EMPLOYEES’ KNOWLEDGE, ATTITUDES AND PRACTICES
AROUND HIV/AIDS AT ROSH PINAH ZINC MINE, NAMIBIA

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A research report submitted to the Department of Social Work, Faculty of Humanities
at the University of the Witwatersrand, Johannesburg, in partial fulfillment of the
requirements for the Master of Arts by course work and
research report in Industrial Social Work.

February 2010
DECLARATION

I, Zelda Rukambe declare that this research report is my own unaided work and that I have given full acknowledgement to the sources I have used. It is submitted in partial fulfillment of the requirements for the Degree of Master of Arts in Social Work in Industrial Social Work at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination at any other University.

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Zelda Rukambe

February 2010
DEDICATION

This research report is dedicated to my almighty father in heaven. “With you all things are possible and to you be all the glory”.
ACKNOWLEDGEMENTS

I wish to thank my heavenly father for giving me victory through Jesus Christ in completion of this research report. I also wish to thank my husband for supporting me in various ways in order for me to complete my research report. A special vote of thanks to my supervisor, Francine Masson, for supervising my research report and for assisting me enormously. I also wish to thank the Rosh Pinah Zink Mine management and staff for their support and cooperation.
ABSTRACT

The spread of HIV/AIDS continues to increase, despite efforts committed globally, regionally and nationally to curb the impact of the HIV/AIDS pandemic (UNAIDS, 2009). Organisations are becoming more aware of the threat of the HIV/AIDS pandemic and as a result many today commit resources towards managing HIV/AIDS in the workplace through HIV/AIDS programmes. The question remains as to whether such efforts will be effective. A Knowledge, Attitudes and Practices/Behaviour (KAPB) study is one of the tools that can be used to monitor and evaluate the effectiveness of an HIV/AIDS programme. Companies that have conducted a Knowledge, Attitude, Practice and Behaviour (KAPB) study within its workforce have found it to be a very useful practice for the development, as well as for the monitoring and evaluation, of HIV programmes (Price Waterhouse Coopers, 2007). An exploratory research design using a mixed-design approach was employed to investigate the existing knowledge, attitudes and practices related to HIV/AIDS by the workforce at the Rosh Pinah Zink Mine Corporation in Namibia. A Maasdorp (2008) standardised questionnaire was used to obtain both quantitative and qualitative information from the respondents. In addition to a small scale survey, qualitative data was collected by means of a focus group to supplement mainly quantitative questionnaire data. The questionnaire was piloted at a company in Windhoek that operates similarly to Rosh Pinah Mine. The mixture of both approaches can compliment and supplement one another on the weakness of each approach. In this way the researcher was able to gain a deeper understanding of the research problem (Punch, 2004). A stratified sample comprising of 123 out of 561 employees across the mine workforce served as respondents, while seven employees served as respondents in the focus group discussion. The information collected by means of the survey was subjected to both quantitative and qualitative data analysis, while the focus group transcripts were thematically analysed.

The results of the study are intended to provide an understanding of the existing knowledge, attitudes and practices of the workforce with regards to HIV/AIDS. The
study arrived at recommendations for the occupational social workers, as well as for planners of HIV/AIDS programmes at the mine in order to address identified gaps with regards to HIV/AIDS knowledge, attitudes and practices of the employees. Secondly, the study arrived at baseline information that may be used to monitor the impact of HIV/AIDS workplace programmes being implemented thereafter. This study provided the basis for a follow-up study that will compare findings of workers who have been exposed to the proposed intervention.
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CHAPTER ONE

1. RESEARCH OVERVIEW AND RATIONALE

1.1 Introduction

i) HIV/AIDS in context

HIV/AIDS is believed to be a threatening disease worldwide and it remains the most challenging disease to public health. According to the United Nations AIDS programme (UNAIDS) (2008), everyday over 6800 persons become infected with HIV and over 5700 persons die from AIDS. The Aids epidemic update by UNAIDS (2008) showed that in 2007, globally 33.2 million people were living with HIV. It is worth mentioning that a decrease in the estimated number of people living with HIV has been noted in some countries, such as Kenya and Zimbabwe.

Inevitably, the HIV/AIDS pandemic also continues to impact organisations.

ii) HIV/AIDS and the workplace

In the beginning HIV/AIDS was only seen as a health issue because of the impact it has on a person’s health, as well as on the health sector, but there is a clear indication that it effects enterprises and the economy as a whole. Companies have lost top managers; workers have lost colleagues and huge amounts of time, energy and emotions have been spent on issues of illness and loss. Families have collapsed, while companies that are struggling against a background of chronic poverty have taken on a burden of dependency Loewenson (1998) (as cited in International Finance Corporation (IFC), 2004).
In addition, Jackson (2002:22) states that “how AIDS affects the workplace can be looked at from both the employees and employers’ viewpoints, for example, employees’ needs for improved medical care and sick leave benefits; while employers are faced with increased costs, but at the same time need to limit expenditure and sustain production.”

In light of these concerns, many organisations have embarked on managing HIV/AIDS at their workplaces through HIV/AIDS workplace programmes. Such programmes include:

- Voluntary counseling and testing
- Treatment, care and support
- Health awareness campaigns

An HIV/AIDS programme, like any other programme, needs to be monitored and evaluated. One of the tools that can be used to measure the effectiveness of such a programme is the Knowledge, Attitudes, Practices/Behavior (KAP/B) study.

1.2 Statement of the Problem and Rationale for the Study

Rosh Pinah is known as a mining town with predominantly migrant workers. Migrant workers are people who have relocated to a different town for work purposes and in most cases whose families are left behind. Migrant labour, according to Smart (1999b:2) (as cited in Jackson, 2002), entails the disruption of social support mechanisms and family structure, unpleasant living conditions and limited opportunities for leisure. This defines the working context for many mine workers, and Rosh Pinah is not an exception. Migrant labour in Rosh Pinah may have contributed to both commercial and casual sexual relationships because of distant marriages. The need for one partner to remain home to look after the household and the family may have resulted in the abuse of substances, such as alcohol, which can often lead to risky sexual behaviours, increasing the risk of a serious HIV outbreak.
Thus, in 2004 according to Moongo (2009), an HIV/AIDS prevalence survey was conducted to find out the HIV infection rate amongst the employees at Rosh Pinah Zink Mine Corporation. Price Waterhouse Coopers (2007) states that a prevalence survey is the logical starting point for an organisation to establish the extent to which it is impacted by HIV and AIDS. The survey was conducted by a private organisation in Namibia called Care Way. The survey’s results initiated the establishment of the HIV/AIDS Programme, together with the appointment of an HIV Coordinator. Voluntary Counseling and Testing (VCT) and HIV/AIDS awareness campaigns, as well as a Peer Education programme were also initiated. One important aspect, which was conspicuously omitted, was the assessment of the HIV/AIDS knowledge, attitudes, and practices of the workforce before the implementation of the HIV/AIDS programme. If this exercise had been undertaken, the results could have served as baseline data in tracking changes of the employees' knowledge and attitudes and the sexual practices of those who attended the HIV/AIDS programme, in relation to the HIV/AIDS pandemic. This research will endeavour to address this deficiency. The research is an exploratory study as it aims to ascertain the existing knowledge, attitudes, and practices relating to HIV/AIDS of the workforce at the mine.

Firstly, the results of the study are intended to shed light on the existence of the foregoing issues. The study also hopes to arrive at recommendations for planners of the HIV/AIDS programme at the mine in order to address identified gaps pertaining to knowledge, attitudes and behaviours of workers in relation to HIV/AIDS.

Secondly, the study also envisages attaining baseline information that will be used to monitor the impact of HIV/AIDS workplace programmes to be implemented thereafter. After a period of two years, another study will be carried out to determine whether any changes have transpired in the workers’ knowledge, attitudes and practices in relation to HIV/AIDS. Relevant available literature highlights the role of information in generating behavioural change in the light of HIV/AIDS problem.
1.3 Research Questions:

- Are the employees knowledgeable about HIV/AIDS, its transmission, prevention and treatment?
- What are the employee’s attitudes towards working with people living with HIV/AIDS?
- What are their attitudes towards going for HIV voluntary counseling and testing?
- How do they practically prevent themselves from HIV/AIDS infections or re-infection?

1.4 Research Aim and Objectives

1.4.1 Primary Aim

The aim of this study was to explore the existing knowledge, attitudes, and practices relating to HIV/AIDS of the workers at the Rosh Pinah Zink Mine Corporation in Namibia.

1.4.2 Secondary Objectives

Several objectives have been set for the study:

i) To assess employees’ knowledge on HIV/AIDS issues including transmission, prevention and treatment;

ii) To obtain information on employees’ attitudes towards working with people living with HIV/AIDS and how they feel about going for HIV testing;

iii) To assess the employees’ safe or risky practices regarding HIV/AIDS;
iv) Based on the former, to arrive at a set of recommendations for the current HIV/AIDS policy to be reviewed and for the development of other related policies and intervention programmes.

1.5 Overview of the research design and methodology

An exploratory research design was used to examine the existing knowledge, attitudes and practices relating to HIV/AIDS by the workforce at the Rosh Pinah Zink Mine Corporation in Namibia. In addition, a hybrid of both qualitative and quantitative research paradigms have been used for the study. The researcher, using availability sampling, distributed 120 questionnaires. In addition, the researcher set up a focus group using a semi-structured interview schedule. Seven participants were purposively selected and included in this focus group. The results of the quantitative data were analysed using descriptive statistics through tables, charts and graphs, whereas, the qualitative data was analysed using thematic content analysis.

More details on the research design and methodology are discussed in chapter three.

1.6 Anticipated Value of the Study

This study explored the employees’ knowledge, attitudes and practices relating to HIV/AIDS at Rosh Pinah Zink Mine Corporation and the anticipated value of the study was:

- To shed light on the existing knowledge, attitudes and practices with regards to HIV/AIDS, as well as related health and attitude issues.
- To provide recommendations for planners of the HIV/AIDS programme at the mine in order to address identified HIV/AIDS-related issues and gaps pertaining to knowledge, attitudes and practices of employees in relation to HIV/AIDS.
➢ To provide baseline information that will be used to monitor the impact of HIV/AIDS workplace programmes to be implemented hereafter.

1.7 Limitations of the research study

As mentioned, a questionnaire and a focus group interview guide were used, however, the methodological limitations have been identified and are described as follows:

- There is a language barrier as most lower-level employees could not read or write in English. In these cases the researcher assisted the respondent. However, where the researcher was challenged, the researcher utilised three trustworthy Peer Educators who were bilingual. These Peer Educators were first briefed about the research and acquainted themselves with the questionnaire.

- Respondents may have been reluctant to talk about sexual matters, which required the researcher to explain, with respect, and help them understand why their honest responses were important.

- The researcher observed that some members were dominating the discussion. To solve this, the researcher kindly invited each person to speak in turn and also tried to create a more relaxed environment.

- The method of a focus group discussion may have been discouraging to some members of the group due to the need to trust each other with sensitive or personal information. As the focus group was not fully confidential or anonymous (there was more than one person in the group), the researcher encouraged group members to maintain confidentiality. The researcher also explained that the notes and audiotapes would be kept completely confidential.
1.8 Abbreviations of Key Words

Table 1: Key Words

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIDS</td>
<td>Acquired Immune Deficiency Syndrome</td>
</tr>
<tr>
<td>HIV</td>
<td>Human Immunodeficiency Virus</td>
</tr>
<tr>
<td>KAP</td>
<td>Knowledge, Attitudes and Practices/Perception</td>
</tr>
<tr>
<td>KAPB</td>
<td>Knowledge, Attitudes, Practices and Behaviour</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organisation</td>
</tr>
<tr>
<td>UNAIDS</td>
<td>Joint United Nations Programme on HIV/AIDS</td>
</tr>
<tr>
<td>UN</td>
<td>United Nations</td>
</tr>
<tr>
<td>SPSS</td>
<td>Statistical Programme for Social Science</td>
</tr>
<tr>
<td>VCT</td>
<td>Voluntary Counseling and Testing</td>
</tr>
<tr>
<td>MOHSS</td>
<td>Ministry of Health and Social Services</td>
</tr>
</tbody>
</table>

1.9 Overview of the Research Report

Chapter one presents an overview of the whole research process. It offers an introduction into the context of HIV/AIDS, highlighting HIV/AIDS globally, HIV/AIDS and the workplace, specifically its impact on organisations. This chapter has further offered the study’s rationale, problem statement, aim and objectives, including the overview description of the research design and methodology. The chapter closed with limitations and the definitions of terms.

Chapter two, aims to discuss HIV/AIDS and the nature of the disease, highlighting where it originated from, its detection, transmission and treatment.
In **Chapter three**, HIV/AIDS will be placed globally and within the Namibian context, also focusing on the corporate context, covering themes such as: the Impact of HIV/AIDS on organisations; the Impact of HIV/AIDS on the Public Sector; the Impact of HIV/AIDS on the Macro Economy; HIV/AIDS and the Mining Sector in Southern Africa; as well as the need for multi-sectoral responses.

Thereafter, the role and benefits of conducting HIV/AIDS KAP studies within the workplace will be detailed, highlighting the typical findings elicited by such studies. Finally, the study will be situated within psycho-social theory in order to emphasise its contribution to knowledge in this field.

**Chapter four** covers the study’s research design and methodology. This includes the research design adopted, the instruments used to collect data, a description of the sample of participants, the procedures undertaken and the analysis conducted, which will all be discussed in relevant detail.

In **Chapter five** the results of the study will be clearly shown. The findings are discussed within the three content areas (knowledge, attitudes and practices/perceptions). The results of the study are presented thematically and statistically.

Finally, **Chapter six** is a discussion of the results, incorporating relevant information from the literature to either substantiate or contrast the current study’s results. Thereafter, some practical implications of the findings will be posited with conclusions and recommendations for future research.
CHAPTER TWO

2. LITERATURE OVERVIEW ON THE FACTS OF HIV/AIDS

2.1 Introduction

This chapter aims to discuss the concept of HIV/AIDS in the context of the biological sphere, highlighting what it is, where it originated from, its detection, transmission and treatment. The psycho-social issues affecting those individuals living with HIV/AIDS will also be discussed.

2.2 The History Of HIV

According to Kander (2007), earlier known cases of HIV in a human was from a blood sample collected in 1959 from a man in Kinshasha, Democratic Republic of Congo. In the United States of America the first signs of a fatal new illness that later became known as AIDS were seen in 1981 (Center for the study of AIDS, 2008), while in Namibia, the first case of HIV was reported in 1986 (Ministry of Health and Social Services (MOHSS), 2003).

