M-PH: Knowledge, beliefs and attitudes regarding counselling behaviour for HIV and AIDS, STIs and TB: A survey of eThekwini District Primary Health Care workers.

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DECLARATION

This research has not been previously accepted for any degree and is not being currently submitted for any other degree.

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ABBREVIATIONS

ART- AntiRetroviral Treatment

ARVs - AntiRetrovirals

AIDS - Auto Immune Deficiency Syndrome

EMTCT- Elimination of Mother to Child Transmission

HAST- HIV and AIDS, STIs and TB

HBM - Health Belief Model (HBM)

HCT- HIV Counselling and Testing

HCW - Health Care Worker

HIV- Human Immune Deficiency

IM - Information-Motivation-Behavioural

IPT- Isoniazid Prevention Therapy

MOU - Memorandum of Understanding

NDOH - National Department of Health

NIMART- Nurse Initiated Management of ART

NSP- National Strategic Plan

OI - Opportunistic infection

PEP- Post Exposure Prophylaxis

PEPFAR - President Emergency Plan for AIDS Relief

PMTCT - Prevention of Mother to Child Transmission

PICT - Provider Initiated Counselling and Testing

SA - South Africa

SADC - Southern African Development Community

SD - Standard Deviation

STDs - Sexually Transmitted Diseases

TB -Tuberculosis

TM - Transtheoretical Model

UNGASS - United Nations General Assembly Special Session on HIV/AIDS

USAID - United States Agency for International Development

WHO - World Health Organization

ABSTRACT

Background

HIV infection continues to be a challenge in South Africa with new infections reported at alarming rates. Health Care Workers (HCWs) who are nurses consequently have frequent contact with HIV positive and TB co-infected patients. During this contact their counselling behaviour is influenced by their knowledge, beliefs and attitudes about HIV and AIDS, STIs and TB (HAST) and may influence provision as well as the quality of HAST counselling behaviour.

Aim

The aim of the study was to assess eThekwini Municipality Health Care Workers' knowledge, beliefs and attitudes regarding counselling behaviour for HAST and to make recommendations based on the findings of this study.

Methods

A descriptive cross sectional study design was used in which data about HAST counselling behaviour were collected using self administered questionnaires. The study population was all the nurses working at eThekwini Municipality Health clinics that were on duty at the time of the study and excluded those nurses who were absent or on leave during the period of data collection. Informed consent was signed by each respondent. Data were captured using SPSS version 14 and univariate, bivariate and multivariate analysis was undertaken. The level of significance was P<0, 05.

Results

The HCWs were well informed regarding counselling behaviour for HAST. HCWs with university education scored higher than those with college level of education but there were no statistically significant differences between the HCWs with the university education and those with college education. However some HCWs' attitudes and beliefs about poverty were negative and may not be helpful in improving a patient's health. Results showed that some HCWs' negative attitudes about HAST counselling resulted from fear of HIV and or TB infection. Age and the

level of education showed statistically significant association with beliefs. Older, better educated HCWs with a university education scored higher for knowledge for HAST counselling behaviour. There was no statistical significant difference found between HCWs who see less than 100 patients per day and those who see more than 100 patients per day.

Conclusion

The findings of the study show that HCWs were well informed regarding counselling behaviour for HAST, even though some HCWs have negative attitudes which are not supportive which need to be addressed.

Recommendations

It is recommended that HCWs receive continuous training in order to address the negative attitudes about counselling behaviour for HAST.

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CHAPTER 1: The Introduction

1.1. Introduction

HIV and AIDS, sexually transmitted infections (STIs) and Tuberculosis (TB) are common co-infections in South Africa, and constitute a major public health problem, both as separate diseases and in combination. Combating these diseases requires a range of initiatives, from prevention through to treatment. Counselling taking place both before and after an infection has been diagnosed, forms an important part of this continuum of care. The information received by those being counseled is dependent on the health care workers with whom they meet, and can have important implications for the treatment they pursue and the way they conduct their lives. It is against this background that a survey of the eThekwini health care workers was undertaken to establish the baseline information of the HCWs' knowledge, beliefs and attitudes regarding counselling behaviour for HAST. This is important as HCT and PICT policies are being implemented to increase HIV testing towards HIV prevention and early ART for eligible patients. This chapter provides an overview of the background to the problem that led to the study and also outlines the study setting, the discussion of terms, the rationale for the study, and indicates the aims and objectives.

1.2. Background

South Africa's (SA) HIV and AIDS epidemic has stabilized from the estimated HIV prevalence of 10.9% in 2008 to an estimated 10.5% in 2010 (Census 2011). However, HIV remains a challenge in SA as the total number of people living with HIV in SA increased from an estimated 4.10 million in 2001 to an estimated 5.38 million by 2010 with an estimated 900 000 babies born HIV positive (Census 2011).

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In response SA developed the National Strategic Plan (NSP) for HIV and AIDS, which seeks to involve all stakeholders in the battle to the HIV epidemic. Through the NSP new infections must be halved and 80% of eligible HIV positive patients must be retained on Antiretroviral Therapy (ART) by 2016. Health care provision must involve implementation of HCT and PICT at public and private health facilities. PICT

implementation must be strengthened at Primary healthcare facilities where nurses provide health care to many patients who live in impoverished areas, including attending to an average of 100 patients a day. The patient daily workload has increased due to the increased burden of disease and due to delays in replacing doctors when they leave which contributes to nurses' duties ranging from nursing care to clinical management of patients including Antiretrovirals (ART) initiation, as the clinic doctors are in short supply (DOH 2010).Since decentralization of Antiretroviral Therapy (ART) to Primary Health facilities, nurses have prepared, initiated and managed patients on Antiretrovirals drugs (ARVs), a strategy designed to allow eligible HIV positive patients to access ARVs within 5km from where they stay. Through Nurse Initiation and Management of patients on Antiretroviral Therapy (NIMART), coupled with clinical mentoring on-site or off-site, nurses are skilled to prescribe and manage patients on ART (DOH 2010).

The risk of acquiring HIV is more for patients infected with sexually transmitted diseases (STD) as amongst South Africa's population of 51 770 560 million HIV transmission is primarily heterosexual, followed by mother-to-child transmission (National HIV and Syphilis Prevalence Survey 2010). There is a very close relationship and association between common STDs and the transmission of HIV and AIDS and as highlighted by Evian (2003):

- "STDs enhance the transmission (and spread) of HIV because STDs cause genital inflammation. Inflammation results in many immune cells with CD4 receptors in and around the genital tract.
- STDs cause damage to the surface and natural barriers in the genital tract. HIV easily gets into the body.
- People who get STDs are also at risk of getting HIV.
- People who have HIV also increase the spread of STDs because of their immune-deficiency.
- In the presence of STDs, it is necessary to always look for signs of HIV infection".

As highlighted by Evian (2003) counselling for HAST is needed by people infected and affected by HIV. Health care workers (HCW)' duties involve providing information that can help people in an objective manner to deal with being diagnosed

with HIV (Evian 2003). This is achieved by the counsellor and the patient exploring relevant issues, and the counsellor encouraging the patient to find coping strategies. Evian (2003) explains that “Counselling encourages the patient to find his or her own solutions to problems”.

Counselling

The term counselling is used in order to explain a wide range of issues which involve educating and supporting patients to adopt ways that improve their health behaviour. Counselling is defined as a helping relationship in which a patient, having identified a problem or concern, seeks the help of a professional. It spans the entire continuum of health care to satisfy primary, secondary and tertiary functions (Whitlock 2002). However, the implementation of HIV Counselling and Testing should ensure cultural appropriateness and should be done within a legal and human rights framework (National HIV Counselling and Testing (HCT) Policy Guidelines 2010). This may also be due to the fact being HIV positive is viewed more negatively than other conditions such as mental illness (Reis et al. 2005).

Counselling behaviour

The success of counselling requires that both the HCW and the patient hold hands in order to empower the patient to take full responsibility and to survive while practicing new healthy ways. Counselling requires that HCWs’ education include empowering and persuading patients to own the choices made about their lives in order for them to implement the necessary steps and to maintain new ways adopted to improve their health (Mash 2008).

These include the use of evidence-based behavioural theories and successful behaviour-change case history management to successfully address the world’s most serious health problems that require behaviour change at the level of individuals, families, communities, organizations, and policy-making bodies. Political will and adequate effective mobilization, including adaptations of successful programs and new approaches, are necessary to ensure the success of effective behavioural counselling.

