The extent of HIV-related stigma and the resultant discrimination among health care workers at Salvation Army Chikankata Mission Hospital, Mazabuka District, Zambia

Zairemthiama Zachungnunga

Assignment submitted in partial fulfillment of the requirement for the degree of Master of Philosophy (HIV/AIDS Management) at Stellenbosch University

Africa Centre for HIV/AIDS Management
Faculty of Economic and Management Sciences
Study leader: Dr. Thozamile Qubuda
March 2012
DECLARATION

By submitting this assignment electronically, I declare that the entirety of the work contained therein is my own original work, that I am the owner of the copyright thereof (unless to the extent explicitly otherwise stated) and that I have not previously in its entirety or in part submitted it for obtaining any qualification.

Signed:

Date: January 2012
ABSTRACT

HIV-related stigma and discrimination remained pervasive problems in health care institutions worldwide. This study aimed at identifying the level of HIV-related stigma and discrimination in a randomly selected sample of health care workers at Salvation Army Chikankata Mission Hospital, Zambia. In total, 50 health care workers were interviewed using a structured questionnaire.

A moderate level of stigma and discriminatory attitudes was observed. The factors associated with such attitudes were: irrational fear about HIV/AIDS; misperceptions of personal risk; inaccurate information about how HIV is transmitted leading to irrational behaviour; association of HIV infection with immoral behaviours that are already stigmatised.

The results indicate that, programmes to reduce irrational fear about HIV transmission and that of judgmental attitudes are, urgently needed.
OPSOMMING

MIV-verwante stigma en diskriminasie bly wêreldwyd problematies in gesondheidsorg-instellings. Die doel van die studie was om die vlak van MIV-verwante stigma en diskriminasie te bepaal in ’n geselekteerde groep gesondheidswerkers by die Salvation Army van die Chikankata Mission Hospitaal in Zambië. Daar is in totaal onderhoude met 50 gesondheidswerkers gevoer.

Daar is ‘n matige vlak van stigma en diskriminasie gevind. Die faktore wat met hierdie houdings geassosieer word is: irrasionele vrees vir MIV/Vigs, wanpersepsies van persoonlike risiko; onakkurate inligting oor hoe MIV oorgedra word wat lei tot irrasionele gedrag; assosiasie van MIV infeksie met immorele gedrag wat reeds gestigmatiseerd is.

Die resultate toon dat daar dringende nood is vir programme wat die irrasionele vrees rondom MIV infeksie en negatiewe houdings kan verminder.
ACKNOWLEDGEMENTS

I express my utmost gratitude to God Almighty who made it possible to bring this assignment to a conclusive end in the midst of several other commitments. My sincere gratitude goes to my study leader Dr Thozamile Qubuda for his support, guidance and encouragement throughout the study period especially when my morale seems to run low.

I thank the management board of Salvation Army Chikankata Mission Hospital, my employer, for granting me permission to conduct this study at the hospital and for their subsequent support.

I acknowledge my debt to various authors whose books and articles I consulted.

Most of all I thank my wife, Laltlan Kimi, for her unfailing confidence, cooperation and inspiration, and my children, Melissa and Marcus, for keeping my feet firmly on the ground.
LIST OF ABBREVIATIONS

The following abbreviations are used in the research report. They are listed here for reference and clarity.

AIDS    Acquired Immune Deficiency Syndrome
ART    Antiretroviral Therapy
ARV    Antiretroviral
HIV    Human Immunodeficiency Virus
HIV/AIDS    Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome
ILO    International Labour Organisation
PEP    Post-Exposure Prophylaxes
PLWHA    People Living with HIV/AIDS
PMTCT    Prevention of Mother to Child Transmission of HIV
UNAIDS    Joint United Nations Programme on HIV/AIDS
UNGASS    United Nations General Assembly
USAID    United States Agency for International Development
VCT    Voluntary Counselling and Testing
WHO    World Health Organisation
# TABLE OF CONTENTS

Declaration ............................................................................................................. 1

Abstract .................................................................................................................. 2

Opsomming .............................................................................................................. 3

Acknowledgements .................................................................................................. 4

List of abbreviations ............................................................................................... 5

Table of Contents .................................................................................................... 6

List of Tables and Figures ....................................................................................... 8

Chapter 1 – Introduction ......................................................................................... 9
  1.1. Background ..................................................................................................... 9
  1.2. Research Problem ......................................................................................... 10
  1.3. Research Question ....................................................................................... 11
  1.4. Significance of the Study ............................................................................. 11
  1.5. Aim and Objectives of the Study .................................................................. 11
  1.6. Structure of the Research Report ................................................................. 12

Chapter 2 – Literature Review ............................................................................ 13
  2.1. Defining Stigma ............................................................................................ 13
  2.2. Discrimination .............................................................................................. 13
  2.3. Internal (Self) Stigma ................................................................................... 13
  2.4. HIV-related Stigma ...................................................................................... 14
  2.5. Stigma is a Barrier to HIV Prevention, Treatment, Care and Support ....... 15
  2.6. Stigma and Discrimination in Health Care Settings ................................... 16

Chapter 3 – Research Design and Methods ....................................................... 18
  3.1. Study Design and Recruitment of Participants ........................................... 18
  3.2. Recruitment and Procedure ........................................................................ 18
  3.3. Questionnaire and Measures ...................................................................... 18
    3.3.1. Questionnaire ......................................................................................... 18
    3.3.2. Measures ................................................................................................ 18
      3.3.2.1. Fear of casual transmission of HIV and refusal of contact with people living with HIV/AIDS................................................................. 18
      3.3.2.2. Value- and morality-related attitudes – blame, judgment and shame................................................................................................................. 18
      3.3.2.3. Enacted stigma (discrimination) ......................................................... 19
      3.3.2.4. Disclosure .......................................................................................... 19
  3.4. Statistical Analysis ......................................................................................... 19
  3.5. Ethical considerations ................................................................................... 19
LIST OF TABLES

Table 1. Fear of casual transmission of HIV  
Table 2. Likert items to determine level of comfort on casual contact  
Table 3. Gender-wise comparison of score results  
Table 4. Gender-wise comparison of comfort level  
Table 5. Comfortable ‘providing’ health services  
Table 6. ‘Caring’ for person with HIV or AIDS  
Table 7. Level of agreement on judgment, blame and  
Table 8. Question items on values  
Table 9. Witnessed enacted stigma (discrimination)  
Table 10. Item score on discriminatory practice  
Table 11. Association of health care workers’ attitudes and behaviour  
Table 12. Know of a colleague who has HIV/AIDS?  
Table 13. Channel of disclosure of HIV status

LIST OF FIGURES

Figure 1. Fear of casual transmission of HIV  
Figure 2. Overall comfort level score by both gender  
Figure 3. Comfortable ‘providing’ health services  
Figure 4. ‘Caring’ for person with HIV or AIDS  
Figure 5. Level of agreement on judgment, blame and shame  
Figure 6. Question items on values  
Figure 7. Witnessed enacted stigma (discrimination)  
Figure 8. Item score on discriminatory practice  
Figure 9. Know of a who has HIV/AIDS?  
Figure 10. Channel of disclosure of HIV status
Acquired Immune Deficiency Syndrome (AIDS) is the most devastating disease to ever face humankind. UNAIDS and WHO (UNAIDS/WHO, 2009) estimate that as of 2008, about 33.4 million people are living with HIV/AIDS and 2.7 million people are newly infected with HIV in the same year. Over two-third of HIV-infected people live in Sub-Saharan Africa, with 70 percent of new HIV infection occurring in the region.

The origin of HIV/AIDS programme in March 1987 at Salvation Army Chikankata Mission Hospital was preceded by the diagnosis of a skin condition, Kaposi’s sarcoma, in a patient with HIV infection in 1986, and another 37 more cases of AIDS was diagnosed later at the end of that year (Silomba, 2002). With the advent of the HIV/AIDS epidemic, the hospital has pioneered home-based care programme as one of the responses to the extensive HIV/AIDS epidemic in its catchment area (Williams, 1990). This programme covers a full range of care and support services, family counselling and health education, linkage of HIV/AIDS care with preventive activities, a formal referral system, linkages with community health centres, technical assistance programmes for other organisations, and formal and informal evaluation.

1.1. Background: Stigma and discrimination has accompanied the HIV/AIDS epidemic from the start. As far back as 1987, Jonathan Mann (UNAIDS, 2002a) then head of the Global Programme on AIDS at the World Health Organisation (WHO), noted that “there were really three phases of the epidemic: the epidemic of HIV transmission, the epidemic of AIDS, and, finally, the epidemic of stigma, discrimination, and denial.” And UNAIDS Fact Sheet (UNAIDS, 2003) highlighted that the World AIDS Day Campaign for both 2002 and 2003 focused on stigma, discrimination and human rights.