Kander (2007) reveals that genetic analysis of this blood sample suggested that HIV 1 may have stemmed from a single virus in the late 1940’s or early 1950’s. In 1982 public health officials began to use the term ”acquired immunodeficiency syndrome”, or AIDS, to describe the occurrences of opportunistic infections. In 1983, scientists discovered the virus that causes AIDS. A sub-species of chimpanzees native to West Equatorial Africa had been identified as the original source of the virus (Kander, 2007). This is confirmed by Center for the Study of AIDS (2008), stating that simian immuno-deficiency virus (SIV), which is found in apes shares many characteristics with HIV and that HIV, as it is a fast mutating virus, could well have mutated from SIV.
2.3 What is HIV/AIDS?

HIV stands for Human Immunodeficiency Virus, and is the virus that causes AIDS. HIV destroys certain blood cells that are crucial to the normal function of the immune system, which defends the body against illness (AIDS, 2006).

If someone is infected with HIV, he/she is said to be HIV positive. Although AIDS is the end stage of the HIV infection, it is also worth mentioning that HIV infection is not a death sentence - a person can live a positive and productive life with HIV for a long time should they receive treatment and live healthily.

Kander (2007) elaborates on the meaning of the name: AIDS stands for Acquired Immunodeficiency Syndrome - Acquired meaning that the disease is not hereditary but develops after birth from contact with a disease causing agent, in this case, HIV. Immunodeficiency, means that is characterised by a weakening of the immune system. Syndrome refers to a group of symptoms that collectively indicate or characterise a disease, which in this case can include certain infections and cancers (Kander, 2007).

2.4 HIV Detection

It is imperative to emphasise that one can never tell whether a person has HIV by just looking at them, even if the person has symptoms of HIV/AIDS. HIV infection is most commonly detected through the test of a sample of blood or oral fluid (oral mucosa) (AIDS, 2006). If the blood or oral fluid sample contains HIV antibodies, then it means the test result is HIV positive, i.e. the person is infected with HIV. Antibodies are special protein complexes that are produced by the immune system to attack and neutralise a specific disease-causing organism (Center for the study of AIDS, 2008). Antibodies are simply proteins the body produces to fight off the infection. Several HIV tests are available, including ones developed for use with oral fluid or plasma specimens (AIDS, 2006).
2.5 HIV Transmission

It is not absolutely certain where HIV originated from, but it is known how HIV can be transmitted. HIV does not survive well outside the body. Therefore, it cannot be transmitted through casual, everyday contact. Mosquitoes and other insects do not transmit HIV. This virus may be passed from one person to another when infected blood, semen, or vaginal secretions come in contact with an uninfected person’s broken skin or mucous membranes (Kander, 2007). HIV can also be spread through sexual relations with an infected person, by sharing needles, syringes and/or other injecting equipment and, less commonly (and now very rarely in countries where blood is screened for HIV antibodies), through transfusions of infected blood or blood clotting factors. Babies born to HIV-infected women may become infected before or during birth, or through breastfeeding after birth (AIDS, 2006).

2.6 Treatment

Even though there are efforts in place to find a cure for HIV, currently there is no cure for HIV. Nevertheless, there are different treatments for HIV-infected people, as well as treatment for people with AIDS, in order to treat many opportunistic infections that are caused by HIV, in order to ensure that people live longer and better lives, even with HIV. For people living only with HIV emotional support through counseling can be very beneficial.

HAART (Highly Active Anti-retroviral Treatment) is recommended through a doctor’s prescription only to HIV-infected people who are at the stage of AIDS. Generally, a person is said to have AIDS when their Cd4 cell count drops to 200 and below (Center for the study of AIDS, 2008). Cd4 cells are known to be the white blood cells, which are critical cells that help the body fight infection.
According to AIDS (2006), HAART is a modality of anti-retroviral treatment that involves the use of three or more ARVs, further, HAART interferes with the virus’ ability to replicate, which allows the body’s immune system to maintain or recover its ability to produce the white blood cells necessary to respond to opportunistic infections. ARV stands for anti-retroviral and refers to a type of drug that works by interfering with the replication of HIV (AIDS, 2006). Ross & Deverell (2010, p.93) emphasised that: “ARVs are not a cure, but if taken correctly as prescribed, will reverse the progression of the disease, keep a person healthy and extend his or her life”.

2.7 Psycho-social issues in an individual living with HIV/AIDS

i) Emotions

Knowing that one has an incurable illness can be extremely stressful to anyone. The stress of learning you are carrying the AIDS virus can be devastating (Barlow & Durand, 2005). The HIV/AIDS epidemic has not only biological or physical implications, but also has various psycho-social implications. It is important to know that not everyone will experience all emotional responses the same. Each HIV/AIDS situation is unique. Some may become withdrawn, aggressive and rude to colleagues or to friends. This may be because that the infected person feels victimised or even angry.

These psycho-social factors influence various HIV/AIDS-related issues such as adhering to treatment programs, the quality of life of the person living with the disease and, naturally, their ability to perform well in the workplace. Understanding the psycho-social factors that play a role in this disease will ensure that people living with HIV/AIDS (PLWHA) are provided with a more comprehensive care than can be provided by medication alone.

According to Ross & Deverell (2010, p.106):”HIV/AIDS carries with it a discreditable stigma and disclosure is often avoided as a result of both felt and enacted stigmas”. In
general, many people continue to ask: “why can’t the people who are infected disclose their HIV status in order to save others?” This is easier said than done but, as long as people hold a stigmatory and discriminatory attitude towards people living with HIV and AIDS, disclosure will be difficult. **Feelings of fear** may prevent PLWHA from disclosing their status to others and from gaining social service assistance (http://userwww.sfsu.edu/~ali1212/Psych.html).

Ross & Deverell (2010) explain that to many disclosure is not an option due to fear of social rejection. **Stigma** can be defined as an attitude or quality which significantly “discredits” an individual in the eyes of others (Center for the study of AIDS, 2008). People hold a judgmental attitude towards such a person, based on their condition or status. In addition, stigma means that people living with HIV are treated differently from others; this is what it meant by discrimination (Center for the study of AIDS, 2008).

A common emotional response is fear, which includes the fear of being rejected by others. Notably, with other terminal illnesses, like cancer, one gets attention and support from friends and family members, however, with HIV/AIDS, one is often rejected and isolated with no support whatsoever from friends and families. Why is this so? Ross & Deverell (2010) explain that HIV/AIDS is not only a terminal illness, but it is also a sexually transmitted disease. Sexually transmitted diseases are perceived to be immoral and therefore not socially acceptable. In fact, friends and family members may disown you. PLWHA further experience the fear of death and fear that arises out of the uncertainty of what their future holds.

Fear may also prevent the person who is infected from seeking treatment. Also, family and community members, friends and co-workers may respond with fear to an individual who is HIV positive, especially if they are not well-informed about the disease. They may fear that the disease is contagious and so refrain from interacting with the infected person, which results in social isolation.
**Feelings of loss** may also occur in PLWHA. This may come in various forms such as grieving the loss of one’s partner and other loved ones, as well as the loss of one’s future, strength and mobility, physical attractiveness, income or employment ([http://userwww.sfsu.edu/~ali1212/Psych.html](http://userwww.sfsu.edu/~ali1212/Psych.html)).

In addition to these feelings of loss, PLWHA may also experience **feelings of anger and frustration** which will be expressed differently and directed at many circumstances. They may experience self-blame for becoming infected or blame the person who had infected them, for the situation that they are now in. They may also feel blamed by others for ‘bringing it upon themself’ and for becoming infected. Additionally, they may also feel anger towards their family and community for not empathising with them, towards the medical profession for not having found a cure for HIV/AIDS yet and also to society for rejecting them ([http://userwww.sfsu.edu/~ali1212/Psych.html](http://userwww.sfsu.edu/~ali1212/Psych.html)).

Furthermore, **feelings of depression, anxiety and hopelessness** may occur in PLWHA. These are brought on by the unpredictable nature of the progression of the disease and also by the fact that there is no cure for the disease. PLWHA, may become depressed or anxious about the quality of life they are going to lead, whether they will be able to function well at work, and experience concern regarding who is going to look after their children or family when they die.

Having learnt of several psycho-social reactions in individuals living with HIV and AIDS, it is crucial for occupational social workers to play a role in the motivation of employees living with HIV and AIDS to seek and adhere to treatment in order for them to execute their duties at work to their full capacity and to have hope for the future and ensure their quality of life. Occupational Social Workers should offer flexible and effective interventions that encourage HIV- and AIDS-infected employees to develop efficient coping and management skills.
ii) Adherence Issues

It is important to highlight that there are various issues that interfere with an HIV/AIDS-infected individual’s ability to comply with complicated medication regimens. Barriers to medication compliance include a lack of understanding of the long-term results of non-compliance, myths and misunderstanding about the effectiveness and necessity of medication, distrust of the medical community, conflicts with lifestyle choices, substance abuse, mental health illness and side-effects of the medication (http://www.dcmsonline.org/jax-medicine/2001journals). MOHSS (2003) also confirm that side-effects of drugs may also cause mental confusion, which adds to the difficulty surrounding compliance around medication.

Occupational social workers should consider developing adherence programmes to increase compliance in employees living with HIV/AIDS, emphasising communication between patient and medical caregiver, development of a supportive medical setting and determination of whether or not the HIV-infected individual is ready to take medication. Psychological interventions also may include training children to swallow pills, identifying cognitive deficits and overcoming difficulties in dealing with social issues that prevent compliance (http://www.dcmsonline.org/jax-medicine/2001journals).

2.8 Psychological Impact on affected family members and caregivers

The impact of HIV/AIDS on the affected person’s family and friends has somehow been overlooked. Family members and or caregivers also experience psychological stresses. Tjikuua (2000) names but a few:

★ Fear of infection
★ Anticipatory grief
★ Shame
★ Helplessness
★ Discrimination
Thus, the same anxieties that are felt by the infected are also felt by the affected family members and caregivers, who also might happen to be an employee. Affected employees are often faced with challenges of loss, death, perceived helplessness, uncertainty about the future, sadness and anger, frustration in navigating the medical system, financial worries and interpersonal stress (Tjikuua, 2000). Consequently, such an employee may not be happy at work due to various emotional disturbances caused by an HIV/AIDS situation at home. Such an employee may not be productive at work and might be constantly absent to take care of a family member who needs medical and moral support.

HIV/AIDS programmes in many cases focus on the infected, forgetting that the affected also needs support and guidance as to how they could cope better with their situation at home, should they have a family member who is HIV-positive or in the stage of AIDS.

2.9 Neuro-psychological Issues

The progression of an HIV infection to an AIDS infection has been associated with central nervous system dysfunction (http://www.dcmsonline.org/jax-medicine/2001journals). The signs and symptoms of HIV-related infection include cognitive impairment, for example, short term memory deficits and confusion. Generally, some degree of mental confusion is common in people with AIDS. These symptoms may be caused by infection of the brain with HIV-opportunistic infections (MOHSS, 2003).

Other symptoms are changes in personality (i.e. apathy and erratic behaviour) and psychotic symptoms (i.e., hallucinations, suspicion) http://www.dcmsonline.org/jax-medicine/2001journals. The mental changes according to MOHSS (2003) include difficulty in:

- The ability to think clearly: This may be noticed as a problem in concentration and losing track of conversation.
- Behaviour: The person may become irritable, disinterested, unpredictable or aggressive. The person may start dropping things more often, falling, or may develop slowness of movement.

2.10 Conclusion

This chapter has brought forth an understanding around HIV/AIDS in the biological context and discussed its origin, transmission and treatment. The psycho-social issues of individuals living HIV/AIDS were also discussed in order to give occupational social workers an understanding of what PLWHA are going through, so that occupational social workers can develop a better approach in helping an employee with HIV/AIDS.

The next chapter will then look at HIV globally and more specifically, in Southern Africa, as well as its impact on different sectors. Responses to HIV/AIDS will also be discussed, followed by a literature review and theoretical framework of the study.
CHAPTER THREE

3. LITERATURE REVIEW AND THEORETICAL FRAMEWORK OF THE STUDY

3.1 Introduction

This chapter aims to first discuss the context of HIV/AIDS internationally and then specially in Namibia, highlighting its impact on different sectors and the need for a multi-sectoral response to combat the pandemic. Thereafter, the role and benefits of conducting KAP/B studies on HIV/AIDS within the workplace is discussed, highlighting the typical findings elicited by such studies. Finally, this chapter includes social-psychological theory in order to emphasise its contribution to knowledge on the topic of HIV/AIDS in the workplace.

3.2 The Global HIV/AIDS Epidemic

According to a United Nations AIDS (UNAIDS) report (2008), there have been global efforts to address the AIDS pandemic, which included providing increased access to effective prevention and treatment programmes. However, the number of people living with HIV continues to grow, as does the number of deaths due to AIDS. It is worth mentioning that a reduction in some areas is noted in the estimated number of persons living with HIV. In 2007 the estimated number of people living with HIV was 33.2 million, a reduction of 16%, compared with an estimate published in 2006 of 39.5 million UNAIDS (2008). In 2008, there was not a significant change, as the estimated number of people living with HIV was at 33.4 million UNAIDS (2009). An estimated 2.5 million people were newly infected with HIV in 2007 and 2.7 million people in 2008 (UNAIDS, 2009). Furthermore, it has been established that children under age 15 accounted for 420 000 of new HIV infections in the world in 2007 (UNAIDS, 2008), while in 2008, 430 000 new cases of HIV infections in children were reported (UNAIDS, 2009). The
UNAIDS (2008) report also shows that more than two out of three (68%) adults and nearly 90% of children infected with HIV live in sub-Saharan Africa; and more than three in four (76%) of all adults and children’s deaths due to AIDS in 2007 occurred in sub-Saharan Africa. Similarly, the World Health Organisation (WHO) (2006), indicates that about 95% of people with HIV/AIDS live in developing countries, of which nearly two-thirds are in sub-Saharan Africa. WHO (2006), further indicates that in the 15-24-year age group, three young women in sub-Saharan Africa are infected for every young man. Almost three-quarters of all women and nearly 90% of children with HIV/AIDS in the World live in this region. It is clear, from the UNAIDS and WHO (2006) reports, that sub-Saharan Africa is the region with the greatest burden of the AIDS pandemic, confirmed by MOHSS (2004). Sadly, UNAIDS (2009) also reveals that in 2008 in sub-Saharan Africa, 22.4 million people were living with HIV, of which 1.9 were new cases. Furthermore, it reveals that 1.4 million deaths were AIDS-related.