Gretchen et al (2000) point outs that effective behaviour counselling is essential for effective behavioural change by using the six stages of (Transtheoretical Model of Change) which are:

1. **“ pre-contemplation** is when patients enter the cycle and are not considering a change
2. **contemplation** is the stage of ambivalence between changing and staying the same
3. **determination** is the time when a patient decides to try to change
4. **action** is when patients take the plunge and experience the change
5. **maintenance** is patients keeping the new behaviour and working to prevent relapse
6. **relapse** occurs where patients return to the old behaviour” (Gretchen et al. 2000).

Patients should be supported to complete all the stages in order to reduce the likelihood of relapse. HCWs should also educate patients about early detection of a relapse, how to maintain gains and how not to behave in ways that do not compromise their health (Gretchen et al. 2000).

There is little consensus about how to describe behavioural counselling with the literature suggesting the Five A's construct which can be used to help the patients to change their risky behaviour (Whitlock 2002). The Five A's construct suggest that HCWs must first familiarize themselves with the patients’ situation. This requires that the HCWs ask questions in order to be clear about the unique situation of each patient. The initial fact finding should be followed by suggestions about ways to be adopted by the patient in order to improve their health. The suggestions should be tailor made for each patient and the HCW must help the patient to make choices that they are willing to live by. HCWs should also in collaboration with the patients agree on follow-up visits and how to support the patients to cope with starting treatment as well as management of acute adverse reactions (Whitlock 2002).

Beliefs or perceptions

Beliefs or perceptions are opinions lacking reference-able proof, or the psychological state in which an individual holds a proposition or premise to be true or an impression as defined in Stanford Encyclopedia of Philosophy (2006), which further states that the majority of contemporary philosophers describe a belief as a "propositional attitude" (Stanford Encyclopedia of Philosophy 2006). For example, a person may learn that HIV and AIDS is a curse; he acquires a new belief (in this case, the belief that a curse causes HIV and AIDS). This new fact may be stored in memory and accessed or recalled when necessary (Stanford Encyclopedia of Philosophy 2006). Hence the definition, "a belief is a statement you say to yourself about someone or something that you hold true". In addition, a belief can be enhanced through repetition and through programming during meditation (The Silva method 2007). It is a feeling, or energy that is subjective, and is necessary for manifesting goals, and studies report that HCWs who perceived, believed or felt their behaviour to be risky and vulnerable to infection (subjective energy) with HIV, led them to seek HIV testing (goal) (Peltzer et al. 2004). Yet, people who declined testing said that they did so because they did not think that they could be infected by HIV (Ikechebelu et al. 2006). However, beliefs or perceptions may also have the opposite effect of inducing the fear of testing HIV positive in an individual which might deter him or her from VCT (Peltzer et al. 2004). A quarter of high-risk study participants chose not to be tested due to fear of learning they are HIV positive (Peltzer et al. 2004).

Attitudes.

The definition of an attitude according to Middlebrook (1980) is that an attitude is a fixed acquired way about certain issues and influences one's thinking, feelings and actions (Middlebrook 1980). In agreement Peltzer et al (2004) states that attitudes are a complicated state of mind about what one believes, how one feels, what has shaped how the individual's reaction (Peltzer et al. 2004).

According to Triandis (1971) attitudes have four functions, namely:

- To bring insight about one's life experiences,
- To maintain their good impression,
- To change with the changing and challenging life experiences,
- To allow exhibiting what matters most

However Triandis (1971) distinguishes attitudes from values and together with Reich & Adcock (1976) agree that important principles that influence the behaviour must not be ignored in order to change attitudes and behaviour.

HCWs' principles and what is important to them must form part of attempts to change their attitudes and how they behave. In addition theories about how to change attitude premise that attitudes can be changed through convincing. However, the role of group dynamics cannot be underestimated, and other influences include the impact of the media on changing attitudes, and promoting behaviour change (Zimbardo et al. 1977; Kaplan & Sadock 1988).

Studies aimed at understanding the complex relationship between attitude and health behaviours suggest that a change in attitude, which is one of the primary determinants of intention, can lead to a change in health behaviour (Peltzer et al. 2004). Intention was used to test positive attitudes toward VCT, and the conclusion was that participants had favorable attitudes due to their high levels of intention to test for HIV (Ikechebelu et al. 2006; Iliyasu et al. 2006). It must be noted that although attitude is one of the primary determinants of intention to perform health behaviour, such as HIV testing, intention to test is still not the same as doing the test. A person might have the intention to perform an act, such as testing for HIV, but may fail to carry out that intention due to other conflicting interests and pressures. Studies found a link between attitude and HIV testing practices (Kalichman et al. 2003). In

addition stigmatization and discrimination, ignorance as well as despondency about HIV affects attitudes and influences behaviour (Allender et al.1991; Baylor & McDaniel 1996; Bliwise et al. 1991; Metz & Malan 1988).

1.3 Study setting

This study investigated health care workers' (HCWs) knowledge, beliefs and attitudes regarding counselling behaviour for HIV and AIDS, STIs and Tb (HAST) at 24 health facilities in the eThekwini Municipality in KwaZulu–Natal (KZN). eThekwini Municipality comprises three health sub-districts, West, North and South sub-districts. The total number of Municipal clinics is 55 with 18 West Municipal clinics, 11 North Municipal clinics and 26 South Municipal clinics. It was conducted during May to June 2010, and aimed to contribute to the body of knowledge about HAST counselling behaviour. eThekwini was one of the two districts which were declared to be at TB crisis point and the two districts have HIV prevalence of over 40% with eThekwini at 41.1% (The 2010 National Antenatal Sentinel HIV and Syphilis Survey). eThekwini also experiences introduction of new services that are not created with their dedicated establishment of human resources as well as continuing financial constraints, resulting in the number of staff required to fulfill service delivery far below what can be reasonably accepted for an effective and efficient service delivery programmed. There is also high absenteeism among staff due to the HAST disease burden. HCWs transfer to private health facilities rather than work in overcrowded public health facilities and that contributes to increased workload for those that remain. It is against this background that eThekwini HCWs are required to implement HCT and PICT policies to increase HCT uptake and early access to ART. A survey of what HCWs know, believe and their attitudes about counselling behaviour for HAST was required to provide baseline information and to assess if gaps existed so that strategies may be developed in order to begin to address them.

1.4. Rationale for the study

The rationale for the study was to do a survey of eThekwini HCWs in order to assess their knowledge, beliefs and attitudes regarding counselling for HAST. HCWs are responsible for HCT and PICT implementation, a policy developed in order to improve the low HIV testing rate and to improve early access to ART for eligible patients. The PICT initiative complements the HCT programme by providing

programme-oriented interventions to guide health care providers and policymakers in integrating HCT into routine medical care.

PICT is implemented in conjunction with existing and related South African policies and guidelines. Integrated PICT and HCT services must be delivered in both public and private sectors and must be made available and offered to all people seeking health care as part irrespective of the health service being sought.

Since causality was established, that the HI virus causes AIDS the pandemic has resulted in an estimated 5.38 million infected by HIV by 2011 (National HIV and Syphilis Prevalence Survey 2010) (Census 2011; Van Dyk 2008)

Table 1: HIV prevalence estimates and the number of people living with HIV, 2001–2010 (National HIV and Syphilis Prevalence Survey 2010)

Year	Population 15–49 years		Percentage of the total population	Total number of people living with HIV (in millions)
	Percentage of women	Percentage of the population		
2001	18.7	15.4	9.4	4.10
2002	19.2	15.8	9.6	4.38
2003	19.4	16.1	9.8	4.53
2004	19.6	16.3	9.9	4.64
2005	19.7	16.5	10.0	4.74
2006	19.7	16.6	10.1	4.85
2007	19.7	16.7	10.2	4.93
2008	19.7	16.9	10.3	5.02
2009	19.6	17.0	10.3	5.11
2010	19.7	17.3	10.5	5.24

HIV and AIDS continue to be a key challenge to efforts to fight this scourge in South Africa (SA). This is despite the response by the SA government as shown by the fact that by 2005, the country had met some of the Millennium Development Goals and was on course to achieve those that had not yet been achieved (United Nations General Assembly Special Session on HIV/AIDS 2007).

KwaZulu-Natal is the epicenter of the HIV and AIDS epidemic and the second largest province in South Africa and has reported major HIV related TB, MDR TB, and XDR TB epidemics (National HIV and Syphilis Prevalence Survey 2010). eThekwini is one of the two KwaZulu Natal districts with the high prevalence above 40% with the highest HIV prevalence of 41.1.% in eThekwini (National HIV and Syphilis Prevalence Survey 2010).

