

Knowledge, attitudes and perceptions of correctional officers towards inmates with HIV/AIDS

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DECLARATION

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ABSTRACT

HIV/AIDS has reached alarming proportions in correctional facilities world-wide, and continues to ravage the lives of inmates in these centres. Studies have shown that HIV prevalence in incarceration institutions is higher than in the general population, sometimes up to 10 times. This survey was brought about by an observation that correctional officers are at the forefront of delivery of services to inmates, and thus having more interactions with all offenders, including those that have illness and diseases such as HIV/AIDS. The purpose of this study was to explore the HIV/AIDS knowledge of correctional officers and establish their attitudes and perceptions towards inmates infected with the virus. A sample of about 120 correctional officers employed at Kirkwood correctional centre was targeted to participate in this survey through completion of self-administered questionnaires. A total of 93 completed questionnaires were returned, equating to a 77.5% response rate. This number eventually translated to 67.5% with the exclusion of 13 questionnaires that were unusable and therefore discarded. Questions asked included (a) those about their basic knowledge of the pandemic such as the HIV/AIDS demographic distribution, (b) their in-depth knowledge such as the modes of transmission of the HIV, (c) their understanding of treatment modalities for HIV infection, and (d) about the distinction between HIV and AIDS. In exploring their attitudes and perceptions, respondents had to reveal how they perceived the HIV-infected, such as whether these inmates are a threat to officers, a burden to the state, and about whether these officers feel comfortable sharing their environment with such offenders. Furthermore, officers were assessed on, and had to declare, their own perception of risk to contracting HIV and whether they feel entitled to extra remuneration for looking after HIV positive inmates. Overall, on analysis of the results, correctional officers displayed a significant level of ignorance. A majority of them could not distinguish between HIV the virus and the syndrome AIDS. Nearly two-thirds of the respondents do not even know what the acronym HIV stands for. Even though a small percentage, there are still those officers who believe that AIDS is curable. Also, safety and security issues are very much of a concern for the majority of correctional officers as they believe HIV-positive inmates are threat to them. The study further shows correctional officers had no understanding of the significance of adherence to antiretroviral medication.

Again, these officers displayed neutrality when it comes to issues of confidentiality regarding disclosure of an HIV positive status of an inmate. These observations indicate pitfalls in information and educational efforts aimed at curbing the spread of HIV/AIDS and therefore the ability to mitigate its impact on correctional centres.

OPSOMMING

Die voorkoms van MIV/Vigs in die korrektiewe dienste neem met rasse skrede toe en volgens studies kan die voorkoms van MIV in gevangnisse tot tien keer so hoog as onder die algemene bevolking wees. Indien die voorkoms so hoog is as wat voorspel word, het dit ernstige implikasies vir Korrektiewe Dienste.

Die doel van hierdie studie was om die kennisvlakke ten opsigte van MIV in die gevangenisdiens in te win en om ook die gesindheid van owerhede, teenoor diegene wat MIV-positief is, te probeer vasstel.

‘n Steekproef van 120 offisiere in die gevangenisdiens is vir die ondersoek gebruik en 93 voltooide vraelyste is terug ontvang en verwerk.

Resultate toon aan dat die bestuur van MIV/Vigs volgens die repondente veel te wense oorlaat. Daar is ‘n redelike mate van onkunde onder gevangenisoffisiere ten opsigte van MIV/Vigs en ‘n redelike aantal deelnemers was nie eens instaat om tussen MIV en Vigs te onderskei nie. Bykans twee-derdes van die deelnemers het nie eens die betekenis van die afkorting Vigs verstaan nie. Die implikasies van bogenoemde bevinding word deeglik bespreek en sekere aanbevelings word aan die hand gedoen ten einde MIV/Vigs meer doeltreffend binne Korrektiewe Dienste te bestuur.

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CHAPTER 1. INTRODUCTION

1.1 Background

In South African correctional facilities, HIV prevalence and growth rates remain a daunting challenge to measure and the exact figures still remain unknown. This is compounded by the fact that HIV testing in prison is conducted on a voluntary basis and therefore, statisticians have to rely on self-reported cases. However, latest statistics estimate HIV prevalence rate in South African prisons to be at 40-45%, which is more than the double the country's general population estimates of 16,9% (Cox, 2011). Stigma and discrimination still play a major role in preventing detainees from getting tested and cases will continue to be underreported, hence obtaining accurate statistics is virtually impossible. The reason that could be attributed to this escalation among the prison population is the high incidence of rape among inmates, homosexual tendencies resulting in unprotected sex, the sharing of unsterilised tattooing instruments amongst gang members, as well as frequent stabbings with blood-soaked needles and sharps. Kirkwood prison near Port Elizabeth is one of a few surrounding correctional facilities which refers HIV-infected inmates and those suffering from AIDS related illnesses to St Albans correctional centre for treatment and care. St Albans obtained accreditation from the department of correctional services in 2006, and this entitles it to carry out a rollout program that involves comprehensive management of HIV/AIDS, including the dispensing of antiretroviral drugs to inmates and offer continuous monitoring of this syndrome in totality. The researcher, as a medical practitioner entrusted with the day-to-day management and treatment of inmates with HIV/AIDS (both awaiting trial and sentenced ones), runs a clinic from the medium B section of the prison. Other surrounding correctional centres in this region of the Eastern Cape that, together with Kirkwood correctional centre, also refer HIV-infected inmates to St Albans include, amongst others, Patensie, Grahamstown, and Port Elizabeth correctional centres. The Kirkwood correctional centre is situated about 17kms from the nearest town of Kirkwood, and about 80kms from Port Elizabeth. It started operating as a Zinc Structure prison in 1973 and was upgraded into a brick structure the following year. The prison is the medium security facility and currently holds a population of between 600 and 700 inmates, which include both males and females living in separate quarters. Furthermore, it has between 150 and 200 personnel, including correctional officers. This facility is where our research study will focus the most.

1.2 Research Problem

As it has been shown through evidence from previous research studies that HIV prevalence rate is much higher in prison populations (amongst inmates) than the general population, it would be interesting, if not being responsible, to pay close attention to the correctional officer's knowledge of HIV/AIDS especially that they remain at the forefront in terms of sharing their environment with, as well interacting with, these HIV-infected inmates on a daily basis at the Kirkwood centre. Considering the statistics, officers may be obliged to assume that they are at a greater risk of contracting the virus compared to the rest of outside-of-prison population. Taking a look at the following quotation : - "Although the risk of exposure to infections is lower for staff members than for inmates, it is nevertheless a risk that may be increasing in line with prison overcrowding and the growing number of HIV positive cases" (*Luyt, 2008*). With this thought in mind, their concerns cannot be considered far-fetched and unrealistic. Therefore assessing their knowledge of the various modes of HIV transmission, as well as prevention methods, qualifies to be a priority.

1.3 Research Question

What is the correctional officers' level of knowledge of HIV/AIDS, and what are their attitudes and perceptions of inmates infected with HIV or suffering from AIDS?

1.4 Aim and Objectives

1.4.1 Aim

To establish the level of knowledge of correctional officers at Kirkwood correctional centre with regards to HIV/AIDS and to determine their attitudes and perceptions towards inmates infected with HIV or suffering from AIDS.

1.4.2 Objectives

The objectives of the study were

- To establish the level of knowledge of correctional officers at Kirkwood prison regarding HIV/AIDS.
- To identify correctional officers' attitudes and perceptions of HIV-infected inmates or those suffering from AIDS.
- To identify gaps in the general knowledge of correctional officers about HIV/AIDS.

- To recommend HIV/AIDS guidelines and protocols aimed at improving correctional officers' level of knowledge, and at curbing their risk of exposure to HIV.

1.5 Significance of the Study

This study is important in that it will highlight the level of knowledge of correctional officers about the topic of HIV/AIDS, and their attitudes and perceptions of inmates infected with HIV or suffering from AIDS. It will further shed light on the gaps in their knowledge that require to be filled. This could be through the encouragement of the development and implementation of HIV/AIDS programs aimed at elevating their knowledge and awareness level, as well as allaying fears fuelled by misinformation and negative perceptions. The study will further promote a re-visitation to the current Department of Correctional Service's HIV/AIDS policy by policy-makers and authorities, with the sole purpose of detecting draft flaws and areas that have been overlooked. Kirkwood correctional centre authorities and senior management might rethink their in-house protocols, with the intension of minimizing exposure to risk of HIV infection amongst inmates, and between inmates and staff members, particularly correctional officers.

1.6 Assumptions

This study assumes that the sample used, namely, correctional officers working at Kirkwood prison, represents a sample from a population of all correctional officers in this facility. The researcher assumes that all the respondents' answers are given in good faith and truthfully. Furthermore, the researcher takes it that the instrument used in data collection has validity to some degree and is measuring the desired constructs.

CHAPTER 2. LITERATURE REVIEW

2.1 Introduction

Throughout the whole wide world, HIV/AIDS continues to account for an increase in the number of reported deaths of inmates in correctional facilities. Since correctional officers are at the forefront of almost all service delivery taking place within these centres, it would be interesting to investigate the extent of their understanding of the epidemic. This curiosity stems from the fact that they are in constant interaction with offenders including those infected with the virus. The following literature review, besides elaborating on existing knowledge, attitudes and perceptions about HIV/AIDS, further sets out to explore: (a) the state of prisons in relation to HIV/AIDS, (b) contributing factors which account for the alarming increase of HIV/AIDS in prisons, (c) the persistent challenges in the fight against this scourge in the correctional centres. Lastly, recommendations that are thought will have a positive impact in conquering this battle, both inside and outside correctional facilities, will also be presented.

2.2 Perceptions about HIV/AIDS

Definition of Perception

According to the Business Dictionary, perception is a “process by which people translate sensory impressions into coherent and unified view of the world around them”. Though necessarily based on incomplete and unverified (or unreliable) information, perception is “the reality” and guides human behaviour in general, the dictionary further explains.

The Positive Mind Newsletter (June, 2003) simplifies this definition and compels one to think of it as “the process of becoming aware of the world around you through your senses”. Once one’s senses start processing what they perceive, it leads to decision making and action taking. This psychology newsletter further explains that the meaning a person attaches to a stimulus that they perceive will fundamentally shape the choices and actions that they take. For example, if one’s skin receptors perceive cold, one is likely to run and dress warmly. However, how a person analyses what they perceive will be greatly influenced by many factors, including past experiences, feelings, beliefs, values, imagination and one’s cultural setting (The Positive Mind: Positive Thinking Principles).

Going back as far as the mid to late nineties, AIDS was very much perceived in a negative light.

According to the following study, conducted in Southern Thailand by Songwathana P & Manderson L. (1998), because no vaccine or effective treatment was available, people's response to, or rather their perception of, AIDS patients, was fear and anxiety. Patients themselves took it that once they were infected with 'AIDS' (HIV is not used in lay terminology by Southern Thais), the destination was death only. Death from AIDS was perceived to be different from death from other causes.

Thai Buddhist referred to it as bad death, as they believed that the spirit of the deceased was polluting as it gets passed to survivors. Perceptions of AIDS are also influenced by media representations of its physical appearance (Lyttleton, 1996; Srirak, 1997; my observations) Media pictures depicted AIDS in negative ways, always displaying patients who are very thin, pale, with oral ulcers and thrush, along with ugly gaping lesions covering the skin. Such negative imagery perpetuated association of AIDS with both dirt and danger, as was proven to be the case with 85, 7% of Thai Village women surveyed.

Furthermore, Thais perceived the blood of a person infected with HIV as 'bad' blood. It is believed to be poisonous and dangerous and that it would turn from red to black, as one of the men on the survey uttered the following regarding persons suffering from HIV/AIDS: 'If a person has AIDS, he or she has bad blood and it may be possible to transmit [the infection]...u black blood is bad and dangerous'. In another study conducted in a rural area of Dehradun, India, involving 356 pregnant women, (Negi K.S et al, 2006), questions were asked to subjects regarding the threat of AIDS to human health. As it turned out, the threat perception increased with the level of education, with just only 16.7% of illiterates, primary educated (28.6%), junior high school (32%), intermediates/graduates and above (30%), giving a positive response favouring AIDS to be a threat in the near future.

Similar findings were also revealed among educated pregnant women in other studies conducted throughout some urban regions of India (Sing et al (4) and Ambati et al (9), 1994) According to a study conducted amongst the population of Mumbai, India, on people's perceptions about HIV/AIDS, the epidemic began with a moralistic stand that HIV is bad and a problem of prostitutes and Gay Groups. Generalized apathy, indifference & insensitiveness were the characteristics of how a layperson perceives HIV/AIDS, and prevailing AIDS communication played an important role in furthering retrogression in perception.

HIV infection was put synonymous with death and AIDS was depicted with a dreaded symbol of death and Dracula. Skulls and bones were popular visuals for AIDS in 4 out of 7 posters (Nigudkar PV, Gogate AS, 2002).