One tends to wonder why this is the case in sub-Saharan Africa. MOHSS (2004) indicates that:

- poverty;
- mobility;
- high levels of income inequality;
- alcohol abuse;
- inequality in status and access to resources, for example: lack of easy and affordable access to medical and health facilities, education, as well as good drinking water;
- high percentage of female-headed households; and
- a high percentage of households with members separated by long distances from each other; all contribute to the high vulnerability of the people of sub-Saharan Africa to HIV/AIDS infection.

In support of the above, Poku (2005) also states that a deadly combination of factors such as poverty, extensive labour migration, gender inequality, low access to reproductive
health care, undiagnosed and untreated sexually transmitted diseases, all create an enabling environment for HIV to spread faster in sub-Saharan Africa, more specifically, in Southern Africa.

It is noteworthy, however, that the high increase of the number of newly infected people is not constrained to sub-Saharan Africa. The UNAIDS (2006) report asserted that in the two years prior to its report (2004-2005), the number of people living with HIV had increased in every region in the world. The most striking increase occurred in East Asia, Eastern Europe and Central Asia, where the number of people living with HIV in 2006 was over one-fifth (21%) higher than previously recorded in 2004 (UNAIDS, 2006). This increase was also confirmed by WHO (2006), stating that HIV/AIDS epidemics in Eastern Europe and East Asia grew rapidly, for example in the largest countries like China, India and Russia, where commercial sex and intravenous drug use are the key drivers. In South- and South-East Asia, the number of new HIV infections rose by 15% in 2004-2006, while in the Middle East and North Africa it grew by 12% (UNAIDS, 2006).

Having indicated the HIV increase rate in other regions apart from sub-Sahara, it simply means that any region in the world is vulnerable and susceptible to the infection of HIV regardless of social-economical or cultural background.

As mentioned earlier, a 16% decrease from 2006-2007 in the number of people living with HIV globally was noted. Of that decrease in the estimates published in 2006 and 2007, 70% were due to changes in six countries: Angola, India, Kenya, Mozambique, Nigeria and Zimbabwe. As it is known that sub-Sahara takes the biggest pie in people living with HIV, it is heartwarming to note that new trends of decline have been noted in two sub-Saharan African countries, namely Zimbabwe and Kenya (UNAIDS, 2008). The trend of decline appears to be associated with changes in risky behavior, leading to increased condom use, fewer sexual partners and sexual intercourse only after marriage (UNAIDS, 2008). In the rest of sub-Saharan Africa, the numbers of those infected with the pandemic appear to be leveling off, but the situation is at exceptionally high levels in most of Southern Africa, for example, the HIV pandemic in South Africa and Swaziland.
continues to grow (UNAIDS, 2008). There is equally no significant signs of decline of the HIV prevalence elsewhere in Southern Africa, including Botswana and Namibia.

Due to the diversity of the regions, it is inevitable that there is a need for a multi-sectoral response in addressing the epidemic.

### 3.2.1 Global efforts in addressing HIV/AIDS

According to WHO (2006), global efforts to address HIV/AIDS have advanced in recent years. Greater international political commitment has been accompanied by increased financial resources through the Global Fund to fight AIDS, TB and Malaria. The United States President’s Emergency Plan For AIDS Relief (PEPFAR) continued funding through World Bank loan and grant instruments.

According to AIDS Brief (2006), the United States Aid Agency (USAID) in collaboration with PEPFAR has helped fund 16 New Starts Centers where 40 000 Namibians have so far received HIV/AIDS testing and counseling services. Evidently, the Namibia Global Fund Programme (NGFP) phase I HIV/AIDS Grant was approved for US$ 26 082 802.00 for a period of 24 months (AIDS Brief, 2006:8). The Global Fund in Namibia is allocated to public and private sector organisations as well as civil and faith-based organisations to implement epidemic interventions countrywide. NGFP is a five-year programme consisting of two phases, phase I for two years (2005-2006), while phase II is for three years (2007-2009).
3.3 **HIV/AIDS in the Context of the Republic of Namibia**

The first four HIV/AIDS cases in Namibia were reported in 1986 and by 31 December 2003 a cumulative number of 136,068 HIV/AIDS cases had been recorded by the Ministry of Health and Social Services (MOHSS, 2004). Particular important push factors of HIV/AIDS in Namibia are the following (MOHSS, 2004):

(a) the high mobility of individuals between different places in the country,
(b) cross-border movement,
(c) high prevalence of Sexually Transmitted Infections,
(d) widespread alcohol and substance abuse,
(e) gender inequalities,
(f) poverty,
(g) certain cultural practices, for example, polygamy, which is encouraged because farming depends largely on the size of the family workforce. Entire families may be infected as a result of these polygamous associations. Another example, is “spouse inheriting”, were the spouse of the deceased brother is inherited by one of the remaining brothers. Sometimes the inheriting brother has a wife already. Such a practice might lead to the spread of HIV because of multiple sexual partners. The main rationale for such practice is to continue the procreation of the family’s lineage. In addition, Fox’s research in Northern Namibia (2002:327) (as cited in University of Namibia (UNAM) and The United Nations Population Fund (UNFPA), 2002: 16) reveals that men decide when sex should take place. Some of the people interviewed stated, ”*A woman has no right to refuse sex if she is not pregnant or menstruating. In our culture, women are not allowed to refuse sex. The man can overpower her or chase her from the house for refusing sex*”
(h) the disintegration of traditional family structures,
(i) inter-generational sex between older men and young women. This is more problematic because, according to Herselman (2003), infection often occurs when a girl has her first penetrative sexual encounter, especially, if such sexual penetration is unprotected, and
(j) ignorance of HIV/AIDS facts and refusal to change risky behaviours.
Nevertheless, commitments from the government of Namibia and the various stakeholders, and various implemented approaches in the fight against HIV/AIDS, continue strongly. The figure below indicates the percentage of HIV prevalence over a period of time. The HIV prevalence curve had a positive move from 1992 to 1996 with a moderate increase in 1996 from 15.4 to 22% in 2002. This was followed by a moderate decline in 2004 to 19.7% and apparent stabilisation to 19.9% in 2006 (MOHSS, 2007).

![HIV prevalence ratio in pregnant women, bi-annual surveys 1992-2008, Namibia](image)

Figure 1  HIV prevalence ratio in pregnant women, bi-annual surveys 1992-2008, Namibia
3.4 The impact of HIV/AIDS on the Public Sector

The public service in many countries takes up high percentage of the respective country’s workforce, hence the early loss of qualified employees in the public sector will result in a decline in the quality of public services and countries will find it hard to replace highly trained public servants such as nurses, doctors and teachers who fall victim to HIV/AIDS (Lisk, 2002). In addition, because of greater employment security in the public sector, the cost of absenteeism will be higher than in the private sector. Lisk (2002) further reiterates that in some countries, government employees may take up to one year sick leave with pay. Current estimates suggest that some Southern African countries will lose between one-quarter and one-third of their skilled and educated population due to HIV/AIDS (IFC, 2004). These losses will result in the steep decline of productivity and the loss of effectiveness of public administration.

3.5 The impact of HIV/AIDS on the Macro Economy: Government revenue and patterns of expenditure

It is evident that HIV/AIDS decreases the labour force as some employees become incapacitated and as a result they go on early retirement while some pass away. In the process, falling productivity is experienced which leads to a decrease in government revenue from individuals and enterprises. Botswana’s government expenditure, for instance, is expected to shrink by more than 20% over the next 20 years, as revenue bases are eroded (Lisk, 2002). At the same time, the costs to government associated with dealing with the pandemic account for an increasing proportion of the budget, crowding out other health and social development expenditures. Estimates by UNAIDS (as cited in Lisk, 2002) show that a decline in services in some of the affected countries in Southern Africa are substantial, accounting for between 20% and 90% the of health budget. In 1997 public health spending for AIDS alone already exceeded 2% of the Gross Domestic Product (GDP) in seven out of the 16 African countries sampled by UNAIDS (as cited in Lisk, 2002).
3.6 The impact of HIV/AIDS on organisations

In countries badly affected by HIV/AIDS, the pandemic affects the supply of labour and reduces income for many workers. Increased absenteeism raises labour costs for employers, and valuable skills and experience are lost (IFC, 2004). Lisk (2002) also opines that loss of skills and tacit knowledge on work makes it difficult to replace staff, even where a pool of unemployed people exists. HIV/AIDS affects the human health capacity and as a result, enterprises are also affected. Rising absenteeism and high employee turnover due to HIV/AIDS means that companies have to employ and train more people than usual. Often a disparity between human resources and labour requirements are the outcome. Stigma and discrimination negatively affect production and workplace morale; also the workload of non-infected workers rises, to the further detriment of their morale. In addition, the organisation suffers from lower productivity and profitability. Tax contributions to the central government also decline, while the need for public services, for example, the need for medical and health facilities increases.

What makes the disease more threatening is that it not only depletes health care and benefit costs, particularly in organisations which extend medical services to employees’ dependents, but it also reduces productivity for years, unlike other illnesses (IFC, 2004). Whiteside and Sunter (2002) (as cited in Jackson, 2002) illustrate the direct labour costs attributable to HIV/AIDS:
3.7 HIV/AIDS and the Mining Sector in Southern Africa

Mining is one of the major industrial sectors in most national economies of the Southern African Development Community (SADC) region, not only in terms of the number of people employed, but also in regard to the foreign exchange generated by mineral exports. In South Africa, experts believe that the industry which is hardest hit by HIV/AIDS is the mining sector (IFC, 2004). Studies of this sector show HIV infection rates range from one-quarter to almost one-half of the country’s miners.

In Zambia, where copper accounts for 85% of the country’s export earnings, 18% of the copper miners (skilled workforce) are estimated to be HIV positive. In Botswana, where diamonds account for 80% of export earnings and half of the government’s total revenue, a third of the industry’s employees are estimated to be HIV positive (IFC, 2004).
Labour is an essential input in mining and the sector’s use of labour leads to unique risk situations in respect of HIV transmission. A few examples to illustrate this factor include:

- In many mining situations, mechanisation is difficult and the industry is very labour-intensive. Rosh Pinah Zink Mine in Namibia is not an exception.
- The use of migrant labour is common, with the accompanying constant disruption of social support mechanisms and family structures, unpleasant living conditions and limited opportunities for leisure. This, in turn, creates situations conducive to the establishment of new and/or casual sexual relationships (IFC, 2004). In Rosh Pinah where two Zink mines are operational, the migrant labour situation does not only result in casual sexual relationships (because of distant marriages as one partner must remain and look after the household and the fields), but also the abuse of substances, which can also lead to indulgement in risky sexual behaviour.

Herselman (2003) stated that recent surveys have highlighted the risky lifestyles of most migrant workers. He gave an example of the repeated seasonality in rural venereal infection which was observed in the former region of Gazankulu (in South Africa), with a higher impact of STI's coinciding with periods when migrants visited their families, as well as during the winter months, with separated women resorting to prostitution. One main reason for prostitution is to earn money to make ends meet. Similarly, the same kind of situation was found in the area of Oshakati (Northern Namibia), where migrant workers visited the hospital for venereal treatment, followed by their wives and/or girlfriends several weeks later. Also, in Northern Senegal, one of the least infected parts of Africa, a survey found that 27% of men who had worked in other countries and 11,3% of their spouses tested HIV positive (Herselman, 2003). About 200 million workers are involved in migrant labour in West Africa, posing the risk of increased levels of HIV on their return.
The question asked by many is, why most mine workers indulge in risky sexual practice? Schoofa (1999) (as cited in Jackson, 2002: 27) answered this: “if you work hundreds of meters underground, where everyday you risk having a big stone fall on your head, then you will have a completely different perception of the risk of a virus that you can’t see and that will live in your body for ten years before you become sick”.

Jackson (2002) furthermore states that research describes how, for mine workers, this lack of control over their life circumstances in general and their health in particular, results in a risk-taking mentality which advocates high levels of sexual activity as a way of dealing with dangerous and stressful lives. Generally, some people’s view is that: “death is death”, whether by a big stone that crushes a person underground or by HIV/AIDS. However, it is important to educate workers to realise that HIV/AIDS is controllable and if it is prevented and managed, it will minimise many other social problems, for example, the creation of orphans and vulnerable children.

3.8 Need for Multi-Sectoral Responses

It is clear from the literature that HIV/AIDS is not only a health issue, but also a business or workplace issue. Therefore, a holistic multi-disciplinary approach from government, non-governmental organisations, as well as from the private sector is essential in addressing the pandemic.

3.8.1 Public Sector: National responses through the National Strategic Plan on HIV/AIDS

The Namibian strategic plan on HIV/AIDS, namely the Third Medium Term Plan (MTP III), forms a unique opportunity to address the challenges that Namibia faces in combating the HIV/AIDS epidemic during the period 2004-2009.
MTP III places particular emphasis on the importance of effective monitoring and evaluation of the epidemic. The national goal of MTP III is the reduction in incidence of HIV infection. To realise this goal, five key strategic results have been articulated as listed below by MOHSS (2009):

Table 2: MTP III-Key Strategic themes

<table>
<thead>
<tr>
<th>Theme (Components)</th>
<th>Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enabling Environment</td>
<td>People infected and affected with HIV/AIDS enjoy equal rights in a culture of acceptance, openess and compassion</td>
</tr>
<tr>
<td>Prevention</td>
<td>Reduction of new infections of HIV and other STIs</td>
</tr>
<tr>
<td>Access to Treatment, Care and Support Services</td>
<td>Access to cost-effective and high quality treatment, care and support services for all people living with, or affected by, HIV/AIDS</td>
</tr>
<tr>
<td>Impact Mitigation Services</td>
<td>Strengthen and expand capacity for local responses to mitigate socio-economic impacts of HIV/AIDS</td>
</tr>
<tr>
<td>Integrated and Co-ordinated Programme Management at all levels</td>
<td>Effective management structure and systems, optimal capacity and skills, and high quality programme implementation at national, sectoral, regional and local levels</td>
</tr>
</tbody>
</table>

Consequently, annual progress reports are produced to measure achievements and progress made on the implementation of the MTP III on HIV/AIDS, (Available progress report, April 2006-March 2007).
UNAIDS (2006) also adds that countries are striving forward with their HIV/AIDS awareness campaigns, as well as promoting the continued availability of access to free HIV Voluntary Counseling and Testing (VCT) and Anti-Retroviral treatment. What needs to be addressed is a change in the attitude and behaviour of individuals towards HIV. Hence, more research should be undertaken to explore individuals’ attitudes and behaviour around the issue of HIV/AIDS in order to address the gaps. A Knowledge, Attitudes and Practices/ Behaviour (KAPB) study is one of the tools that can be used to monitor and evaluate the effectiveness of an HIV/AIDS programme.