1.5. The research question

What is the knowledge, beliefs and attitudes regarding counseling behaviour for HAST of Health Care Workers in eThekwini District?

1.6. The aim and objectives of the study

The aim of the study was to assess eThekwini Municipality health care workers' knowledge, beliefs and attitudes regarding the counselling behaviour for HAST.

The study had the following objectives

1. To assess health care workers' knowledge regarding the counselling behaviour for HAST.
2. To assess health care workers' beliefs regarding the counselling behaviour for HAST.
3. To assess health care workers' attitudes regarding the counselling behaviour for HAST.
4. To make recommendations to health management.

1.7 Summary

Chapter 1 presented the background to the research problem which led to the survey of the knowledge, beliefs, attitudes regarding counselling behaviour for HAST of HCWs in eThekwini district. In order to fight the HIV epidemic HCT and PICT policies have been adopted for implementation in order to increase HIV testing and early ART for eligible patients. Chapter 2 covers the literature review of this study.

CHAPTER 2: Review of literature

2.1. Introduction

Chapter 2 presents the literature review and starts with a background about the burden of HIV and AIDS, and the responsibility and role of HCWs, as SA implements HCT and PICT as part of taking responsibility for a path to zero HIV infections. The literature method used is discussed, knowledge, beliefs and attitudes regarding counselling for HAST of HCWs is discussed, potential barriers to counselling behaviour for HAST and models of counselling.

2.2. Background

HCWs are in the unique position of being in contact not only with patients, but also with their own families and friends, and with the community at large. They therefore have a specific role in the prevention and control of HIV and AIDS and as highlighted by Van Dyk (2008) HCWs are important:

- To create a safe working environment for themselves and their colleagues;
- To educate patients and the general public;
- To counsel where counselling is needed;
- To combat fear, ignorance and prejudice and replace it with understanding and preparedness; and
- To offer care and compassion to those living with HIV infection and dying of AIDS.

HCWs' influence is important as HIV and AIDS mortality remains a global concern as the majority of deaths are HIV-related with sub-Saharan Africa the worst affected region (UNAIDS 2008). HIV-related deaths although recognized more than two decades ago continue to rob many lives and reports show that up to 75% of deaths was AIDS related in 2007, 38% of which occurred in the southern African sub-region (UNAIDS 2008). HIV and AIDS kill adults, citizens in their productive years, which undermines the social and economic achievements of developing countries including SA with the rising unemployment rate now at 25,5 % (UNAIDS 2008) (Census 2011). As predicted by economists HIV and AIDS contributed to less productivity in a study done in Kenya, which showed that HIV infected workers were less productive

and also stayed off work more than those who were not infected depending on the WHO stage and HIV and AIDS disease progress (Fox et al. 2004). In addition, HIV related expenditure increased due to medical expenses, which contributed to a reduction in household income. SA reported a 23% decline in household expenditure over a 3-year period in homes where an AIDS death had occurred (Spencer 2007).

The health sector performance has also been negatively affected, as the burden of disease increases the demand for their services, while reducing the supply provision by affecting the health of its workforce (Connelly et al. 2007; Deghaye et al. 2006; Dorrington et al. 2006; Shisana et al. 2002; Tawfik & Kinoti 2003; Uebel et al. 2004). It is against this background that HCT and PICT policies have been adopted to strategically increase HIV testing and early ART access in order to curb the burden of disease due to HIV. It is against this background that the following section reviews the HCWs' knowledge regarding the counselling behaviour for HAST.

2.3. HCWs' knowledge regarding the counselling behaviour for HAST

This section will review aspects of HCWs' knowledge about policies and HCWs duty regarding counselling for HAST. Knowledge about HAST is important as it contributes to positive attitudes and good intentions but while this is not in itself sufficient to change behaviour, it is an essential starting point in any HIV prevention programme (Kalichman et al. 2003). HIV prevention programmes' entry point using HCT and PICT review follows.

2.3.1. PICT Policy

SA developed the HCT and PICT to complement VCT and to be part of the HCWs' duties as shown in Table 2. HIV Counseling and Testing (HCT) expanded into two types of HCT, Client Initiated HIV Counseling and Testing and HIV Initiated Counseling and Testing. Client Initiated HIV counseling and Testing is comprised of VCT in both the private and public health facilities as a stand- alone community VCT, Mobile VCT, Home based VCT and VCT while PICT is provider initiated HIV Counseling and Testing. Yet some HCWs may resist implementing this policy as part of their tasks as they may think that HAST counselling is not their duty and is best left to counsellors and psychologists. These HCWs may then treat patients like

technicians, and offer clinical activities only. HCWs may avoid or reject patients and fail to use good communication skills which form part of the basics of good nursing, and are offered in basic training to allow any HCW to exemplify good counselling behaviour (Reis et al. 2005). Failure to provide PICT HIV counselling and testing initiated and recommended by HCWs to patients (adults, youth and children) attending health care facilities may comprise HIV testing uptake and early access to health care.

Table 2: Differences between VCT and PICT (Provider Initiated and Counseling (PICT) 2010)

PICT	**VCT**
Patient seeking medical care is offered HCT	Patient asks for HCT
Confidentiality and documenting the HCT results ensures continuity of care	Anonymous or confidential HCT
Goal is to identify HIV positive patients and linking them to prevention, treatment and care	Goal is HIV acquisition prevention through risk assessment, risk reduction and testing
Verbal consent is sought and once obtained forms part of patient's records	Written consent or thumb print for illiterate patients
HCWs is first user of HCT test results to make a correct diagnosis and provide patient specific treatment	Patient is first user of HCT test results to make own life decisions

To create an enabling environment for HIV counselling and testing, VCT was extended to HCT. HCT implementation involves PICT by HCWs involves offering routine HIV testing at any encounter with a patient in order to improve HCT uptake (Provider Initiated Counselling and Testing (PICT) 2010). HCT is an extension of VCT and is policy guideline designed to improve access to HIV prevention, treatment and care. Thus HCWs must take all available opportunities to offer HCT, including at STI, Family Planning and antenatal clinic, including to those who do not voluntarily seek HCT. HCT offered to patients routinely through PICT affords patients a chance to know their status irrespective of the clinical presentation.

Through PICT patients will know their HIV status and this will contribute to NSP goals. Post PICT HIV positive patients may access treatment early. Women of child bearing age will also be counseled about how to make wise family planning decisions. Patients are also empowered to develop and to implement risk reduction plans including the number of concurrent and sex partners, preventing vertical transmission, and are supported to make responsible choices about child custody as well as what to do when new health problems emerge.

PICT like any HIV testing policy must address human rights issues enshrined in counselling, obtaining consent, and maintaining confidentiality (National HIV Counselling and Testing (Provider Initiated Counselling and Testing (PICT) 2010). PICT must also address concerns that a patient's right to refuse may be compromised due to the inherent power of a HCW, which may be coercive. Yet patients have a right to refuse to be tested for HIV without being denied medical care. Refusal should be recorded in the patient's medical records and facility logbooks. PICT may be perceived as ordering a patient to test for HIV, compared to when the patient voluntarily initiates HIV testing. The situation may be worsened by the fact that VCT requires that the consent must be written while PICT requires that the consent must be verbal and documented in the patient's file. The language used by the HCW may also be viewed as coercive, leaving the patient little room to consent. PICT implementation may fail to include information about the patients' right to refuse. Counselling may not precede HIV testing and may not be used as a chance to empower patients to make informed choices, but may be a disrespectful experience with HCWs avoiding HIV positive looking patients (Reis et al. 2005). HCWs may fail to provide patients with information about why HIV testing is important and the importance of early diagnosis. Testing must be voluntary and free of coercion.

Other concerns raised are that traditional pre-test counselling is shortened in PICT and is adapted without a full education and counselling session, as was offered for VCT. This is because in PICT, HCW focus on confirming the patients' desire to test and to test those consenting patients. Unlike VCT, PICT relies on group counselling and or counselling by other team members in the health care system to do justice to pre-test counselling. PICT also relies on continuing patient education through post-

test counselling which is education about access to HIV prevention, access to care, basic support, treatment and partner support if positive, eligibility for ARVs, and any other relevant referrals e.g. Family Planning. Thus the PICT's team approach to HCT still affords the patient an opportunity for education, risk reduction counselling and negotiation of a risk reduction plan. HCWs' counselling behaviour, how they counsel patients pre - and post - HIV testing for HIV negative and HIV positive patients as shown in Table 3 is therefore important to ensure quality prevention and adherence counselling.

