or pharmacy. It is encouraging that the majority of employees would seek assistance from clinics, hospitals or doctors and in this way ensure that their STD is treated. This shows that almost all the participants are aware of where to go for assistance and it also facilitates access to services to prevent further infections. However, it must be mentioned that 26% of the participants indicated that they would go to a traditional healer for assistance for a sexually transmitted disease. As Namibia is a multi-cultural society with both western and traditional belief systems, traditional healers play a significant role in providing

healthcare and medication even amongst the working population (LeBeau, 2009). The Namibian Charter of Rights has made provision for the role of traditional healers by recognising that they too need to be provided with the appropriate and correct education and information about HIV/AIDS, its opportunistic infections and sexually transmitted diseases (Namibian HIV/AIDS Charter of Rights, 2004: 7), and this needs to be incorporated into HIV/AIDS workplace programmes.

After the voluntary counselling and testing, 81% of participants indicated that they discussed the results of their HIV test with their spouse or partner, and 77% of participants indicated that they changed their sexual behaviour. This is very encouraging as this is evidence that the post-test counselling (education) that participants received after the VCT was successful, thus contributing to their knowledge and enabling them to make plans for the future (Oberzaucher and Baggaley, 2002: 9). 35% of participants went to the doctor after the VCT, 56% of participants realised that their risk of becoming infected with HIV was much higher than they previously thought and 60% of participants realised that their risk of becoming infected with a sexually transmitted disease was much higher than they previously thought. It can be that the 35% of participants who went to the doctor after the VCT either tested HIV-positive, or realised that they had a higher risk of becoming infected with a sexually transmitted disease and thus went to a medical facility for further information or a full medical check up. Also, it could be that participants who did not realise that their risk of becoming infected with HIV (44%) or a STD (40%) was higher than they previously thought, tested HIV negative and were only exposed to further education on prevention and adopting safer sexual behaviour.

The responses of participants who realised that their risk of becoming infected with HIV or a STD were higher than they thought were cross-tabulated with the responses of participants who indicated that they changed their sexual behaviour after the VCT. The findings showed that 94% of participants who realised that their risk was higher after the voluntary counselling and testing alleged that they changed their sexual behaviour. Although 54% of participants indicated that they did not realise that they have a higher risk, it is still encouraging that 46% of these participants indicated that they changed their sexual behaviour. This finding is supported by the research of Mundy and Dickinson (2004:3) where a further increase in knowledge after VCT promotes risk reduction in individuals because they are aware of their HIV status, their risk perceptions have changed and new norms of responsibility have been enforced.

Employees were asked to add their opinions and comments on the voluntary counselling and testing that was offered at their company in the final section of the follow-up questionnaire. 50 participants completed this section and a summary of their comments are displayed in Table 23. The majority of responses were very positive with regard to the provision of the voluntary counselling and testing the company, especially because the service was brought to the workplace so that they can know their status and the employees did not have to travel far distances to community testing centres. Another common suggestion was that the service should be repeated at least very six months and it should be continued so that the employees can undertake an HIV test regularly. Seven respondents requested that more information be given with regard to HIV and AIDS, while two respondents indicated that there was a need to provide a private space or area if employees had further questions to ask or discuss with the counsellors. One employee requested that the service providers need to include a tuberculosis test together with the HIV test as these two illnesses often occur together. In general, the group of employees were satisfied with the voluntary counselling and testing services and were eager to undergo the exercise again.

CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS

This concluding chapter needs to be interpreted in view of the many limitations that were present in my evaluation. As discussed in Chapter 3, some research limitations were that the pre-VCT and post-VCT questionnaire was not exactly the same, the follow-up period between the VCT and my research was rather short, my follow-up questionnaire was only available in English, there was the risk of misinterpretation and/or misunderstandings between the interviewers or translators, social desirability bias may have led to under-reporting of high-risk behaviour, and there was no concrete way of establishing whether any changes in participants were as a result of the VCT intervention or other outside interventions. However, as participation in my follow-up study was voluntary and anonymous, the biggest limitation was that I had to rely on available subjects: there was no way of linking specific employees to their “before and after VCT” responses and thus the group of employees who participated in my follow-up study will not necessarily share the same demographic characteristics as the group of employees who participated in the VCT.

The aim of my study was to evaluate the outcome of the voluntary counselling and testing at the company in terms of how successful it was in assisting employees who participated in the VCT to identify their individual risk; in increasing the knowledge of HIV/AIDS of employees who participated in the VCT; in motivating employees who participated in the VCT to implement risk reduction plans; and in motivating attitude and behaviour/practice change in employees who participated in the VCT.