Stigma and discriminatory attitudes towards people living with HIV/AIDS among healthcare workers have been observed in many countries (Bharat et al, 2001a; Paxton et al, 2005). As per report (UNAIDS/WHO, 2008a) the estimated adult (15-49 years old) HIV prevalence for Zambia in 2007 is 15.2 percent. The majority of those infected and affected by HIV had one thing in common—they were in some way or another marginalised within society. Fear of and actual experience with stigma and discrimination reduce an individual’s willingness to practice prevention, seek HIV testing, disclose his or her HIV status to others, ask for care and support, and begin and adhere to treatment (Nyblade & MacQuarre, 2006a).
UNAIDS/WHO (2008b) also reported that percent coverage of antiretroviral therapy (ART) for adults and children with advanced HIV infection in Zambia is only between 25 to 49 percent. And percent coverage for prevention of mother to child transmission of HIV (PMTCT) is also a low 25 to 49 percent (UNAIDS/WHO, 2008b).

In 1999, an estimated 860000 children lost their teachers to AIDS in sub-Saharan Africa (UNAIDS, 2002b). In Zambia, teacher deaths caused by AIDS are equivalent to about half the total number of new teachers the country manages to train annually (UNAIDS, 2001a). Despite these catastrophes caused by the epidemic, silence prevails and action is slowed because of stigma and denial.

Countries still lack laws protecting people living with HIV/AIDS from discrimination. Only 26 percent of countries report the existence of laws that protect men who have sex with men, and antidiscrimination laws for sex workers and injecting drug users are reported in 21 percent and 16 percent of countries respectively (UNGASS, 2008). There are well-documented cases of people living with HIV/AIDS being stigmatised, discriminated against and denied access to services on the ground of their serostatus (Panos; UNAIDS, 2000) in countries all over the world.

Discrimination by health care workers towards people living with HIV/AIDS includes: HIV testing without consent; breaches of confidentiality; denial of treatment and care; refusal of admission to a hospital; refusal to operate or assist in clinical procedures; cessation of ongoing treatment; early discharge from hospital; judgmental attitudes of hospital workers; physical isolation in the ward; restricted access to shared facilities; denial of hospice facilities; refusal to lift or touch the dead body of an HIV-infected person; and reluctance to provide transport for the dead body of an HIV-infected person (Parker et al, 2002a; Bharat et al, 2001b).

Fear of such treatment may cause many people living with HIV/AIDS to avoid seeking critical health care (UNAIDS, 2001b). At Salvation Army Chikankata Mission Hospital, stigma and discrimination related to HIV/AIDS among health care workers have been documented (Zachungungu, 2009). For example, some health care providers labelled admitted patients as HIV-positive, disclosed their HIV status to family members and others without their permission, and excessively used barrier precautions when working with them.

1.2. Research Problem: Our knowledge about the true extent of stigma and discrimination within Salvation Army Chikankata Mission Hospital health care setting is very limited and it
has been recognised that there are gaps between our programme and policy. There is a felt need to move beyond documentation of the problem, and assess and design responses to hospital-based stigma and discrimination.

HIV-related stigma is most profound in hospitals because this is where the risks are highest. The fear of infection creates concern among those going to health facilities, especially where AIDS patients are received. Naturally, HIV/AIDS patients detect those attitudes (Deacon, Boulle, 2006).

Health care workers are also concerned about the risks of HIV transmission through casual contact (Li et al, 2007). This fear leads to the adoption of excessive and unnecessary measures that are experienced as stigmatising by those living with the disease. The perspectives and experiences of people living with HIV/AIDS show that health workers' attitudes toward them are negative. These negative attitudes are expressed through avoidance and sometimes through rudeness (Hong et al., 2004).

1.3. Research Question: To what extent do HIV-related stigma and the resulting discrimination among health care workers at Salvation Army Chikankata Mission Hospital, Mazabuka District, Zambia affect their services to people living with HIV/AIDS?

1.4. Significance of the Study: This study will identify the hospital's strengths and weaknesses of services for people living with HIV/AIDS, and of policies and procedures to prevent occupational exposure to HIV by staff. This will help hospital managers to develop action plans that will result in improved health care workers' knowledge of HIV transmission and improvement in attitudes toward people living with HIV/AIDS, improved practices regarding informed consent and confidentiality, better infection control through improved understanding and practice of universal precautions and infection control procedures including better access to post-exposure prophylaxis (PEP). The customised interventions will protect the well being of both people living with HIV/AIDS and health care workers and will contribute to a safer and less stigmatising and discriminatory hospital environment.

1.5. Aim and Objectives of the Study: The aim of this study is to establish the level of HIV-related stigma among health care workers and to determine its influence on the services of the health care workers in order to develop action plans that ensure a safer and less stigmatised hospital environment. The objectives are to:
   - assess health care workers' perceptions of HIV-related stigma and discrimination;
   - compare HIV-related stigma across different contexts within the hospital;
• assess current attitudes of health care workers towards people living with HIV/AIDS and colleagues perceived to be HIV-positive;
• detect if a current existing particular programme or practice is having unintended consequences;
• recommend strategies to mitigate the impact of HIV-related stigma and discrimination in the workplace.

1.6. Structure of the Research Report: Chapter 2 provides a brief overview of stigma and discrimination within the context of HIV/AIDS obtained from various literature sources. Chapter 3 outlines the design and methods used in the study and the results and discussions are covered in Chapters 4. Finally, Chapter 5 draws conclusion and makes recommendations for policy and practice.
CHAPTER 2
LITERATURE REVIEW

2.1. Defining Stigma: The word “stigma” has its origin from ancient Greek where outcast groups were branded and marked as a permanent measure of their status which was deemed inferior (Morrison, 2006a). And Goffman (1963), a US sociologist defined stigma as an attribute that “intensely discredits” an individual or group in the eyes of others which results in the reduction of a person or group from a whole person to a tainted, discounted one. Thus, the ultimate effect of stigma is the reduction of life chances of the stigmatised through discriminatory actions.

2.2. Discrimination: In keeping with Goffman (1963) we cannot conceptualise discrimination as separate from stigma, but as the end result of the process of stigma. In fact, discrimination is “enacted” stigma. We can define discrimination (or enacted stigma) as the negative acts that result from stigma and that serve to devalue and reduce the life chances of the stigmatised. Discrimination occurs when a distinction is made against a person that results in their being treated unfairly and unjustly on the basis of their belonging, or being perceived to belong, to a particular group (UNAIDS, 2003). A fairly different definition of discrimination may be used by the legal or human rights communities in their work on HIV-related discrimination and relevant laws and policies (Carael et al, 2000). In this particular study we refer to “discrimination” as the “forms” and “manifestations” of stigma.

2.3. Internal (Self) Stigma: Internal (self) stigma is the shame that people living with HIV/AIDS experience and the blame they put upon themselves when they internalise the negative responses and reaction of others (Smart, Module 1.4). Internal stigmatisation can lead to depression, withdrawal and feeling of worthlessness. Psychologists suggest that internal stigma is shaped by previous experiences of shame and blame (Sherr et al, 1998). The process of internalising stigma is complex, and any person diagnosed as HIV-positive experiences some form of it (USAID, 2009a). There is evidence to suggest that individuals who experience high levels of internal stigma do so in the context of a recent diagnosis, have families who are less accepting of their illness, are less likely to have attended an HIV-positive support group (Lee et al, 2002).

Stigma and discrimination are interacting aspects that are common in all walks of life (Hossain & Kippax, 2010). To better understand HIV-related stigma and discrimination, one needs to break them down into their interrelated three components that emerged as part of a cyclical continuum: stigma, discrimination, and internal stigma. Stigma causes
discrimination; discrimination leads to internal stigma; and internal stigma, in turn, reinforces and legitimises stigma (Morrison 2006b).

2.4. HIV-related Stigma: Stigmatisation is a process of devaluation and occurs within a particular culture or setting. Certain attributes are seized upon and defined by others as discreditable or unworthy, and the stigmatised person who possesses these attributes is seen to deserve sanctioning (UNAIDS, 2002c). Stigma is not unique to HIV and has been seen throughout history in relation to other diseases, including tuberculosis, syphilis, and leprosy, which are associated with the misdemeanour of social norms (Herek & Mitnick et al, 1998a).

HIV-related stigma and discrimination is the result of interaction between diverse pre-existing sources of stigma and discrimination and fear of contagion and disease (Parker & Aggleton et al, 2002a). The pre-existing sources, such as those related to gender, sexuality, and class, often overlap and reinforce one another. This interaction has contributed to the deep-rooted nature of HIV-related stigma and discrimination, limiting our ability to develop effective responses. It has also created a vicious circle of stigma and discrimination which works in two ways. (1) HIV/AIDS is associated with marginalised behaviours, and people living with HIV/AIDS are stigmatised because they are assumed to be from marginalised groups. (2) Already marginalised groups are further marginalised because they are assumed to have HIV/AIDS.

Bollinger (2002) observes that HIV has been stigmatised because it can be fatal and therefore causes fear; it is often associated with behaviour that is already stigmatised, such as sex work; infection is seen as the result of choices made by an individual (e.g., the “choices” to have unprotected sex or to share needles to inject drugs); and it is seen as punishment for “abnormal” behaviour such as prostitution, homosexuality and injecting drug abuse.