Table 3:**Post-test counselling. (National HIV Counselling and Testing (HCT) Policy Guidelines 2010)**

Positive	**Negative**
Inform about positive HCT results	Inform about negative HCT results
Explore understanding of results and implication and provide support to adjust to result or refers patient to on site lay counselor	Give patient messages about prevention and how to remain negative e.g. medical male circumcision, condom use, and reduction in the number concurrent of sexual partners
Inform about need for HIV care treatment, support and re-infection	Guide client to develop a risk reduction and behaviour change plan
Advise client of the need to get partner/s tested as partner may be negative	Advise client that partner needs to be tested
Encourage disclosure to an at risk third party; discuss to whom and when it will be done	Offer TB questionnaire an refer for investigation if necessary
Offer TB questionnaire an refer for investigation if necessary	Reinforce the need for annual testing
Perform WHO clinical staging	Make an appointment for retesting at 32 weeks for pregnant women
Collect blood for CD4	Refer to nearby community – based resources for Partner testing Window period retesting for people at

	risk of recent exposure Additional prevention counselling
Cervical screening (Pap smear) and pregnancy test for females	
Refer to appropriate support service as required	
Nutrition	
Psychosocial support	
For pregnant women discuss: Plans for child birth Availability and use of antiretroviral drugs where indicated to prevent mother-child transmission	
Infant feeding options and support for the mother in implementing her infant feeding choice	
HIV testing for the infant and the necessary follow-up	
Partner testing	
Record all information in the patient records	

HCWs' counselling role also extends beyond PICT to other combination prevention strategies, including Isoniazid Prevention Therapy (IPT), and counselling patients about effective condom use. HCWs' responsibilities involve HAST counselling using verbal and non-verbal communication skills.

2.3.2. Prevention counselling

HAST prevention counselling involves counselling patients about risk reduction and helping them to develop a risk plan whether they test HIV negative or HIV positive. Post-testing a patient HIV negative, the HCWs' duty includes persuading the patient to adopt ways to stay HIV negative. HIV negative patients are educated about the combination prevention approach which includes using condoms and reducing the

number of concurrent sex partners. HAST prevention counselling for patients who test HIV positive, includes counselling them about all the above, as well as educating them about their duty not to transmit HIV, as well as adherence counselling for eligible HIV positive patients.

2.3.3. Adherence counselling

HAST adherence counselling focuses on ART for eligible patients who test HIV positive. Using non-verbal communication skills HCWs must offer education about ART regimen types, side effects, drug interactions and how to adhere to ART. Patients are also educated about how their ART adherence is a strategy to prevent HIV transmission. HCWs persuade eligible pregnant patients to adhere to ART in order to save their unborn babies. HCWs also persuade patients to adhere to ART in order to prevent transmission to their sex partners. HCWs' knowledge and intention to implement HAST policies may be influenced by their beliefs and attitudes to people who are HIV-infected; personal vulnerability to HIV; perceived responsibility for infection and risk practice, such as unsafe sexual behaviour.

2.3.4. HCWs' knowledge about promoting patients' rights

Upholding patients' rights is important for SA's HCWs (DOH 2002) (NSP 2007-2011). These policy documents form part of the HCWs' basic training on HIV and they request HCWs to be caring. In agreement Evian (2003) posits "Counselling should be confidential, professional and non-judgmental". Mash (2008) also concurs that the HCWs professional manner should utilize motivational interviewing where both HCWs talk and listen to another. Yet some HCWs may want to retain power and authority, and may believe that power retention is necessary to persuade patients. Associated with the mystery of medicine, power retention tactics may contribute to reduced communication. HCWs may expect patients to just listen to them as knowledgeable and inquisitive patients contribute to HCW uneasiness. Promoting patients' rights also involves maintaining confidentiality an important element of counselling behaviour for HAST which is discussed in the section below.

2.3.5. HCWs' knowledge about promoting patients' rights by maintaining confidentiality

HCT and PICT involve encouraging patients to tell their sex partners when they test HIV positive. In addition shared confidentiality is practiced where the HCW directly involved with the care of the newly diagnosed HIV positive patient can access the results. Yet, HCWs are cautioned about disclosing to a third person as HCT implementation should be within a legal and human rights framework (National HIV Counselling and Testing (HCT) Policy Guidelines (2010).This is important as studies show that patients are concerned about the confidentiality of their HIV test results (Boshamer et al. 1999) (Peltzer et al. 2004). Confidentiality is one of the factors that may be a barrier to the HCWs' intention to provide appropriate counselling behaviour for HAST. Other factors besides may influence the HCWs' intentions and HCWs must be aware of these. Awareness is an initial step towards action to plan how to overcome these barriers which may be patient related, HCW related or structural factors. The following section reviews the other potential barriers.

2.4. HCWs' beliefs regarding the counselling behaviour for HAST

Risk practice, a psychological concept known as the self-positive bias, means "it won't happen to me". It is a belief or perception of personal invulnerability to HIV, and blocks intentions to reducing risky behaviour, by increasing accessibility to the causes of HIV infection, perceptions of one's own risk increased, which can reduce the self-positivity bias. As experience of caring for HIV and AIDS patients increases the HCW's accessibility to the causes of infection, their attitudes and intentions in reducing risk behaviour should be improved. HCWs' attitudes in the prevention of HIV transmission, particularly concerning their own vulnerability to infection and responsibility for infection should help them translate the knowledge of the prevention of HIV transmission into safe behaviours. This will reduce both their personal and occupational risk practice and protect them from HIV infection and through standard clinical techniques protect their patients as well.

Some factors influence reducing risk practice, such as self-efficacy. Self-efficacy is regarded as an individual's ability to see himself as competent, able and willing to carry out particular tasks. This perception is directly linked to actual task performance. The consideration of self-efficacy in preventing HIV transmission is of

importance. Nevertheless, it necessitates working with the individual. In countries like South Africa resources are limited for individual work. HCWs' beliefs may also be affected by statements they hold true or by programming and meditation. HCWs may hold true statements about patients' socioeconomic status obtained through programming by their parents or societies, such as beliefs that people of low socioeconomic status are helpless. Beliefs may influence the HCWs' intention to counsel patients for HAST and this may also be influenced by HCWs' attitudes which will be explored in the next section of this chapter.

2.5. HCWs' attitudes regarding counselling for HAST

Counselor attitudes to HIV and AIDS are a result of beliefs of personal vulnerability to HIV, perceived responsibility for infection, attributes concerning the causes of HIV and AIDS, beliefs about HIV and AIDS and its cure, and stereotypes about infected persons. The perceived responsibility for infection encouraged reducing risky practices, it also reduced the HCWs' willingness to help infected individuals. The concern with this latter point is that reduced empathy is related to reduced-risk practice; and is therefore considered to be a stumbling block in preventing HIV transmission. Therefore, the effects of HCWs' attitudes and beliefs need to be taken into account in HIV and AIDS prevention programmes. The HCWs' attitudes may also be influenced negatively by religious beliefs as studies report that the HCWs believed HIV positive patients were being punished for their sins, and that treating HIV positive patients was a waste of time (Reis et al. 2005). The section below further reviews the emotional component of HCWs and the influence on their counselling behaviour for HAST.

The emotional component of the attitudes of nurses towards HIV positive patients

HCWs' emotions may be positive or negative towards patients including HIV positive patients as confirmed in the available literature (Reis et al. 2005). Studies also report that HCWs feel anger, as a response to being in contact with potentially dangerous and infectious patients whom they regard as being responsible for being HIV positive (Reis et al 2005). Feelings of anger may influence the attitudes of HCWs and how behave toward HIV positive patients as studies report that HCWS believed that

treating HIV positive patients is a waste of time (Reis et al. 2005). They may refuse to take care of HIV positive patients due to fear of contracting HIV at work (Bliwise et al.1991).

The behavioural component of the attitudes of nurses towards HIV positive patients

HCWs' responsibilities include empathizing with and caring for patients (NSP 2007-2011). They should walk in the patients' shoes in order for them to afford the patients a platform to open up about what they are experiencing as HIV positive patients. Studies' reports vary with some studies reporting that HCWs do embrace HIV positive patients while other studies report that HCWs are scared of HIV and this contributes to them avoiding contact with these patients and over use of precautions to protect themselves from occupational diseases is reported (Baylor & McDaniel 1996). While the use of universal precautions is permitted these measures may be used to perpetuate stigma and discrimination of HIV positive patients. HCWs may fail to use these universal precautionary measures with every patient whether they are diagnosed as HIV positive or not. HCWs may rush for protection or use of additional precautions as soon as they learn about the HIV status of a patient and this may compromise the quality of counselling behaviour which according to Van Dyk (2008) should be non-judgmental . HCWs may avoid HIV positive patients or practice use of additional universal precautionary measures as a means of coping. Yet patients stand to benefit from advocacy by HCWs who openly embrace them and show them respect even if this could mean conflicting with other colleagues who still practice discrimination and stigmatization. (Wilson et al. 2005).