Various studies to find the association between perception of risk to HIV infection and sexual behaviour have been conducted in various parts of the world. A review of quantitative and qualitative studies shows that individuals are more likely to underestimate than to overestimate their risk of HIV infection regardless of the nature of their sexual behaviour (Nzioka, 2001; Aggleton et al, 1994; Ingham & Van Zessen, 1997; Beckr & Joseph, 1998). A qualitative study in Kenya found that although AIDS was perceived as a great threat in focus group discussions, individuals did not necessarily perceive themselves to be at risk (Idele, 2002).

People often rationalize risk-taking behaviour using a range of socially constructed criteria that could explain the apparent mismatch between objective risk and perceived risk (Abrams et al, 1990).

The age of a person is another factor that may influence sexual behaviour and the level of risk of HIV infection. Men and women in their teens are at an increased risk of HIV infection because they often engage in unprotected sexual intercourse (Hulton et al., 2000). Religion can also influence attitudes to HIV and perception of risk (Nzioka ,1996), using in-dept interviews among people living with HIV/AIDS and opinion leaders, noted that religious people considered AIDS to be a disease that affected those who transgressed against God.

Another belief that may influence the perception of HIV is the way that illness is viewed (Williams, 1986). Some see AIDS as punishment for immoral behaviour, so that those who view their lifestyle as being morally upright may perceive their chance of being infected by HIV to be low (Konde-Lule, 1993; Nzioka, 1996). Furthermore, AIDS is seen as a distant rather than an immediate threat:, a disease that affects other people (Akwaba P.A, Nyovan, J.M., Hinde, A, 2003). Lastly, in some parts of Africa condoms are perceived to be a barrier to making sexual intercourse more pleasurable.

2.2.1 Recommendations to Improve People's Knowledge and Perceptions of HIV/AIDS

The following are some of the most important recommendations to improve people's knowledge and perceptions of HIV/AIDS:

- Isolated messages and images related to taboo issues should be avoided and the process of developing sensitive communication strategy with acceptable, friendly approach should be adopted for developing positive perception about issues related to HIV/AIDS. (Nigudkar PV, Gogate, AS, 2002).
- Educating people about HIV/AIDS can prevent new infections, improve the quality of life of HIV positive people, and help reduce stigma and discrimination (Avert, Prisons, prisoners and HIV/AIDS,2008)
- HIV testing is not only important for diagnosing those with HIV and offering them support, treatment and care, but also help to identify those taking part in risky behaviors, and provides a chance to offer them information and advice (Avert, Prisons, prisoners and HIV/AIDS,2008)
- People's perception of risk is the first stage towards behavioral change that needs to be addressed. A high perception of risk might lead to a modification of sexual behavior from risk-taking to a safer behavior, for example, abstinence, which should be encouraged and promoted (Nigudkar PV, Gogate, AS, 2002).
- Exposure to AIDS information through mass media may lead to high levels of awareness, which in turn influences self-assessed risk of HIV and b. (Nigudkar PV, Gogate, AS, 2002). Mainstream media should play a role in the field of preventative and health education, informing infected persons about their rights, developing methods to deal with the most vulnerable categories, and establishing coordination and cooperation between the information, education and health sectors in the struggle of HIV/AIDS (workshop on the role of media and in raising awareness on HIV/AIDS prevention, Beirut, 2004).
- If success in AIDS prevention is to be achieved, the issue of gender differences that inhibit women's roles in sexual decision-making and negotiation should be addressed and done away with (UNAIDS, 2002 a, Seidel, 1993).

Prisoners and prison staff should be informed about HIV/AIDS and about ways to prevent HIV transmission, with special reference to the likely risks of transmission within prison

environments and to the needs of prisoners after release (World Health Organization, 2007).

2.2.2 Knowledge and Perceptions of Correctional Officers

Various research studies across the globe have proven that correctional officers lack special training in both knowledge and skills in handling people with HIV/AIDS who are both inmates and patients. An article in the Union Daily (April, 2007) reported that it was impossible for prison guards to treat inmates only as prisoners or only as patients. In a seminar on HIV/AIDS held in Jakarta, Indonesia, attended by chief prison wardens of Indonesia's prisons, it became obvious that ignorance about HIV/AIDS among these officials was prevalent. Fifteen chief wardens at the meeting publicly admitted that they had no knowledge about the pandemic and that they needed urgent help to curb the rising number of HIV/AIDS cases in the penitentiaries they managed (Dursin, 2004). Their lack of basic understanding was evidenced by the type of questions that they asked, which were predominantly about basic facts as, 'who can get infected with HIV/AIDS?', 'how is HIV/AIDS transmitted?', 'how can we know that a person has HIV/AIDS?', and 'how can we cure HIV/AIDS?'. Such level of ignorance proved worrisome for some attendees at the meeting, and especially distributing to one HIV/AIDS activist who subsequently voiced her dismay, asking how could prison wardens show compassion to inmates with HIV/AIDS when they don't know at all the basic facts about the epidemic (Dursin). Negative perceptions were also displayed at the same seminar, as one prison official asked why they should be responsible if an inmate gets infected with HIV. Some even started defending their ignorance by asking how they could be expected to focus on HIV/AIDS when they also think of other complex problems like maintaining peace and security, as well as providing food and space for inmates.

In another study conducted by the National Institute on Drug Abuse (NIDA) (2010) on harm reduction knowledge and beliefs among armed prison guards in Albania, 34 percent of respondents reported having no information on HIV, and 90 percent had no information on the harm reduction (HR) concept and programmes. What was surprising was a staggering 88 percent of respondents that had no knowledge on condom use at all, with 50 percent admitting to having never used any at all. Their perceptions towards inmates infected with HIV were also revealed, as 62 percent believed that an HIV-infected prisoner is a danger to others. However, researchers concluded that there was a clear gap between knowledge and beliefs about the HR programs.

Negative attitude by prison warders towards HIV infected inmates were also reported in a study conducted in a Ugandan prison, named Mabuku (Christoper, 2011). According to the prisoners, the HIV-infected were subjected to hard labour whilst they were seriously ill. The prison warders and officers, who have been alleged to be involved in such HIV discrimination practices, were noted to state that it is the mistake of inmates that they have been infected with HIV and as such they do not get special treatment. These attitudes were fuelled by fear of prison officers who expressed concerns at guarding HIV positive inmates. As far back as nearly two decades ago, correctional officers in the New South Wales (NSW) prison expresses fears related to sustaining a needlestick injury whilst carrying out random cell searches, being assaulted with an injected syringe, or being taken hostage. Many officers expressed concerns about not knowing the identities of the infected inmates as they perceived them to be a threat (Doyle, 1994).

In another study conducted in a Bangkok prison by Goodman (2008), it was established that due to lack of knowledge of HIV/AIDS, prison officials and guards forced HIV positive inmates to sleep in the same quarters away from other inmates. Their negative attitudes and perceptions lead them to frown on condoms being circulated behind bars, because they thought such practice would increase sexual activity.

2.3 The State of Correctional Facilities and HIV/AIDS

In correctional centres across the world, the HIV/AIDS epidemic presents major challenges. Penal institutions have grossly disproportionate rates of HIV infection and confirmed AIDS cases (UNAIDS, 2006). According to Robyn Cox (2011), prison populations worldwide tend to have a much higher HIV/AIDS prevalence rates than the general population for many complex and interesting reasons. On a global scale, the prison population is growing rapidly, with these high incarceration rates leading to overcrowding, a phenomenon that poses significant health concerns with regard to control of infectious diseases, particularly HIV/AIDS (UNAIDS). This is as a result of limited access to prevention methods despite high rates of unprotected sex and injecting-drug use, and offenders tend to be left out when it comes to effective HIV/AIDS interventions. Prevention programs that have been shown to reduce HIV transmission are rarely available for inmates, and many of them are unable to access life-saving antiretroviral treatment.

In many parts of the world, conditions in correctional centres are far from satisfactory and HIV positive inmates barely receive the most basic healthcare and food.

(Prisons, Prisoners and HIV/AIDS, undated). However, inmates do not remain within the confines of the centre forever and the majority will return to their families and communities in the general population, in most instances within one year. Thus, high rates of HIV infection within prisons are a cause for public concern when it comes to the risk of transmission in the general population (Robyn Cox). The institute for security studies (ISS) (2003) report reiterated this view by emphasising that the problem of HIV/AIDS in prison, and the wider issue of penal reform, are therefore questions that should concern all of us. The impact of HIV/AIDS on prisoners is most visible in the rising number of deaths in prison each year, the report cautioned. Prison conditions in most countries of the world are ideal for the transmission of HIV due to overcrowding and the atmosphere of violence and fear under which they commonly operate. Tensions abound, including sexual tensions. Release from these tensions, and from the boredom of prison life, is often found in the consumption of drugs or in sex (UNAIDS, Best Practice).

According to the United Nations Office on Drugs and Crime there is a high turnover among prisoners. At any given time, there are more than 10 million people imprisoned worldwide. In some countries about three quarters of people in a prison setting have some kind of substance-related problem, which may be drug dependency. As is often found, this pattern is usually associated with a high risk of HIV transmission. From an article in Prisons, Prisoners and HIV/AIDS (2009), the number of inmates living with HIV varies between countries. America has the highest prison population in the world, around 1.5 % of whom are HIV positive. Goyer, K.C. (2003) claims that studies of HIV infection in US prisons have found that the seroprevalence is anywhere from five to ten time higher than the general population. In addition, he further noted that the number of new AIDS cases in prison is 20 times that of the population at large. For instance, one of a few studies carried out by the centre for Disease Control (CDC) on a sample of male prisoners in Illinois, it was discovered that out of 2,390 prisoners who tested negative at intake, there were seven confirmed seroconversion after one of incarceration. This translated to 0.33% annual transmission rate (Goyer). In 2005, 1.8% of all state inmates and 1.0% of all federal prison inmates in the U.S. were believed to be HIV positive, leading to a total of 22,480 infected individuals behind bars (The AIDS PANDEMIC, 2005). These percentages are said to be disproportionate to the rest of the general population, making HIV/AIDS about four times as common among inmates as that of the population at large.

Around 25% of all HIV infected people spent time in a correctional facility. In fact, the Joint United Nations programme on AIDS (UNAIDS) listed prisoners as one of four ‘major at-risk and neglected populations’ in the HIV/AIDS pandemic (Global Aids Epidemic, 2006). In some studies in the US, an observation made was that HIV-infection rates were higher among female offenders because women prisoners were more likely to have history of injection drug use. This finding was reiterated in a case study at a Mysore Jail in Karnataka, India - a state with one of the highest prevalence rates in that country where it was found that the seroprevalence rate was highest among female inmates, at 9.5%, and that this was 25% amongst inmates who were also commercial sex workers. Again, a number of studies in the United Kingdom affirmed these findings, where they noted that HIV prevalence amongst female prisoners in England and Wales was 13 times that of the general population, compared to a combined prevalence for both male and female offenders which were four times that of the general population (Goyer).

In Canada, studies that have been conducted from as far back as 1993 until recently have all attributed the same conclusion that HIV-infection rates amongst offenders are much higher than the general population. For instance a comprehensive survey of over 12 000 inmates entering Ontario prisons in 1993 established HIV-infection rate of about 1.0% for adult male offenders and 1.2% for the female counterparts. Even though these rates seemed to be low, they were more than ten times that of the Canadian population. The findings in other less extensive studies were also in keeping with this view (Goyer, 2003). One explanation offered for this commonality was that the higher prevalence rate is related to two factors, the proportion of offenders who injected drugs prior to imprisonment, as well as the rate of HIV infection among injection drug users in the community.

Across Europe and Central Asia, HIV/AIDS has been noted to be a serious problem for prison populations (World Health Organization (WHO), 2012). The organization stated that incarceration rates in some countries in Eastern Europe were among the highest in the world. For example, the incarceration rate in the Russian Federation in 2008 was 629 persons per 100 000, second only to rates in the United States of America. Typical rates in Western European countries are 50-100 people per 100 000. For most other European countries, there are great variations in HIV infection rates amongst inmates, the common factor being that correctional centres generally have far much higher rates than the general populations in these respective countries (WHO).

However, due to successful prevention interventions targeting intravenous drug users (IDU's) early in the epidemic, HIV prevalence rates amongst offenders are typically less than 1%, with it being higher in female offenders than in males.

In South America, studies from prisons in Brazil and Argentina reveal a particularly high HIV prevalence - ranging from 3.2 to 20 percent in Brazil and 4 to 10 percent in Argentina (Prisons, Prisoners and HIV/AIDS).