Fear of contagion coupled with negative, value-based assumptions about people who are infected leads to high levels of stigma surrounding HIV/AIDS (UNAIDS, 2008). Thus, the factors that contribute to HIV-related stigma are: (Jones et al, 1984; Herek, 1999)

- HIV/AIDS is a life-threatening disease, and therefore people react to it in strong ways.
- There is a lot of inaccurate information about how HIV is transmitted, creating irrational behaviour and misperceptions of personal risk.
HIV infection is associated with behaviours (such as homosexuality, drug addiction, prostitution or promiscuity) that are already stigmatised in many societies. HIV infection is often thought to be the result of personal irresponsibility. Most people become infected with HIV through sex which often carries moral baggage.

Religious or moral beliefs lead some people to believe that being infected with HIV is the result of moral fault (such as promiscuity) that deserves to be punished.

The fact that HIV/AIDS is a relatively new disease also contributes to the stigma attached to it (Zaccagnini, 2010). The fear surrounding the emerging epidemic in the 1980s is still fresh in many people’s minds. At that time very little was known about the risk of transmission, which made people scared of those infected due to fear of contagion.

The family and community often propagate stigma and discrimination, partly through fear, partly through ignorance and partly because it is easy to blame those who have been first affected. The process of stigmatising a person usually involves the following steps: differences (such as HIV status) are noted and labelled; these differences are then given a negative attribute; a distinction is made between “us” who do not have this negative attribute and “them” who do; the person with this negative attribute is seen as having a lower status; and, finally this person is discriminated against (Link & Phelan, 2001).

2.5. Stigma is a Barrier to HIV Prevention, Treatment, Care and Support: HIV-related stigma and discrimination take different forms and are manifested at different levels—societal, community and individual—and in different contexts (UNAIDS 2000a; Malcolm et al, 1998), like policy and legal, institutional (education and schools, employment and the workplace, health care systems, HIV/AIDS programmes itself, religious institutions), community, family and individual contexts (Parker & Aggleton et al, 2002b).

HIV-related stigma and discrimination in society is commonly manifested in the form of laws, policies, and administrative procedures, which are often justified as necessary to protect the “general population” (Kirp & Bayer 1992; Manuel et al, 1990). Examples of stigmatising and discriminatory measures include compulsory screening and testing, compulsory notification of AIDS cases, restrictions of the right to anonymity, prohibition of people living with HIV/AIDS from certain occupations, and medical examination, isolation, detention and compulsory treatment of infected persons (Tomasevski et al, 1992; Gostin & Lazzarini, 1997). One important example concerns limitations on international travel and migration.
A substantial body of literature, both qualitative and quantitative, has emerged to convincingly support the hypothesis that stigma inhibits access to testing services, antiretroviral (ARV) uptake and adherence to treatment. Stigma was cited as a primary barrier to using voluntary counselling and testing (VCT) services (Wolfe et al., 2006). “Perceived stigma” was a predictor for declining to test for HIV among both men and women (Babalola, 2007).

Stigma emerged spontaneously as the second most frequently listed reason why women do not begin ART in a qualitative study in Zambia (Murphy et al., 2006). It is also clear that stigma and discrimination present barriers to good adherence to anti-retroviral therapy (ART).

A related finding from qualitative studies on the context of prevention of mother-to-child transmission services in Malawi and South Africa is that fear of stigma and discrimination, along with fear of household conflict, divorce, and lack of support from husbands, was often cited as a reason for women dropping out following their initial antenatal clinic visit (Bwirire et al., 2008; Varga & Brookes, 2008).

Stigma and discrimination represent obstacles such as preventing individuals from being tested; preventing persons from recognising that they or family members are HIV positive; inhibiting people from seeking care, support, and treatment; causing people to mislead others; impeding people from using protection in intimate relations; preventing quality care and treatment; increasing social inequities; hindering the access of people living with HIV to housing, education, employment, and mobility; negatively affecting quality of life; and, eventually, leading to increased transmission, morbidity, and mortality. (MacQuarrie et al., 2009).

2.6. Stigma and Discrimination in Health Care Settings: Although the health care system provides care for people living with HIV/AIDS, it also is often a source of stigma. Many providers express negative attitudes towards people living with HIV/AIDS and would prefer not to treat those (Herek & Mitnick et al., 1998b).

In healthcare settings, people living with HIV/AIDS experience stigma and discrimination such as differential treatment, denial of care, and disregard for the right to patient confidentiality. Such responses are often fuelled by ignorance of HIV transmission routes amongst doctors, midwives, nurses and hospital staff. That medical staff should perhaps
have a better understanding of HIV makes discrimination in healthcare settings all the more damaging (Stutterheim, S.E et al, 2009).

Lack of confidentiality has been repeatedly mentioned as a particular problem in health care settings. Many people living with HIV/AIDS do not get to choose how, when, and to whom to disclose their HIV status. Studies by the WHO in India, Indonesia, the Philippines and Thailand found that 34 percent of respondents reported breaches of confidentiality by health workers (WHO, 2008).

There have been many reports from health care settings of HIV testing without consent, breaches of confidentiality, and denial of treatment and care (AIDS Bhedbhav Virodhi Andolan 1993; Carvalho et al, 1993; Masini & Mwampeta 1993). Factors contributing to these stigmatising and discriminatory responses include lack of knowledge, moral attitudes, and perceptions that caring for people living with HIV/AIDS is pointless because HIV/AIDS is incurable (Daniel & Parker 1993; Herek et al, 1998).

Fears of stigma are supported by dismaying reports of discrimination within health care settings. Studies in numerous Indian locations reported health services to be the major setting in which discrimination occurs; in one study a quarter of people living with HIV had been refused medical care (Marfatia et al, 2007).

HIV/AIDS policies and programmes may unintentionally contribute to stigmatisation and discrimination by differentiating between the “general population” and “high-risk populations,” prioritising actions to prevent HIV spreading to the former from the latter (Parker & Aggleton et al, 2002c). This approach is often justified in terms of avoiding stigmatisation of “high-risk populations,” since targeting such populations is believed to reinforce the association of HIV/AIDS with marginalised groups.

Since all cadres of health care workers carry out stigmatising and discriminatory practices, it is necessary to focus on the causes and manifestations of stigma and discrimination, and HIV/AIDS-related attitudes, knowledge, and practices of health workers. It is also necessary to identify institutional strengths and weaknesses of services for people living with HIV/AIDS, and of policies and procedures to prevent occupational exposure to HIV by staff.

Empirical research is needed to identify the best strategies for training and monitoring health care providers to ensure that they are sensitive to the problems of HIV-related stigma and understand how to minimise its occurrence and address its negative consequences.
CHAPTER 3
RESEARCH DESIGN AND METHODS

3.1. Study Design and Recruitment of Participants: The study from which the findings presented in this paper are taken is designed to identify the levels and correlates of different aspects of HIV-related stigma and discrimination among health care workers and to document their real-life experience.

3.2. Recruitment and Procedure: The study is cross-sectional in nature. Fifty health care workers (25 males, 25 females) of ages between 21-59 years are interviewed for the study from Salvation Army Chikankata Mission Hospital, Mazabuka, Zambia. The sample is randomly selected. Data are collected during the months of February, March, April and July 2011.

3.3. Questionnaire and Measures:
3.3.1. Questionnaire: A structured questionnaire mostly close-ended question is developed from previous research (Nyblade & MacQuarre, 2006b) for data collection which covered the following four key domains: (i) Fear of casual transmission and refusal of contact with people living with HIV/AIDS, (ii) Value- and morality-related attitudes—blame, judgment and shame, (iii) Enacted stigma (discrimination), and (iv) Disclosure.

3.3.2. Measures
3.3.2.1 Fear of casual transmission of HIV and refusal of contact with people living with HIV/AIDS: This is measured via seven selected items (see Table 1) that asked health care workers on their level of fear and also via eight selected items (see Tables 2 & 3) that asked their degree of comfort on certain activities rendered to people living with HIV/AIDS. On the measure of fear, health care workers are asked to answer each item by one of these responses—‘Have fear’, ‘Don’t fear’, and ‘Don’t know’. On the measure of degree of comfort, they are asked to rate each item on a four-point Likert scale, indicating their agreement or disagreement (1=Strongly agree; 2=Agree; 3=Disagree; 4= Strongly disagree; however, for the last three reversal items the score is given as 4=Strongly agree; 3=Agree; 2=Disagree; 1= Strongly disagree). The average score on the degree of comfort scale is 1.73, ranging from 1.30 to 2.50. The higher the score on this scale, the higher the level of discomfort.

3.3.2.2. Value- and morality-related attitudes—blame, judgment and shame: A seven-item instrument is designed to measure the value- and morality-related attitudes (see Table
8). The respondents are asked whether they agree or disagree with each statement. More responses with ‘disagree’ indicate less discriminatory and judgmental attitudes towards people living with HIV/AIDS.