Defense mechanisms used by nurses while caring for HIV positive patients

To cope with the high morbidity and mortality experienced by HCWs, some may block the negative feelings they have towards HIV positive patients (Wilson et al. 2005). Denial or blocking frightening and painful experiences may help the HCWs to continue working with HIV positive patients. HCWs may justify their actions of avoiding patients or their negative feelings of anger by reasoning that they had no role in infecting HIV positive patients. This is in keeping with reports that HCWs stated that treating HIV positive is a waste of time (Reis et al. 2005). HCWs may

also reason that they avoid HIV patients in order to protect themselves as myths about HIV transmission still persist.

Coping mechanisms used by nurses during nursing of HIV positive patients

HCWs embrace their vocation as they derive satisfaction from witnessing patients get better as well as the recognition by the communities for their role which makes them feel that their life is worth living. HCWs engage in spiritual activities in order to cope where they are taught and encouraged to practice surrendering life and its challenges to a higher power. Increased spirituality helps HCWs to take their cross of vowing to care for sick people including HIV positive patients and this enables them to overcome their fear and put live for others as exemplified by Christ who sacrificed and died for others as an effective coping mechanism in this case.

The moralistic and judgmental nature of some HCWs is in keeping with literature according to Evian (2003) that HCWs' should be professional and non-judgmental as they counsel patients about HAST. However other studies report that HCWs found it hard to embrace HIV positive patients whom they believed deserved to suffer as they were being punished for their sins (Reis et al. 2005).

2.6. HCWs' knowledge regarding potential barriers to appropriate counselling behaviour for HAST

HCWs' ability to provide appropriate counseling is affected by a number of patient or health care worker related factors or structural issues such as time constraints, fear, lack of space, perceived self efficacy, patients' age, patients' gender, patients' marital status, patients' socioeconomic status, patients' education level and these will be reviewed below.

2.6.1. HCWs' lack of knowledge as a potential barrier to providing appropriate counselling behaviour for HAST

Knowledge about potential barriers to rendering appropriate counselling behaviour for HAST and to developing a therapeutic relationship may be the initial step towards removing the barriers. The Information-Motivation-Behavioural (IMB) model of understanding health behaviour says that information is necessary in order to

influence patients' behaviour. As discussed earlier, studies reported that improved HIV and AIDS knowledge significantly predicted a positive attitude toward VCT for HIV and AIDS (Iliyasu et al. 2006). However, knowledge alone may not be sufficient to change behavior but it may be affected by negative attitudes and or beliefs of the recipients Kalichman et al (2003) reported that a high HIV and AIDS knowledge score amongst the patients, where the mean score was 83%, was not associated with HIV test uptake (Kalichman et al. 2003). Knowledge about VCT and HIV and AIDS may have been influenced by other factors, such as attitude towards VCT and HIV and AIDS. This resulted in reduced HIV testing uptake (Kalichman et al. 2003). Time constraints may also influence HCWs' intention to provide appropriate counselling for HAST as reviewed in the section below.

2.6.2. Lack of time as a potential barrier to providing appropriate counselling behaviour for HAST

A shrinking health workforce as reported by Shisana et al (2004) and Uebel et al (2004) may influence how HCWs behave during the consultation. Expected to screen, diagnose, investigate and manage a patient HCWs may hurriedly ask particular questions in order to fit all in the consultation. Little or no time may be allowed for patients to explore and find solutions to their individual problems. To consult as many patients as possible may contribute to HCWs spending less time talking to patients and listening to their issues. HCWs may fail to include patients in the decision making process and patients may leave with decisions made for them by the HCWs which they cannot implement (Mash 2008). HCWs may also fail to empathize with the patients' situation including their socioeconomic status as discussed in the following section.

2.6.3. Patients' socioeconomic status as a potential barrier to providing appropriate counselling behaviour for HAST

HCWs' behaviour may be influenced by the patients' socioeconomic status as reported by one study where poor patients were found to be spending less time in the consulting room (Bodenheimer 2005). Another study reported that 40% of health professionals believed that they could diagnose an HIV status based on the patients' appearance and further reported that they would deny health care to these patients (Reis et al. 2005). This can be deceptive where people are very poor or are

refugees who are mobile populations are particularly vulnerable and may reluctantly seek care, risking being reported to the authorities and having to return to their home country (SADC Regional Forum of HIV Cross-Border Patient Challenges in the SADC Region 2010). HCWs' fear may also influence how they counsel patients about HAST as discussed below.

2.6.4. HCW's fear as a potential barrier to providing appropriate counselling behaviour for HAST

HCWs fear facing litigation from the people who come to seek their help as a case may be built on what the HCW said or wrote. Yet HCWs are required to ensure that adequate and correct information is given to the patient and this is particularly important in SA where 8.6 % of people aged 20 have no schooling (Census 2011). HCWs may also fear contracting occupational diseases while counselling patients. Fear may also influence HCWs' intentions to provide appropriate counselling behaviour as well as their being influenced by stigma and discrimination due to gender and this will be reviewed in the section below.

2.6.5. The patients' gender, being HIV positive as a potential barrier to providing appropriate counselling behaviour for HAST

There is evidence that discrimination and stigma may also be perpetuated by HCWs as reported in a study in Nigeria, where up to 18% of the health professionals who participated in the study had refused care or hospital admission to a patient because of their sero-status (Reis et al. 2005). HCWs' intentions not to stigmatize and discriminate may be influenced by reports or experiences of adverse consequences post sero-status disclosure as studies report that 13% of women had experienced violence from a sex partner, 9% reported that their partner had left them, and 3% said they had to move from their home (Mathews et al. 1999). Other studies concur that gender based discrimination and stigma remain the greatest obstacles to people living with HIV and AIDS (Van Dyk 2008;Kalichman et al.2003; Peltzer et al. 2004; Spencer 2007). Studies show that women are biologically predisposed to be HIV infected through sexual intercourse as well as through intergenerational and transactional sex or when women are raped (Shisana & Simbayi 2002). HCWs need to empathize in order to discuss gender issues as key drivers of HIV transmission without prejudice.

2.6.6. The patients' age as a potential barrier to providing appropriate counselling behaviour for HAST

HCWs' duties involve discussing issues relevant to HIV transmission in youth particularly issues about poverty, transactional sex, intergenerational sex as well effective condom use.

Yet some young people may disclose involvement in compromising intergenerational relationships where women of school going age are encouraged to engage in sex with men old enough to be their fathers in exchange for material goods (Shisana & Simbayi 2002). Poverty contributes to why young women end up in risky relationships (Shisana & Simbayi 2002).

Influenced by culture where the elders make decisions for their young adults, HCWs may not afford young people appropriate counselling for HAST. HCWs may fail to embrace the youth and to use every opportunity to counsel them about HAST issues that relate to them. However HIV affects the young aged between15-49 (Shisana et al. 2004).

2.7. Models of counselling and their influence to providing appropriate counselling behaviour for HAST

A number of counseling models have been developed and in this section they will be reviewed with respect to HAST counselling to highlight the HCWs' responsibilities regarding counselling for HAST.

2.7.1. The Information-Motivation-Behavioural Skills (IMB) model

This model was designed specifically to address issues of preventing the transmission of HIV (Fisher et al. 2002), and proposes that education about how to prevent acquiring or transmitting HIV, persuasion and behavioural skills should form part of the basics of HIV preventive behaviour. Motivation to change or decrease AIDS risk behaviour includes positive attitudes to support patients to make choices about how to improve their health and to be supported to prevent relapse to old risky behaviours. Lastly, the individual needs the behavioural skills and a sense of self-efficacy to perform the AIDS prevention behaviour (Fisher et al. 2002). HCWs' duties involve supporting patients to adopt and to perform HIV preventive acts.

2.7.2 The Health Belief Model (HBM)

Developed in the 1950s by Hochbaum, Rosenstock and Kegels while working as social psychologists in the US public health services, this model was inspired by a study on why people sought X-ray examinations for TB (Green 2008). The HBM proposes that a person's perceived vulnerability to a condition, their perceptions of the severity of the condition, and their perceptions of the efficacy and benefits of any proposed action in the background of a trigger to act can explain health behaviour. Lately, it has been adapted to explore a variety of health behaviours including sexual risk behavior and HIV prevention (Boshamer et al. 1999). Knowledge of the Health Belief Model may influence HCWs' counselling behaviour as they support patients to explore their situations.