Compared to other regions in the world, the sub-Saharan Africa is the hardest hit by the epidemic with almost two-thirds of all people infected with HIV living in this global locality (UNAIDS 2006). Despite this, and although there has been a significant increase in national funding to control the epidemic, prison settings in sub-Saharan Africa have received surprisingly little attention, the UN further observed. In an article published by the *Irin Plus News* (June, 2003), it was stated that sentenced and locked away prisoners in many African countries have been forgotten by HIV/AIDS prevention programmes. This is despite the WHO Guidelines for HIV/AIDS in Prison stating that all inmates have a right to equitable health care, and that national AIDS programmes should be applied in jails. Many governments simply turn a blind eye rather than grapple with the contradictions of the spread of HIV occurring within prison premises. To this day, correctional facilities in this region continue to bear the greatest burden of the global HIV epidemic. Muntingh (2008) pointed out that even though AIDS has been known in Africa for more than 20 years, very little is known about the epidemic in prisons, prevalence rates, how it is transferred, the effectiveness of interventions, the link between prison and community, and the management of AIDS patients in prison. He further noted that prevalence figures cited are often based on research that was done in only locality, making it difficult to obtain a system-wide view of the problem. The fact remains that most of the available data on HIV among prisoners globally is compiled in developed countries, and by contrast, little information is available for Africa. The number of HIV-positive prisoners is unknown for most African countries.

Despite all these shortcomings, a review of the best available data on gender composition of the incarcerated indicates that African countries have among the lowest numbers of female prisoners compared to global figures. Existing data which is randomly collected in a number of African countries show HIV prevalence rates in prisons ranging from 2.7 percent in Senegal and 9 percent in Zambia.

Studies conducted in South Africa have indicated that 40-50 percent of prisoners are HIV-positive. This may largely be due to the fact that this country holds the continent's largest prison population, with currently more than 150 000 souls behind bars (UNAIDS, 2006). This is more than double the current prevalence in adults aged 15-49, estimated at 16.9%. In spite of all the uncertainties about the exact HIV prevalence figure in South African correctional facilities, prison authorities during 2003 admitted that HIV/AIDS in these centres is an enormous problem and that the growth is unknown (Luyt, 2008). At the beginning of the last decade the South African Judicial Inspectorate of Prisons estimated HIV prevalence to be as high as 60%, based on research by the University of Natal at the Westville Correctional Centre (Goyer, 2003). The Department of Correctional Services refuted these estimates as unrealistic and unreliable. This was complicated by the fact that HIV testing in South African Correctional centres was, and still is, conducted on a voluntary basis, and hence, can be said to be underreported. According to the 1996 policy document, testing for HIV must only be done on medical grounds on recommendation of the district surgeon or by request of the prisoner and with his/her written consent. Therefore, to obtain accurate statistics is virtually impossible for as long as statistics are predominantly derived from self-reported cases, that is, those who volunteer to have an HIV test (Luyt, 2008). One indicator of the enormity of the epidemic in S.A. prisons is the extent of natural deaths reported. Figures have demonstrated an escalation of 584% during the period 1995 to 2000. This trend continued until 2003, when the figure was observed to be at a record high, before levelling off in 2004. It remains a challenge to determine how many of these deaths can be attributed to AIDS, because some records list only tuberculosis (TB) or pneumonia as the cause of death, given that the most common clinical presentation in which HIV/AIDS presents itself in S.A is through TB. However, it can be assumed that the dramatic increase in natural deaths in custody is a result of the same disease which is causing an increase in deaths outside of prison. The logical conclusion is that offenders, like their counterparts in the community, are dying of AIDS (Goyer).

A further potential indicator of HIV infection in South African correctional centres could be the number of terminally ill offenders released on medical grounds, as advanced illness due to AIDS is sufficient grounds for medical parole from a South African correctional centre.

Even under these circumstances, one has to be cautious though that all medical releases could not be attributed to AIDS.

2.4 Factors That Increase HIV Prevalence and Infection Rates in Correctional Centres

Goyer (2003) advocated that those who are among the most likely to contract HIV are the same people who are most likely to go to prison: young, unemployed, un- or under-educated, black men. This is because many of socio-economic factors which result in high behaviours for contracting HIV are the same factors which lead to criminal activity and incarceration.

Inside correctional centres, there are several high risk behaviours which encourage the transmission of HIV, some primary and others secondary. These are the following:

2.4.1 Injection Drug Use (IDU's)

The use of contaminated injection equipment by offenders when taking recreational drugs is an effective route of HIV transmission. Outside sub-Saharan Africa injecting drug use accounts for just under a third of injections (Prison, Prisoners and HIV/AIDS, undated). This is due to the fact that sharing of dirty needles and syringes is a common practice (The Aids Pandemic, September, 2008). Multi-country studies have revealed that between 56 and 90 per cent of people who inject drugs have been incarcerated. The estimated percentage of inmates who inject drugs ranges between 0 and 30 percent. Many industrialized countries face a pervasive problem with intravenous drug use. In the United States, there are more IV drug users in American correctional centres than in drug rehabilitation centres. Sentencing practices for drug-related offences can lead to an extremely high incarceration rates amongst drug users and addicts, particularly in these countries where drug policy emphasizes criminalization over rehabilitation. While in custody, addicts will find ways to feed their habit, but are less likely to obtain clean needles or syringes or even disinfectants, and thus needle-sharing becomes widespread (Goyer, 2003). As expressed in an article of The Aids Pandemic (March, 2007), 'clean needles are almost impossible to find and needles or improvised injection devices are often shared by inmates'. The article further mentions that despite strict regulations against drugs in prisons, intravenous drug use still occurs. Possessing a needle is often a punishable offence in most countries.

In a study of prisoners and HIV in England and Wales in the period 1997-1998, it was established that 75% of adult male IDU's and 69% of adult female IDU's had shared needles/syringes inside prison (Prison, Prisoners and HIV). Another significant discovery from a number of studies was

that IDU's are more likely to share injecting equipment within prison than before imprisonment. Taking a look at the African continent, the issue of injection drug use in Africa has been largely overlooked compared to other regions. Existing data indicate that in the prison community, injecting drug use in sub-Saharan Africa is on the rise in countries like Senegal, Kenya, Mauritius, etc. (UNAIDS, 2006). However, more reliable data is required to endorse or reject these suspicions. Intravenous drug use is not common in South African correctional centres, perhaps because these types of substances are far too expensive and are normally used by socio-economic segments of the country that are typically not sent to prison (Goyer, 2003). A recent study on AIDS and human development confirmed that 'drug use through injections appears to be limited, and sharing of needles does not, at this stage, appear to be a very significant mode of HIV transmission (in South Africa)'. This finding was supported by a study conducted by the DCS in Westville Medium B prison in 2002, where both offenders and staff interviewed confirmed that IV drug use does not happen at all in that particular prison. It is however difficult to predict whether IV drug use will increase in South Africa, but if an injection culture develops outside of prison, it can be expected to erupt inside as well (Goyer).

An integral part of the prison subculture, which goes along with IDU is the incidence of rudimentary tattooing and body piercing by inmates on other prisoners. This is typically performed through multiple skin punctures, mostly without sterile instruments. A multiplicity of make-shift tools such as staples, paper clips, plastic ink tubes from ballpoint pens, as well as razor blades are used for this purpose (The AIDS Pandemic, 2007). The unfortunate truth is that tattooing carries a major risk of HIV transmission, especially that offenders do not have access to any materials to clean these implements, such as bleach or disinfectant. In South Africa, tattooing is part of the extremely powerful gang structure within the correctional centre. Due to the fact that everyone's clothing is uniform, identifying tattoos become the medium for communicating who belongs to which gang.

2.4.2 High Risk Sex

One of the primary routes of HIV transmission in correctional facilities is through sexual intercourse. In many prisons both consensual and non-consensual sexual activities are common among inmates, even though they may be forbidden under prison rules (Prison, Prisoners and HIV/AIDS). By far, sex in prison usually takes place in situations of violence or intimidation (Institute for Security Studies (ISS), (2003). It is difficult to determine the extent to which such

activities occur, as those involved risk punishment if exposed. As a result both perpetrators and victims are disinclined to discuss its occurrence, hence the majority of cases go unreported, the ISS report noted. There are various aspects of man-to-man sexual activity in prison which make it a high risk for HIV transmission such as: (a) Rape: - the often violent nature of non-consensual sex can cause tearing and bleeding, which increase the risk of HIV transmission. The prevalence of rape in correctional centres worldwide ranges from 0 to 16 percent (UNAIDS, 1999), (b) Unavailability of condoms: - condoms, which can prevent HIV infection if used consistently and correctly, are often considered contraband within some correctional facilities in different countries. Under these circumstances, inmates are unlikely to make use of them, let alone having access to them, for fear of prosecution, (c) Presence of sexually transmitted infections (STI's): - STI's render one more susceptible to HIV infection than otherwise would have been the case in its absence.

In a study conducted at the Zamba prison in Malawi in 1999 respondents reported about 10-60 percent of prisoners to be participating in homosexual activities (Irin Plus News, 2003). This study further demonstrated that those who served as the 'receptive partner' (that is, the one receiving the ejaculate) were usually recently detained, either juveniles or young adults, who have no blankets, soap, plate or food. They may have no relative from the outside to help and care for them, usually in physical need and are still confused by the recent detention. As a result they resort to turning to others to care for them. The ones they usually turn to are those who have outside supplies, usually older inmates, who will attend to their physical needs in exchange for sexual favours. This relationship was described as similar to that between a poor prostitute and a rich client. The report also described the existence of prostitution rings, in which prison guards were involved in smuggling juveniles into the adult blocks, sometimes for as little as 30 US cents.

In South Africa, Lawyers for Human Rights estimate that 65% of prisoners participate in homosexual activity within the correctional centres. Awaiting trial prisoners tend to fall victims more frequently, as they are robbed and raped by other inmates 80% of the time before they are officially charged (Goyer, 2003).

In a study carried out by the DCS at Westville Medium B Correctional centre (WMB), inmates/interviewees describe sex as currency in prison, used by powerful gang members in exchange for protection and influence. These gang members are often assisted by corrupt prison

guards and officials who engineer changes in cell arrangements in exchange for cash (Goyer). Of note is the realization that some inmates turn to sex as a means to escape the boredom of prison life (The Aids Pandemic, undated). Because distribution of condoms is prohibited in most penal institutions, safe sex is not even an option for most inmates, hence the risk of HIV transmission continues to maximize.

2.4.3 Overcrowding

According to the UNAIDS (2006), occupancy rates especially across African countries reflect overcrowding, with ranges of up to 345 percent above planned prisoner capacity levels. Overcrowding translates into the mixing of prisoners across categories, such as putting together awaiting-trial detainees, juveniles, convicted inmates, and in some instances, men and women. It inevitably results in poor supervision, hygiene and safety, which significantly increases the risk of gang activity, intimidation and violence. Bloodshed can increase the risk of HIV transmission if there is contact of bodily fluids between inmates. Another downside to the issue of overcrowding is the increased likelihood of incidences of homosexual activities and rape (Goyer, 2003). In a country such as South Africa, scarcity of beds and blankets is common occurrence, and inmates tend to share these items. This can ultimately result in homo-sexual activities and rape, with the resultant increase in the risk of HIV transmission. Goyer highlights that a further challenge with overcrowding is the elevated risk of the spread of airborne communicable diseases such as TB, especially in instances where there is poor ventilation. HIV positive people, because of their immunocompromised state, are 100 times more at risk of contracting TB than HIV negative people. The end result would be an accelerated progression of his/her HIV disease.

2.4.4 Nutrition

Food in prisons across the third world countries, especially in Africa, is a scarce commodity. The frequency of meals and the type of food served to inmates are the determinants of a good nutritional status. According to the study at WMB, inmates are fed twice a day in the morning and in mid afternoon (Goyer). The bulk of these servings are mostly made up of starch, with few other nutrients, besides the fact that the actual portion itself is too small. Fresh fruit and vegetables are not permitted from visitors as the perception about these food items is that they could potentially harbour drugs. Such restricted access to proper nutrition leads to mal- and under-nourishment for most inmates, only except if they manage to steal or smuggle these items. This inadequate supply of food has disastrous consequences for those offenders who are

immunocompromised since a lack of crucial nutrients and vitamins can contribute to the progression of their illness.

2.4.5 Prison Conditions

The impact of prison conditions can contribute to a greater extent on the risk of HIV transmission and the progression of the disease. Goyer (2003) made reference to an author who stated that incarceration has been proven to cut in half the life expectancy of infected with HIV. He further claims that there are several factors which greatly contribute to this phenomenon, with stress and malnutrition being the majors in playing this role. Stress, as alluded to by the staff interviewed at WMB correctional centre, can negatively impact on offender's mental state. It is usually brought about by factors such as being separated from family and other support structures, intimidation by other inmates such as gang members, as well as the knowledge of one's HIV positive status. Social workers and psychologists attested that those who lost hope and resigned themselves to die usually have their disease progress most rapidly from HIV infection to full-blown AIDS, because stress enhances depression of the immune system.