With regard to whether the VCT increased the knowledge of HIV/AIDS in participants, it can be concluded that there was a small increase in knowledge with regard to knowing what a sexually transmitted disease is as well as knowing that there is treatment that can enable HIV-positive people to live longer. There was a larger increase in participants’ knowledge on what an HIV-positive pregnant woman can do to reduce the risk of transmission to her unborn baby, while there was both a knowledge increase and decrease in the responses of participants to general HIV/AIDS statements. Although the majority of respondents indicated that their knowledge increased after the VCT, upon closer analysis it was evident that participants who had a secondary or higher level of education had more knowledge, or more of a knowledge increase, than the participants with a primary or lower level of education. Most of the employees at the company have a lower level of education and it

seems as if there was not much of a knowledge increase amongst these employees after they participated in the VCT. There is a definite need to provide further HIV and AIDS-related information to the employees who participated in the VCT as it is clear that even after the VCT, there is not an equal knowledge distribution amongst participants in the lower and higher education groups.

From the research findings, it was evident that the voluntary counselling and testing assisted participants to identify their individual risks as the self-reported risk perceptions with regard to becoming infected with HIV and/or a sexually transmitted disease of employees increased after they participated in the VCT. On the one hand, the VCT was successful by increasing participants' awareness of their risk, but on the other hand one would expect that the risk perceptions of employees after the VCT would have decreased and not increased as was the case in my findings. It may be that although there was an increase in the knowledge of the participants' individual risks with regard to becoming infected with HIV or a sexually transmitted infection, there was no coinciding behaviour change to reduce their risk of becoming infected.

Together with risk identification, there was evidence that the participants also implemented risk reduction plans after the voluntary counselling and testing, as there was a decrease in the percentage of participants who had casual sex partners as well as an increase in participants who had not had casual sex partners in the previous six months. Unfortunately the condom use amongst participants (which would be the best indicator of safe behaviour risk reduction plans) could not be generalised to the sample of my study as only a very small number of employees responded to this question. However it is motivating that almost all the participants requested that condoms should be provided in the workplace thus hinting at possible behaviour change amongst the participants by practising safe sex.

With regard to motivating attitude and behaviour change in participants, it can be concluded that the VCT did contribute to an attitude change especially with positive changes in participants' willingness to work with an HIV positive colleague as well as keeping the HIV-positive status of a family member a secret. Although the attitudes of the participants towards people living with HIV/AIDS after participation in the VCT could not be compared to their attitudes before the VCT, it

can be concluded that the general attitude amongst employees is relatively non-discriminatory towards HIV-positive people. However, as was the case with regard to the knowledge of employees, it is evident that participants with primary or lower education displayed more stigmatising and discriminatory attitudes than participants with secondary or higher education. Again, it seems as if the VCT was not as successful in transferring information and education on HIV and its methods of transmission amongst employees with lower education levels as amongst employees with a higher level of education and there is a definite need to provide further information education to less educated employees. The attitudes of employees towards HIV/AIDS-related service provision by the company also changed significantly. It can be concluded that after the VCT, participants preferred the company to only provide condoms at the workplace while other services such as education, information, VCT and treatment should be provided by an external HIV/AIDS-related service provider. Although the above can be interpreted as employees having more trust in an external HIV/AIDS-service provider than in the company itself, the general willingness of participants to voluntarily disclose their HIV-positive status to colleagues reflects a general level of trust and confidence amongst the workforce.

In conclusion, the voluntary counselling and testing that was provided to the employees was generally successful, specifically in terms of assisting employees to know their HIV status, to provide basic HIV/AIDS-related information and to raise awareness of HIV and AIDS amongst the employees at the company. However, it is imperative that the company or service provider embarks on an intensive education and information sharing campaign amongst the employees especially to address the apparent lower level of knowledge amongst employees with lower education levels (which makes up the majority of the workforce), as it does not appear that employees with primary or lower education benefited much from the intervention in terms of an increase in knowledge. Although the general manager of the company mentioned that the company had joined as a member of the Namibia Business Coalition on AIDS (NABCOA), there have been no further HIV workplace programmes to date to build upon the foundations that were laid by the VCT intervention. It is recommended that further HIV/AIDS service provision or workplace programme activities commence as soon as possible within the company to provide ongoing education and information sharing.