2.7.3. The Integrative Model (IM) of Behaviour Prediction

The IM proposes that there are seven variables that are needed in order to bring about as well as reinforce a desired behaviour (Fishbone 2008). These include intention, attitude, perceived norms, self-efficacy or perceived behavioural control, behavioural beliefs (Fishbone 2008). According to the reasoned action approach, the first step to predict, understand, change or reinforce a given behaviour is to be absolutely specific about the behaviour of interest. For example, during HCT, talking about practicing safer sex in general will not help a patient, but in cooperation with the patient agreeing that "I must always use a condom" will be of help. The second step is to determine if the individual has an intention to carry out the specific behavior.

Intentions reflect all the motivational factors that influence specific behaviour and are the single best predictor of behaviour (Van Dyk 2008). A measure of intention may indicate how ready one is to act according to one's convictions. (Fishbone 2008). According to IM, the primary determinants of intention are the attitudes toward performing the specific behaviour, perceived norms or normative influences and self-efficacy or perceived behavioural control. In the IM, attitude toward performing the specific behaviour results from a positive or negative evaluation of the outcome of the behaviour; the perceived norms or normative influences refer to influences from significant others in a person's life and one's desire to please them; self-efficacy or perceived behavioural control is the person's perceived ability to carry out specific

behavior successfully. It is important to note that IM views these three primary determinants of intention as functions of underlying beliefs. These are beliefs about the outcomes of performing the specific behaviour (behavioral beliefs), about specific referents (normative beliefs) and about specific barriers to behavioural performance (control beliefs). Knowledge about IM and how beliefs influence counseling behaviour are important to enhance the HCWs' ability to provide appropriate counselling behaviour for HAST.

2.7.4. The Transtheoretical Model (TM)

This model has shown that people go through five stages in the process of health behaviour change (Gretchen et al. 2000). As discussed previously these stages are the Pre-contemplation, Contemplation, Preparation, Action and Maintenance. According to TM, the initial stage is the stage at which there is still no apparent intention to act in a way that indicates that one is convinced. Next is the Contemplation stage with patients seriously thinking about change those in Preparation stage are ready to plan and implement change while those in the action stage started changing the behaviour and the person in the Maintenance stage is getting used to the new behaviour. These stages of change are not linear but rather cyclical, and people can reach the maintenance stage, relapse and then start the cycle again. Knowledge of the TM is important to assist HCWs to support patients to successful adopt and maintain preventive acts and to prevent relapse.

It can be seen from the above theories that HCWs are required to do more than provide clients with health information but are also required to perform counselling duties in order to persuade patients to change and to maintain HIV preventive health behaviour. HCWs have to be specific in their communication to their patients about the need for them to adopt HCT as HIV preventive health behaviour. In the bid to understand, change or reinforce their patient's intention to go for HCT, HCWS must not forget the primary determinants of intention like beliefs and attitudes and potential barriers to counselling behaviour for HAST. HCWs' knowledge of the models for counselling is important in order for them to recognize that change is not an event but rather a process and that people may be at different stages at different times. Armed with this knowledge HCWs may empathize and provide appropriate counselling behaviour to benefit patients.

2.8. Summary

Chapter 2 served to review relevant literature about HCWs' knowledge, beliefs and attitudes regarding counselling behaviour for HAST. The literature review showed that HIV and AIDS still pose a challenge in SA. Knowledge about potential barriers to counselling behaviour (the patients' own potential barriers such as patients' age, sex, gender and socioeconomic status and health system related factors like space, time constraints and HCWs' fear were reviewed. The chapter also involved a review of models of change as HCWs' knowledge of these may influence how HCWs empathize with patients in order to benefit the counselling process.

CHAPTER 3: Methodology

3.1. Introduction

Chapter 3 presents the research methods about how data were gathered and analyzed for this study. The chapter includes a description of:

- The study design
- Study area
- Study sample
- Study instrument

This chapter also includes a description of how reliability and validity were evaluated. Ethical considerations are also presented.

3.2. Study design

An observational cross – sectional study was undertaken using quantitative research methods to assess health care workers' knowledge, beliefs and attitudes regarding counselling behaviour for HIV and AIDS, Sexually Transmitted Infections and Tuberculosis (HAST).

The quantitative research method as described by (Bryman 2007) involves an inquiry that seeks to test a theory that is composed of variables which are measured with numbers and analyzed using statistical techniques. The process seeks to achieve the quantitative research method's goal which is to determine whether the hypothesis can be accepted or rejected. The quantitative research method assumes that the research does not depend on the researcher and that they may be no conflict of interest that could affect how the research is conducted. The assumption is that research can be separated from the research and that testing causality follows a predictable order.

The method's end result helps to prove a theory and to contribute an existing body of knowledge.

However, even though the quantitative research method was used in this study, according to (Render et al. 2009; Strydom et al. 2003; Bell et al.1996; Johnson &

Christensen 2007) a research can be descriptive, explorative or explanative, qualitative, post hoc, ex post facto, longitudinal, causal or predictive. Statistics Canada (2003), and Cooper and Schindler (2003) stated that quantitative research seeks only for quantifiable responses. The use of quantitative research in this study was dictated by lack of resources, and time constraints. The student lacked massive amounts of resources to engage complex and expensive research methods such as experimental or a typical case study approach. Quantitative research methods also minimized the amount of collected information, as it sought single responses to statements about which other research methods such as a qualitative study or exploratory research would generate a lot of information. This reduced the costs making the study possible. In terms of time, this study was limited by time as it was an academic exercise that had to be completed within the stipulated registrar rotation. Using any other research method other than the quantitative approach employed would have led to a lot of time expended on the study. Quantitative research was also selected for this study because it renders the process of data collection possible (Swanepoel et al. 2000). The responses were in figures, so it was easier for the respondents to indicate their responses according to numbers rather than through long explanations that are required in qualitative research. Consequently, within a short period of time, all the data were collected.

Quantitative research was also used because it renders the data analysis process easier, as raw data was fed the data into Microsoft excel, and exported i into SPSS for analysis. Thereafter, within minutes the findings were generated. This would not have been possible with other research methods such as qualitative, experimental, or exploratory, where a lot of information is generated. All such reasons therefore rendered selection of quantitative research as the principal research methodology in this study possible.

3.3. Study area and the study population

eThekwini was the study area chosen where the Principal Investigator was rotating as a Registrar for Public Health in the eThekwini Health Department. The study population was all health care workers in eThekwini Municipality Primary Health Care clinics.

3.4. Study sample and study population

According to Statistics Canada (2003) a target population is defined as the population of the organization or the population within a geographical location which is the main object of a research study. However, Strydom et al (2003), state that such a population is usually too large to be studied, and therefore it is important that a sample which can easily be managed is drawn. Thus a sample population is the number of sampling units that are included in the investigation (Strydom et al. 2003). In this study, the target population comprised of the 55 eThekwini Municipality Primary Health Care clinics. Patton (2002) suggests that in a research process the organization under study may have a large population and it is also not feasible to study the whole population. Since it was not possible to study the whole of this target population of 55 eThekwini Municipal Primary Health Care clinics, a sample of 24 clinics was randomly selected.

eThekwini Municipality is divided into three health sub-districts, West, North, and South sub-districts. There are 18 Municipal Primary Health Care clinics in the West sub-district, 11 in the North sub-district and 26 in the South sub-district. With the help of the Nelson R Mandela Medical School, University of KwaZulu-Natal Statistician, 24 Primary Health Care clinics were selected through stratified random sampling. The number of Primary Health Care clinics was estimated in order to obtain a sample of 200 nurses to provide sufficient power for the study. The university statistician calculated the sample size based on alpha equals 5% and beta equals 80%.

Inclusion criteria - Only Municipality Primary Health Care clinics were selected from eThekwini Metropolitan Primary Health Care clinics. A total sample of 24 Primary Health Care clinics was included in the study. A proportional number of clinics were selected randomly from each cluster as follows:

1. 26 / 55 = 0.47
   0.47 X 24

   =11 clinics that were selected randomly to be part of the sample in the South sub-district.