3.3.2.3. **Enacted stigma (discrimination):** Seven items are selected to measure enacted stigma (discrimination) towards people living with HIV/AIDS. Responses to these items are either ‘Yes’ or ‘No’. More responses with ‘No’ indicate lower incidence of discriminatory practice.

3.3.2.4. **Disclosure:** The first item on disclosure asks the respondents whether they know of a health worker/colleague who has HIV/AIDS. The response is to be given in either ‘Yes’ or ‘No’. More responses with ‘Yes’ will mean a high level of disclosure. However, in order to know whether the disclosure is done through appropriate channel, another item asked the respondents to choose one from the seven options given to them (see Table 13).

3.4. **Statistical Analysis:** Data from structured interviews are analysed to identify the frequency of different key themes and categories related to stigma and discrimination. Data are analysed using tables, bar graphs, pie chart, and mean as expressed in numbers and percentages. Correlation coefficients of Phi and Chi-square are used for examining the relationship/association between the dependent variable and other independent variables in bivariate analysis (Ahuja R, 2009; Bland M, 200; Koul L, 2009; Argyrous G, 2005; Christensen L.B, 2007, all of these are heavily consulted throughout the analysis).

3.5. **Ethical Consideration:** The study investigators strictly adhere to ethical research procedures. The researcher is granted permission by Chikankata Mission Hospital Management Board for him to carry out the research at the hospital (See Appendix C). Application is also submitted to Stellenbosch University’s Ethical Committee and a written permission obtained from the Committee (See Appendix D). In order to ensure research ethics, maintenance of confidentiality is the key concern of the researcher. Confidentiality is maintained by means of coding in numbers and no names, addresses or personal identification of respondents is recorded. The data obtained from the research is stored in the personal computer of the researcher and he is the only person who has access to it. Data files on the personal computer of the researcher are password protected to avoid unauthorised access to data.

Written informed consent is obtained from each respondent (See Appendix B). No monetary remuneration is given to respondents.
CHAPTER 4
RESULTS AND DISCUSSIONS

4.1. Fear of casual transmission of HIV and refusal of contact with people living with HIV/AIDS: On the whole 25 percent of the health care workers say they have fear of, 73 percent say they have no fear of and 2 percent do not know whether or not to fear casual contact with people living with HIV/AIDS (See Table 1 & Figure 1). There is significant level of irrational fear.

<table>
<thead>
<tr>
<th>Item</th>
<th>Male</th>
<th>Female</th>
<th>Total (male + female)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fear</td>
<td>48</td>
<td>41</td>
<td>89 (25%)</td>
</tr>
<tr>
<td>Don’t fear</td>
<td>127</td>
<td>129</td>
<td>256 (73%)</td>
</tr>
<tr>
<td>Don’t know</td>
<td>0</td>
<td>5</td>
<td>5 (2%)</td>
</tr>
<tr>
<td>Total response</td>
<td>175</td>
<td>175</td>
<td>350</td>
</tr>
</tbody>
</table>

Table 1. Fear of casual transmission of HIV and refusal of contact with people living with HIV/AIDS

Herek et al (2002) state that irrational fear about transmission of HIV strongly correlates with discriminatory attitudes, and argue that fear produces discrimination towards people living with HIV/AIDS. Fear is associated with the labeling of people living with HIV/AIDS as ‘others’ – homosexuals, sex workers, injecting drug users – all of whom are already stigmatised in the society. Fear is considered to be the root source of HIV-related stigma and discrimination. HIV/AIDS is associated with many different fears. People fear the casual transmission of the virus, the loss of productivity of people living with HIV/AIDS, that
resources may be wasted on people living with HIV/AIDS, living with the disease, or imminent death (POLICY Project, 2003b).

The health care workers generally are comfortable working with HIV-infected colleague or treating people living with HIV/AIDS (See Table 2). The respondents agree that they are comfortable assisting or being assisted by HIV-infected colleague (Likert score 1.54). They agree to being comfortable sharing a bathroom with an HIV-infected colleague (Likert score 1.70). They strongly agree to both being comfortable providing health services to HIV-infected clients (Likert score 1.30) and to the rights of sex workers accessing the same level of health care as other clients (Likert score 1.38). But they are uncomfortable performing surgical or invasive procedures on clients of unknown HIV status (Likert score 2.50). Most say they strongly disagree to both being afraid of becoming infected by touching the clothing and belongings of HIV infected clients (Likert score 1.40) and to the belief that most HIV-positive health care workers get infected at work (Likert score 1.78). And they disagree to the belief of work-related exposure as the most frequent mode of HIV infection among health care workers (Likert score 2.24). If these are the findings, then there is the question of why the health care workers should be uncomfortable performing surgery or other procedures on clients of unknown HIV status.

<table>
<thead>
<tr>
<th>Likert Item</th>
<th>Likert scale (score)</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I am comfortable assisting or being assisted by a colleague who is HIV</td>
<td>S.A. (n=50)</td>
<td></td>
</tr>
<tr>
<td>infected</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. I am comfortable performing surgical or invasive procedures on clients</td>
<td></td>
<td></td>
</tr>
<tr>
<td>whose HIV status is unknown</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. I am comfortable providing health services to clients who are HIV-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>positives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. I am comfortable sharing a bathroom with a colleague who is HIV-infected</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Clients who are sex workers deserve to receive the same level and quality</td>
<td></td>
<td></td>
</tr>
<tr>
<td>of health care as other clients</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. You avoid touching the clothing and belongings of clients known or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>suspected to have HIV for fear of becoming HIV-infected</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. The most frequent mode of contracting HIV among health care workers is</td>
<td></td>
<td></td>
</tr>
<tr>
<td>through work-related exposure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Most HIV-positive health care workers get infected at work</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reversal Item</th>
<th>S.A. (n=50)</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. You avoid touching the clothing and belongings of clients known or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>suspected to have HIV for fear of becoming HIV-infected</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. The most frequent mode of contracting HIV among health care workers is</td>
<td></td>
<td></td>
</tr>
<tr>
<td>through work-related exposure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Most HIV-positive health care workers get infected at work</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SA=Strongly agree=1(or = 4 in reversal item); A=Agree= 2(or = 3 in reversal item); D=Disagree= 3(or = 2 in reversal item); SD=Strongly disagree=4(or = 1 in reversal item)

Table 2. Overall score results of respondents on the eight Likert items to determine their level of comfort on casual contact with people living with HIV/AIDS

Response average 1.73
When the survey data is further simplified by combining the four response categories (i.e. strongly agree, agree, disagree, strongly disagree) into two nominal categories – comfortable and uncomfortable – it helps us to measure the overall comfort level score by both gender. We find that there are 341 (85%) responses on ‘comfortable’ and 59 (15%) responses on ‘uncomfortable’ (See Figure 2). This indicates that there is significant level of discomfort among health care workers when it comes to casual contact with people living with HIV/AIDS.

![Overall comfort level score by both gender (male+female)](image)

If we compare across gender, the comfort level of the health care workers on casual contact with people living with HIV/AIDS (See Table 3), we find that the response averages of Likert scores 1.59 for male and 1.65 for women, which are both closest to 2 on the Likert scale show that both gender agree to the positive item numbers 1 through 5 and disagree to reversal item numbers 6 to 8. This means that generally the health care workers are comfortable in having casual contact with people living with HIV/AIDS.

However, if individual Likert items are taken separately, we find that female health care workers disagree to being comfortable performing surgical or invasive procedures on clients whose HIV status are unknown (Likert score 2.68 on item 2) and also agree to the belief of work-related exposure as the most frequent mode of HIV infection among health care workers (Likert score 2.56 on item 7). This is in contrast to their male counterparts, who under all items, demonstrate that they are comfortable in having casual contact with people living with HIV/AIDS. The female health care workers are likely to have more stigmatising and discriminatory attitudes than the male health care workers.
Further analysis using correlation coefficients of Phi and Chi-square are done to examine the relationship/association between gender and comfort level of health care workers on casual contact with people living with HIV/AIDS using Table 4 below.