It is further recommended that voluntary counselling and testing is provided to the employees at the company on a regular basis, not only because the employees have requested it, but also to monitor whether the voluntary counselling and testing for HIV at the company had the desired effects on the employees, especially with regard to increase in knowledge, a reduction of stigma and discriminatory attitudes, and the desired behaviour change amongst the participants. Should further research be conducted amongst the participants to evaluate and monitor the effects and outcome of the VCT in future, it would be imperative to anonymously identify participants (perhaps by using barcodes) and link these specific employees to their “before and after” responses. It would also be recommended to have a control group so as to make more concrete conclusions that any changes in participants knowledge, attitudes and practices are due to the VCT intervention and not due to other HIV/AIDS campaigns. Lastly, questions which were not included in the initial pre-HIV test questionnaire of January 2009 should be added to the standard questionnaire of the service provider, and the same questionnaire should be administered whenever the service is provided to the company again, in order to assess any changes or trends with regard to the HIV status of the employees, their knowledge, attitudes, practises and behaviours.

Mundy and Dickenson (2004: 20) found that a high level of knowledge is not always sufficient to change behaviour and encourage regular HIV testing: “Of crucial importance to the success of VCT in workplace programmes is the development of knowledge, and the establishment of trust and confidence in workplace interventions (Mundy and Dickinson 2004: 21). Similar to the findings of research conducted by Sher *et al* (2207: 859), my findings of the evaluation of voluntary counselling and testing at the workplace confirm and reiterate the importance of scaling-up education and information sharing during post-test counseling, as well as ensuring that behaviour change communication is included in post-VCT interventions.

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Annexure A:

Post VCT Survey

As “Trailer King” was one of the first companies to conduct voluntary counselling and testing for HIV amongst its employees, I am doing a survey to find out what the impacts of this intervention was. Thank you very much for making the time to complete it. Please note that this survey is voluntary and anonymous, ie. Your name will not be recorded anywhere and cannot be attached to any of your responses - all information provided will be treated confidentially.

Some of the information may be considered sensitive but please answer openly and honestly to ensure that the findings of this research are accurate and can contribute to improving your wellness programme.

Delia Weimers-Maasdorp

Master Degree Student, Stellenbosch University

Please feel free to make any additional comments or suggestions at the end of this form.

(please circle the appropriate number)

1	Age
2	Gender	Male 1 Female 2
3	What is your highest education?	Pre-school/No Education 1 Primary school not completed 2 Primary school completed 3 Secondary school not completed 4 Secondary school completed..... 5 Vocational training 6 College 7 University undergraduate..... 8

	University postgraduate 9
	Other (please specify)..... 25

4. Did you participate in the VCT offered by your company?	Yes.....1 No.....2
5. Before the VCT was offered by your company, did you ever go for Voluntary Counselling and Testing?	Yes.....1 No.....2
6. Do you know what a sexually transmitted disease is?	Yes..... 1 I am Uncertain.....2 No.....3
7. If you were HIV-positive would you voluntarily disclose your status to your fellow colleagues if they asked you?	Yes..... 1 I am Uncertain.....2 No.....3
8. After the VCT, did your knowledge about HIV/AIDS:	Increased a lot..... 1 Increased somewhat.....2 No increase, I already had a good knowledge..... 3 No increase because of the VCT.....4

9	Please indicate if you believe the following statements are true or false:			
	<i>(Circle one answer for each row)</i>	True	False	Don't know
	A healthy looking person can have HIV/AIDS	1	2	88
	A pregnant woman infected with HIV can transmit HIV to her unborn baby	1	2	88
	People can reduce their chances of getting HIV by using a condom every time they have sex	1	2	88

	A person can get infected with HIV by sharing food with a person who has AIDS	1	2	88
	A person can get infected with HIV if he/she has sex without a condom with an HIV infected person	1	2	88
	A person can get infected with HIV through mosquito bites	1	2	88
10	What can an HIV-positive pregnant woman do to reduce the risk of transmission of HIV to her unborn child?	Nothing.....1 Take medicine2 Don't know.....88		
11	Is there treatment that can enable HIV-positive people to live longer?	Yes.....1 No.....2 Don't know.....88		

12. For each of the following please indicate if you are willing to do the following:

(Circle one answer for each row)	Yes	No	Don't know
a. Work with a colleague who is HIV-positive	1	2	88
b. Use the same toilet with a HIV-positive colleague	1	2	88
c. Buy food prepared or sold by someone who is HIV-positive	1	2	88
d. Shake hands with someone who is HIV-positive	1	2	88
e. Kiss someone who is HIV-positive	1	2	88
f. Live with somebody who is HIV-positive	1	2	88
g. Dress the wounds of somebody who is HIV-positive	1	2	88
h. Allow your children to play with HIV-positive children	1	2	88
i. Drink from the same glass as an HIV-positive colleague	1	2	88
j. If a family member had HIV would you want it to remain a secret?	1	2	88