2.5 Challenges in the Fight against HIV/AIDS in Prison

There are a number of challenges and limitations which continue to hamper the implementation of effective HIV/AIDS interventions in correctional facilities across the globe.

These range from a lack of political will, the lack of resources, failure to implement strategies on the ground, to challenges regarding the provision of HIV/AIDS prevention, treatment and care. If one considers a country like South Africa, even though laws to protect the rights of prisoners living with HIV/AIDS are conspicuous on paper, and the government has a stated policy on the management of those infected, the reality is that implementation of these is proving to be an uphill battle (Irin Plus News, 2003). This article further highlighted that, according to one prison official, the DCS (which oversees all prison facilities in South Africa) introduced its AIDS policy in September 2002. However, there has been little coordination to ensure proper implementation. Furthermore, even the United Nations Office on DRUGS and Crime (UNODC) (2012) acknowledges that effective policies to prevent HIV inside prisons and other correctional institutions are hampered by the denial of the problem especially that of the existence of the factors that contribute to the spread of HIV. Often when it comes to tackling the epidemic, prisoners are neglected and overlooked (Prisons, Prisoners and HIV/AIDS). This irresponsible trend continues irrespective of existing legislation, which bestows rights to prisoners with HIV.

The WHO Guidelines on HIV infection and AIDS in prisons (1993), states that all prisoners have the right to receive health care, including preventative measures, equivalent to that available in the community without discrimination. The Bill of rights (South African Constitution (19..)) also affords prisoners with HIV the rights to be treated in exactly the same way as all other prisoners. It further elaborates on the unlawfulness of treating differently an inmate because of HIV status. Therefore, recommended HIV/AIDS policies will accomplish very little in the absence of basic reforms (Goyer, 2003). The following discussion aims to discuss some of these barriers in correctional facilities in an effort to highlight what changes need to be made in order to provide prisoners with comprehensive HIV/AIDS packages.

2.5.1 Challenges with Authorities

The failure to implement comprehensive programmes known to reduce the risk of HIV transmission in correctional centres and to promote the health of prisoners living with HIV is often related to lack of political will (WHO). Authorities and politicians often sight concerns about security in prisons, particularly the mistaken assumptions that such programmes will encourage injecting drug use through loopholes in the system, as well as unsafe sexual behaviour. Often a lack of resources, or limited thereof, and technology to meet the overwhelming needs of correctional centres contributes immensely towards the lack of success in fighting the scourge in prisons (The Aids Pandemic, 2008). It then becomes obvious that this reluctance by the powers-that-be retards all inroads envisioned to make a dent in this battle.

2.5.2 Prison Conditions

Prison conditions such as overcrowding, inadequate natural lighting and ventilation are major barriers to the success of HIV prevention programmes in prisons (Prison, Prisoners and HIV/AIDS). Furthermore, a shortage of clean water, poor facilities for personal hygiene, and poor nutrition often exacerbate the condition for those suffering from illness and disease. As it is commonly accepted that a nutritional diet is vital for antiretroviral drugs to work properly, in resource-poor communities, prison authorities are often unable to provide nutritious meals for inmates. This inevitably implies that HIV-infected offenders will be less likely to benefit from these drugs and more likely to experience disease progression (Prison, Prisoners and HIV/AIDS). Cox (2011) attested to the fact that a lack of fresh fruit and vegetables coupled with substandard hygienic circumstances, harsh weather, and inadequate medical services, increase the risk of HIV infection as well as HIV-related mortality. One report from studies conducted in Zambian prisons

found that minimal ventilation, a significant immune-compromised population and overcrowding, contributed to a suspected high tuberculosis rate in a number of these correctional centres. Goyer (2003) in his survey on S.A correctional services concluded that overcrowding has adversely affected prison conditions to the point that they are entirely unconstitutional. Another major barrier to comprehensive HIV and AIDS packages in prisons is inadequate research. The lack of reliable research data and more specifically data on intervention impact evaluations, presents a particular challenge in respect of evidence-based law and policy reform. In resources-constrained environments, it is indeed risky for governments to develop or adjust policy and legislation in the absence of evidence, continued research, and evaluations. On the other hand, a quick perusal of policy documents, guidance notes and technical commentaries developed by international agencies over the past two decades on HIV/AIDS indicate a demanding agenda for developing countries, and in particular for Africa, which has the least resources but carries more than two thirds of the HIV burden (CSPRI Newssletter, 2008).

Again, another factor that may hamper research efforts is reluctance or rather, resistance, to participation. An HIV prevalence survey conducted in a prison in Gauteng province by the South African DCS identified significant resistance to participation in the survey by the very DCS officials. This was an unfortunate discovery in that, besides posing a limitation to the study, researchers pointed out that it indicated underlying issues in the organizational culture that will impact on efforts to manage HIV/AIDS effectively in the Department (CSPRI). Furthermore, within the same survey, researchers noted prisoner's resistance to participation. This was attributed to the fact that potential respondents (inmates), during pre-test counselling, stated that they were aware of their HIV-positive status but refused to participate in the study as it reminded them of their condition which they were unwilling to accept.

2.5.3 Challenges for Prevention

The unfortunate existing reality is that prevention programmes that have been shown to reduce HIV transmission are rarely available for inmates in most parts of the world (Prisons, Prisoners and HIV/AIDS), and prevention, strategies have been met with a number of challenges. This is despite the fact that it is more cost-effective to invest in prevention than treating an already infected individual. The general fear amongst authorities in some countries is that these programmes will encourage illegal or undesirable behaviours. Challenges range from disregard of legislation, difficulties to access condoms, high risk practices and behaviours by inmates such as

sexual assault, rape, intravenous drug abuse, as well as prison tattooing. For instance, according to this article, in a country like the United Kingdom (UK), authorities only provides condoms when prescribed by a doctor and will refer to section 74 of the sexual offences Act of 2003, which prohibits sexual activity in a 'public place'.

Another barrier to access to condoms is the fact that in a country like South Africa, even though Government policy states that condoms are to be distributed to the prisoners on the same basis as they are provided to the general community, the reality is that the policy document adds that a prisoner may not receive condoms before having undergone educational counselling regarding AIDS (Irin Plus News, 2003). This process may prove to be very uncomfortable for some prisoners, and may result in them being reluctant to approach a health care worker for condoms. Inmates, by their very nature, are very suspicious of lack of privacy under these circumstances.

Also requesting condoms from a prison official can be embarrassing for offenders, and at times it can result in fear of violent attack for sexual coercion. Furthermore, there is a general lack of acceptance around condom distribution amongst prison officials, which often leads to secrecy among prisoners around their sexual practices. These will inevitable result in higher rates of unprotected sex (Cox, 2003). Another hindrance is that, as it is common knowledge, condoms available for distribution are designed for heterosexual sex and the unfortunate thing is that no lubricant are supplied with these. This may be an inadequate and an unacceptable prevention method in a prison environment where anal sex predominates.

The implementation of information, education and counselling (IEC) programmes as a prevention mechanism in a prison setting also presents a challenge (Cox, 2003). Effective IEC in prisons is hampered by the occasional inability of community-based organizations (CBO's) or others to gain access to prison populations in order to deliver these types of interventions. This is despite the fact that correctional centres provide an ideal opportunity in terms of access and time to promote behavioural change, knowledge and awareness about HIV. Cox further mentioned that this is due to lengthy or restrictive security procedures, but more often because of negative stereotyping by prison officials whose attitudes are mostly at fault. Prison staff/officials' attitudes were also noted in a pilot study by the DCS in a Gauteng prison, where resistance to participation by staff was observed. This posed a limitation to the survey but most of all this revealed underlying issues in the organizational culture that will impact on efforts to manage HIV/AIDS effectively in the Department (Muntingh, 2008). Again Cox pointed out that prisoners are

generally suspicious of official programmes and this can undermine interventions that have been successful in the general population.

According to one director who runs an employee-assistance programme (IRIN PLUS NEWS, 2003), the biggest obstacle in workplace programmes remains stigma and discrimination. Fear of discrimination defers prisoners from accessing voluntary HIV testing available in most prisons (The AIDS Pandemic, 2007). Test results confidentiality is a very major issue in a prison environment, where even the suspicion of a positive test result can lead to stigmatization, bringing social isolation and violence from other inmates and sometimes even from staff, the article further highlighted.

According to Goyer (2003), prison officials, as well as prisoners themselves, are reluctant to discuss the nature and extent of sexual activity in prison because it is deemed to indicate a lack of control and/or weak management. A further negative impact of stigmatization is that many of the symptoms of STI's can be very embarrassing to discuss, and inmates may resort to suffer in silence. This has the potential to spread HIV infection should such an inmate be involved in unprotected sexual intercourse. Another drawback in successful implementation of HIV prevention strategies is with access, or lack thereof, to life-saving treatment and care. As alluded to by the UNAIDS (2006), in many sub-Saharan countries, access to voluntary counselling and testing and to HIV treatment is often non-existent. This continues to be the trend in other continents, especially in the Asia-Pacific region. Thailand, for instance, has been praised for its fight against HIV and AIDS, which includes universal access to antiretroviral (ARV) therapy. Yet prison inmates infected with HIV were excluded from treatment. As a result, many died in prison, although life-saving drugs were widely available outside (Goodman, 2008). Even in countries where drugs are readily available, relocation of inmates often results in difficulties for those infected with HIV to adhere to their antiretroviral regimen. Prison conditions also undermine the dosing schedules that are important for the effectiveness of antiretroviral therapy (The AIDS Pandemic, 2007). A study of HIV positive inmates in a UK prison found three quarters had experienced breaks in their treatment due to transfers between prisons or prison wings, court attendances, and hospital visits (Prisons, Prisoners and HIV/AIDS). Even after release from prison concerns about access to, or continuing, antiretroviral therapy continued to mount. Studies of prison inmates in America have revealed that only a small percentage of those who had been taking ARV's within prison continued taking the drugs upon their release, and

many experienced interruptions in their regimes which can lead to treatment failure (Prison, Prisoners and HIV/AIDS). Cox (2011) attributed this to the fact that for many prisoners who are released from incarceration, issues such as finding housing, being reunited with their families, and finding employment, are much more pressing than finding ways to continue treatment. At an organizational level, the pandemic has resulted in prison healthcare facilities having to treat and care for more chronically ill patients than was intended for, even though these facilities were not designed to cater for these numbers.

This, coupled with the prison staff being overburdened, results in offenders not receiving treatment and care to which they should be entitled (Cox). Lastly, random searches for contraband substances by correctional officers may also result in medicine confiscation (Kantoor, 2006)

2.6 Recommendations to Improve Management of HIV/AIDS in Correctional Centres

2.6.1 Introduction

HIV/AIDS has continued for decades to ravage the lives of inmates in correctional centres through the world, partly because inmates have been neglected as they are considered the undesirables of society. This is hard to swallow given that at any given time, there are more than 10 million people imprisoned worldwide and many of these people return to society within a short while. To address conditions in these facilities, comprehensive strategies must be developed. An essential first step in developing such strategies is to sensitize and create awareness among policymakers about the HIV/AIDS situation in prisons (UNODC, 2012). This can be facilitated by a multifaceted approach to enhance its efficiency, from addressing legal issues such as the development of alternatives to imprisonment, dealing with structural dynamics within the correctional centres such as controlling overcrowding and corruption, raising awareness among prison staff, provision of health education within incarceration centres, discouraging the habits of intravenous drug use amongst prisoners and that of sexual violence, to provision of rehabilitation opportunities.

It is vital that prisoners have access to public health intervention equivalent to those provided outside prison (Cox, 2011). This is precisely due to the fact all but a small fraction of prisoners return to community. It is therefore primarily for this reason that Goyer (2003) emphasized that issues of prison health will always impact issues of public health. According to him, the prison hospital and/or clinic should operate and be funded as a public institution. Its budget should be

drawn up from the purse of the Department of Health, and not from that of the Department of Correctional Services, since health provision is not the core function of the latter department. The most important idea to be kept in mind by prison authorities and policy-makers is that it is absolutely vital that prison health interventions and infrastructure be based on best practice and good evidence, rather than being a result of public opinion or political commitment (Cox, 2011). Prevention of the spread of HIV in correctional centres should take centre stage if authorities are to succeed in mitigating its impact. First and foremost, HIV testing and education are supposed to be the cornerstone of prevention. HIV testing should not only be seen to be important for diagnosing those with HIV and offering them support, treatment and care, but that it provides an opportunity to identify those taking part in risky behaviours, and provides a chance to offer them information and advice (Prisons, Prisoners and HIV/AIDS). Goyer (2003) recommends that prisoners should receive HIV testing upon request, free of charge and without exception, the so-called optional testing. However, some states still believe in compulsory testing, as this was observed in the U.S. in 2008, where 24 states tested all inmates for HIV upon admission or at some point during incarceration. Prison authorities at these institutions believe that there is a need to identify those who are infected with HIV so they can provide treatment and support, and protect staff and other inmates from becoming infected. The WHO believes that compulsory testing should be prohibited as it breaches human rights. In 2009 the American Centre for Disease Control (CDC) published guidelines on HIV testing in correctional facilities, supporting this same viewpoint. This document advocates that this strategy will improve early access to care and prevention. It further recommends that testing be kept confidential so as to encourage many inmates to come forward, given that they often face stigma if their status is revealed to inmates or staff.