3.8.2 Private Sector response: HIV/AIDS Workplace Programme

Occupational Social Workers in the 21st Century are required to have a more comprehensive programme in order to deal with contemporary issues of HIV/AIDS effectively, thus, Jourbert & Brouard (2008) (as cited in Gresak & Dorkin, 2009, p. 409) illustrate in table 3 a framework for HIV prevention interventions:

Table 3: Framework for HIV Prevention interventions

<table>
<thead>
<tr>
<th><strong>Individual Level Intervention</strong></th>
<th>Assume that risky behaviours are due to individual, psychological needs or deficits. Examples includes:</th>
</tr>
</thead>
<tbody>
<tr>
<td>♦ Biological interventions like VCT and treatment</td>
<td></td>
</tr>
<tr>
<td>♦ Educational interventions eg. peer education programme</td>
<td></td>
</tr>
<tr>
<td>♦ Psychological intervention eg. counseling</td>
<td></td>
</tr>
<tr>
<td>♦ Group training sessions</td>
<td></td>
</tr>
<tr>
<td>♦ Awareness-raising</td>
<td></td>
</tr>
<tr>
<td><strong>Social Interventions</strong></td>
<td>Assume that risky behaviours are affected by norms, values and beliefs which are socially constructed, including:</td>
</tr>
<tr>
<td>➢ Stigma mitigation through positive message from leaders</td>
<td></td>
</tr>
<tr>
<td>➢ Shifting community norms</td>
<td></td>
</tr>
<tr>
<td>➢ Building positive social capital and social cohesion by supporting links and network</td>
<td></td>
</tr>
<tr>
<td>➢ Making safer-sex ‘sexy’</td>
<td></td>
</tr>
<tr>
<td>➢ Working in school and faith</td>
<td></td>
</tr>
</tbody>
</table>
Condom provision and sexuality information and education

<table>
<thead>
<tr>
<th>Intermediate Structural Level Interventions</th>
<th>Macro Level Structural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target the conditions outside the control of an individual, for example:</td>
<td>Target conditions which shape society including:</td>
</tr>
<tr>
<td>♦ Setting up local testing and treatment centers</td>
<td>♦ Poverty alleviation programmes</td>
</tr>
<tr>
<td>♦ Develop HIV policies and programmes in the workplace</td>
<td>♦ Developing relevant laws eg. regarding discrimination</td>
</tr>
<tr>
<td>♦ Offering social services, such as grants</td>
<td>♦ Developing national policies on treatment of refugees and asylum seekers</td>
</tr>
<tr>
<td>♦ Condomes social marketing</td>
<td>♦ Addressing gender inequity</td>
</tr>
<tr>
<td>♦ Local media strategies</td>
<td>♦ National media laws, policies and strategies</td>
</tr>
<tr>
<td>♦ Programmes on sex workers rights</td>
<td></td>
</tr>
</tbody>
</table>

In addition, IFC (2004) highlights the elements of a comprehensive HIV/AIDS workplace programme. The main elements will further be discussed briefly.

The purpose of the HIV/AIDS Workplace Programme includes, amongst many other goals, the prevention of new HIV infections and the provision of care and support for infected and affected employees. The elements are:

- Prevention through behavior-change communication;
• Peer education;
• Condom promotion and distribution;
• Sexual transmitted infection (STI) management;
• A safe working environment;
• A wellness programme consisting of;
  - Nutritional advice and support;
  - Lifestyle education;
  - Treatment of minor ailments;
  - Treatment of STIs;
  - Reproductive health services for woman;
  - Prevention and treatment of malaria;
  - Prevention and treatment of opportunistic infections;
  - Anti-retroviral therapy
  - Psycho-social support;
  - Family support;
  - Referral networks and partnerships; and
  - Highly active antiretroviral therapy (HAART) programmes

A) Prevention through Behaviour-Change Communication

Behaviour-change communication (BCC) is a multi-level tool for promoting and sustaining risk-reducing behaviour change in individuals and communities by means of tailored messages and using a variety of communication channels (IFC, 2004). Even in situations where HIV prevalence is high, the majority of employees are still uninected, and prevention efforts should always remain an important component of workplace responses to HIV/AIDS. Occupational social workers can also make use of meso-training or other group initiatives that involve peers, partners, unions to change individual behaviors (Gresak & Dorkin, 2009).
B) Peer Education

Peer education, in its broadest sense, refers to a programme designed to train select members of any group of equals in order to effect change among members of that same group (IFC, 2004). Peer education is a means whereby the effectiveness of a single trained educator can be multiplied.

In general, peer education is based on behavioural theory which asserts that people make changes not because of scientific evidence or testimony, but because of the subjective judgment of close, trusted peers who have adopted changes and who act as persuasive role models for change. As Peer Education is an initiative under occupational social work, it is the responsibility of the occupation social worker to empower and strengthen the Peer Educators to function effectively. Gresak & Dorkin (2009) add that Peer Educators need to be updated with new skills and knowledge in order to be suitable and be able to meet the needs of the population in need, otherwise the purpose of the Peer Education Programme will be compromised. Further, Gresak & Dorkin (2009) said that Peer Education Programmes in many companies fail due to lack of management support. Thus, the occupational social workers should be innovative and creative in sustaining the Peer Educators, together with marketing the work of Peer Educators to management for support and recognition.

C) Condom Promotion and Distribution

Condom promotion and distribution aims at encouraging safer sexual practices through raising awareness and opening the debate about safer sex and condom use and ensuring that supplies of condoms are readily accessible, when and where they are needed.
Since the earliest days of the HIV/AIDS pandemic, the use of male condoms has been a central component of prevention initiative. Male and (more recently) female condoms, when used consistently and correctly, can effectively help prevent HIV infections, other STIs and unplanned pregnancies among people who are sexually active and who need to protect themselves.

**D) Safe Working Environment**

To prevent the transmission of HIV in any work environment, the central strategy is the adoption of universal infection control precautions. Typically these precautions are part of broader occupational health and safety procedures (IFC, 2004).

**E) Voluntary Counseling and HIV Testing (VCT)**

Voluntary counseling and testing (VCT) refers to confidential HIV testing done on an individual basis to establish his/her HIV status. After having undergone pre-test counseling, the individual voluntarily consents to the test (IFC, 2004). VCT also implies that post-test counseling will be provided when the person receives his/her test result.

VCT is more than drawing and testing blood and offering a few counseling sessions. It is a vital point of entry to other HIV/AIDS services, including prevention of mother-to-child transmission control, and psycho-social and legal support. VCT provides benefits for those who test positive as well as those who test negative. VCT alleviates anxiety, increases a client’s perception of their vulnerability to HIV, promotes behavioural change, facilitates early referral into a wellness programme for treatment, care and support including access to anti-retroviral therapy, and assists in the reduction of stigma in the community (IFC,
On-site VCT services can enable companies to track employee responses to the HIV/AIDS programme, by monitoring their uptake of the VCT service.

F) Prevention of Mother to Child Transmission (of HIV) (PMTCT)

A PMTCT programme aims to reduce the rate (and overall numbers) of HIV transmission from infected mother to child; and to contribute to improving the health status of children and mothers, whether HIV-infected or not (IFC, 2004). This can be done by preventing unwanted pregnancies, improved antenatal care and management of labour, providing antiretroviral drugs during pregnancy and labour, modifying feeding practices for newborns and provision of anti-retroviral therapy to newborns.

The workplace therefore needs to play a role in this important prevention intervention, which constitutes an important investment in the future of any country. Gresak & Dorkin (2009) emphasised that although biological interventions, for example, PMTC and ART, are not the primary work of an occupational social worker, occupational social workers are still required to have a good understanding of the biology of HIV/AIDS and its treatment for an effective facilitation and co-ordination of the HIV/AIDS workplace programme.
G) Wellness Programme

According to IFC (2004), a wellness programme is a multi-faceted, multi-disciplinary workplace treatment, care and support programme, into which HIV/AIDS has been integrated. It aims to benefit:

- The organisation, by keeping HIV/AIDS infected employees healthy and fit to work for as long as possible;
- HIV-infected employees, by delaying the onset of illness and AIDS, preventing opportunistic infection and providing a range of treatment, care and support services and options;
- HIV/AIDS affected employees, by providing support services and options; and
- All employees, by creating an enabling, caring and supportive working environment.

There are many reasons why an organisation should establish and implement a wellness programme. These reasons include:

- Wellness programmes delay the need for HAART (highly active antiretroviral therapy). Employees with HIV disease will experience ever more frequent illnesses and will become progressively incapacitated. With appropriate prophylaxis these episodes can, to a large extent, be prevented and if they do occur, they can often be managed at primary health care level (such as at an occupational health clinic).
- Even where HAART is available there is need for a system of delivery and careful monitoring. Wellness programmes also promote adherence, prevent side effects and help delay the onset of resistance to ARVs.
- HIV/AIDS is a disease with profound psycho-social implications, which, if not managed appropriately, can be as debilitating as the physical effects of the disease.
i) A Wellness Programme should consist of the following elements (IFC 2004):

1. Nutritional advice and support

A PLWHA’s good nutritional status is a critical requirement for continued health. Advice includes what food to eat and not to eat; how to use food to boost the immune system, on the one hand, and to fight opportunistic infection, on the other; how to prepare and store food safely; and how to maintain one’s appetite.

Support for good nutritional status takes the form of nutritional supplements, vitamins and trace elements.

2. Lifestyle education

Often referred to as positive living, this is a way of living in which PLWHAs take control of their physical, mental and spiritual health. It involves diet and healthy nutrition; limiting unhealthy practices, such as alcohol consumption and smoking; regular exercise, relaxation and meditation; avoiding stress; practices to prevent HIV transmission and re-infection; making plans for the future and sharing problems.

3. Psycho-social support

Psycho-social support is arguably as important as medical care for PLWHAs. It can take the form of one-on-one counseling or support group activities. The HIV Strategic Plan for 2007-2011 according to the Department of Health (2007) (as cited in Gresak & Dorkin, 2009, p.410) states that: “Less emphasis has been given to the psycho-social impacts of the disease, which are related to illness and death of parents, children, and other family members”. Thus, the role of an occupational social worker in providing social support is essential, through individual counseling or support groups.
Naude & Weyers (2009, p.478) also added other components of an ideal HIV/AIDS Workplace Programme:

1. Comprehensive HIV and AIDS policy;
2. Management involvement and strategies;
3. Communication and marketing strategy
4. Partnership and networking
5. Monitoring and evaluation system
6. Feedback and reporting back
7. HIV/Wellness education and awareness campaigns
8. Specialised training and education

Above all, it is worth mentioning that it is of great importance to have a comprehensive Wellness Programme in addressing HIV/AIDS as well as overall wellness, and not only focusing on a purely HIV/AIDS programme. When dealing with HIV/AIDS only, not only does it create stigma and fear of being labeled when seen at the HIV/AIDS Coordinator’s office, but also the programme itself does not support or benefit employees at all levels and/or employees with other wellness needs.

3.9 Background to HIV/AIDS Knowledge, Attitudes and Practice Studies

Companies that conducted Knowledge, Attitude, Practice and Behaviour (KAPB) studies within the workforce found it to be a very useful practice for the development, as well as for the monitoring and evaluation, of HIV programmes (Price Waterhouse Coopers, 2007). The implementation of Knowledge, attitudes, and practice studies focusing on employees is increasing, even though in the past such studies only focused on students, professionals and the public.
3.9.1 Level of Education and HIV/AIDS Knowledge

Several recent studies discussed below have examined the HIV/AIDS knowledge levels of adolescents and adults.

According to Uwalaka and Mutsao (2002), many researchers, for example, Al-Owaish, et al., (1999) Asuzu, (1994) Buysse, (1996) and Carducci, et al., (1995) have found moderate to high levels of knowledge about HIV/AIDS across cultures. Roscoe and Kruger (1990) on the other hand studied junior and senior college students and found that while 90% of the participants answered two-thirds of questions correctly, a variable concerning the cause of HIV/AIDS was the only question incorrectly answered by about 50% of the participants (Uwalaka & Mutsao, 2002). It is assumed that the higher the level of education a person attains, the more knowledgeable the person is about HIV/AIDS. However, other studies show this not to be the case, for example, some have shown that there were low levels of HIV/AIDS knowledge among college students, showing that a large proportion of respondents did not have accurate knowledge of the causes and prevention of HIV/AIDS transmission (Uwalaka and Mutsao, 2002).

3.9.2 HIV/AIDS Knowledge and Practices

It seems that there is little correlation between HIV/AIDS knowledge and practices, because a number of studies have shown that there is still high engagement in unsafe sexual behaviours. For example, a high average number of partners, sex with an unknown person, as well as less than positive views about condom use and a low rate of behaviour change, even after learning about HIV/AIDS, according to Al-Owaish, (1999); Buysse, (1996); Gray and Saracino, (1989) (as cited in Uwalaka and Mutsao, 2002). This suggests that a moderate to high knowledge level of HIV/AIDS may not necessarily be a predictor of safe sexual behavioural practices, explain Gray and Saracino (1989) (as cited in Uwalaka and Mutsao, 2002). On the contrary, studies of American and Nigerian
adolescents suggest that as a result of the threat of HIV/AIDS, adolescents intend to make, or have made, changes in their sexual behaviour and report lower engagement in unsafe sexual behaviours Asuzu (1994) Roscoe and Kruger (1990) (as cited in Uwalaka and Mutsao, 2002).

3.9.3 HIV/AIDS Knowledge and Attitudes

Regarding the correlation between HIV/AIDS knowledge and subsequent attitudes towards people with the virus, Waddingham (2003) states that it has been consistently found that as one’s level of HIV/AIDS knowledge increases, so too does one’s tolerance and empathy for people living with HIV/AIDS. To correlate this, the opposite was found to be the case in those individuals who have poorer levels of HIV/AIDS knowledge, who have been found to be more intolerant and un-empathetic towards people with HIV/AIDS. The reason for such attitudes, Waddingham (2003) further states, is due to misinformation, misconception about the transmission and lack of knowledge around prevention of HIV/AIDS.

Having considered all the above factors, it is important then to understand the relationship between knowledge, attitudes, and behaviour from a theoretical point of view.

3.10 THEORETICAL FRAMEWORK

There are quite a number of theories or models which attempt to explain a variety of human behaviors by linking knowledge to attitudes and behaviour. Overall, the merging of components from various theories is common, as researchers and programmers seek to gain a better understanding of how behaviour change occurs (Denison, 1996).

One such theory is from Prochaska, et al., (1992) (as cited in Denison, 1996). This theory focuses on stages of change, namely the pre-contemplation, contemplation, action, and
maintenance stages. Since then, a fifth stage (preparation for action) has been incorporated into the theory, as well as ten processes that help predict and motivate individual movement across the stages (Denison, 1996).