13.	What do you think your chances are of getting HIV/AIDS?	No risk at all.....1 Don't know, I am uncertain.....2 Moderate.....3 High.....4 I am infected with HIV.....5
14.	What do you think your chances are of getting a sexually transmitted infection?	No risk at all.....1 Small.....2 Moderate.....3 High.....4 I have a sexually transmitted infection.....5 I don't know what a sexually transmitted disease is.....6

15. If you need assistance for a sexually transmitted infection would you: <i>(you may circle more than one answer)</i>	YES	NO
a. Go to a clinic, hospital or doctor?	1	2
b. Consult a traditional healer?	1	2
c. Seek advice from a shop or pharmacy?	1	2
d. Ask advice from friends or relatives?	1	2

e. Other: _____

16.	Would you like your company to provide:		
	<i>(Circle one answer for each row)</i>		
	More HIV/AIDS education	Yes 1	No 2
	Supply of condoms	1	2
	Information about voluntary counselling and testing	1	2
	Information on HIV/AIDS treatment	1	2
	Voluntary counselling and testing for employees	1	2
	Voluntary counselling and testing for dependants	1	2
	HIV/AIDS treatment for employees	1	2
	HIV/AIDS treatment for dependants	1	2
17.	If you need to talk about HIV related issues, would you prefer to use an external service provider or an internal employee wellness coordinator?	Internal coordinator 1 External coordinator 2 No preference..... 3	

18.	In the past six months, did you have any casual sex partners?	Yes.....1 No.....2 Never had sexual intercourse.....3
19.	If yes to 18, how often did you and or partner use condoms during sexual intercourse?	All the time.....1 Most of the time.....2 Sometimes..... Never.....4

NOTE: IF YOU DID NOT PARTICIPATE IN THE VCT IT IS NOT NECESSARY TO COMPLETE THE REST OF THIS QUESTIONNAIRE.

This last question is to gather information of your own impression of the VCT that was offered at Bezêrs. Your opinion on whether the intervention was good or bad, useful or not etc, as well as your recommendations on how the service can be improved is very important. Please feel free to answer this question honestly.

20. For each statement, please indicate whether **you did**, **you did not** or **not applicable** by circling the appropriate number.

		I did	I did not	Not applicable
a)	Discuss the results of my HIV test with my spouse or partner	1	2	3
b)	Change my lifestyle/behaviour because of the voluntary counselling and testing	1	2	3
c)	Went to the doctor as a result of the voluntary counselling and testing	1	2	3
d)	After the VCT, I realised that my risk of becoming infected with HIV was much higher than I previously thought	1	2	
e)	After the VCT, I realised that my risk of becoming infected with a sexually transmitted disease was much higher than I previously thought	1	2	
f)	After the VCT, I changed my sexual behavior	1	2	

20. Please share your general impressions of the voluntary counselling and testing for HIV that was offered at Bezêrs:

Annexure B: Questions for interview with the General Manager

Date of interview: 6 July 2009

Time of interview: 09h00

1. How many employees does the company have?
2. What is the general literacy of these employees?
3. Why did the company agree to conduct the VCT amongst its employees?
4. Have you done a similar intervention or activity before? If not, why not?
5. Did you participate in the testing?
6. Why/Why not?
7. Were you or other management members provided with a report with anonymous statistics of the results of the testing?
8. How would you describe the standard of the VCT service that was provided to the company?
9. Are you of the opinion that the VCT service provided was confidential?
10. Did the report have any value in understanding the HIV risks of the employees?
11. What has the management done with the information provided in the report, specifically with regard to HIV? Can you give any examples?
12. What is your opinion of the information given to you in the report?
13. What does the company do with regard to prevention, education and treatment for employees who are HIV-positive as well as for employees who are HIV-negative?
14. I understand that the company does not have any kind of HIV/Wellness programme for its employees. Do you think that the information reported back to the management will serve as a motivation to implement a programme? Why/Why not?

15. It has been approximately 6 months since the VCT intervention at your company. Why would you say that the company still has not embarked on any kind of programme or assistance to the employees who are HIV-positive? Are there any plans in this regard?
16. Would you say that employees trusted the VCT service provided?
17. Where would you say (in what areas) can the VCT service be improved? Is there any additional information that the company would have wanted? Do you have any recommendations in this regard?
18. What is your opinion regarding the VCT provided to the company in general?
19. Did it have any positive impact in the company?
20. Did it have any negative impact in the company?
21. Would you provide this service to employees again in the future?