2.6.2 Overcrowding

There needs to be a push to find practical solutions for the prison context to deal with high numbers of HIV-infected prisoners. Reforming the current state of correctional facilities would not only help alleviate the burden on prison staff but would also help these facilities run smoothly (The Aids Pandemic, 2008). According to Goyer (2003) the solution to overcrowding should not necessarily be to build more prisons, but rather aimed at reducing the prison population. He purports that the prison population consists of a significant number of people who should not be there at all, such as awaiting-trial inmates and those convicted of petty crimes like theft or non-

violent offences of a strictly economic nature. These are crimes that do not necessarily require a prison sentence and hence can be dealt with through other forms of corrective measures such as correctional supervision, granting of a warning or fine, or giving a suspended sentence. This will greatly alleviate the burden of overcrowding to some extent.

Cox proposed that another potential solution would be the transfer of critically ill patients to public health facilities. The WHO guidelines call for the early release of prisoners in the advanced stage of AIDS, to allow them to die in dignity. Goyer suggests that the application process for release of terminally ill inmates should be expedited. The nurses who look after these patients/inmates should be sensitized so that they can inform or alert the doctors to initiate the application for presentation to the parole board in a reasonable period. The UNODC recommends that for those inmates who have been from prison meaningful rehabilitation measures should be put in place. These should include pre-release integration programmes that are targeted at reducing the number of repeat offenders.

2.6.3 Education

Education is usually considered an essential component of HIV prevention. It can prevent new infections and help reduce stigma and discrimination. In prisons, it is in fact one of the least controversial prevention methods (Prisons, prisoners and HIV/AIDS). A report by the Institute for Security Studies (ISS) in S.A. published in *Irin Plus* news (2003) recommended aggressive behavioural change interventions, transforming cells into classrooms, in which gang leaders are co-opted as peer educators. It further conceded that attitudes of denial will have to be changed if societies want to see the rate of HIV infection - inside and outside of prison - change. It should always be borne in mind that many prisoners are from groups of society that are hard to reach for HIV prevention programmes and so prison settings provide an ideal opportunity to target these groups. The WHO guidelines (2003) recommend that “prisoners and prison staff should be informed about HIV/AIDS and about ways to prevent HIV transmission, with special reference to the likely risks of transmission within prison environments and to the needs of prisoners after release”.

It is then why Goyer (2003) suggested the education programmes have to be presented in the context of specific lifestyle of inmates. Written materials must cater for the wide diversity of languages spoken in prisons, and need to take into account the low literacy rate of the prison population. He also refuses the use of scare tactics as they have been proven ineffective and

counter-productive to the extent that elicits a denial response. Instead, he suggests the use of drama and video presentations followed by small group discussions as means of education and intervention programmes.

This, he maintains, will encourage prisoner participation. Furthermore, increasing HIV and AIDS awareness through prisoner health education programs is crucial to decreasing the stigmatization of HIV inside prisons that prevents many inmates from seeking testing (The AIDS pandemic, 2007).

2.6.4 Preventative Instruments

Sexual activities are usually forbidden in prisons and as a result many prisons do not provide condoms for inmates (Prison, Prisoners and HIV/AIDS). The UNAIDS' position is clear. "Recognizing the fact that sexual contact does occur and cannot be stopped in prison settings, and given the high risk of disease transmission that it carries, UNAIDS believes that it is vital that condoms, together with lubricant, should be readily available to prisoners. This should be done either using dispensing machines or supplies in the prison medical service" (Irin Plus news: HIV in prisons, 2003). Goyer suggests that condoms and lubricants must be made available in latrines, showers, the cafeteria, and any other discreet location to which prisoners have access. Prisoners should no longer be required to personally request condoms. He also endorses the provision of water-based lubricant to help prevent condom breakage and reduce rectal tearing, and hence, reduce the risk of HIV transmission.

2.6.5 Sexually Transmitted Infections

Treatment of sexually transmitted infections in prisons should be made a major priority by authorities, as untreated STI's increase the risk of HIV transmission. In line with the WHO recommendations, a 'syndromic approach' to treatment of STI's should be adopted, if STI's are to be eradicated (Goyer).

2.6.6 Harm Reduction Programmes

Harm reduction programmes aim to reduce the damage caused by intravenous drug injection without condoning or prohibiting drug use. These programmes include needle exchanges (where an inmate is given access to a new needle in exchange for a used one; drug substitution therapy- where the aim is to minimize heroin use by providing a substitute in the form of methadone or

buprenorphine; and bleach provision to clean used injecting needles (Prison, Prisoners and HIV/AIDS). Unfortunately, these programmes are not widely used in prisons.

The European department of the WHO recommended that, where resources were available, needle exchange programmes should be introduced, regardless of the existing HIV prevalence. In 1992, Switzerland was the first country to distribute syringes to inmates through a prison doctor, and as a result other countries should follow suit.

Regarding the provision of bleach to IDU's, WHO suggests that bleach should only be used in community or correctional settings where needle exchanges are impossible to implement due to fear or hostility from community or authorities. Goyer further suggests that bleach tablets should also be used to sterilize instruments used for tattooing, and that the involvement of gang leaders to promote this initiative should be explored as tattooing is directly related to gang membership. In a study conducted in England and Wales in 2005 where drug substitution therapy was used, a growing body of evidence has shown a decline in the frequency of injecting among those taking methadone.

2.6.7 Antiretroviral Therapy

The provision of antiretroviral treatment to HIV positive inmates is of paramount importance if society is to limit the spread of HIV infection. International guidelines advocate the equivalence principle, or the idea that the same care should be provided in prison that is available to the general public (Goyer). As Cox (2011) puts it, 'theoretically prisons are an ideal setting for treatment adherence because patients are far less likely to be lost to follow up'. Provision must be made by authorities to minimize possible interruption of treatment when prisoners are transferred between facilities or from one wing to another within the same facility. Cox advises that it is also important that there is effective linkage with community-based health programmes or those programmes in other prison facilities so that inmates are able to maintain their treatment adherence and receive adequate care when they are released. Furthermore, as he suggests, treatment and care linkage programmes need to be delivered in a way that targets individuals' specific needs and provides solutions for adherence and access to care in conjunction with other issues facing the inmates. Post-exposure prophylaxis (PEP) is a treatment option that may be used to prevent infection following exposure to HIV. Making PEP available in prisons would decrease the risk of HIV infection among victims of sexual assault (Prisons, Prisoners and HIV/AIDS).

2.6.8 Conclusion

Worldwide, governments have failed to address the issue of HIV/AIDS among prison population effectively. Even though a substantial body of evidence empirically shows that HIV preventative measures, correctly applied, do reduce HIV-related risk-behaviours both within the general community and within prison populations, the majority of inmates are denied access to these programmes. Offenders in some correctional centres throughout the world are still denied access to condoms, as these are thought to encourage sexual activities. Even in instances where condoms are made available, inmates have to go through a prison healthcare provider or prison official, instead of having these put in discrete locations for ease of access.

In countries where intravenous drug use and tattooing are common amongst prisoners, harm reduction programmes are hardly adhered to. Needle exchanges and bleach tablets or kits are sometimes not freely available, even though these methods have been shown to reduce the transmission of HIV. Overcrowding is still a problem in many prisons across the globe with holding cells exceeding their capacity by up to 7 fold. The provision of adequate and good nutrition is also another challenge, and inmates become mal- and under-nourished resulting in accelerated progression of HIV infection for those who are infected.

These challenges result in increased competition for food and space, leading to more incidences of sexual violence. Even though a syndromic approach to the treatment of sexually transmitted infections has been demonstrated to be effective in reducing HIV transmission in countries like S.A., there seems to be no vigorous attack to the treatment of S.T.I.'s in some countries especially in the Sub-Saharan Africa. In most cases inmates are scared to come forward for treatment for fear of being identified to be taking part in sexual activity, which is prohibited. The limited knowledge of HIV/AIDS amongst correctional officers hampers efforts to deliver effective services that help curb the spread of HIV in prisons. Their negative attitudes and perceptions are in most instances counter-productive to the fight against this epidemic.

Recommended international guidelines on HIV/AIDS are rarely followed and the appalling conditions in correctional facilities make it impossible to deliver adequate healthcare services to those inmates in need.

This health crisis definitely does require urgent attention and action from authorities, as healthcare provision standards continue to deteriorate in these in these facilities. In order for change to be effective, it must occur on multiple levels, from national governments, through

senior correctional services department authorities, to junior prison officials. Furthermore, the fact that the vast majority of all incarcerated individuals will eventually return to society, bringing with them their diseases and infections implies that authorities can no longer turn a blind eye on the issue at all. Under national and international law, governments have a moral and ethical obligation to prevent the spread of HIV/AIDS in prisons and to provide proper and compassionate care, treatment and support for those infected (WHO). People in prison have the same right to health as those outside. It is therefore vital that resources such as funding, not excluding related infrastructure be allocated to HIV interventions in prisons. This will serve as a base upon which policies and programmes can be implemented, which will consequently provide inmates with the best healthcare possible. However, the provision of these programmes must not be viewed in isolation from the broader healthcare initiatives in a country, or improving correctional centre conditions in general. If officials can bridge these barriers, they can indeed have an ever-lasting impact on the spread of HIV/AIDS in prisons worldwide. Thus, an all-inclusive approach to healthcare for prisoners is essential in order to address a range of issues that affect individuals (inmates) on a personal as well as on a broader contextual level. Protecting offenders' health is protecting general public health.

CHAPTER 3. RESEARCH METHODOLOGY

3.1 Introduction

Research methodology is the system of procedures that the researcher follows in conducting a diligent and systematic inquiry into the subject matter, in order to establish facts (Petra Christian University Library, 2008). This chapter outlines the research design that was structured for the study and the rationale behind using such a design, the setting where the study takes place, the population under scrutiny from which a sample was selected and the measuring instrument utilized to collect information. It further elaborates on the statistical method used for data analysis and closes by exploring as ethical considerations.

3.2. Research Design and Rationale

The researcher's approach was to make use of quantitative research, which entailed conducting a survey. This approach was preferred for its efficiency and the inexpensive way to collect data from a large number of respondents, as well as its ease to ascertain high reliability of such information. Due to the fact that many questions were being asked on the subject, namely, about the HIV/AIDS knowledge, attitudes and perceptions of correctional officers, this approach allowed for standardization of questions, thus giving flexibility to the analysis (Colorado State University, 1993). According to the Wikipedia, it is appropriate to study attitudes, beliefs, values and past behaviour, which in essence was what the study partly hoped to achieve. Again, Jenkins (2009) believes this is the best approach to utilize in this particular study in that it offers results in precise measurements. Data collected is in the form of numbers and statistics. Furthermore, with this approach there is no ambiguity about the concepts being measured, as there's only one way to measure each concept, that is, on a scale (Audience Dialogue, 2006).

3.3. Research Setting

This study was conducted on correctional officers working at the Kirkwood correctional facility, which is situated about 17km from the nearest town of Kirkwood, and about 80km from Port Elizabeth. This prison opened its doors in 1973, operating as a Zinc Structure Prison and was upgraded into a brick structure the following year. It is a medium security facility which holds a rotating population of between 600-700 inmates at any given time. Offenders in this correctional centre include both males and females, living in separate quarters. Furthermore, the centre has between 150-200 personnel, including correctional officers.

3.4. Population & Sampling

As defined by Castillo (2009) a research population is generally a large collection of individuals or subjects that is the main focus of a scientific query. This well-defined collection of individuals is known to have similar characteristics. For the purposes of this study, the researcher's focus was all correctional officers employed at Kirkwood Correctional Centre. Due to the large size of this population, its representative subset, called a sample, was obtained from it. This sample was necessary in that conclusions derived from the study were to be assumed to reflect the entire feedback from at least ± 80 respondents (correctional officers) and to achieve this, a total of about 120 data collection instruments was prepared and circulated through the correctional centre.

3.5. Measuring Instrument

The data collection instrument utilized in the study was a self-administered questionnaire, and was chosen due to its ease of circulation as there were a large number of respondents expected to participate. These questionnaires were distributed to correctional officers in the various sections of the facility, namely the female and male holding quarters, as well to those officers in the outlying areas along the periphery of the correctional centre. Each questionnaire had 33 questions, divided into 4 sections, namely, A, B, C and D. Section A had 3 questions related to biographical information of the participants, whilst sections B, C and D consisted of 10 questions each. Questions in section B were intended to establish the HIV/AIDS knowledge base of the correctional officers; section C to identify their perceptions of inmates infected with HIV or suffering from AIDS; and section D explored their attitudes towards such inmates. All questions were structured, using a likert-type scaling to obtain more meaningful and sensible data, and all closed-ended.