2. 18/55 = 0.33

0.33 X 24

= 8 clinics that were selected randomly to take part in the study in the West sub-district

3. 11/55 = 0.20
   0.20 X 24

   = 5 clinics that were randomly selected to take part in the study in the North sub-district

   Total number of clinics:

   11 + 8 + 5 = 24

3.5. Study instrument

Data collection methods involved a questionnaire which Cooper & Schindler, (2005) defines as a group of written questions used to gather information from respondents. As a survey questionnaire is regarded as one of the most common tools for gathering data the student opted for this since it gives time for consideration of the issues which may provide the required answers to the research questions of the study.

The survey questionnaire was designed not to be time consuming with the help of feedback from the pilot study, since this would also be used to lobby HCWs to participate. Further the questionnaire was designed using Likert Scales which means that respondents would not have to spend time explaining.

The questionnaire design was based on the advice by Cooper & Schindler (2005) so that the questions were not double barreled, leading, or ambiguous. Care was taken that the questionnaire contained language which a layman would easily understand without explanations. The student also drafted the questionnaire with the aim, research questions and objectives in mind so that the questionnaire contained sections which were aligned to both the research questions and objectives.

The anonymous self reported questionnaire was designed after a literature review which did not find any suitable study instruments. The literature review also informed

the variables which were selected. Thus the questionnaire (Appendix A) was piloted and amended before being translated into isiZulu (Appendix B).

The instrument was intended to gather the following information:
• The demographic profile of the respondents
• Their knowledge, beliefs and attitudes regarding counselling behaviour for HAST.

The questionnaire comprised 51 questions including demographic information and questions about HCWs' knowledge, beliefs and attitudes regarding counselling behaviour for HAST.

The demographic questions sought answers to questions about respondents including:

- Geographical location / source - sub district of health facility
- Age of the HCW
- Job category : whether the respondent is a staff nurse or a professional nurse
- Training: whether the respondent had received training in HAST and if yes, how long was the training
- Number of patients seen per day

3.5.1. Knowledge regarding counselling behaviour for HAST

The knowledge questions included the following statements:

- During consultation both health care workers and patients should get a chance to talk and to listen to each another.
- Asking the patient more questions may result in the health care worker getting a clearer picture about the patient's situation.
- Naturally every health care worker can counsel patients even without being trained.
- Health care workers *know a lot* about HIV and AIDS, STIs and TB.
- Health care workers should ask patients about how best to help them.

The methodology included use of Cronbach's alpha as a measure of internal consistency and questions about HCWs' knowledge and counselling behaviour for HAST were combined to form a scale with a Cronbach's alpha=0.55. However, when the first two questions were combined to form a scale the Cronbach's alpha was equal to 0.60.

3.5.2. Beliefs regarding counselling behaviour for HAST

Questions about beliefs of HCWs comprised of the following statements

- No amount of counselling can help as some communities are completely helpless.
- Patients in urban areas know all about how to improve their health.
- Poverty stricken patients just need treatment as they cannot do anything to improve their health.
- Uneducated patients can never understand no matter how much time one spends talking to them.
- Very few patients benefit from health talks.
- Blaming patients for their health condition may prevent them from opening up.
- Patients may understand more when health care workers look genuinely interested in them.
- Privacy is necessary when talking to a patient about their individual situations.

Cronbach's alpha was used as a measure of internal consistency and questions about beliefs of HCWs were combined to form a scale with a Cronbach's alpha = 0.55.

3.5.3. Attitudes regarding counselling behaviour for HAST

Questions about attitudes that HCWS responded to included the following statements:

- An experienced health care worker should just decide for a patient to save time.
- Health care workers should not waste time counselling patients with good adherence.
- Patients who abuse alcohol do not benefit from counselling.

- In the clinic where I work there is sufficient space to counsel

3.5.4. Potential barriers to counselling behaviour for HAST

There were also questions that sought to get responses concerning potential barriers to counselling behaviour for HAST.

Questions that sought to get responses about potential barriers to counselling for HAST comprised of questions about sociodemographic factors such as age, gender, time, fear, confidence, space, self efficacy and variables such as, education, socio-economic status, and alcohol. The statements included:

- **Time**:
  - Health care workers have insufficient time to counsel patients properly.
- **Fear**:
  - I am afraid that I may get TB whilst talking to patients.
  - I am afraid to care for patients who look HIV positive.
  - Counselling a lot of TB patients puts my own life in danger.
- **Space:**
  - In the clinic where I work there is sufficient space to counsel patients.
- **Self efficacy**:
  - I do not feel confident to counsel HIV positive patients.
  - I am confident that I have enough skills to counsel patients about HIV and AIDS, STIs and TB.
- **Age**:
- Young patients should never be left to make choices about how to improve their health.
- **Adherence**:
- HIV positive patients who fail to adhere to ART deserve no sympathy.
- **Geographical location**
- Patients in urban areas know all about how to improve their health.
- **Gender** :
- For everybody's sake HIV positive female patients must be told how to live their lives.
- **Marital status** :

- I feel safe when talking to married HIV positive patients.
- **Socioeconomic status**
- Poverty stricken patients just need treatment as they cannot do anything to improve their health.
- **Education level**
- Uneducated patients can never understand no matter how much time one spends talking to them.
- Patients that abuse alcohol deserve no sympathy.

The questionnaire comprised of questions about knowledge, beliefs and attitudes regarding counselling behaviour for HAST. The responses used a Likert scale which ranged from 1=strongly disagree; 2=disagree; 3=neither agree nor disagree; 4=agree; 5=strongly agree.

3.6. The Pilot study

The design of the instrument was done based on the literature reviewed and was refined through the pilot. The pilot was undertaken on HCWs attending TB Training at the Nelson Mandela School of Medicine. Feedback was used to reduce the questionnaire to 51 questions including the demographic profile of respondents, their knowledge, beliefs and attitudes, and counselling behaviour for HAST. It was translated into isiZulu by an experienced translator identified by the Bioethics Committee's list of translators. Translation and back translation was also used to improve the clarity of the questions and the validity of responses was encouraged through the anonymity of the questionnaire.

After piloting the questionnaire the feedback obtained from the participants was used to fine tune the questionnaire under the guidance of the supervisor.

Analytical statistics as well as measures of central tendency (the mean and the median) and measures of dispersion (standard deviation) were computed for all the knowledge, beliefs and attitude, and counselling behaviour for HAST questions, and were used to summarize the data statistically.

All statistical analysis of data was supervised and was guided by the University Statistician.

Only the student collected data in order to promote reliability of the data collection process. Efforts were made to ensure that respondents felt comfortable and were not intimidated by the student's medical background and understanding of the context, and, in overcoming the doctor or nurse power relations and this included using either isiZulu or English as a medium of communication.

3.7. Reliability and validity

Measures taken to ensure reliability, validity and objectivity included piloting the questionnaire. Reliability is the degree of similarity of the information obtained when the measurement is repeated every time on the same subject or the same group (Statistics Canada 2003). The validity of a measuring instrument refers to the extent to which the instrument measures what it is intended to measure (Cooper & Schindler 2005). However, if the reliability is inadequate, the validity will also be poor since the test score's validity is dependent on the score's reliability (Strunig & Stead 2001).

Reliability, validity and objectivity of the instrument include calculating the internal consistency of the measuring instrument. This is a measure of the instruments' reliability which was calculated for all the questions on knowledge, beliefs, attitudes regarding counselling behaviour for HAST as the questions had similar scales. Cronbach's alpha was used in this study as a measure of internal consistency. Cronbach's alpha is a reliability coefficient based on the average correlation of items within a test if the items are standardized, but on the average covariance among the items if the items are not standardized (Gosh 2003). Cronbach's alpha ranges from 0 to 1 with a value of 0.7 or higher being a very good value of reliability. Gosh (2003) also agree that the closer the Cronbach Alpha coefficient is to 1.0, the greater the internal consistency of the items in the scale. This is in keeping with George & Mallery (2003) who state that if the result is > ***.9*** *– excellent,* > ***.8*** *–good,* > ***.1****– acceptable,* > ***.6*** *questionable,* > ***.5*** *– poor,* < ***.5*** *– unacceptable*.

3.8. Ethical considerations

Permission to undertake the study was obtained from the UKZN Biomedical Research Ethics' Committee. Permission to collect data was obtained from eThekwini Head of Department Health, after approval by the eThekwini Health Research Committee eThekwini Health Department also granted permission for the study. After reading the information leaflet (see Appendix C) the respondents signed the informed consent (see Appendix D) voluntarily. Extra care was taken to make sure that confidentiality was not breached. No respondent's name appeared on the questionnaire and no marks were used to identify who completed a questionnaire. Provision was also made to anonymise names of the Primary Health Care clinics in all reports from this study. All the efforts done to promote confidentiality and anonymity, it was hoped would also encourage HCWs to give truthful responses.