### Table 3. Gender-wise comparison of score results of respondents on the eight Likert items to determine their level of comfort on casual contact with people living with HIV/AIDS

<table>
<thead>
<tr>
<th>Likert item</th>
<th>Likert scale (score) according to Gender (n=50, M=25, F=25)</th>
<th>Mean</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>F</td>
<td>M</td>
<td>F</td>
<td>M</td>
<td>F</td>
<td>M</td>
<td>F</td>
<td>M</td>
<td>F</td>
<td>M</td>
<td>F</td>
<td>M</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>1. I am comfortable assisting or being assisted by a colleague who is HIV infected</td>
<td>16 9 16 9 14 0 2 0 0 0 1.36 1.72</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. I am comfortable performing surgical or invasive procedures on clients whose HIV status is unknown</td>
<td>6 3 9 7 6 10 4 5 2.32 2.68</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. I am comfortable providing health services to clients who are HIV-positive</td>
<td>19 16 6 9 0 0 0 0 1.24 1.36</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. I am comfortable sharing a bathroom with a colleague who is HIV-infected</td>
<td>11 8 14 13 0 4 0 0 1.56 1.84</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Clients who are sex workers deserve to receive the same level and quality of health care as other clients</td>
<td>16 16 9 8 0 1 0 0 1.36 1.40</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reversal item</td>
<td>S.A. (1) A (2) D (3) S.D. (4) Mean</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>F</td>
<td>M</td>
<td>F</td>
<td>M</td>
<td>F</td>
<td>M</td>
<td>F</td>
<td>M</td>
<td>F</td>
<td>M</td>
<td>F</td>
<td>M</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>6. You avoid touching the clothing and belongings of clients known or suspected to have HIV</td>
<td>1 1 0 1 3 9 21 14 1.24 1.56</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. The most frequent mode of contracting HIV among health care workers is through work-related exposure</td>
<td>2 7 5 5 7 8 11 5 1.92 2.56</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Most HIV-positive health workers get infected at work</td>
<td>0 1 1 3 15 13 9 8 1.68 1.88</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Response average 1.59 1.65

SA=Strongly agree=1(or = 4 in reversal item); A=Agree= 2(or = 3 in reversal item); D=Disagree= 3(or = 2 in reversal item); SD=Strongly disagree=4(or = 1 in reversal item); M=Male; F=Female

### Table 4. Gender-wise comparison of comfort level of health care workers on casual contact with people living with HIV/AIDS

<table>
<thead>
<tr>
<th>Comfort level</th>
<th>Gender of health care workers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
</tr>
<tr>
<td>Comfortable</td>
<td>181</td>
</tr>
<tr>
<td>Uncomfortable</td>
<td>19</td>
</tr>
<tr>
<td>Total (N)</td>
<td>400</td>
</tr>
</tbody>
</table>

### Phi coefficient (φ):

\[
\Phi = \frac{ad - bc}{\sqrt{(a+b)(c+d)(a+c)(b+d)}}
\]

\[
\Phi = \frac{(181\times40) - (160\times19)}{\sqrt{(181+160)(19+40)(181+19)(160+40)}}
\]

\[
= \frac{7240 - 3040}{\sqrt{(341 \times 59 \times 200 \times 200)}}
\]

\[
= \frac{4200}{28368.29}
\]

\[
= 0.148
\]
Phi coefficient (\(\phi\)) of 0.148 indicates slight positive correlation between gender and comfort level of health care workers on casual contact with people living with HIV/AIDS. Male health care workers at Chikankata Mission Hospital are slightly more comfortable than their female counterparts when it comes to casual contact with people living with HIV/AIDS.

**Chi-square:**

\[
\text{Chi-square (X}^2\text{)} = N \Phi^2 \\
= 400 \times 0.148^2 \\
= 8.7616
\]

The Chi-square (X\(^2\)) critical values for 1 df are 3.841 and 6.635 respectively for 0.05 and 0.01 levels of significance and the obtained value 8.7616 of X\(^2\) is higher than these values. This indicates that there is a significant relationship between gender and comfort level and that gender and comfort level of health care workers on casual contact with people living with HIV/AIDS are dependent at 0.01 level of significance. Male health care workers are more comfortable than their female counterparts when it comes to casual contact with people living with HIV/AIDS.

Another interesting observation is that while overall 15 percent ‘uncomfortable’ score is made by the health care workers across all the eight items (see Figure 2), but when it comes to item number three, all of them either ‘strongly agree’ or ‘agree’ to being comfortable ‘providing’ health services to clients who are HIV positive (See Table 5 & Figure 3).

| Comfortable ‘providing health services’ to clients who are HIV positive |
|-------------------------------------------------|---------------|----------|-----------------|
| Strongly agree | Agree | Disagree | Strongly disagree |
| 35 | 15 | 0 | 0 |

*Table 5. Comfortable ‘providing’ health services to clients who are HIV positive*

*Figure 3. Comfortable ‘providing’ health services to clients who are HIV positive*
Similarly, while 25 percent of the health care workers say they have fear (See Table 1 & Figure 1) across all the seven question items on measurement of fear of casual contact with people living with HIV/AIDS (See Appendix A), only 6 percent say they have fear of ‘caring’ for person with HIV or AIDS (See Table 6 & Figure 4).

<table>
<thead>
<tr>
<th>‘Caring’ for person with HIV or AIDS</th>
<th>Have fear</th>
<th>Don’t fear</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have fear</td>
<td>3</td>
<td>47</td>
<td>50</td>
</tr>
</tbody>
</table>

*Table 6. ‘Caring’ for person with HIV or AIDS*

It appears that the two verbs – ‘providing’ and ‘caring’ – used here lead the respondents to suffer from social desirability bias and hence they provide responses that are socially acceptable rather than correct. In fact, all the questions in the questionnaire that measure attitudes are hypothetical questions, and hypothetical questions have the tendency to suffer from social desirability bias (Nyblade & MacQuarrie, 2006c).

4.2. Value- and morality-related attitudes—judgment, blame and shame: In their response to the seven questions provided to measure value- and morality-related attitudes (See Table 8 & Figure 6), a significant 16 percent responses agree to judgment, blame and shame towards people living with HIV/AIDS (See Table 7 & Figure 5).

<table>
<thead>
<tr>
<th>Item</th>
<th>Male</th>
<th>Female</th>
<th>Total (male + female)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>22</td>
<td>34</td>
<td>56(16%)</td>
</tr>
<tr>
<td>Disagree</td>
<td>153</td>
<td>141</td>
<td>294(84%)</td>
</tr>
<tr>
<td>Total response</td>
<td>175</td>
<td>175</td>
<td>350</td>
</tr>
</tbody>
</table>

*Table 7. Level of agreement on judgment, blame and shame towards people living with HIV/AIDS*
When we look at the individual items on the measure of values and morality (See Table 8 & Figure 6), we find that 14 percent respondents agree HIV infection is a punishment for ‘bad behaviour’, 38 percent associate HIV infection with ‘promiscuity’ of men, and 32 percent associate HIV infection with ‘prostitution’ of women.

<table>
<thead>
<tr>
<th>Questions for Values</th>
<th>Agree</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>HIV is a punishment from God</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>HIV is punishment for bad behaviour</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Promiscuous men are the ones that spread HIV in our community</td>
<td>7</td>
<td>12</td>
</tr>
<tr>
<td>It is the women prostitutes who spread HIV</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>People with HIV should be ashamed of themselves</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>I would feel ashamed if I was infected with HIV</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>I would feel ashamed if someone in my family was infected with HIV</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

Table 8. Question items on values
This finding corresponds with findings from other studies conducted in the recent past (Herek, G. M, Mitnick, L. et al, 1998c; Parker & Aggleton et al, 2002d; USAID, 2009b). HIV-related stigma has been layered upon pre-existing societal stigma toward out-groups affected by HIV/AIDS – injecting drug users, homosexuals, and prostitutes. Herek, G. M, Mitnick, L. et al (1998c) further argue that pre-existing stigma indeed helps to give rise to the HIV/AIDS epidemic by creating social conditions that foster HIV transmission. Societal stigma directed at illegal drug use and prostitution, for example, drives these two observable facts “underground” which have facilitated the efficient transmission of HIV and other microorganisms.

When gender is taken into consideration within the measurement of value- and morality-related attitudes (See Table 8 & Figure 6), it is evident that HIV-related stigma and discrimination are also linked to gender-related stigma by the respondents. According to Aggleton and Warwick (1999), in settings where heterosexual transmission is significant, the spread of HIV infection has been associated with female and male sexual behaviours that are not consistent with gender norms. This is true with the context of the communities served by Chikankata Mission Hospital. For example, prostitution is extensively perceived as abnormal female behaviour, and female sex workers are often identified as ‘vectors’ of infection that put at risk their clients and their clients’ sexual partners. Equally, in many
settings, men are blamed for heterosexual transmission, because of assumptions about male sexual behaviour, such as men’s preference or need for multiple sexual partners.

On the ‘punishment theory of disease’ (Kopelman, Loretta M, 2008) 96 percent – most health care workers – are against the view that HIV/AIDS is a punishment from God, while a relatively lower 86 percent are against the view that it is a punishment for bad behaviour. Moral judgement causes stigma.

It is interesting to note that none of the respondents finds any reason why people living with HIV/AIDS should be ashamed of their status. But when it comes to a more personal level, 14 percent say they would feel ashamed if infected with HIV, and 10 percent say they would be ashamed if someone in their family is infected with HIV. This means the tendency for internalisation of stigma is very strong among the health care workers at Chikankata Mission Hospital. It is also important to note that HIV-related stigma can be experienced not only by people living with HIV/AIDS but also by people who are suspected to be living with HIV/AIDS (POLICY Project, 2003b).