3.6. Ethical Considerations

Participants in this study were assured of anonymity and confidentiality, as they were not required to divulge their names or other personal details, except for their gender, age and basic educational qualifications, on the questionnaire. An informed consent was considered granted through participation in the study. Respondents were assured that the research material and any other related documentation that contains their responses were to be kept locked up and the researcher would remain the only person having access to such material.

3.7. Statistical Analysis

A coding procedure was utilized in converting the questionnaire data into meaningful categories in order to facilitate analysis. All coded questions from the completed questionnaires were entered into a computer program for analysis, using a software package called Statistical Package for Social Sciences (SPSS). The rationale behind the choice of this package was that it is flexible and easy to use. Frequency tables, bar graphs and pie charts were utilized for presentation of collected data in a simplified and summarized manner, as well as declaring relationships among the variables.

CHAPTER 4. SURVEY RESULTS AND ANALYSIS

4.1 PRESENTATION OF RESULTS

This chapter presents the research results from completed questionnaires and explores existing relationships among the variables. From the total of 120 questionnaires that were circulated for completion, 93 were returned. This translates to 77.5% response. Of these, 12 were spoilt and rather unusable, and hence, were discarded. This is due to the fact that in some questionnaires, some of the questions were left unanswered, whilst in some, more than one answer was chosen for the same question. This effectively translates to 67.5% positive feedback (that is, 81 questionnaires in total).

Figures 4.1, 4.2 and 4.3 outline the distribution of the survey sample in terms of its demographic characteristics, namely; - the age, gender and educational qualifications.

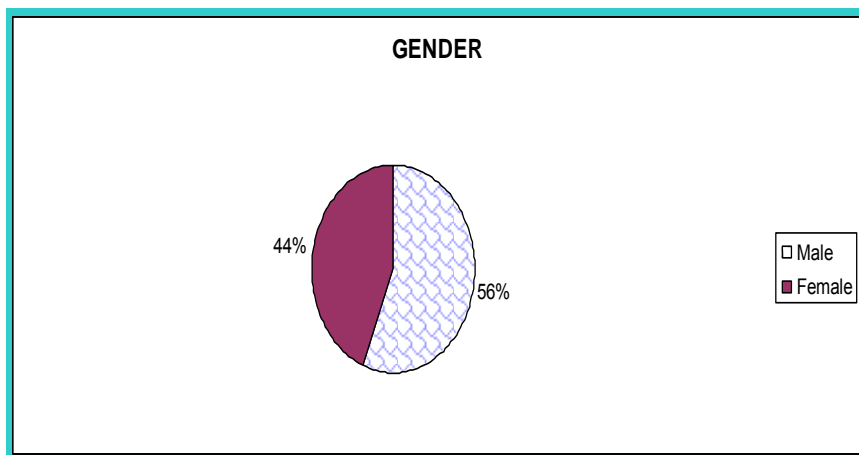


Figure 4.1 Gender Distribution of the Respondents

Figure 4.1 outlines the ratio between males and females who took part in the survey. More males than females participated, as shown by 56% (45 males in total) against 44% (36 females).

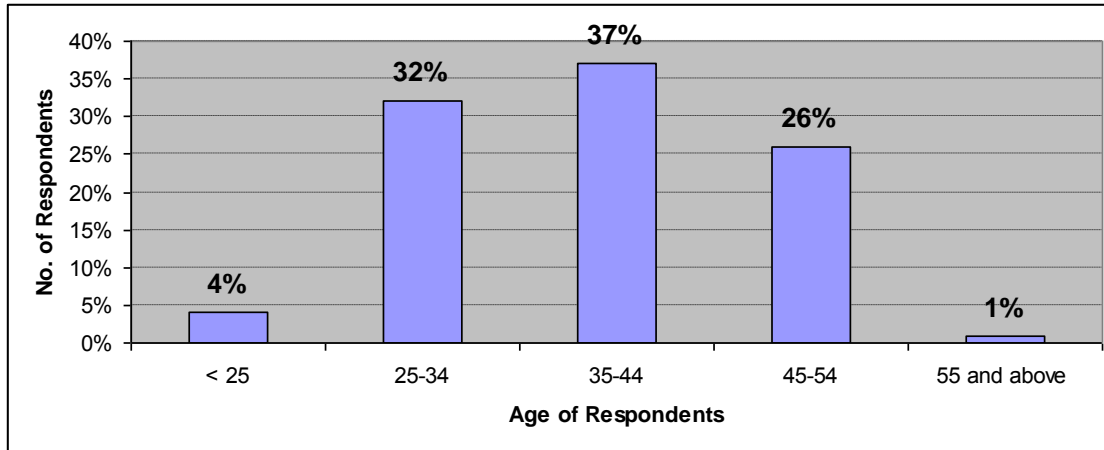


Figure 4.2 Age Distribution of Respondents

Figure 4.2 outlines the age distribution of participants in the study. Only 4% are under the age 25. By far, the majority of respondents (72 in total) fall between the ages of 25 - 54, with 32% in the range 25-34, whilst 37% fall between 35-44, and only 26% in the range 45-54. Of note is that only 10% of the respondents fall in the age range 55 and above.

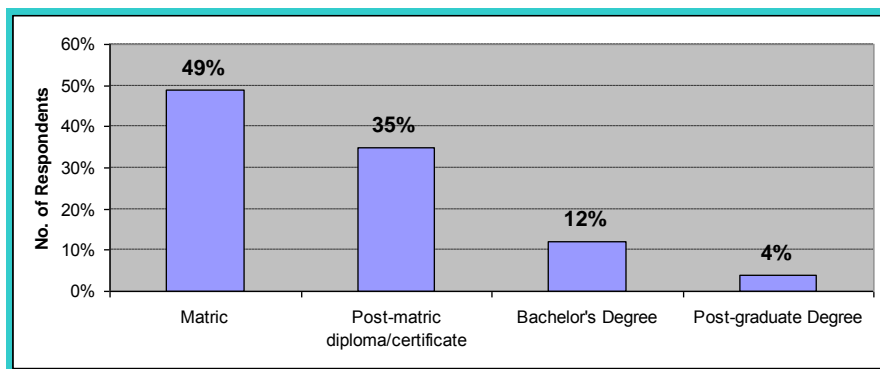


Figure 4.3 Distribution of Respondents according to Educational Level.

Figure 4.3 indicates that the majority of respondents (40 in total) have matric as the basic educational qualification. This translates to 49% of the total. Trailing behind is the 28 with a post-matric diploma or certificate, representing 35%. Ten of the respondents have a bachelor's degree, which constitute 12%, and only 4% of them have a bachelor's degree, that is, 3 participants out of the total.

In tables 1- 8, the following abbreviations are applicable: SA = Strongly agree; A = Agree;

N = Neutral; SD = strongly disagree; D = Strongly disagree. The number under each variable column corresponds to the question number as read from the questionnaire.

Table 4.1 Respondents' HIV/AIDS General Knowledge

Variable	Response	Frequency	Percentage
4. An estimated 40million people are infected with HIV world-wide.	SA	24	30%
	A	38	37%
	N	16	20%
	D	1	1%
	SD	2	2%
	(TOTAL)	81	100%
5. The majority of HIV-infected people live in Sub-Saharan	SA	12	15%
	A	33	41%
	N	27	33%
	D	7	9%
	SD	2	2%
	(TOTAL)	81	100%
6. In SA the province with HIV prevalence rate is Eastern Cape	SA	10	12%
	A	19	23%
	N	16	20%
	D	29	36%
	SD	7	9%
	(TOTAL)	81	100%
7. HIV prevalence is higher in S.A. prisons than in the general population.	SA	7	9%
	A	15	19%
	N	21	26%
	D	32	39%
	SD	6	7%
	(TOTAL)	81	100%

Table 4.1, covering questions 4, 5, 6 and 7 under section B, briefly outlines the respondents' (correctional officers) HIV/AIDS general knowledge. In response to question 4, about two thirds of the respondents (30% + 37%) do agree that an estimated 40 million people are infected with HIV world-wide. However about 20% is undecided, and only 3% disagrees with such claims.

With reference to question 5, just over half of respondents (15%+40%) seem to be agreeable with the fact that the majority of HIV-infected people live in sub-Saharan Africa. Twenty seven percent are taking a neutral stance, whilst only 11% seem to disagree.

Again, in response to question 6, a third of respondents (12% + 23%) seem to think that Eastern Cape is the province with the highest prevalence rate. This is in contrast with the 41% (36% + 9%) that disagrees, with 20% choosing to remain neutral.

In response to question 7, only 28% of respondents agree that HIV prevalence is higher in S.A. prisons than in the general population. A whopping 46% tends to disagree, whilst 26% choose not to take sides.

Table 4.2 Respondents' In-depth Knowledge of the true meaning of HIV, the Syndrome AIDS, and the Relationship between the two.

Variable	Response	Frequency	Percentage
8. AIDS is caused by a virus that attacks The immune system	SA	35	43%
	A	38	47%
	N	4	5%
	D	3	4%
	SD	1	1%
	(TOTAL)	81	100%
9. A positive HIV test means that a person Has AIDS.	SA	5	6%
	A	23	28%
	N	6	8%
	SD	17	21%

10. HIV stands for human insufficiency virus	SA	17	21%
	A	33	41%
	N	9	11%
	D	12	15%
	SD	10	12%
	(TOTAL)	81	100%
13. AIDS is not curable but treatment exists to improve the quality of life.	SA	35	43%
	A	35	43%
	N	7	10%
	D	2	2%
	SD	2	2%
	(TOTAL)	81	100%

Table 4.2 indicates the respondents' in-depth knowledge of the true meaning of HIV, the syndrome AIDS, as well as the relationship between the two. With reference to question 8, a staggering 90% (43% SA + 47% A) of respondents does agree that AIDS is caused by a virus that attacks the immune system. Another 10% seems to be equally divided between those who are opposed to the view (4% D + 1%SD) and those who are neutral about it. In response to question 9, 34% (6% SA+ 28% A) of respondents agree with the statement that suggests that a positive HIV test means a person has AIDS. However, 58% (37% D + 21% SD) totally disagree, whilst 8% is taking no sides. Regarding question 10, a total of 62% (21% SA + 41% A) assumes that HIV stands for 'human insufficiency virus', in contrast to just 27% (15% D + 12 % SD) that disagrees, whilst 11% chooses to remain neutral. In responding to question 11, 86% is agreeable that AIDS is not curable but treatment exists to improve the quality of life. Just 4% seems to think otherwise (disagrees), and 7% falls into neither side.

Table 4. 3

Respondents' Knowledge of HIV Transmission Modes

Variable	Response	Frequency	Percentage
11. Having unprotected sexual intercourse Increases your risk of contracting HIV.	SA	46	57%
	A	32	40%
	N	1	1%
	D	2	2%
	SD	0	0%
	(TOTAL)	81	100%
12. Tattooing with unsterilized instruments is one possible way of becoming infected with HIV	SA	31	38%
	A	38	47%
	N	9	11%
	D	2	3%
	SD	2	3%
	(TOTAL)	81	100%

Table 4.3 outlines respondents' knowledge of HIV transmission modes. Regarding whether having unprotected intercourse increases one's risk of contracting HIV (question 11), nearly all respondents (97%) agree with this statement, and only 2% seem to think otherwise. One person, equating 1% of participants, remains neutral. Again, on whether tattooing with unsterilised instruments is one possible way of becoming infected with HIV (question 12), only 85% seems to think so, with 9% remaining neutral, and only 1% disagreeing.

Table 4. 4

Respondent's Attitudes towards Inmates Infected with HIV.