This theory attempts to explain that before behaviour is changed a problem or concern must exist, despite whether the individual recognises it or not, and that stage is known as:

I. **Pre-contemplation stage** The process that it follows is consciousness rising through information awareness. This stage illustrates that through feedback and the reception of information one becomes aware of the problem.

II. **Contemplation** This is where an individual recognises the problem and is seriously thinking about changing the situation. The process that follows is where one evaluates and re-evaluates the existing behavior and considers possibilities for change.

III. **Preparation for Action** This is the next stage, where an individual recognises the problem and intends to change the behaviour. Some behaviour change efforts may be reported, such as inconsistent condom usage. Another stage is where an action is being taken, meaning that an individual has enacted consistent behaviour change, for example, embarking on consistent condom use or having a more empathetic attitude towards HIV/AIDS people, or avoiding high-risk behaviours.

IV. The last stage of this theory is the **Maintenance Stage**, where an individual consistently maintains a new behaviour for a period of six months or more.

Some studies like Al-Owaish, (1999), Buysse, (1996), Gray and Saracino, (1989) (as cited in Uwalaka & Mutsao, 2002) have stated that there is weak, or no correlation between knowledge and behaviour. The above-mentioned theory provides a framework assuming that there is a correlation between knowledge, attitude and behaviour. It is through the stages of change as mentioned above that the change starts: after becoming
more knowledgeable an individual may start to re-evaluate the current behaviour and reconsider change, and finally change their behaviour or attitude.

The limitations in the Stages of Change Theory are that it focuses on individuals without assessing the role that structural and environmental issues may have on a person’s ability to enact behaviour; and that each of the stages may not be suitable for characterising every population (Denison, 1996). One cannot deny the fact that even if one is knowledgeable about HIV/AIDS, socio-economic and environmental factors can still have an impact on a person’s ability to change a behaviour or attitude. For example, Rosh Pinah, as a mining town with a migrant labour force, is faced with common disruption of social support mechanisms and family structures, unpleasant living conditions and limited opportunities for leisure. Not only does it lead to casual sexual relationships, in most cases, it results in risky sexual behaviours, for example: having unprotected sex or not being faithful to one’s sexual partner.

The second theoretical model is that of Rosenstock et al., (1994) (as cited in Denison, 1996) known as the Health Belief Model (HBM). This model attempts to explain and predict health behaviours by focusing on the attitudes and beliefs of individuals (Denison, 1996). There is not much difference between this theory and the Stages of Change Theory, except that HBM shows that an individual’s behaviour and attitudes are influenced by one’s background, for example, one’s education, age, sex, race and ethnicity. It also illustrates that one’s background has an impact on one’s perceptions and attitudes, which will result in one’s action. External motivators, such as public education campaigns, an image of a person dying from AIDS, or informal support groups may also cause people to examine and potentially change their sexual activities (Denison, 1996). Other factors such as environmental or economic factors that may influence health behaviours are not taken into consideration. The model also does not incorporate the influence of social norms and peer influences on people’s decisions regarding their health behaviours (Denison, 1996).
3.11 Conclusion

One can conclude that, far from being a health issue alone, HIV/AIDS is an economic, social, humanitarian, security and development issue that cuts across all sectors of society, globally. Thus, the threat of HIV/AIDS and its devastating effects should not be left to government to manage alone. It is clear from the literature that HIV/AIDS is a national and global crisis, the effects of which seriously affect organisations, the public sector and the macro economy. In light of this concern, commitment from all sectors nationally and globally is necessary to prevent and manage HIV/AIDS. To monitor and evaluate HIV/AIDS efforts, HIV/AIDS education programmes, awareness, business strategies, policies and empirical research can be used. Thus, companies use Knowledge, Attitude and Practice and Behaviour (KAPB) studies within the workforce and find it to be a very useful practice for the development, as well as for the monitoring and evaluation of HIV programmes, even though some company’s KAP/B studies are not always reliable and/or valid.
CHAPTER FOUR

4. RESEARCH DESIGN AND METHODOLOGY

4.1 Introduction

This chapter outlines how the research process was carried out. The strengths and limitations of the research design are explained. The focus is on the research design and method used, including sampling techniques, methods of data gathering, ethical considerations, as well as the control measures taken to ensure soundness and trustworthiness of the research.

4.2 Research design and methodology

A research design is a plan on how one envisages conducting the research. The research design according to Punch (2004) is the link between the research question and the data to be collected, i.e. the process followed from the question posed to how it will be collected and interpreted in order to find the answers.

An exploratory research design using a mixed design approach was employed to investigate the existing knowledge, attitudes, and practices related to HIV/AIDS by the workforce at the Rosh Pinah Zink Mine Corporation in Namibia. “Explorative research is conducted to gain insight into a situation, phenomenon, community or individual” Bless & Higson-Smith (1995) (as cited in De Vos, Strydom, Fourche & Delport, 2005, p.106). In addition to a small scale survey, qualitative data was collected by means of a focus group to supplement the mainly quantitative questionnaire data.
4.2.1 Mixed Design Approach: Qualitative and Quantitative

A qualitative design has been used due to the fact that the research is aimed at exploring and obtaining detailed descriptions of the employee’s existing knowledge, attitudes and practices with regards to HIV/AIDS. A quantitative research design was also used to measure and quantify the results.

Neuman (2000 p.122) explained: “Quantitative researchers are more concerned about issues of design, measurement and sampling because their deductive approach emphasises detailed planning prior to data collection and analysis; whilst qualitative researchers are more concerned about issues of richness, texture and the feeling of raw data because their inductive approach emphasises developing insights and generalisations from the data collected”.

Strengths for using mixed approaches, according to Punch (2004):

i) The mixture of both approaches means that one can compliment and supplement the another regarding the weaknesses of each approach, thus the researcher will gain a deeper understanding of the research problem;

ii) Findings can be validated by checking the results gained through each approach against the other.

4.2.2 Limitations of the Research Design

The limitations of a qualitative research design are as follows:

- Not all non-verbal communication could be captured during the focus group discussion as the researcher was focusing on the discussion.
- The interpretation of some data could have been influenced by the researcher’s subjectivity.
Participants who experienced language barriers could not answer their open-ended questions and some did not elaborate their answers sufficiently for the researcher to understand what they really meant.

Qualitative research in general is more time consuming due to the intense data gathering through a focus group discussion, as well as through open-ended questions.

Focus groups are often small in size, thus, the discussion thereof is not necessarily representative of the larger population.

The limitations to a quantitative research design are also noted as follows:

- The researcher being present with the respondents may have influenced the process due to the researcher’ own perceptions and opinion.
- The participants are assumed to provide generalised answers and subsequently provide answers that they think the researcher wants to hear, which are not necessarily a true reflection of their own views.
- It could also be that Peer Educators who assisted participants who had language and writing barriers might have influenced the answers of the participants.

### 4.2.3 Sampling procedure

A stratified sample comprising of 123 out of 561 employees across the mine workforce served as respondents. The procedure became a stratified sample as the different segments of the workforce were represented. Stratified samples are mainly used to ensure that the different group or segments of a population are sufficiently represented in the sample Chadwick et al., (1984: p 59) and Nachminas (1981: p.434) (as cited in De Vos et al., 2005, p.200).

Morgan (1997: p.6) (as cited in De Vos et al., 2005, p.300) describe the focus group as a research technique that collects data through group interaction on a topic determined by
the researcher. The researcher decided to use a focus group as an additional source of data gathering to supplement the data collected through the questionnaire.

The above sampling procedure applied to the focus group as well. Twelve employees from across three levels (top management, middle management (grade g & f) and grade 5 and below were invited to serve in a focus group, however, only seven employees turned up. The management was represented in the focus group.

4.3 Research Instrument

4.3.1 Questionnaire

A Maasdorp (2008) standardised questionnaire was used to obtain both quantitative and qualitative information from the respondents.

The questionnaire contained closed-ended, follow-up questions, as well as open-ended questions, to measure the employees’ knowledge, attitudes and practices with regards to HIV/AIDS. In addition, the questionnaire also measured the employee’s perceptions about their company’s HIV/AIDS Programme. The questionnaire comprised of three sections. The first section covered the employees’ general characteristics. The second section addressed the employees’ personal opinions, while the third section addressed the employees’ perception about their company. In order to ensure that baseline requirements for KAP studies were followed, the researcher consulted a previous questionnaire by Maasdorp (2008). A few questions were added to suit the background of the research population and the aim of the research. The following was incorporated in the questionnaire:

- Different departments at Rosh Pinah Zink Mine
- Different position grades
- Open-ended questions (22 & 23)
4.3.2 Focus group interview guide

A semi-structured interview guide was used to obtain information from the focus group. The researcher gained permission from the focus group respondents to record the focus group interview on tape.

Table 4: Rational for the focus group questions

<table>
<thead>
<tr>
<th>Questions</th>
<th>Rational</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is your deepest concern about HIV/AIDS in general?</td>
<td>The researcher needed to ask general questions before moving to more specific questions. General questions help participants feel at ease and comfortable to participate further as the first moments of the group discussion are critical Seidman (1998: p. 63-77) (as cited in De Vos et al., 2005: p. 288).</td>
</tr>
<tr>
<td>What do you think about employees knowledge with regards to HIV/AIDS, are they knowledgeable?</td>
<td>The researcher wanted a qualitative assessment from employees on whether employees are knowledgeable on HIV or not, in order to compare with the quantitative data.</td>
</tr>
<tr>
<td>What contributes to the spread of HIV/AIDS here? Why is it still increasing?</td>
<td>The researcher wanted to determine whether there is a correlation between knowledge and practice, for example, to understand why HIV is still increasing if they claimed to be knowledgeable on HIV/AIDS.</td>
</tr>
<tr>
<td>How should people protect themselves against HIV/AIDS?</td>
<td>To assess employees’ knowledge on HIV/AIDS issues, including prevention.</td>
</tr>
<tr>
<td>How do you describe the employee’s attitudes towards those infected?</td>
<td>To obtain information on employees’ attitudes towards working with people living with HIV/AIDS.</td>
</tr>
<tr>
<td>How do employees feel about going for HIV Testing and VCT?</td>
<td>To obtain information on employees’ feelings about going for HIV testing and VCT.</td>
</tr>
<tr>
<td>Where do people prefer to go for an HIV test, is it at work through VCT campaign or</td>
<td>To determine whether the company has an enabling environment for employees in</td>
</tr>
</tbody>
</table>
outside at you GP?  
Do you think it is necessary to disclose?  

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
</table>
| Do you have an HIV/AIDS Policy?  
What is the content of your policy? | Based on the former, to arrive at a set of recommendations for the improvement and the development of the HIV/AIDS intervention programmes. |
| What can be done to improve the HIV/AIDS/Wellness Programme? | |

### 4.3.3 Piloting of the research instrument

The questionnaire was piloted in a company in Windhoek that operates similarly to Rosh Pinah Mine. The questionnaire was piloted on six employees across all levels and a few weaknesses was identified and rectified, for example, the word “promiscuous” was used in the initial questionnaire which was difficult for some respondents to understand and the researcher simplified it to “male with multiple sexual partners”, another position grade which was left out was included, similar questions on ‘HIV/AIDS as a punishment’ and another on VCT were removed. The layout of the questionnaire was also modified.

### 4.4 Data Collection procedure

The management of Rosh Pinah Zink Mine granted permission for the researcher to conduct the research. A month before the actual data collection date the researcher contacted the management of Rosh Pinah Zink Mine in order to remind them of the research date. The researcher also contacted the Wellness Co-ordinator of the company in this regard so that the Wellness Co-ordinator could raise awareness across the mine of the impending research.

Upon arrival, it was arranged that the researcher was to first visit the Human Resources manager as well as the Wellness Co-ordinator with regards to logistical arrangements, for example, being issued an access card and being introduced by the Wellness Co-ordinator to different departments. Finally, the researcher started collecting data through a convenient sequential sample, as earlier explained in the paragraph on “sampling procedure”.
4.4.1 Questionnaire

The respondents were given the questionnaires by the researcher personally which included an attached letter of informed consent. The researcher collected the questionnaires immediately after the respondents had completed it. Some respondents asked the researcher to return later to collect the questionnaires, which was done successfully.

The questionnaire was written only in English, therefore the researcher was assisted by Peer Educators where a language barrier was experienced. The researcher administered the questionnaire herself. This provided an opportunity to explain and clarify certain issues.

4.4.2 Focus group

Focus group respondents were selected through a convenient sequential sampling procedure and each respondent was given a letter of informed consent days before meeting. The researcher met with the focus group in the boardroom as agreed.

4.5 Data Analysis

The information collected by means of the survey was subjected to both quantitative and qualitative data analysis, while the focus group transcripts were thematically analysed. The descriptive statistical and thematic analysis results will be presented in Chapter 5.

*The quantitative data analysis*

The quantitative survey data was captured and descriptive statistics were produced using the Statistical Package for the Social Science (SPSS). Thematic analysis was used to
analyse the open-ended survey questions. A coding scheme was devised which was then applied in order to categorise these responses into themes.

*The qualitative data* has been analysed through thematic analysis.

In analysing the data collected through the *focus group*, the researcher looked for trends and patterns that re-occurred within the focus group discussion. The researcher started with the pre-analysis, through notes taken during the focus group discussion, including non-verbal communication detected. Finally, the data collected was transcribed and coded by the researcher. The data collected from the focus group was analysed using thematic analysis. In the process of analysis, the researcher has considered the words, the context and all comments, as well as what was not said, according to guidelines by Morgan & Krueger (1998) (as cited in Des Vos et al., 2005).

4.6 Ethical Considerations

Gravetter & Farzano (2003) (as cited in Des Vos et al., 2005, p. 56) state that “researchers have two basic categories of ethical responsibility, namely responsibility to all those, both human and non-human, who participate in a project; and responsibility to the discipline of science, to be accurate and honest in the reporting of their research”.

The following ethical issues were considered:

- **Privacy.** No information disclosing the identity of the respondents was requested or collected from individuals completing the questionnaire in order to ensure their privacy. With regards to the focus group, pseudonyms were used in place of real names.
- **Confidentiality.** The focus group was not fully confidential or anonymous, because there was more than one person in the group and they all knew one another. Therefore the researcher encouraged group members to maintain
confidentiality regarding what they heard during the meeting. The researcher also explained that the notes and audiotapes would be kept completely confidential.

- **Publication of the findings.** Data collected was designed to ensure no individuals could be identified. At no time will individual research responses be showed to, or communicated with, management. The report on the research results will be designed to ensure anonymity and maintain the confidentiality of respondents.

- **Informed consent.** A letter of informed consent was issued to all respondents to inform them of the purpose of the study as well as the research procedure. This letter also highlighted voluntary participation of respondents in the study, without any negative consequences if employees refused to participate.