Religion has had a positive as well as negative impact. Religious norms and values have been praised for favouring care and support activities during the earliest stage of the HIV/AIDS epidemic (Global Programme on AIDS/WHO, 1991). At the same time, many religious leaders interpreted HIV/AIDS as God’s punishment of sinners and called for behaviour change or repentance (Tiendrebeogo G & Buykx M, 2004). They propagated judgmental attitudes towards people living with HIV/AIDS. In general, this generated defensive behaviours, fatalism and self-stigmatisation among its followers. It also slowed the process of taking action to mitigate the impact of HIV/AIDS.

4.3. Enacted stigma (discrimination): The seven items (See Table 10 & Figure 8) used for determining the level of discriminatory practices among the health care workers give a result which shows that in the past 12 months, as a whole 20 percent responses witness discrimination of people living with HIV/AIDS (See Table 9 & Figure 7).

<table>
<thead>
<tr>
<th>Item</th>
<th>Male</th>
<th>Female</th>
<th>Total (male + female)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>40</td>
<td>31</td>
<td>71(20%)</td>
</tr>
<tr>
<td>No</td>
<td>135</td>
<td>144</td>
<td>279(80%)</td>
</tr>
<tr>
<td>Total response</td>
<td>175</td>
<td>175</td>
<td>350</td>
</tr>
</tbody>
</table>

Table 9. Witnessed enacted stigma (discrimination) meted out against people living with HIV/AIDS in the past 12 months – overall score
The three most common behaviours of the health care workers which, willingly or unwillingly, discriminate HIV infected clients are: using latex gloves for performing non-invasive exams on clients suspected of having HIV (36 percent); extra precautions being taken in the sterilisation of instruments used on HIV positive patients (34 percent); and health care providers gossiping about a client’s HIV status (36 percent).

The inappropriate use of gloves and the misinterpretation of universal precautions, widely found in this study, is one particularly challenging issue for resource-limited health care settings like Chikankata Mission Hospital. Thus, when health workers reported using gloves for these activities only with HIV positive patients, it was both indicative of discriminatory practices and potentially problematic in an environment where gloves were sometimes unavailable for needed procedures.

<table>
<thead>
<tr>
<th>Item on discriminatory practice</th>
<th>Agree</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Receiving less care/attention than other patients</td>
<td>5</td>
<td>45</td>
</tr>
<tr>
<td>Extra precautions being taken in the sterilization of instruments used on HIV</td>
<td>17</td>
<td>33</td>
</tr>
<tr>
<td>positive patients</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Requiring some clients to be tested for HIV before scheduling surgery</td>
<td>7</td>
<td>43</td>
</tr>
<tr>
<td>Using latex gloves for performing non-invasive exams on clients suspected of having</td>
<td>18</td>
<td>32</td>
</tr>
<tr>
<td>HIV</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Because a patient is HIV-positive, a senior health care provider assigned the client</td>
<td>2</td>
<td>48</td>
</tr>
<tr>
<td>to a junior provider</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Testing a client for HIV without his/her consent</td>
<td>4</td>
<td>46</td>
</tr>
<tr>
<td>Health care providers gossiping about a client’s HIV status</td>
<td>18</td>
<td>32</td>
</tr>
</tbody>
</table>

**Table 10. Item score on discriminatory practice**
While even on its own gossiping about a client’s HIV status is purely a discriminatory behaviour, argument can be made to defend those of the former two actions (excessive use of latex gloves and taking extra precaution during sterilisation) as measures taken for universal precaution. This is because safety in the workplace is a concern for health care workers. This and other studies (Nyblade et al, 2003; Mahendra et al, 2006) have shown that health care workers perceive themselves to be at high risk of HIV infection because of their exposure to the virus during service delivery. Despite being well-equipped with knowledge and skills, they do not perceive the environment within which they work as safe. The health care workers became more fearful in the absence of universal precaution in the health care system, and this also evokes discrimination towards people living with HIV/AIDS. Thus it is essential to assess and acknowledge health care workers’ fears and risk and then develop and implement workplace policies that ensure staff safety and respect for health care workers’ rights. These policies need to ensure the availability of essential supplies like gloves and post-exposure prophylaxis for maintaining optimum infection control practices by health care workers at all times to not only protect themselves but also protect their patients from exposure to infection.

### Discriminatory practices and stigmatising attitudes:

Association between stigmatising attitudes and discriminatory practices is also examined (See Table 11). Association is tested between one stigmatising attitude item (judgment, blame and shame towards people living with HIV/AIDS) on one side and discriminatory behaviour (witnessing of discrimination meted
out against people living with HIV/AIDS) on the other side. The analysis is done using Phi and Chi-square correlation coefficients.

\[
\text{Phi coefficient (\( \phi \))}: \\
\text{Phi (\( \phi \)) = } \frac{ad - bc}{\sqrt{(a+b)(c+d)(a+c)(b+d)}} \\
= \frac{56 \times 279 - 294 \times 71}{\sqrt{350 \times 350 \times 127 \times 573}} \\
= \frac{-5250}{94416.35} \\
= -0.055
\]

The computed Phi coefficient (\( \phi \)) of -0.055 reveals that there is no significant inverse relationship between attitudes (stigma) and behaviour (discrimination) of health care workers at Chikankata Mission Hospital towards people living with HIV/AIDS.

### Chi-square:
Chi-square (\( X^2 \)) = \( N \Phi^2 \)
\[
= 700 \times -0.055^2 \\
= 2.1175
\]

The Chi-square (\( X^2 \)) critical values for 1 df are 3.841 and 6.635 respectively for 0.05 and 0.01 levels of significance and the obtained value 2.1175 of \( X^2 \) is lower than these values. This indicates that there is no significant relationship between the attitudes (stigma) and behaviour (discrimination) and that attitudes (stigma) and behaviour (discrimination) of health care workers towards people living with HIV/AIDS are independent at 0.01 level of significance. This means that, for health care workers at Chikankata Mission Hospital, their attitudes towards people living with HIV/AIDS translate into corresponding behaviours.
4.4. Disclosure:
Disclosure of HIV status often is considered an alternative measure for HIV-related stigma and discrimination, with the assumption that in an environment where stigma and discrimination is low, disclosure will occur more often and among a wider group of individuals (Nyblade L & MacQuarre K 2006b). Disclosing one’s own HIV status is very difficult because of the fear of judgment and rejection, and loss of the respect of the family and community. So one will rather live in silence.

At Chikankata Mission Hospital, 63 percent of the health care workers know of a colleague or someone working in the hospital who has HIV/AIDS (See Table 12 & Figure 9). Over half (51 percent) of the respondents say the main source of knowledge about a colleague’s HIV status is through disclosure to a close colleague by the person her/himself. And 19 percent of them know of a colleague’s HIV status from reading through his/her hospital file and 16 percent know through general gossip or rumour. None of them reported to have known a colleague’s HIV status from another health care provider where the person tested (See Figure 10).

<table>
<thead>
<tr>
<th>Item</th>
<th>Male</th>
<th>Female</th>
<th>Total (male + female)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>33</td>
<td>30</td>
<td>63</td>
</tr>
<tr>
<td>No</td>
<td>17</td>
<td>20</td>
<td>37</td>
</tr>
<tr>
<td>Total response</td>
<td>50</td>
<td>50</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 12. Know of a colleague or someone in the health facility who has HIV/AIDS?

![Figure 9. Know of a colleague or someone in the health facility who has HIV/AIDS?](image-url)
It is interesting to note that the type of hospital where the health care workers are working is a significant predictor of their discriminatory attitudes towards people living with HIV/AIDS. Professional contact with HIV-positive people is likely to have reduced discriminatory attitudes as has been shown in other studies (these are studies done by Kalichman SC & Simbayi LC, 2004; Van Dyk A, 2001), and this corresponds with the finding of this study which has a high disclosure rate of 63 percent and over half (51 percent) of the disclosure happening voluntarily. On the other hand one may argue about why another significant 19 percent of the disclosure should take place through reading of the patients' personal file. The explanation is that the participating health care workers are mostly specialised in providing care, treatment, and diagnosis of HIV infection. Thus, most of the health care workers of the hospital who are interviewed are involved with either providing treatment for HIV/AIDS or diagnosing HIV/AIDS and have direct access to the patient files.

| The infected person told me her/himself | 26 |
| Read from his/her hospital file | 10 |
| General gossip/rumour | 8 |
| Family member of infected person told me | 3 |
| Community member told me | 2 |
| From a health care provider where the person tested | 0 |
| Other | 2 |
| **Total** | **51** |

*Table 13. Channel of disclosure of HIV status*

*Figure 10. Channel of disclosure of HIV status*
4.5. Limitations of the study:

This study is not without limitations. The results of the study should be interpreted in the context of a number of limitations. First, all the questions in the questionnaire that measure attitudes are hypothetical questions, and hypothetical questions have the tendency to suffer from social desirability bias (Nyblade & MacQuarrie, 2006c) due to the possibility of respondents providing responses that are socially acceptable rather than being correct. Second, there is also a limitation of generalisability of the findings of the study as only 20 percent of the health care workers are interviewed from the hospital. To have a full understanding of stigmatising attitudes and discriminatory behaviours of health care workers, a bigger sample should be studied in a broader context. Third, due to time constraint, a convenient sample is selected based on availability. Hence, selection bias may have occurred.
CHAPTER 5
CONCLUSION AND RECOMMENDATIONS

Interventions to reduce stigma are crucial for improving care, quality of life, and emotional health for people living with HIV/AIDS. A multifaceted approach encompassing legal protection, policy development, and programme services is necessary to address the social climate that sometimes appears to legitimise stigma and discrimination (Klein et al., 2002). The following recommendations emerged from the study:

5.1. **Law and legal protections**: Law and legal protections are essential components of the societal response to stigma and discrimination (Klein et al., 2002). For maximum impact, law and legal interventions to prevent HIV must be integrated with interventions against HIV-related stigma and discrimination. Legal protection for people living with HIV/AIDS is a powerful way of restoring, and thereby mitigating, the unequal power relations, the social inequality and the exclusion that lie at the heart of HIV-related stigma and discrimination. Within the health care setting, it must be ensured that codes of ethics and professional conduct for health care services are in place and are enforced.