Variable	Response	Frequency	Percentage
14. Prison inmates infected with HIV are a Threat to correctional Officers	SA	14	17%
	A	13	16%
	N	10	13%
	D	30	37%
	SD	14	17%
	(TOTAL)	81	100%
12. Tattooing with unsterilized instruments is one possible way of becoming infected with HIV	SA	31	38%
	A	38	47%
	N	9	11%
	D	2	3%
	SD	2	3%
	(TOTAL)	81	100%
17. HIV positive inmates should be allowed to share incarceration cells with those that are not infected.	SA	10	12%
	A	16	20%
	N	14	17%
	D	25	31%
	SD	16	20%
	(TOTAL)	81	100%
18. It is a waste of money to give anti-retroviral drugs (ARV's) to HIV-positive inmates.	SA	4	5%

A	7	10%
N	3	4%
D	39	48%
SD	28	35%
(TOTAL)	81	100%

Variable	Response	Frequency	Percentage
19. Inmates infected with HIV should be left to die as they are a burden to the state	SA	1	1 %
	A	1	1%
	N	4	6%
	D	35	43%
	SD	40	49%
	(TOTAL)	81	100%

Variable	Response	Frequency	Percentage
20. A correctional Official should feel comfortable restraining or accompanying an inmate known to be HIV-positive	SA	11	13%
	A	28	34%
	N	20	25%
	D	15	19%
	SD	7	9%
	(TOTAL)	81	100%

22. Would you help an injured inmate if you know he or she is infected with HIV?	SA	36	44%
	A	8	10%
	N	21	26%
	D	4	5%
	SD	12	15%
	(TOTAL)	81	100%

23. Do you feel legally obliged to report an inmate to your superiors if you discover that he or she is HIV-positive	A	28	35%
	O	4	5%
	S	19	23%
	S	3	4%
	N	27	33%
TOTAL		81	100%

Table 4.4 elaborates on respondents' attitudes towards inmates infected with HIV. With reference to question 14, 33% of respondents believe that inmates infected with HIV are a threat to correctional officers, whilst 54% disagrees. Thirteen percent remains neutral. On whether prisoners with HIV/AIDS deserve to die (question 15), only 5% share that view, with 84% begging to differ. Ten percent remains undecided. Regarding whether the names of HIV positive prisoners should be made public (question 16), only 15% support that view, with 78% assuming an opposite stance. Seven percent choose to stay neutral.

On the question (number 17) of whether HIV positive inmates should be allowed to share incarceration cells with those that are not infected, only under a third (32%) condone such a move, with just over half (51%) of respondents differing with such a view, and 17% remaining neutral. About whether it is a waste of money to give anti-retroviral drugs to HIV positive inmates (question 18), only 15% support such a notion, with the bulk of respondents (83%) disagreeing with it. A meagre 4% remains undecided. An overwhelming number of respondents (92%) disagree with the belief that inmates infected with HIV should be left to die as they are a burden to the state, and only 2% support it, whilst 6% does not fall on either side (question 19). Regarding whether a correctional officer should feel comfortable restraining or accompanying an inmate known to be HIV positive (question 20), 47% feels satisfied with taking on such a responsibility whilst 28% rejects to it. A quarter of respondents take a neutral stance. Fifty four percent of respondents claim that they would help an injured inmate even if they know he or she is HIV-positive (question 22). However, 20% seems to disagree, whereas 26% choose to remain neutral. A total of about 40% of respondents feels legally or morally obliged to report an inmate

to their superiors if they discover that he or she is HIV-positive (question 23). But, 37% begs to differ (disagrees), whilst 23% takes a neutral stance.

Table 4.5

Respondents Perceptions of their Risk of Contracting HIV

Variable	Response	Frequency	Percentage
24. Correctional Officers are at an increased Risk of contracting HIV than the general Population.	SA	16	7%
	A	18	22%
	N	13	16%
	D	33	41%
	SD	11	14%
	(TOTAL)	81	100%
25. Manhandling unruly inmates increases Correctional Officer's risk of getting Infected with HIV.	SA	9	11%
	A	29	36%
	N	20	25%
	D	17	21%
	SD	6	7%
	(TOTAL)	81	100%
26. correctional Officers should be Compensated for looking after HIV-positive inmates	SA	10	12%
	A	17	21%
	N	22	27%
	D	20	25%
	SD	12	15%
	(TOTAL)	81	100%

Table 4.5 indicates respondents' perception of their risk of contracting HIV. In response to the statement that suggests that correctional officers are at an increased risk of contracting HIV than the general population (question 24), 29% seems to think so, whereas 55% does not agree. Sixteen percent has no opinion about it (neutral). In believing that manhandling unruly inmates increases correctional officers' risk of getting infected with HIV (question 25), nearly half (47%) of the respondents agrees, even though 28% disagrees and 25% takes a neutral stance. On the question of whether correctional officers should be compensated for looking after HIV-positive inmates, 27% feels that is warranted (agree) despite the 32% that takes an opposite viewpoint (disagree), and twenty to percent opts not to take any sides.

Table 4. 6

Respondents' Perceptions of Offenders' Risk (or Probability) of being Infected with HIV

Variable	Response	Frequency	Percentage
27. All inmates should be presumed to be HIV-positive	SA	9	11%
	A	6	8%
	N	13	16%
	D	40	49%
	SD	13	16%
	(TOTAL)	81	100%
28. HIV is only found in those inmates Detained for crimes involving sexual Assault or rape	SA	1	1%
	A	5	6%
	N	6	8%
	D	38	47%
	SD	31	38%
	(TOTAL)	81	100%

Variable	Response	Frequency	Percentage
29. All inmates who are victims of sexual assault or rape in prison have HIV.	SA	0	0%
	A	5	6%
	N	12	15%
	D	37	46%
	SD	27	33%
	(TOTAL)	81	100%

Table 4. 6 outlines respondents' perception of inmates' risk or probability of being infected with HIV. Taking a look at question 27, only 19% support the notion that all inmates should be presumed to be HIV positive. However, a staggering figure of 65% does not agree with that, whilst 16% has chooses to remain neutral. Very few (only 6%) of the respondents seem to think that HIV is found only in those inmates detained for crimes involving sexual assault or rape, whilst an almost equal number declines to comment (8%). The majority of participants (85%) totally disagree with such an assertion. Again, put differently, to the suggestion that all inmates who are victims of sexual assault or rape in prison have HIV, only 6% supports such, as opposed to the 79% takes a differing stance. Fifteen percent opts not to comment.

Table 4. 7

Respondents' Understanding of the Relationship between HIV infection and AIDS the Syndrome

Variable	Response	Frequency	Percentage
30. All HIV-inmates also have AIDS	SA	5	6%
	A	7	9%
	N	15	19%
	D	40	49%
	SD	14	17%
	(TOTAL)	81	100%

Variable	Response	Frequency	Percentage
31. All inmates who have tuberculosis (TB) also have HIV.	SA	2	3%
	A	1	1%
	N	13	16%
	D	43	53%
	SD	22	27%
	(TOTAL)	81	100%

Table 4.7 explores respondents' understanding of the relationship between HIV infection and syndrome AIDS. Regarding whether all HIV positive inmates also have AIDS, just 15% maintain such a viewpoint, with 66% leaning towards the contrary. Nineteen percent remains undecided. Again, only 4% of respondents agree that all inmates who have tuberculosis also have HIV. The majority (80%) refute these claims, whilst 16% declines to comment.

Table 4.8

Respondents' Perceptions and their Understanding of the Necessity of Adherence to Antiretroviral Drugs (ARV's).

Variable	Response	Frequency	Percentage
32. There is hardly a problem if an inmate on anti-retroviral drugs (ARV's) skip his medication by a few weeks.	SA	16	7%
	A	18	22%
	N	18	22%
	D	26	32%
	SD	16	20%
	(TOTAL)	81	100%

Variable	Response	Frequency	Percentage
33. There is a necessity for Correctional Officers to ensure that inmates on anti-retroviral drugs honour their appointments with the healthcare workers at the wellness centre	SA	39	48%
	A	28	35%
	N	9	11%
	D	4	5%
	SD	11	1%
	(TOTAL)	81	100%

Table 4. 8 outlines respondents' perceptions and/or understanding of the necessity of adherence to antiretroviral drugs. On question 32, 29% of respondents feel there is hardly a problem if an inmate on antiretroviral drugs skips his medication by a few weeks. However, 52% feels different (that is, disagrees). A whole 22% has shed no opinion. On whether there is a necessity for correctional officers to ensure that inmates on antiretroviral drugs honour their appointments with the healthcare workers at the Wellness Centre, a total of 83% of them acknowledges the necessity of such a responsibility, and only 6% rejects walking that extra mile. Nine percent chooses to share no opinion.

4.2 Discussion and Analysis of Results

In terms of the demographic characteristics of our sample, it is clear that there are slightly more males than females who took part in our study. This could mean that there are more males than female employed at the Kirkwood correctional facility, or simply that more males were willing to participate. Furthermore, this may imply that men consider the job of being a correctional officer more often than females, as it potentially entails utilizing physical strength and force in instances where one has to restrain ill-disciplined offenders. Hopefully, this has nothing to do with employment quotas where males are preferred over females for this kind of a job.

The majority of correctional officers at this centre fall between the ages of 25-54, with a peak age of around 40 years, which is the age that most people are at the height of their working lives.

Surprisingly though is the fact that there are far less young people who form part of this workforce (only 4% of participants are <25). This may imply that: (a) people start considering a job as a correctional officer later on in their lives, perhaps after they have acquired post-matric qualifications or only after they have had other jobs; (b) preference for recruitment is from the older age group. Another interesting observation is to note that there is just only 1% of the respondents falling above the age of 54 years. A conclusion that can be drawn from this is that the very mature age group takes early retirement packages or simply gravitates towards administrative duties. Furthermore, another seemingly interesting observation is the fact that almost half of all the correctional officers just have matric as their basic educational level. A deduction that can be drawn from this is that post-matric qualifications are not necessarily a qualifying requirement for job performance.

Regarding the correctional officers' general knowledge of HIV/AIDS, it is somewhat encouraging to realize that at least about two thirds of them are aware of the global demographic distribution of HIV. What is worrisome though is the 20% of participants that has no clue at all about this fact, over and above the 3% that has entirely got it all wrong. Again, the fact that only 56% of correctional officers is aware that the majority of HIV-infected people live in Sub-Saharan remains a concern, given that this part of world (SA) carries the most of the HIV burden. It remains a wonder what the other 44% think is the part of the world where HIV-infected people are in the majority. This may mean that participants are in denial of the extent of HIV in this region of Africa. Given that all respondents are South Africans, it is surprising that more than a third of the respondents are not aware of the province with the highest HIV prevalence in this country. Adding to that number the 20% that is unsure, this figure goes up to a staggering 55%. This simply means that respondents are either ignorant or simply do not care about the HIV prevalence distribution in their own country. This could have disastrous consequences when it comes to taking precautionary measures when visiting certain provinces in the country. Only a lousy 28% seem to understand that HIV prevalence is higher in S.A. prisons than in the general population. Nearly half of all respondents do not think so and topping this figure with the 26% that is unsure, it gets to more than two thirds of those who either do not believe in this fact or are just unsure of it at all.

This simply means that the bulk of these officers do not think that HIV-negative individuals or inmates are at a more higher risk of contracting HIV within the centre than they would be from the outside-of-prison population. This is a sad story in that people may avoid taking extra risk preventative measures to protect themselves from being infected as they do not think that they are necessarily in a more dangerous territory.

It was quite encouraging to learn that at nearly 90% of correctional officers do know that AIDS is caused by some organism known as a virus that attacks the immune system. An inference that can be drawn from this is that at least educational efforts do make some inroads. However, what they still do not comprehend is what the acronym HIV stand for, as shown by a staggering 62% who got it all wrong, and a potential 11% that is unsure. Perhaps educational efforts are lacking emphasis when it comes to this area. Fortunately, this has no significant impact on the risk of acquiring HIV. Worrying though is the lack of distinction between HIV and AIDS. It is quite surprising that just over a third of the correctional officers still believe that if a person has tested positive for HIV, it then means he or she has AIDS. Such ignorance needs to be tackled as it can fuel stigmatization of those infected with HIV, labelling them as AIDS sufferers. What is also very much encouraging is to note that almost all of them (97%) do acknowledge that having unprotected sexual intercourse increases the risk of contracting HIV, as this understanding reveals their HIV risk awareness level. What remains to be seen is whether this knowledge will necessarily translate into preventative behavioural change. The same applies to their awareness of the fact that tattooing with unsterilised instruments is another possible way of becoming infected with HIV.

Again, by far an overwhelming majority of the officers do know that AIDS is not curable (86%). What remains unbelievable is the other 4% that disagrees and the other 10% that is undecided. What this may imply is that some officers believe that there are people who have been cured of AIDS, or that there are other forms of treatment, besides the conventional ARV's, that can completely cure AIDS. This can have grievous consequences in that these individuals may just continue having unprotected sex in the hope that they will be cured once they were diagnosed with HIV, thus, propagating the spread of the virus. The fact that a third of correctional officers strongly believe that prison inmates infected with HIV are a threat to correctional officers is somewhat disturbing, to say the least.