- **Possible emotional harm to research participants.** To minimise possible emotional distress and/or discomfort that may occur during the study, the researcher arranged that the Rosh Pinah Zink Mine’s Employee Wellness Co-ordinator offer counseling sessions, however this was not required.

### 4.7 Reliability and Validity of the Study

“Reliability and validity are central issues in all measurement. Both concern how concrete measures are connected to constructs“ (Neuman, 2000, p.164).

Even though perfect reliability and validity are virtually impossible to achieve according to Neuman (2000), the researcher increased reliability through piloting the research instrument to ensure clarity and format. Reliability suggests that the same thing is repeated under similar conditions (Neuman, 2000), thus the researcher used the previous standard questionnaire by Maasdorp (2008), and the questionnaire was piloted on six employees across all levels. A few questions were added to suit the background of the research population and the aim of the research. The reliability aspect was concerned with the consistency of the measures (Neuman, 2000).
Validity implies truthfulness and refers to the match between a construct, or the way a researcher conceptualises the idea in a conceptual definition, and a practical measure (Neuman, 2000). To ensure Face validity, the researcher made sure that the questionnaire measured what it was intended to measure in relation to the primary and secondary aims of the research.

4.7.1 Soundness and Trustworthiness of the Study

Padgett (1998) identified ways to increase the trustworthiness of the study:

- Researcher should prolong his/her engagement with participants for participants to become comfortable.
- By using more than one type of research tool, triangulation.
- Peer de-briefing/support for the researcher to ensure objectivity.
- Member checking is done by going back to the participant to verify information.
- Maintaining an audit by ensuring that every part of the process of data collection and analysis are kept, such as raw data and a recorded group discussion and transcripts.

Of the above, the researcher used more than one type of research tool, namely, the questionnaire and the focus group interview, to increase validity. In addition, the researcher will maintain an audit in accordance with ethical requirements by ensuring that the raw data and recorded group discussion and transcripts are kept for six years, to ensure trustworthiness.

4.8 Conclusion

This chapter explained the procedure through which the research was conducted, from selection of the research population to data collection and analysis. Ethical considerations, as well as the control measures taken to ensure the soundness and trustworthiness of the study, were also discussed
5. RESEARCH RESULTS

5.1 Introduction

An exploratory research design was employed to investigate the existing knowledge, attitudes and practices related to HIV/AIDS prevalent in the workforce at the Rosh Pinah Zinc Mine Corporation in Namibia. Exploratory research as earlier explained is conducted to gain insight into a situation, phenomenon, community or individual Bless & Higson-Smith (1995) (as cited in De Vos, Strydom, Fourche & Delport, 2005, p.106). In addition to a small-scale survey, qualitative data was collected by means of a focus group to supplement mainly quantitative data. The results are reported through tables, graphs, figures, consolidated themes and verbatim quotations. The process and procedure of the means of data collection is discussed in chapter 4.

In this section the demographic information of participants will be highlighted and research findings discussed.

5.2 Research Results

5.2.1 Demographic Information of Participants

Twenty percent (123 employees) of the total workforce of Rosh Pinah Zinc Mine Corporation participated in the research. The majority of respondents who took part were single young male employees, whose highest level of education was Grade 12 or less (see Figure 3 & 4).
Furthermore, as Figure 5 below shows, most were employed as lower-level workers in the mining department (64 participants or 52%).
Figure 5: Department by job level (N=123)

About a third (41 participants) were mid–level employees (married with Grade 12 education or higher, working mostly as engineers) and the remaining 15% (18 respondents) were supervisors and top managers who were older, married employees working in various departments.

5.2.2 HIV/AIDS in general

i) Employees’ concerns

HIV status disclosure remains a problem compared to other chronic diseases, due to the negative connotations attached to the disease. People fear losing their jobs, even though laws and policies emphasise that HIV-positive employees will not lose their jobs due to their status or be discriminated against. Employees are also afraid of being disliked and of their children being rejected, and fear being judged directly or indirectly by society and fellow employees Sister Meyer (as cited in Perspective African Journal on HIV/AIDS, 2009). Participants had the following to say:
Table 5: Employee’s concern with regards to HIV/AIDS: Quotes from participants

<table>
<thead>
<tr>
<th>Employee’s concern with regards to HIV/AIDS</th>
<th>Quotes from participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fear of rejection</td>
<td>“HIV/AIDS, nobody knows how it feels to fear HIV/AIDS. If you deal with your fear, you are free and healthy, then you can live longer. The fact is that it is still kept closed.”</td>
</tr>
<tr>
<td></td>
<td>“Fear for rejection, it is the fact that you don’t know what people’s reaction may be, or what they will say. Will my family accept me, even my teenage daughters?”</td>
</tr>
<tr>
<td></td>
<td>“People are afraid to disclose, … to reveal.”</td>
</tr>
<tr>
<td></td>
<td>“.people fear at work even if they are under medication… people still go on even if the doctor says don’t says don’t do this or that.”</td>
</tr>
</tbody>
</table>

ii) Factors contributing to the increase of HIV/AIDS

Despite continuous mitigation services in the fight against HIV/AIDS, it is still on the increase (UNAIDS, 2009). One of the factors contributing to its increase is the influence of traditional beliefs (The Center for the Study of AIDS, 2008), such as:

- The virus being the result of sin
- HIV being caused by condoms or witchcraft
- Muslims are impervious to HIV
- White people brought AIDS to Africa
- The power of sexual intercourse with a virgin to cure HIV/AIDS

One of the participants recalled: “Condoms promote infection...it is the work of the devil, it is sin that does that”. In addition, we heard: “Condom is the ...root cause of HIV/AIDS. We need to make a plan according to the church, because it is the work of the devil".
The learning here is that HIV/AIDS programme custodians, including occupational social workers, should go further in the community to challenge the societal norms, values and beliefs influencing individuals' behaviour and in some cases contributing to the increase of the HIV/AIDS.

The rest of the participants indicated the following factors as contributing to the increase of HIV/AIDS:

### Table 6: Factors contributing to the increase of HIV/AIDS: Quotes

<table>
<thead>
<tr>
<th>Factors contributing to the increase of HIV/AIDS</th>
<th>Quotes</th>
</tr>
</thead>
<tbody>
<tr>
<td>The infected are unknown and infect innocents</td>
<td>“HIV/AIDS increases because people are not known..., then if you are infected, you also infect others deliberately, kind of a revenge.”</td>
</tr>
<tr>
<td></td>
<td>“...infecting the innocent ones.”</td>
</tr>
<tr>
<td>Community norms, values and beliefs</td>
<td>“One man has three wives, one here, one there, engaging in risky sexual behavior, … tradition allows or encourages a man to have more than one wife or sexual partner, and through that, HIV increases.”</td>
</tr>
<tr>
<td></td>
<td>“Morals and values in … society are degraded. You cannot have another partner every night.”</td>
</tr>
<tr>
<td>Socio-economic conditions of migrant labour</td>
<td>“With migrant labour it is even worse because you have left your family far to come to work; that also leads you to have another sexual partner … and maybe your partner on the other side also does the same and in addition, protected sex is not guaranteed.”</td>
</tr>
<tr>
<td>Alcohol abuse and other sexual partners</td>
<td>“In my past experience, my husband abused alcohol and had other sexual partners and that created conflict, yet he beat me when I asked to use a condom and accused me of sleeping around.”</td>
</tr>
<tr>
<td>Ignorance</td>
<td>“Some woman are beautiful and they look healthy, and when one tells you she is HIV positive, you disbelieve her and pretend to put the condom on... So you become infected and take revenge and infect others.”</td>
</tr>
</tbody>
</table>
5.2.3 Knowledge of HIV

i) Level of HIV/AIDS knowledge

Knowledge is the first step in behavioural change. According to Hyde & Associates (2001) accurate knowledge assists individuals in making appropriate choices, while cautioning that knowledge alone is not enough to change behaviour. The majority of participants in this study (99.2% or 120) knew what HIV/AIDS is, and only 4 (3.3%) indicated they did not know what a sexually transmitted disease is.

Encouragingly, 82% of respondents (101) correctly answered the knowledge statements. In terms of knowledge on transmission, 25% (31 participants) answered incorrectly when asked if a person can be infected with HIV through a French (tongue) kiss. Likewise, 18% (22) of participants answered incorrectly when asked if a person can be infected with HIV through a mosquito bite. Clear information on HIV transmission therefore needs to be re-emphasised.

With regard to knowledge of HIV prevention, 107 participants (87.%) indicated that the slogan of Abstinence, Be faithful, Use a Condom, also known as ABC, is considered the best way of preventing HIV. One participant added, “The best way to protect yourself is to abstain, be or remain faithful, and use a condom every time you have sex”. Good knowledge of the basic facts about HIV/AIDS, how it is transmitted and how it can be prevented, is the first step to empowering people (Hyde & Associate, 2001).

ii) HIV/AIDS knowledge and level of education

It is assumed that the higher the level of education a person attains, the more knowledgeable the person is about HIV/AIDS. However, other studies have shown this not to be the case. For example, some have demonstrated that there were low levels of HIV/AIDS knowledge among college students, reporting that a large proportion of
respondents did not have accurate knowledge of the causes and prevention of HIV/AIDS transmission (Uwalaka and Mutsao, 2002).

However, current research findings confirm that the higher the education level, the higher the knowledge of HIV/AIDS. Findings indicate that participants with a diploma, degree or post-graduate education scored higher in knowledge statements, with an average percentage of 87.9%, whilst participants with a lower level of education (Grade 10) scored the lowest, with an average knowledge statement score of 78%.

During the group discussion, one participant stated that “supervisors walk out when it is time for a HIV/AIDS information session”. On the surface, this could imply that supervisors are less knowledgeable about HIV, due to their absence in HIV education sessions. However, a breakdown of HIV/AIDS knowledge statement results by job level reveals that management is actually more knowledgeable, achieving the highest aggregate score (94.9%).

Table 7: Measure of HIV/AIDS knowledge by job level of participants (N=123)

<table>
<thead>
<tr>
<th>Knowledge Statements</th>
<th>Correct Answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Using a condom properly can protect someone from getting HIV</td>
<td>Management N=3</td>
</tr>
<tr>
<td></td>
<td>N %</td>
</tr>
<tr>
<td>Using a condom properly can protect someone from getting HIV</td>
<td>3 100.0</td>
</tr>
<tr>
<td>HIV infection can be prevented by washing after having sexual intercourse</td>
<td>3 100.0</td>
</tr>
<tr>
<td>A healthy-looking person can be infected with HIV</td>
<td>3 66.7</td>
</tr>
<tr>
<td>A person with tuberculosis is always HIV positive</td>
<td>3 66.7</td>
</tr>
<tr>
<td>Statement</td>
<td>Yes (%)</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>A person can be infected with HIV by a French (tongue) kiss</td>
<td>3</td>
</tr>
<tr>
<td>A person can be infected by shaking hands with an HIV-positive person</td>
<td>3</td>
</tr>
<tr>
<td>An individual can get HIV by sharing food with an HIV-positive person</td>
<td>3</td>
</tr>
<tr>
<td>A person can be infected with HIV by a mosquito bite</td>
<td>3</td>
</tr>
<tr>
<td>There is treatment that can completely remove the HIV virus from your body</td>
<td>3</td>
</tr>
<tr>
<td>Anti-retroviral therapy can enable HIV-infected people to live longer,</td>
<td>3</td>
</tr>
<tr>
<td>healthier lives</td>
<td></td>
</tr>
<tr>
<td>Traditional healers can cure HIV/AIDS</td>
<td>3</td>
</tr>
<tr>
<td>Sexual intercourse with a virgin can cure HIV/AIDS</td>
<td>3</td>
</tr>
<tr>
<td>HIV is the virus that attacks the immune system and AIDS is the disease</td>
<td>3</td>
</tr>
<tr>
<td>caused by HIV</td>
<td></td>
</tr>
<tr>
<td><strong>Average Percentage for total sample</strong></td>
<td><strong>94.9</strong></td>
</tr>
</tbody>
</table>

iii) HIV/AIDS knowledge and behaviour

When confirming employees’ knowledge with regards to HIV/AIDS, participants in the focus group asserted that employees are knowledgeable as enough information continues to be disseminated through various communication channels. They emphasised that people are just “ignoring the issue”.
Table 8: Employees knowledge on HIV: Quotes

<table>
<thead>
<tr>
<th>Employees knowledge on HIV</th>
<th>Quotes</th>
</tr>
</thead>
<tbody>
<tr>
<td>They are knowledgeable but ignoring information</td>
<td>“Ignoring it until it happens to you..”</td>
</tr>
<tr>
<td></td>
<td>There is enough information given through radio, newspapers, television etc, but people remain ignorant. The message goes in one and out the other ear.”</td>
</tr>
<tr>
<td></td>
<td>“Some people believe HIV/AIDS does not exist. They just believe something when it happens to them.”</td>
</tr>
</tbody>
</table>

Some studies, such as Al-Owaish, (1999), Buysse, (1996), Gray and Saracino, (1989) (as cited in Uwalaka & Mutsao, 2002) state that there is a weak or non-existing correlation between knowledge and behaviour. On the other hand, the behavioural theory as discussed in Chapter 3 provides a framework for a correlation between knowledge, attitude and behaviour. This theory is demonstrated by the stages of change: change in behaviour only starts once knowledge is attained. Once this happens an individual starts to re-evaluate his or her current behaviour, then reconsiders change, and finally changes his or her behaviour or attitude.

The findings of this study indicate that employees are knowledgeable: in relation to the behavioural theory, this would imply that the precondition for a change in their attitude or behaviour has been met. From this it follows that they are well-equipped to prevent themselves from HIV infection, which will result in a decrease in new HIV infection cases. However, the socio-economic conditions in Rosh Pinah, a mining town with a predominantly migrant labour force, might make employees susceptible to sexually-risky behaviour, even if they are knowledgeable about HIV/AIDS.

In Rosh Pinah mining town, just as in many other mining situations, mechanisation is difficult and the industry is very labour-intensive. The use of migrant labour is common, with the accompanying constant disruption of social support mechanisms and family
structures, unpleasant living conditions and limited opportunities for leisure. This, in turn, creates situations conducive to the establishment of new and/or casual sexual relationships (IFC, 2004). In Rosh Pinah, where two zinc mines are operational, the migrant labour situation not only results in casual sexual relationships (because of distant marriages), but also the abuse of substances, which can further increase risky sexual behaviours.