5.2. **Continuing advocacy for empowerment of people living with, and affected by, HIV/AIDS**: Continuing advocacy is needed for social change in response to HIV-related stigma and discrimination. The role of people living with HIV/AIDS and of religious and political leaders in such a process cannot be underrated. Community mobilisation, advocacy and social change must take place alongside programme interventions carried out to individuals and community.

5.3. **Providing support to enable people living with HIV/AIDS to disclose their status**: It needs to be ensured that comprehensive care and services, including voluntary counselling and testing (VCT) and follow-up care are available to enable individuals to learn their serostatus. Support system must be available to enable them to voluntarily disclose their status. Concrete action also needs to be taken to ensure greater access to, and uptake of, treatment medicines. Helping people to understand that it is possible to live with HIV/AIDS, and to help them realise that treatment advance promises real hope for the future, is an important step in dispelling fear and anxiety in the workplace and in the community.

5.4. **A multi-sectoral, participatory approach is crucial to reduction of stigma and discrimination**: Participatory problem identification and problem solving and the involvement of all levels of staff in intervention activities will bring improvements in health
care workers’ attitudes, practices and institutional policies. The workplace provides an excellent opportunity to set standards that protect human rights and to establish a supportive environment for people living with HIV/AIDS. A workplace policy on HIV/AIDS is a powerful instrument with which to combat discrimination and encourage solidarity through education and awareness-raising (ILO, 2001). Action is needed to tackle gender and sexual inequalities and stereotypes upon which HIV-related stigma and discrimination thrives. In particular, efforts should be made to counter injustice and misunderstanding and to protect the human rights of marginalised groups who are discriminated against.

5.5. In order to reduce stigma and discrimination, it is important to assess and improve HIV-related knowledge and attitudes of all health care workers: Misinformation and judgmental attitudes among all cadres of health care workers can foster stigma, fear, and differential treatment of people living with HIV/AIDS. It is important for programmes to target all levels of health care workers with initial and ongoing training. Such training should go to the extent of sensitising staff to the needs, concerns, and rights of people living with HIV/AIDS. It is essential to integrate HIV prevention into primary care. It is important to encourage practical HIV-related training for all health care workers to promote better understanding, to promote confidentiality and to reduce speculative anxiety.

Public education opportunities must be used to put a human face on HIV/AIDS. Involvement of people living with HIV/AIDS in public education is essential along with support of HIV prevention education materials developed by and for communities. It is important to maintain a proactive presence in the community (e.g., in schools, at World AIDS Day, and at HIV Testing Day events), getting the involvement and support of families and communities of the infected and affected.

5.6. Increased knowledge and improved attitudes must be accompanied by policies, information, and supplies that create a safe working environment for health care workers: It is essential to assess and acknowledge health care workers’ fears and risk and then develop and implement workplace policies that ensure staff safety and respect for health care workers’ rights. The policy needs to ensure the availability of essential supplies like gloves and post-exposure prophylaxis for maintaining optimum infection control practices by health care workers at all times to not only protect themselves but also protect their patients from exposure to infection. The use of universal precautions will not only allay staff anxieties but will also help protect the identities and rights of infected patients. Reducing stigma and discrimination in health facilities requires not only addressing the attitudes and practices of health care workers but also meeting their needs for HIV/AIDS
information, training in health care for people living with HIV/AIDS, and supplies for universal precautions to prevent occupational exposure to HIV.

In conclusion, the findings of this study are certainly not unique to health care providers at Chikankata Mission Hospital alone. However, the findings such as the ones reported in this study would be helpful in assessing HIV-related stigma and its impact on service delivery and would aid in designing effective intervention programmes for those on the front lines of service provision for people living with HIV/AIDS around the world.
REFERENCES


MacQuarrie, K.; Eckhaus, T.; Nyblade, L. (August 2009). *HIV-related Stigma and Discrimination: A Summary of Recent Literature*, International Center for Research on Women to UNAIDS. This work was funded by UNAIDS. pp 5-6


Nyblade L, MacQuarre K (2006b). Can we measure HIV/AIDS-related stigma and discrimination? Current Knowledge about Quantifying Stigma in Developing Countries. USAID. ICRW. The POLICY Project; pp 5-10

Nyblade L, MacQuarre K (2006c). Can we measure HIV/AIDS-related stigma and discrimination? Current Knowledge about Quantifying Stigma in Developing Countries. USAID. ICRW. The POLICY Project; p 4

Panos: http://www.panos.org.uk/aids/stigma_countries_study.htm


Smart, R. HIV/AIDS-related stigma and discrimination, Module 1.4, p 124


UNAIDS. (2000). HIV and AIDS-related Stigmatisation, Discrimination and Denial: Forms, Contexts and Determinants, Research studies from Uganda and India (prepared for UNAIDS by Peter Aggleton). Geneva, UNAIDS.


APPENDIX A

Chikankata Mission Hospital – HIV-related Stigma Questionnaire
(for Structured Interview)

QUESTIONS FOR FEAR OF CASUAL CONTACT WITH PEOPLE LIVING WITH HIV/AIDS

In response to the following situations, please indicate if you have fear of HIV transmission, do not have fear of HIV transmission, or do not know if you have fear of HIV transmission:

1. Touching the sweat of a person with HIV or AIDS.
   - Have fear
   - Don't fear
   - Don't know

2. Touching the saliva of a person with HIV or AIDS.
   - Have fear
   - Don't fear
   - Don't know

3. Giving an injection to a person with HIV or AIDS.
   - Have fear
   - Don't fear
   - Don't know

4. Caring for a person with HIV or AIDS.
   - Have fear
   - Don't fear
   - Don't know

5. Dressing the wounds of a person with HIV or AIDS.
   - Have fear
   - Don't fear
   - Don't know

6. Conducting surgery on or suturing a person with HIV or AIDS.
   - Have fear
   - Don't fear
   - Don't know

7. Putting a drip in someone who is showing signs of AIDS.
   - Have fear
   - Don't fear
   - Don't know

Do you strongly agree, agree, disagree or strongly disagree with each statement:

1. I am comfortable assisting or being assisted by a colleague who is HIV infected.
   - Strongly agree
   - Agree
   - Disagree
   - Strongly disagree

2. I am comfortable performing surgical or invasive procedures on clients whose HIV status is unknown.
   - Strongly agree
   - Agree
   - Disagree
   - Strongly disagree

3. I am comfortable providing health services to clients who are HIV-positive.
   - Strongly agree
   - Agree
   - Disagree
   - Strongly disagree

4. I am comfortable sharing a bathroom with a colleague who is HIV-infected.
   - Strongly agree
   - Agree
   - Disagree
   - Strongly disagree

5. Clients who are sex workers deserve to receive the same level and quality of health care as other clients.
   - Strongly agree
   - Agree
   - Disagree
   - Strongly disagree

6. You avoid touching the clothing and belongings of clients known or suspected to have HIV for fear of becoming HIV-infected.
   - Strongly agree
   - Agree
   - Disagree
   - Strongly disagree

7. The most frequent mode of contracting HIV among health care workers is through work-related exposure.
   - Strongly agree
   - Agree
   - Disagree
   - Strongly disagree

8. Most HIV-positive health care workers get infected at work.
   - Strongly agree
   - Agree
   - Disagree
   - Strongly disagree
QUESTIONS FOR VALUES
Do you agree/disagree with the following statement?
1. HIV is a punishment from God.
   Agree □     Disagree □
2. HIV is punishment for bad behaviour.
   Agree □     Disagree □
3. People with HIV should be ashamed of themselves.
   Agree □     Disagree □
4. Promiscuous men are the ones that spread HIV in our community.
   Agree □     Disagree □
5. It is the women prostitutes who spread HIV.
   Agree □     Disagree □
6. I would feel ashamed if I was infected with HIV.
   Agree □     Disagree □
7. I would feel ashamed if someone in my family was infected with HIV.
   Agree □     Disagree □