This is because such belief may translate into the way that the officers tend to treat such inmates, which may be with aggression and discrimination. However, only 6% of the officers advocate the suffering of inmates infected with HIV, contrary to the majority (84%) that does not condone such thoughts. This may be comforting news in that at least, by far, the bulk of the respondents are displaying compassion, and that maybe demonstrated in the way they handle such offenders. Again, it is also heart-warming to learn that an overwhelming number of officers (78%) do not endorse the view that recommends making public the names of HIV positive offenders. This implies that they understand issues of confidentiality when it comes to HIV disclosure. This may further indicate that they are aware of the potential threat of stigma and discrimination that accompanies unwarranted disclosure. Again, still tackling the correctional officers' attitudes towards HIV infected inmates; over half of them (51%) oppose the idea of having HIV-positive inmates sharing incarceration cells with those that are not infected. This could highlight fears of cross transmission given that sexual violence in correctional centres is common. The fact that 83% of officers refute claims that giving anti-retroviral to HIV-positive inmates is a waste of money, emphasizes the fact that most officers understand the benefits on antiretroviral medication, which are to improve the quality of life of those on treatment and at the same time minimize the risk of transmission (in those with undetectable viral loads). This is further endorsed by the 92% that totally disagrees with a proposal that inmates infected with HIV should be left to die as they are a burden to the state. Even, though just under half of the correctional officers (47%) feel comfortable restraining or accompanying an HIV positive inmates against the 28% that objects, this demonstrate some understanding of the possible modes of transmission. This may display an understanding that such modes definitely do not include applying restraining measures such as man-handling or simply accompanying the inmate. The quarter of the respondents that remains undecided is either unsure or being cautious about taking a stance, given the incidence of violence of against officers (such as being suddenly stabbed with a blood soaked needle). Again, the menial 54% of officers that is willing to help an injured known HIV positive inmate may be a reflection of a lack of understanding of the various precautionary measures that an officer has to adhere to in order to reduce the risk of possibly contracting the virus.

Interesting to note is the fact that there is nearly an equal split between those officers who take it that it is their moral or legal obligation to report an inmate to their superiors if they discover his or her HIV-positive status, and those who differ. This may be a demonstration of indecisiveness with regards to steps that should be followed once officers become aware of an inmate's HIV positive status. Furthermore, some officers may not necessarily be aware of confidentiality issues when it comes to HIV. Regarding their perception of risk, a little over than half of the officers (55%) reject claims that they are at an increased risk of contracting HIV than the general population. Others either are undecided or do not think so. A conclusion that can be drawn from this is that officers are split on the issue of safety from contracting the virus from inmates. They may understand the modes of transmission but may also be concerned about the violent and spiteful nature of inmates (where officers may be concerned about the risk of being suddenly stabbed with an HIV- infected instrument).

Correctional officers are also split on the issue of compensation for looking after HIV positive inmates, with just a few more thinking that they are entitled to such compensation. This may again further highlight safety and security concerns. Nearly two thirds of officers argue against presuming that all inmates are HIV positive, despite the 19% that has taken a view to the contrary. This may be an indication of an understanding that only an HIV test can confirm a positive status of an individual. Further, an overwhelming majority (85%) rejects the claim that HIV is only found in those inmates detained for crimes involving sexual assault or rape. This certainly reveals their comprehension that any inmate can be infected with HIV irrespective of the type of crime convicted for. They may also allude to the fact that contracting HIV can also be through consensual intercourse or via other transmission modes besides sex. This same explanation also applies to the assertion that seeks to suggest that all inmates who are victims of sexual assault or rape in prison have HIV, where 79% of officers dispute such views.

Given that only two-thirds of officers understand that not all HIV-positive inmates also have AIDS, it is quite alarming that there seems to be an apparent lack of understanding of the distinction between HIV infection and AIDS. This may project shortcomings of educational programs.

Again, the fact that a staggering figure (80%) of officers objects to the statement that all inmates with TB also have HIV, is an illustration of their acknowledgement that an infection with TB can exist in the absence of a concurrent HIV infection. More needs to be done by way of educational programmes to rectify the misconception that the other 15% (possibly 34% when combined with the 19% that is unsure) has about the association between the two infections.

It is very much encouraging to note that 83% of officers see the necessity to ensure that inmates on ARV's honour their appointments with a healthcare practitioner at the Wellness Centre. Nevertheless, it is very much of concern to learn that only 52% of officers think it is hardly a problem if an inmate on ARV's skips his medication by a few weeks. This is a clear reflection of a deficiency in understanding the importance of adherence to antiretroviral medication.

CHAPTER 5 - SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

This study sought to explore correctional officers' knowledge of HIV/AIDS, and their attitudes and perceptions towards inmates infected with HIV. A survey was conducted on a sample of correctional centre, employing a quantitative approach and making use of questionnaires to obtain answers. Results from completed questionnaires by respondents were documented and analysed, and conclusions were drawn.

5.2 Conclusion

The majority of correctional officers employed at Kirkwood correctional centre are predominantly male, with the media age (representing all of the respondents) of 40 years. Even though all respondents had formal education, by far the majority (about 50% of them) had only matric as the highest educational level achieved. The study uncovered that correctional officers do not possess extensive and in-depth knowledge of the HIV/AIDS epidemic, such as the inadequate understanding of its demographic distribution. For instance, more than half of them had no knowledge that sub-Saharan Africa carries the highest number of all HIV infections in the world, and a third of them were not even aware of the province with the highest prevalence in South Africa. This is despite the fact that all of the participants in the study were South Africans. This survey also surprisingly indicated that correctional officers do not think that HIV/AIDS is significantly higher in prisons than the general population, in spite of being aware of increase sexual assault tendencies in correctional centres. Furthermore, there seems to be an apparent lack of distinction between the virus, HIV, and the syndrome, AIDS, as evidenced by the majority of officers who still believe that an individual who is infected with HIV also has AIDS. Over and above, almost two thirds of them do not even know what the acronym, HIV, stands for. These discoveries seem to suggest pitfalls in educational efforts amongst these officers. The study also shows that there is still ignorance amongst these officers in that there are still those, who believe that AIDS is curable.

Again, safety and security issues are very much of a concern for correctional officers as the study reveals that a bulk of them (a third) believe that HIV infected inmates remain a threat to them. This was further supported by the fact that nearly half of officers are willing to help an injured known HIV positive inmate.

The study also shows that confidentiality issues when it comes to revealing an inmate's HIV status show a very disturbing trend. This was declared by an almost equal split between those who believe that they have a moral or legal obligation to report an HIV-positive inmate to their superiors, and those who do not. Also, concerns about extra remuneration for looking after HIV-positive inmates are very much alive amongst correctional officers. Regarding their understanding of the importance of antiretroviral treatment, officers do not seem to clearly grasp the significance of daily adherence to this treatment.

5.3 Recommendations

The following recommendations are suggested based on the results and conclusions drawn from this survey.

- **Comparative** research studies need to be conducted in other incarceration facilities to explore the state of affairs in those centres. These studies need to assess and ascertain the extent of the problem of the level of ignorance amongst correctional officers, and try to identify prevailing attitudes and perceptions that may hamper efficient delivery of services aimed at curbing the spread of HIV in prison.
- It is necessary that HIV/AIDS information and education programmes for correctional officers are not just put in place, but that authorities ensure that officers are made aware of their existence. In order to achieve this goal, regular workshops and seminars aimed at empowering correctional centre staff with knowledge and build capacity. In instituting these efforts the department of correctional services needs incorporate various stakeholders from senior management to junior officers. Offenders should also be part and parcel of these gatherings and be mentored to be actively involved in HIV/AIDS educational campaigns. Frequently all-inclusive awareness programmes need to be intensified.

Lastly, continuous monitoring and evaluation of these intervention should be applied to ensure success in imparting correctional officers with knowledge and the skills necessary to handle inmates with HIV and AIDS.

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ADDENDUM A QUESTIONNAIRE

PARTICIPANT INFORMATION SHEET

The researcher, Dr K Ncoyo, are undertaking this research project to assess HIV/AIDS knowledge of correctional officers as well as determining attitudes and perceptions towards the disease. To this end, we kindly request that you to complete the following questionnaire regarding your knowledge, attitudes and perceptions with the utmost honesty and truthfulness. It should take no longer than 10-15 minutes of your time. Although your response is very important to us, your participation in this survey is entirely voluntary.

Please do not enter your name or contact details on the questionnaire as it remains anonymous. Information provided by you will be kept confidential and reported in summary format only.

Kindly return the completed questionnaire to us by placing it in the provided box located in your section. Summary results of this research will be made available to all the various sections soon after the study is completed.

Should you have any queries or comments regarding this survey, you are welcome to contact us at 041-469 5474 / 082 773 6857 or e-mail us at kncoyo@mweb.co.za

Thanking you in advance.

Dr. K Ncoyo

The Researcher

ADDENDUM B - QUESTIONNAIRE

PLEASE ANSWER THE FOLLOWING QUESTIONS BY CROSSING (X) THE RELEVANT BLOCK IN THE SPACE PROVIDED.

EXAMPLE of how to complete the questionnaire:

Your gender?

If you are female:

Male

Female x

SECTION A -- BIOGRAPHICAL INFORMATION

1. Gender

Male

Female

2. Age

Less than 25 25-34 35-44 45-54 55 and above

3. Highest educational qualifications

Grade 12 (std 12 or matric) Post- matric certificate or diploma

Bachelor s degree (s) Post-Graduate degree (s)

SECTION B - GENERAL KNOWLEDGE QUESTIONS

4. An estimated 40million people are infected with HIV world-wide.

Strongly agree Agree Neutral Disagree Strongly disagree

5. The majority of HIV- infected people live in Sub-Saharan Africa.

Strongly agree Agree Neutral Disagree Strongly disagree

6. In S.A. the province with highest HIV prevalence rate is the Eastern Cape.

Strongly agree Agree Neutral Disagree Strongly disagree

7. HIV prevalence is higher in S.A . prisons than in the general population.

Strongly agree Agree Neutral Disagree Strongly disagree

8. AIDS is caused by a virus that attacks the immune system.

Strongly agree Agree Neutral Disagree Strongly disagree

9. A positive HIV test means that a person has AIDS.

Strongly agree Agree Neutral Disagree Strongly disagree

10. HIV stands for human insufficiency virus.

Strongly agree Agree Neutral Disagree Strongly disagree

11. Having unprotected sexual intercourse increases your risk of contracting HIV.

Strongly agree Agree Neutral Disagree Strongly disagree

12. Tattooing with unsterilized instruments is one possible way of becoming infected with HIV.

Strongly agree Agree Neutral Disagree Strongly disagree

13. AIDS is not curable but treatment exists to improve the quality of life.

Strongly agree Agree Neutral Disagree Strongly disagree

SECTION C – ATTITUDE QUESTIONS

14. Prison inmates infected with HIV are a threat to Correctional Officers.

Strongly agree Agree Neutral Disagree Strongly disagree

15. Prisoners with HIV/AIDS deserve to suffer.

Strongly agree Agree Neutral Disagree Strongly disagree

16. The names of HIV-positive prisoners should be made public.

Strongly agree Agree Neutral Disagree Strongly disagree

17. HIV positive inmates should be allowed to share incarceration cells with those that are not infected.

Strongly agree Agree Neutral Disagree Strongly disagree

18. It is a waste of money to give anti-retroviral drugs (ARV's) to HIV – positive inmates.

Strongly agree Agree Neutral Disagree Strongly disagree

19. Inmates infected with HIV should be left to die as they are a burden to the State.

Strongly agree Agree Neutral Disagree Strongly disagree

20. A Correctional Officer should feel comfortable restraining or accompanying an inmate known to be HIV – positive.

Strongly agree Agree Neutral Disagree Strongly disagree

21. All prisoners must be presumed to have HIV.

Strongly agree Agree Neutral Disagree Strongly disagree

22. Would you help an injured inmate if you know he or she is infected with HIV?

Always Often Sometimes Seldom Never

23. Do you feel legally or morally obliged to report an inmate to your superiors if you discover that he or she is HIV - positive?

Always Often Sometimes Seldom Never

SECTION D – PERCEPTION QUESTIONS

24. Correctional Officers are at an increased risk of contracting HIV than the general population.

Strongly agree Agree Neutral Disagree Strongly disagree

25. Manhandling unruly inmates increases Correctional Officers' risk of getting infected with HIV.

Strongly agree Agree Neutral Disagree Strongly disagree

26. Correctional Officers should be compensated for looking after HIV – positive inmates.

Strongly agree Agree Neutral Disagree Strongly disagree

27. All inmates should be presumed to be HIV- positive.

Strongly agree Agree Neutral Disagree Strongly disagree HIV is only found in those inmates detained for crimes involving sexual assault or rape.

Strongly agree Agree Neutral Disagree Strongly disagree

28. All inmates who are victims of sexual assault or rape in prison have HIV.

Strongly agree Agree Neutral Disagree Strongly disagree

29. All HIV – positive inmates also have AIDS.

Strongly agree Agree Neutral Disagree Strongly disagree

30. All inmates who have tuberculosis (TB) also have HIV.

Strongly agree Agree Neutral Disagree Strongly disagree

31. There is hardly a problem if an inmate on anti-retroviral drugs (ARV's) skips his medication by a few weeks.

Strongly agree Agree Neutral Disagree Strongly disagree

32. There is a necessity for Correctional Officers to ensure that inmates on anti- retroviral drugs honour their appointments with the healthcare workers at the Wellness Centre.

Strongly agree Agree Neutral Disagree Strongly disagree