5.2.4 Employees’ Attitudes towards People living with HIV/AIDS

i) Stigma and discrimination

Generally, stigmatising is when you look at a person with a judgmental attitude, based on such person’s condition or status. In addition, stigma means that people living with HIV are treated differently from others; this is what it meant by discrimination (Center for the Study of AIDS, 2008).

ii) Stigma and discrimination and level of education

Among the statements that were used to determine employees’ attitudes towards people living with HIV/AIDS, 90% (105) of the participants disagreed with the statement that: “People who have HIV should be isolated”, and 89% (109) of the participants disagreed with the statement: “An individual with AIDS should not continue to work”. The research findings showed that, overall, 74% of participants (91) offered non-stigmatising responses, whereas 14% (17 participants) offered discriminatory responses.

Similar research by Waddingham (2003) indicated that those with post-graduate qualifications offered the least empathy towards hypothetical colleagues with HIV/AIDS. Waddingham (2003) further indicated that such research was in contrast with previous studies (Pitts et al., 1990), where it was found that groups with lower education (less than tertiary) demonstrated the highest level of hostility and stigmatisation towards people with HIV/AIDS. From Figure 6, the research findings indicated that there were no
differences in terms of educational level as to who has more stigmatising or discriminatory attitudes towards colleagues living with HIV/AIDS.

The percentages depicted in Figure 6 below refer to the average percentage scores across the three statements that questioned the employee’s attitude towards colleagues living with HIV/AIDS.

![Attitude towards HIV positive colleagues by level of education](chart)

Figure 6 Employees’ positive attitude towards HIV-positive colleagues by level of education (N=123)

iii) Stigma and discrimination and job level

According to Uwalaka & Mutsao (2002), there is a weak or non-existing correlation between knowledge and attitude. This is contrary to the behavioral theory discussed in Chapter three, which is based on the premise that there is a correlation between knowledge, attitude and behaviour. This theory implies that more knowledgeable persons treat HIV infected persons with more empathy. Such theory does not seem to apply in this research, because according to it, management, the most knowledgeable (see Table 5), should have a less stigmatising and discriminatory attitude towards people living with HIV/AIDS. However, as Figure 7 below reveals, management showed higher
stigmatising and discriminatory attitudes towards people living with HIV/AIDS than any of the other job-level groups. Their average percentage of the attitude statements is 56% compared to 90.5% for supervisors and 81.8% and 76.0% for the middle and lower level respectively. A lower percentage here indicates a less positive attitude. Although stigma and discrimination appear not to be a big concern in the research, it is worth mentioning that it can be very disruptive if not addressed at an early stage. According to IFC (2004), if stigma and discrimination are not addressed, this can:

- negatively affect worker morale
- result in reduced productivity
- compromise employee health in instances where stigma constitutes a barrier to access to treatment and care
- result in the loss of manpower and employees leaving
- certainly undermine the HIV/AIDS prevention programme

![Attitude Towards HIV Positive Colleagues by Job Level](image)

Figure 7 Employees’ positive attitude towards HIV-positive colleagues by job level (N=123)

However, the numbers of respondents from both the “Management” and “Postgraduate” categories are very small. As a result, the percentage statistics might be misleading and the findings may not be a true reflection of the attitudes of higher job and higher
education-level employees. If both these categories are joined with the next highest, then the percentage distribution is as follows (see Figures 8 and 9):

Figure 8 Employees’ positive attitude towards HIV-positive colleagues by level of education

Figure 9 Employee’ positive attitude towards HIV-positive colleagues by job level
iv) Management’s attitude towards the HIV/AIDS programme

The researcher has learned from the findings that employees’ attitudes towards infected people appear not to be a major concern, rather the issue is supervisors’ attitudes towards the HIV/AIDS programme. One participant responded that: “I will never disclose until they change their mind”. Similarly, others responded as follows:

Table 9: Employees’ attitudes towards those who are infected: Quotes

<table>
<thead>
<tr>
<th>Employees’ attitudes towards those who are infected</th>
<th>Quotes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of support from Supervisors</td>
<td>“One-on-one engagement is not observed or identified, but supervisors do not have a negative attitude towards the HIV/AIDS programme, of course not all of them.”</td>
</tr>
<tr>
<td></td>
<td>“Supervisors do not give time enough time to HIV/AIDS or wellness sessions; they say it is disturbing production.”</td>
</tr>
<tr>
<td></td>
<td>“Until their mindset changes to one of recognizing the importance of HIV/AIDS information or the programme, … I will never disclose..”</td>
</tr>
</tbody>
</table>

HIV/AIDS is recognised as a threat to a company’s production and profit. This implies that the supervisors’ attitudes towards existing HIV/AIDS programmes should be addressed through sensitising and training supervisors to the benefits of the HIV/AIDS programme in the company. Rather than seeing the programme as a disturbance to production, they need to recognise its contribution towards enhancing the productivity and profitability of the company. In countries badly affected by HIV/AIDS, the pandemic cuts the supply of labour and reduces income for many workers. Increased absenteeism raises labour costs for employers, and valuable skills and experience are lost (IFC, 2004). Lisk (2002) also added that the loss of skills and tacit knowledge on work makes it difficult to replace staff, even where a pool of unemployed people exists. HIV/AIDS affects the human health capacity and as a result, enterprises are also affected. Rising
absenteeism and high employee turnover due to HIV/AIDS means that companies have to employ and train more people than usual.

5.2.5 Employees’ Attitudes towards VCT

i) VCT

Voluntary counselling and testing (VCT) refers to the confidential HIV testing conducted on an individual to establish his or her HIV status, and who, after having undergone pre-test counselling, voluntarily consents to the test. VCT also implies that post-test counselling will be provided when the person receives his/her test results (IFC, 2004). The responses below indicate that participants shared the same sentiment that knowing one’s HIV status is vital, although it can be an anxious experience.

**Table 10: Employees’ attitudes/feelings with regard to VCT and HIV test: Quotes**

<table>
<thead>
<tr>
<th>Employees’ attitudes/feelings with regards to VCT and HIV test</th>
<th>Quotes</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is important and a relief, even if it can be an anxious experience</td>
<td>“When I went for my test, my stomach was shivering. The doctor was taking too long to tell me my status, but it is really a good thing.”</td>
</tr>
<tr>
<td></td>
<td>“People are anxious, but after knowing your HIV status it is a relief.”</td>
</tr>
<tr>
<td></td>
<td>“One would not want to repeat such an experience, but it is important.”</td>
</tr>
</tbody>
</table>

HIV testing induces high levels of anxiety and fear of the unknown. HIV is known to be a virus which cannot be cured, and is also linked with death. From the responses above, it is clear that employees are nonetheless willing to know their HIV status, which is their stepping stone to prevention and positive living.
ii) Willingness to utilise available VCT facilities

When exploring where people would feel the most comfortable going for their HIV test, responses varied. Some said they would prefer to go to their doctor while others chose to visit the VCT on site.

Table 11: Employees’ preferred service for HIV test VCT on site: Quotes

<table>
<thead>
<tr>
<th>Employees’ preferred service for HIV test</th>
<th>Quotes</th>
</tr>
</thead>
<tbody>
<tr>
<td>VCT on site</td>
<td>“VCT at work or nearby at no cost.”</td>
</tr>
<tr>
<td></td>
<td>“It encourages other employees when they see you in the queue.”</td>
</tr>
<tr>
<td></td>
<td>“Our medical aid is good, if you are tested positive, you get free medication.”</td>
</tr>
</tbody>
</table>

From the survey responses it emerged that 90% (111 respondents) knew their HIV status while 10% (12) of the participants indicated they did not know their status. In addition, 87% (107 participants) had gone through VCT, while 13% (16 participants) had not done so yet. In Namibia, as in South Africa, efforts have been made to encourage people to know their HIV status. That such efforts have been effective transpires from this survey’s findings. VCT services are made accessible in Namibia through donor agencies, within and outside of the workplace.

VCT is useful in promoting the concept of living positively with HIV/AIDS. From this it follows that employees’ willingness to know their HIV status will contribute greatly towards helping them to overcome the fear and stigma associated with being HIV-positive. In addition, willingness to get tested and knowledge of one's HIV status contributes positively to the prevention of an increase of HIV. Most international agencies such as UNAIDS see VCT campaigns as an important tool in preventing the increase of HIV. It is also regarded as a good opportunity to enhance HIV awareness and
to encourage the early uptake of services for the infected in order to produce social benefits (Center for the Study of AIDS, 2008).

5.2.6 Prevention of HIV

i) HIV prevention knowledge and practice

Being knowledgeable about HIV/AIDS is not enough, rather preventing oneself from HIV is better than cure. Employees were asked how they prevent themselves from getting infected by HIV. The consolidated themes that transpired from the qualitative analysis with regard to prevention revealed the following:

Table 12: Consolidated themes on the prevention of HIV/AIDS

<table>
<thead>
<tr>
<th>NO. OF THEMES</th>
<th>TITLE FOR THEME</th>
<th>NO. OF PARTICIPANTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>N</td>
</tr>
<tr>
<td>Theme 1</td>
<td>Stick to one partner and use a condom correctly</td>
<td>74</td>
</tr>
<tr>
<td>Theme 2</td>
<td>Abstain from sex</td>
<td>16</td>
</tr>
<tr>
<td>Theme 3</td>
<td>Know your partner’s status and your own</td>
<td>10</td>
</tr>
<tr>
<td>Theme 4</td>
<td>Be faithful to your partner</td>
<td>17</td>
</tr>
<tr>
<td>Theme 5</td>
<td>Wait until marriage</td>
<td>1</td>
</tr>
<tr>
<td>Theme 6</td>
<td>Do not use un-sterilised equipment</td>
<td>1</td>
</tr>
<tr>
<td>Theme 7</td>
<td>Other (not answered)</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>123</td>
</tr>
</tbody>
</table>

Notably, 107 (87% of participants) indicated that ABC (Abstain, Be faithful, and Condomise) is the best way to prevent HIV/AIDS (consolidated from theme 1, 2 and 4).

The findings revealed that employees are knowledgeable about preventing HIV infection. According to Al-Owaish, (1999); Buysse, (1996); Gray and Saracino, (1989); (as cited in
Uwalaka and Mutsao, 2002) other research has revealed little correlation between HIV/AIDS knowledge and practices, because a number of studies have shown a high degree of engagement in unsafe sexual behaviours, knowledge notwithstanding. For example, the author cites a high average number of partners, sex with an unknown person, as well as less than positive views about condom use and a low rate of behaviour change even after learning about HIV/AIDS. This suggests that a moderate to high knowledge level of HIV/AIDS may not necessarily be a predictor of safe sexual behaviour practices, explain Gray and Saracino, (1989) (as cited in Uwalaka and Mutsao, 2002).

By contrast, studies of American and Nigerian adolescents suggest that, as a result of the threat of HIV/AIDS, adolescents intend to make, or have made, changes in their sexual behaviour, and report lower engagement in unsafe sexual behaviours (Asuzu, 1994, Roscoe and Kruger, 1990 (as cited in Uwalaka and Mutsao, 2002).

The peer educators from Rosh Pinah Zinc Mine, through an informal conversation with the researcher, indicated that people continue with sexually-risky behaviours, even though they are knowledgeable about HIV/AIDS, and even if peer educators continued to distribute sufficient condoms. Based on what the peer educators revealed, it showed that there is not always a correlation between knowledge and behaviour. Other factors, such as adverse socio-economic environments might also compromise the benefits of HIV knowledge, leading to behaviour change.

ii) The use of a condom

An increase of HIV/AIDS can also be attributed to misperceptions and myths about condoms not being safe, or that they promote sex. As a result, people are not using condoms even though these are accessible and free (Take Control Bulletin, 2002).

Similarly, on the issue of prevention against HIV/AIDS, a participant responded strongly that “Condoms are the …root cause of HIV/AIDS”. This indicates that as long as people
still have a wrong perception about the usage of condoms, which is confirmed to be the best protective method to those who practice sex, HIV will continue to be on the increase, even though people’s knowledge level is very high.

According to the Take Control Bulletin (2002), condoms are a safe way for sexual active people to prevent HIV transmission during sex. Among couples with one HIV-positive and one HIV-negative partner that always use a condom, the infection rate was less than 1 per hundred per year. This means that in 99% of cases, no transmission occurred among consistent condom users that were regularly exposed to HIV. This shows that condoms are very safe and therefore remain the best way to protect oneself from HIV if one chooses to have sex. The World Health Organisation (as cited in Take Control Bulletin, 2002) has analysed 19 studies on the subject and found no evidence that sex education programmes, which usually include condom promotion, lead to earlier or increased sexual activity among teens. Furthermore, experience in countries like the Netherlands, Sweden and Uganda has shown that sex education at an early age delays sexual activities among teenagers as they become aware of the responsibilities and risks involved.

The reason why people generally question the effectiveness of condoms is usually because of an inability to use them. Thus, for condoms to be effective, one needs to use them correctly and consistently (Center for the Study of AIDS, 2008).

5.2.7 Perception on the Company’s HIV/AIDS Programme

i) HIV/AIDS/Wellness Programme

According to Hyde & Associate (2001), a comprehensive corporate HIV/AIDS intervention focuses on two major goals:

- Reducing the number of new HIV infections, and
- Managing and containing the possible negative effects of HIV/AIDS on individuals, their families and the company.
Such interventions equip employees with the necessary knowledge and also address attitudes as well as practices regarding HIV/AIDS prevention (Hyde & Associate, 2001). To find out employees’ views on their HIV Workplace Programme, participants had this to say through the consolidated themes:

**Table 13: Consolidated themes on suggestions to improve the Company’s HIV/AIDS Programme**

<table>
<thead>
<tr>
<th>No. Of Themes</th>
<th>Title For Theme</th>
<th>No. Of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>N</td>
</tr>
<tr>
<td>Theme 1</td>
<td>Fine as it is</td>
<td>10</td>
</tr>
<tr>
<td>Theme 2</td>
<td>Provide us with condoms</td>
<td>1</td>
</tr>
<tr>
<td>Theme 3</td>
<td>Communicate more</td>
<td>3</td>
</tr>
<tr>
<td>Theme 4</td>
<td>Encourage VCT and communicate results, and increase HIV/AIDS and wellness awareness activities</td>
<td>52</td>
</tr>
<tr>
<td>Theme 5</td>
<td>Increase funds for social activities to promote behaviour change</td>
<td>1</td>
</tr>
<tr>
<td>Theme 6</td>
<td>Give more support to peer educators and commitment from management is needed</td>
<td>10</td>
</tr>
<tr>
<td>Theme 7</td>
<td>Protect employees who disclose their HIV status</td>
<td>1</td>
</tr>
<tr>
<td>Theme 8</td>
<td>Increase HIV/AIDS AND Wellness awareness at caucus meetings and through induction</td>
<td>8</td>
</tr>
<tr>
<td>Theme 9</td>
<td>Educate and support infected employees on they way forward not just giving attention to those who are not infected</td>
<td>3</td>
</tr>
<tr>
<td>Theme 10</td>
<td>Improve confidentiality to protect infected employees</td>
<td>3</td>
</tr>
<tr>
<td>Theme</td>
<td>Employees and management to support the wellness programme</td>
<td>6</td>
</tr>
<tr>
<td>----------</td>
<td>-----------------------------------------------------------</td>
<td>---</td>
</tr>
<tr>
<td>Theme 12</td>
<td>Educate young people to prevent themselves from risky behaviour</td>
<td>1</td>
</tr>
<tr>
<td>Theme 13</td>
<td>More peer educators outreach at work</td>
<td>6</td>
</tr>
<tr>
<td>Theme 14</td>
<td>No idea</td>
<td>1</td>
</tr>
<tr>
<td>Theme 15</td>
<td>Provide and display educational materials</td>
<td>1</td>
</tr>
<tr>
<td>Theme 16</td>
<td>Other (invalid, not answered)</td>
<td>16</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>123</td>
</tr>
</tbody>
</table>

ii) VCT and HIV awareness

The majority of the participants, 52 (42%) felt that more VCT and HIV/AIDS/wellness campaigns should be launched. It is encouraging to note that employees would want more VCT campaigns every year and not only every second year as has been the practice at Rosh Pinah Zinc Mine. This implies that employees have come to accept HIV and are no longer afraid of the HIV test. The more they know about their HIV result, the better they are equipped to protect themselves from getting infected or being re-infected, because through VCT they receive counselling and health education on HIV/AIDS and on how to change risky behaviors, in addition to being tested.