QUESTIONS FOR ENACTED STIGMA (DISCRIMINATION)
In the past 12 months, have you seen or observed the following happen in this health facility because a client was known to have or was suspected of having HIV/AIDS?
1. Receiving less care/attention than other patients.
   Yes □     No □
2. Extra precautions being taken in the sterilization of instruments used on HIV positive patients.
   Yes □     No □
3. Requiring some clients to be tested for HIV before scheduling surgery.
   Yes □     No □
4. Using latex gloves for performing non-invasive exams on clients suspected of having HIV.
   Yes □     No □
5. Because a patient is HIV-positive, a senior health care provider assigned the client to a junior provider.
   Yes □     No □
6. Testing a client for HIV without his/her consent.
   Yes □     No □
7. Health care providers gossiping about a client’s HIV status.
   Yes □     No □

QUESTIONS FOR DISCLOSURE
1. Is there anyone you know in the health facility who has HIV, but has not yet shown signs and symptoms of AIDS?
   Yes □     No □
How did you know that he/she has HIV infection? _______________________________________
2. Do you know of a health worker/colleague who has HIV or AIDS?
   Yes □     No □
How did you know he/she has HIV or AIDS?
   1. The infected person told me her/himself □
   2. Family member of infected person told me. □
   3. Community member told me □
   5. From a health care provider where the person tested □
   6. Read from his/her hospital file. □
   7. Other □ Specify______________________________________________________________
APPENDIX B

STELLENBOSCH UNIVERSITY
CONSENT TO PARTICIPATE IN RESEARCH

Title of the study: To what extent do HIV-related stigma and the resulting discrimination among health care workers at Salvation Army Chikankata Mission Hospital, Mazabuka District, Zambia affects their services to people living with HIV/AIDS?

You are asked to participate in a research study conducted by Dr Zairemthiama Zachungungu, from the Africa Centre for HIV/AIDS Management at Stellenbosch University. The results of the study will lead to an MPhil (HIV/AIDS) degree. You were selected as a possible participant in this study because you are a health care worker of Salvation Army Chikankata Mission Hospital and work in the environment where HIV/AIDS is prevalent.

1. PURPOSE OF THE STUDY
Our knowledge about the level of stigma and discrimination within the Salvation Army Chikankata Mission Hospital health care setting is very limited and it has been recognised that there are gaps between our programme and policy. There is a felt need to move beyond documentation of the problem, and assess and design responses to hospital-based stigma and discrimination. The purpose of the study is to establish the level of HIV-related stigma among health care workers and to determine its influence on the services of the health care workers in order to develop action plans that ensure a safer and less stigmatised hospital environment.

2. PROCEDURES
If you volunteer to participate in this study, we would ask you to do the following things:

- A two page questionnaire will be given to you.

- You will have to answer each question by marking an ‘X’ in the space provided against each option given.

- There is no right or wrong answer. You just have to choose as your answer what you think is the best option/options from the multiple options given.

- Working on the questionnaire will take you about 15 minutes maximum.

- Once you complete your questionnaire you are requested to submit it to the researcher/investigator at Room 8.

3. POTENTIAL RISKS AND DISCOMFORTS
Your participation in this research through answering this questionnaire will not bring to you any reasonable foreseeable risks, discomforts, or inconveniences. It also will not bring...
significant physical or psychological risks. Also none of the research results will be used in any way whatsoever for the purpose of staff appraisal or disciplinary hearings.

4. POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY
The research is expected to benefit you by mean of increasing your knowledge base about HIV/AIDS-related stigma and discrimination. This knowledge will then translate into positive attitudes and practices.

5. PAYMENT FOR PARTICIPATION
You will not receive payment for participation in this research.

6. CONFIDENTIALITY
Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission or as required by law. Confidentiality will be maintained by means of coding in numbers and no names, addresses or personal identification of respondents will be recorded. The data obtained from the research will be stored in the personal computer of the researcher and he will be the only person who will have access to it. Data files on the personal computer of the researcher will be password protected to avoid unauthorised access to data.

The final result will be submitted to the concerned faculty of Africa Centre for HIV/AIDS Management at Stellenbosch University as per the compulsory submission of the final thesis for examination.

In case the researcher is planning to publish results of study, confidentiality will be maintained in publication by not disclosing any individual identity or related personal information. Also none of the research results will be used in any way whatsoever for the purpose of staff appraisal or disciplinary hearings.

7. PARTICIPATION AND WITHDRAWAL
You can choose whether to be in this study or not. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. You may also refuse to answer any questions you don’t want to answer and still remain in the study. The investigator may withdraw you from this research if circumstances arise which warrant doing so.

8. IDENTIFICATION OF INVESTIGATORS
If you have any questions or concerns about the research, please feel free to contact the following:
Dr. Zairemthiama Zachungnunga, MPhil (HIV/AIDS) Research Student,
Room 8, Salvation Army Chikankata Mission Hospital,
Ph. +26 0978124056, Email: zairemthiama@gmail.com

Dr. Thozamile Qubuda, Study Supervisor,
HIV/AIDS Social Scientist,
Africa Centre for HIV & AIDS Management
Faculty of Economics & Management Sciences,
Tel: +27 021 808 3999, E-mail: tqubuda@sun.ac.za

9. RIGHTS OF RESEARCH SUBJECTS
You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights or remedies because of your participation in this research study. If you have questions regarding your rights as a research subject, contact Ms Malène Fouché [mfouche@sun.ac.za; +27 021 808 4622] at the Division for Research Development.
SIGNATURE OF RESEARCH SUBJECT OR LEGAL REPRESENTATIVE

The information above was described to me by Dr. Zairemthiama Zachungnunga in English and I am in command of this language or it was satisfactorily translated to me. I was given the opportunity to ask questions and these questions were answered to my satisfaction.

I hereby consent voluntarily to participate in this study. I have been given a copy of this form.

_________________________________________________________
Name of Subject/Participant

_________________________________________________________
Name of Legal Representative (if applicable)

_________________________________________________________
Signature of Subject/Participant or Legal Representative Date _______

SIGNATURE OF INVESTIGATOR

I declare that I explained the information given in this document to __________________ and/or [his/her] representative __________________ He/she was encouraged and given ample time to ask me any questions. This conversation was conducted in English and no translator was used.

Dr. Zairemthiama Zachungnunga
+26 0978124056 30 March 2011
Signature of 1st Investigator Date

Dr. Thozamile Qubuda
+27 021 808 3999 30 March 2011
Signature of 2nd Investigator Date

Stellenbosch University  http://scholar.sun.ac.za
APPENDIX C

The Salvation Army
Chikankata Mission Hospital
PB S-2, Mazabuka, Zambia

15th October 2010

Research Ethics Committee: Human Research (Non-Health)
University of Stellenbosch

RE: Permission to Conduct Research on HIV/AIDS-Related Stigma at Salvation Army Chikankata Mission Hospital.

Sir/Madam,

This is to bring to your kind attention that the Salvation Army Chikankata Mission Hospital Management board has no objection for Dr. Zairemthiana Zachungunya, an MPhil student of Stellenbosch University, to carry out research activities within the hospital and among our staff.

The hospital is committed to render him full support in his research on the above mentioned topic.

Yours faithfully,

[Signature]

Dr. Trevor Kaile BSc(HB), MBChB, MSc, MMED (Internal Med)
Chairman, Chikankata Hospital Management Board &
Territorial Health Strategic Development Director & Director of Colleges
The Salvation Army, Zambia territory

Heart to God and Hand to Man
A Christian Church Serving in Zambia
APPENDIX D

11 January 2011

Tel.: 021 - 808-6183
Enquiries: Sidney Engelbrecht
Email: sidney@sun.ac.za

Dr Z Zachungungra
Africa Centre for HIV/Aids Management
University of Stellenbosch
STELLENBOSCH
7600

Dr Z Zachungungra

APPLICATION FOR ETHICAL CLEARANCE

With regards to your application, I would like to inform you that the project, To what extent do HIV-related stigma ant he resulting discrimination among health care workers at Salvation Army Chikankata Mission Hospital, Mazabuka District, Zambia affects their services to people living with HIV/AIDS?, has been approved on condition that:

1. The researcher/s remain within the procedures and protocols indicated in the proposal;
2. The researcher/s stay within the boundaries of applicable national legislation, institutional guidelines, and applicable standards of scientific rigor that are followed within this field of study and that
3. Any substantive changes to this research project should be brought to the attention of the Ethics Committee with a view to obtain ethical clearance for it.
4. The researcher/s implements the suggestions made by the mentioned by the Research Ethics Committee (Human Research) in order to reduce any ethical risks which may arise during the research.

We wish you success with your research activities.

Best regards

MR SF ENGELBRECHT
Secretary: Research Ethics Committee; Human Research (Non-Health)