The goals of VCT are to promote HIV awareness at an individual level and also to provide counselling, which will help an individual to know and change risky behaviours. Through VCT, prevention of HIV transmission and HIV acquisition is addressed and the early uptake of service for the infected is encouraged. VCT campaigns also normalise HIV/AIDS (Center for the Study of AIDS, 2008).

iii) Lack of management commitment
According to Hyde & Associate (2001), lack of leadership commitment will only make it more difficult for the company to manage HIV/AIDS at the workplace. Goals such as reducing the number of new HIV infections and managing and containing the possible negative effects of HIV/AIDS on individuals, their families and the company will be hard to attain in the absence of leadership support and commitment. Whilst 8\% (10 participants) indicated that management’s commitment is essential in order to make the programme successful, as is giving support to peer educators, one participant added: “The programme is just there to show that there is a programme, but the management and supervisors do not give support”.

iv) HIV/AIDS Programme

Only 10 participants (8\%) were satisfied with the programme as it is currently. This is an indication that much improvement is needed. Wellness officers and Peer Educators might be frustrated due to a lack of management commitment. Haimbili (2009) stated that a comprehensive HIV/AIDS-Wellness Programme should include:

1. Management commitment
2. Managers and supervisors training on HIV/AIDS and other wellness issues
3. Peer educators programme
4. HIV voluntary counseling and testing (VCT)
5. Provision of free anti-retroviral treatment (ARV)
6. Counselling, care and support
7. HIV/wellness education and awareness campaigns
8. Other wellness screenings

In addition, according to Pharmaccess (2009) a good wellness programme adds value to its employees and in return employees will have the following characteristics:

- Committed and motivated to reach company goals
- Eager to collaborate and work in teams
o Creative and energised people who use their time and skills to enhance the growth of the organisation and its people
o Provide leadership in their field of expertise
o Adhere to company values
o Loyalty towards company time and property with zero tolerance for dishonest and fraudulent behaviour
o Disciplined and responsible attitudes towards healthy lifestyles in order to perform at their peak

From this it follows that it is worthwhile to invest in the HIV/AIDS-wellness programme in order to reap the above benefits.

Sixteen (13%) of the participants were captured in the category of Other, because participants gave answers that did not apply to the question (invalid answers), or did not respond. Participants who did not answer this question (non-responses) might have done so for various reasons. It could be that they thought it pointless to answer as that would not really help or bring forth any improvement even if they mentioned it. Another reason could be the fact that an HIV/AIDS programme is perceived as an added benefit and not as an entitlement. Others may have had the feeling that management lacks commitment, thus feeling the programme will not improve unless management strengthen their support.

v) HIV/AIDS Policy

With regard to the HIV/AIDS Policy, participants mentioned that the company does have such a policy. “We have a very good policy”. However, not all employees know about it, and some need to be refreshed on it, as one stated. One added: “Yes but more awareness should be [raised] on the content of the policy, because not all know about it and some have forgotten about it”.

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Thus, more information on the content of the policy should be made available. According to Joubert & Brouard (2008) (as cited in Gresak & Dorkin, 2009), occupational social workers together with relevant stakeholders can play an important role in facilitating the development of a suitable comprehensive HIV workplace policy. Joubert & Brouard (2008) (as cited in Gresak & Dorkin, 2009), further state that such policy should be a summarised one-pager that is easier to read and accessible to most staff, not lengthy and complex.

5.3. Conclusion

In this chapter the research findings have been reported and discussed in relation to the literature and the relevant theory, also with their implications. Whilst the purpose of the study was not to test the correlations, it has transpired from this chapter that there is no correlation between knowledge and behavior as put forward by the behavioural theory, described in chapter 3.

Conclusions from the research findings and recommendations thereof will be discussed in the next chapter.
CHAPTER SIX

6. CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

It is inevitable that HIV/AIDS affects enterprises and the economy as a whole. Companies have lost top managers; workers have lost colleagues and huge amounts of time; energy and emotions have been spent on issues of illness and loss. Families have collapsed, while companies are struggling against a background of chronic poverty (Loewenson 1998) (as cited in IFC, 2004).

What needs to be addressed is a change in the attitude and behaviour of individuals towards HIV. Hence, more research should be undertaken to explore individuals’ attitudes and behaviour around the issue of HIV/AIDS, in order to address the gaps. A Knowledge, Attitudes and Practices/Behaviour (KAPB) study is one of the tools that can be used to monitor and evaluate the effectiveness of the HIV/AIDS programme.

This chapter will present the summary of the main findings in relation to the research objectives, the conclusions drawn and recommendations. The main aim of the research is to investigate the existing knowledge, attitudes and practices related to HIV/AIDS by the workforce at the Rosh Pinah Zink Mine Corporation in Namibia.

6.2 Summary of the main findings

Objective 1: To assess employees’ knowledge on HIV/AIDS issues, including transmission, prevention and treatment

Overall, an average of 82% (101 participants) of the total participants were knowledgeable with regards to HIV/AIDS. Through the knowledge statements, with regards to HIV prevention and treatment, an average of 80% (98 participants) of the
participants answered correctly. However, more awareness of HIV transmission should be encouraged as employees were still confused as to whether one can be infected through a mosquito bite or through a french kiss. Regarding knowledge on HIV prevention, findings further revealed that 107 (87%) participants indicated that “Abstinence, Being faithful, Using a condom” also known as “ABC”, is considered to be the best way of preventing infection from HIV. This shows that the majority of the participants have adequate knowledge of the basic facts about HIV/AIDS and how it can be prevented.

In addition, the finding that lower-level employees scored lowest with 79%, while management scored the highest with 94.9% in the knowledge statements, can be associated with their lower level of education. The research revealed that there was a positive correlation between education level and HIV/AIDS knowledge. The higher the level of education of the participants, the more knowledgeable employees were about HIV. However, another research report found low levels of HIV/AIDS knowledge among college students, reporting that a large proportion of respondents did not have accurate knowledge of the causes and prevention of HIV/AIDS transmission, even if they had a higher level of education (Uwalaka and Mutsao, 2002).

The focus group discussions also revealed that while people are knowledgeable, they do not always practice what they know. This discrepancy could be associated with social-economic and environmental factors that exist at the mining town Rosh Pinah with its high numbers of migrant labourers. The behavioural theory in chapter three explained that knowledge is the stepping stone to behavioural change. However, knowledge alone may not be enough to change risky sexual behaviour.

**Objective 2: To obtain information on employees’ attitudes towards working with people living with HIV/AIDS and how they feel about HIV testing**

The research revealed that overall 74% (91 participants) of the participants offered non-stigmatising responses, whereas 14% (17 participants) offered stigmatising responses. Of
all employees, some employees at management level appeared to be the most stigmatising. Nevertheless, the researcher concludes that generally employees’ attitudes towards people living with HIV/AIDS was positive. Such positive attitudes may contribute to a decrease in HIV because people may not be afraid to come out, as they may feel they will be accepted. Even though employees’ attitudes towards people living with HIV/AIDS was positive, stigma should still be addressed in various awareness campaigns to reduce and prevent negative attitudes towards people living with HIV/AIDS.

Employees’ attitudes towards HIV testing and VCT was positive, even though they indicated that it is an anxious exercise. A participant recalled: “People are anxious but after knowing your HIV status, it is a relief”. 89% (109) of the participants knew their HIV status and 87% (107) - of the participants have gone through VCT. Employees’ willingness to get tested and to know their HIV status contributes positively to the prevention of an increase of HIV.

Objective 3: To assess the employees’ safe or risky practices regarding HIV/AIDS

It appears that employees are indeed knowledgeable as to how they should protect themselves against HIV infection and/or re-infection. The research further revealed that the employees appear to have developed some safe practices in order to prevent HIV infection:

Table 14: Consolidated themes on practices in preventing from HIV/AIDS

<table>
<thead>
<tr>
<th>No. of Themes</th>
<th>Title for Theme</th>
<th>No. of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theme 1</td>
<td>Have one partner and don't succumb to risky behaviour</td>
<td>28 23</td>
</tr>
<tr>
<td>Theme 2</td>
<td>Abstain from sex</td>
<td>28 23</td>
</tr>
<tr>
<td>Theme 3</td>
<td>Use a condom with you partner</td>
<td>42 34</td>
</tr>
<tr>
<td>Theme 4</td>
<td>Be faithful to your partner and know you status and</td>
<td>15 12</td>
</tr>
<tr>
<td>your partners' status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------</td>
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</tr>
<tr>
<td>Theme 5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Protect yourself from open wounds</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Theme 6</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Other (invalid, not answered)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>123</td>
<td>100%</td>
</tr>
</tbody>
</table>

Unfortunately, peer educators maintain that people continue to indulge in risky behaviour, despite being knowledgeable. One of the contributing factors could be the myths around condoms and its usage. An increase in HIV/AIDS infections has social and economic consequences for the company. It disturbs production, increases absenteeism, raises labour costs for employers and valuable skills and experience are lost (IFC, 2004). HIV/AIDS affects the human health capacity and as a result, enterprises are also affected. Rising absenteeism and high employee turnover due to HIV/AIDS means that companies have to employ and train more people than usual.

**Objective 4: Based on the former, to arrive at a set of recommendations for the HIV/AIDS intervention programmes**

With regard to the company’s HIV/AIDS programme, 8% (10) of the participants were satisfied with the programme as it is currently offered. However, 52 (42.3%) participants agreed that more VCT and HIV/AIDS and Wellness awareness campaigns should be conducted. Participants confirmed that there is a HIV Policy, however they indicated that there is a need for more awareness on the content of the HIV policy. The main risk factor identified was that there was a lack of visible leadership commitment towards the programme and towards the peer educators.

**6.3 Conclusions**

Furthermore, it appears from the research that majority of employees were knowledgeable about HIV/AIDS and also appeared to know how to prevent HIV infection. Peer educators maintain that people continue with risky behaviours despite being knowledgeable. The question remains, if people were so knowledgeable about
HIV, its transmission and prevention, why do they still indulge in risky sexual practices which can lead to HIV infection? Does it mean that people are no longer afraid of HIV/AIDS and that they have accepted it as it comes just like another disease? Surely societal norms, values and beliefs have a big influence an individual behaviour as well as peer influence?

The researcher further concludes that the employees’ attitude towards people living with HIV/AIDS, as well as towards VCT and HIV tests, were positive; however some managers were concluded to not have a good attitude towards the HIV/AIDS Programme.

6.4 Recommendations

6.4.1 Recommendation for Occupational Social Work

To prevent the spread of HIV/AIDS, one should develop and adopt the most relevant interventions that address contemporary issues of HIV/AIDS. In addition, consider addressing the community at large where employees come from, because a community also has an influence on behaviour and mind, based on societal norms, values and beliefs which are socially constructed Du plessis (1990) (as cited in Gresak & Dorkin, 2009).

Furthermore, HIV/AIDS programme custodians should:

- Targeted education and awareness initiatives should be implemented to emphasise HIV/AIDS transmission, as well as to address the effectiveness of condoms when used correctly and consistently.
- Intensify the importance and benefits of VCT and of knowing one’s status through HIV/AIDS awareness programmes.
- Disseminate the company’s HIV/AIDS policy at all levels to clearly convey the company’s position on HIV/AIDS and its commitment to support
people with HIV/AIDS. This can also be incorporated into generic training. The policy document should be short and easy to understand.

- Address the fear about infection in the workplace, as well concerns around working with someone living with HIV.
- Improve the profile of managers by encouraging visible leadership commitment to the company’s HIV/AIDS interventions. Plan and implement more innovative and creative HIV/Wellness initiatives to ensure the programme achieves its aims and objectives.

6.4.2 Recommendations for future research

Further research is needed on:

- Contributing factors to risky behaviours that lead to HIV infection, despite employees having knowledge about HIV.
- How people can change risky behaviours in order to better prevent themselves from HIV/AIDS infection, or re-infection. Although people seem to be knowledgeable about HIV/AIDS, its' transmission and prevention, risky practices are still continuing, which increases the HIV prevalence rate in Southern Africa.
- After a period of two years, another study will be needed to determine whether any changes have transpired in the workers’ knowledge, attitudes and practices in relation to HIV/AIDS.

6.5 Concluding comment

HIV/AIDS is a complex issue and people continue to be infected despite HIV/AIDS programmes and interventions, therefore those entrusted with HIV/AIDS Programmes should really not continue with the same old preventative interventions. Employees come from a community in order to work and go back to a community where they stay and socialise, therefore one should not narrow the HIV/AIDS Programme by looking only at
the workplace, but rather look at the broader community to address risk factors by society.

Occupational Social Workers should look outside the box of traditional HIV/AIDS preventative programmes to develop and adopt methodologies that are contemporary, specific and relevant to the needs of the workplace Du plessis (1990) (as cited in Gresak & Dorkin, 2009). This applies to all HIV/AIDS Programme custodians. More needs to be done regarding behavioural change at community level as people’s attitude and risk behaviours are influenced by socially constructed societal norms, values, and beliefs Du Plessis (1990) (as cited in Gresak & Dorkin, 2009).
7. List of References