3.9. Bias

To overcome non-response bias all sampled Primary Health Care clinics including HCWs found at work on the date when data was collected were included in the study and this serves to address concerns about sampling bias. Non-response bias as is defined by Bowling (2002) is bias that results from the possible difference in characteristics between those that respond and those that refuse to respond. Failure to respond is a concern as it could mean that those that do not respond have something important to hide.

To reduce selection bias data collection was done so that more HCWs participated. This was done by addressing HCWs' concerns about participating in the study. Efforts to promote confidentiality and anonymity were also communicated. HCWs were given the information leaflet which also served to provide clarity about the aims and objectives of this study.

The questionnaire was translated into isiZulu to minimize language bias and recall bias. Assessments relied on the HCWs' self-report and recall.

3.10. Data collection

Data were collected during May and June 2010 using a questionnaire; however the plan to use a checklist to observe nurses during consultation was not permitted. Due

to time constraints HCWs who agreed to participate were allowed only 20 minutes to respond to the questionnaire. Data collection was undertaken over a month long period with several trips to the various sub-districts. After obtaining authorization from the Head of eThekwini Health, Area Managers and Facility Managers were invited to cooperate via email and telephonically. Briefing Area Managers and Facility Managers about the protocol was also done telephonically and by email. Suitable dates and times to collect data were agreed upon with Facility Managers or delegated persons. The sampled Primary Health Care clinics were visited in the three sub-districts. On arrival the Facility Managers introduced the student, designated the venue for the answering of the questionnaires and also ensured channeling of the respondents. Managers insisted that each respondent spend only 20 minutes completing the questionnaire

3.11. Data management.

The data were stored in a locked cupboard.

3.12. Data analysis

When all questionnaires were returned from each participating Primary Health Care clinic, the student went through each questionnaire one by one checking whether all the questionnaires had been properly completed. The completed questionnaires were then one after another captured onto Microsoft Excel. The questions were entered horizontally on the spreadsheet, while the number of respondents went vertically. The data were entered into Excel and analyzed using SPSS version 14 and univariate, bivariate and multivariate analysis was done.

After all data had been captured further checks were made to ensure that there was no error. Frequencies, means, median and standard deviations, were used to summarize the data and the results were reported in the tables.

The method used to check for the normality of data for attitude, belief and knowledge scores was the one sample Kolmogorov-Smirnov test. The test shows that attitude and belief scores were normally distributed but that knowledge was not. Mean beliefs and attitudes score were compared using ANOVA. Parametric tests were used because the beliefs and attitudes score were not skewed. Median knowledge scores were compared using the Kruskal-Wallis test. This non-parametric test was used to

analyze the median score because the knowledge score were skewed. Calculating the internal consistency of the measuring instrument was done to measure reliability of the instrument. Internal consistency was calculated for all the questions on knowledge, beliefs and attitudes and counselling behaviour for HAST. This study used Cronbach's alpha as a measure of internal consistency. Cronbach's alpha is a reliability coefficient based on the average correlation of items within a test if the items are standardized, but on the average covariance among the items if the items are not standardized (Gosh 2003). Cronbach's alpha ranges from 0 to 1 with a value of 0.7 or higher of deemed to be of acceptable reliability. In this study, the Cronbach's alpha results varied for questions about HCWs' knowledge, attitudes and beliefs and counselling behaviour for HAST. Questions about knowledge of HCWs and counselling behaviour for HA ST were combined with a Cronbach's alpha equal to 0.55. However, the first two out of four questions were combined to form a scale with a Cronbach's alpha equal to 0.60. Questions about beliefs of HCWs yielded a Cronbach's alpha equal to 0.55. Questions about attitudes of HCWs and counselling behaviour yielded a Cronbach's alpha equal to 0.68 as reported previously.

The Cronbach's alpha ranged from questionable (055 for knowledge and beliefs) to acceptable reliability (0.68 or 0.7 for attitudes). Obtaining a Cronbach's alpha equal to 0.68 and 0.55 respectively means that that the measuring instrument was of fair internal consistency and reliability.

3.13. Summary

This chapter described the methodology which was used to gather and to analyze the data about HCWs' knowledge, beliefs and attitudes and counselling behaviour for HAST. Initially the study design was described including the study area and the study sample. This was followed by the description of the study instrument. The instrument comprised of statements which sought responses about HCWs' knowledge, beliefs, attitudes, and counselling behaviour for HAST. Other questions included were about HCWs' knowledge, beliefs and attitudes about the potential barriers to counselling behaviour for HAST which could be HCW related like time, training in HIV, TB or STIs, or client related like socioeconomic status, alcohol abuse, gender, age. The methodology also described how reliability and validity

were measured using the Cronbach's alpha. The pilot study and ethical considerations, bias and limitations were also described.

CHAPTER 4: Results

Chapter 4 presents the findings of the study.

4.1. Introduction

The presentation of the results starts with sociodemographic results followed by analytical statistics to indicate if there are any associations between the HCWs' knowledge, beliefs and attitudes about counselling behaviour and sociodemographic characteristics such as age, gender, level of education and place of work and training needs. The analytical statistics results are also presented to indicate if there are associations between the HCWs' knowledge, beliefs and attitudes regarding counselling for HAST and potential barriers to counselling behaviour for HAST.

4.2. Background to the study sample

Out of 162 HCWs found at the 24 sampled Primary Health Care clinics in the three sub-districts of eThekwini District, 43 (26.5%) HCWs declined to participate in the study. Of the 119 (73.5%) HCWs who voluntarily participated, 87 (73.1%) survey questionnaires were returned complete, while 32 (26.9%) survey questionnaires were returned incomplete and were discarded and did not form part of the data analysis.

4.2.1. Respondents' sociodemographic profile

4.2.2. Results to show HCWs' responses to statements posed to assess the following regarding HAST counselling:

- The HCWs' knowledge
- The HCWs' beliefs
- The HCWs' attitudes
- Potential barriers to counselling behaviour for HAST
  - Time
  - Fear
  - Space
  - Self Efficacy
  - Age

- Adherence
- Geographical location
- Gender
- Marital status
- Socioeconomic status
- Education level
- Alcohol

4.3. Sociodemographic profile

This section will present the sociodemographic profile of the respondents as shown in Table 4.

Table 4: HCWs' sociodemographic profile, n=87

Demographic Variable	**Category**	**Number (%)**
Age (years)	21-30	50 (57.5)
	31-40	3 (3.4)
	41-50	33 (37.9)
	51-60	1 (1.1)
Sex	Male	36 (41.4)
	Female	51 (58.6)
Marital Status	Single	4 (4.6)
	Married	43 (49.4)
	Divorced	39 (44.8)
	Widow(er)	1 (1.1)
	Cohabitation	0

Place of Work	Urban	54 (62.1)
	Rural	22 (25.3)
	Peri-Urban	11 (12.6)
Level of Education	University	47 (54.0)
	College	40 (46.0)
Sub-district **North** **West** **South**	**No. of respondents** 36 (41.4) 29 (33.3) 22 (25.3)	**No. of clinics** 5 (20.8) 8 (33.3) 11(45.8)

Most of the respondents (41.4%) were from the Northern sub-district followed by 33.3% from the Western sub district although the northern area only had five Primary Health Care clinics (20.8% of the sample) as shown in Table 4.

4.3.1. Daily patient workload

Table 5: Daily patient work load, n=87

Patient load	**Category**	Frequency (%)
No of patients seen per day	<100	28 (32.2%)
	>100	59 (67.8%)
	Total	87 (100%)

Table 5 shows that In the 24 Primary Health Care clinics, two thirds of the HCWs (67.7%) saw more than 100 patients per day. The following section represents the results about HCWs' training for HAST.

4.3.2. Training information

Table 6: Profile of training, year and duration of training, n=87

HCWs' reported training	Response	Number (%)
Training received	Yes	83 (95.4)
	No	4 (4.6)
What year?	2007	1 (1.1)
	2009	51 (58.6)
	2010	35 (40.2)
How long?	Hours	43 (49.4)
	Days	44 days (50.6)

The training reported by the HCWs varied in duration from 43 hours to 352 hours (44 days x 8 working hours per day)(Table 4) . The following section presents results about HCWs' responses to knowledge, beliefs and attitudes about counselling behaviour.

4.4. HCWs' knowledge about counselling behaviour

Table 7: Responses to individual knowledge statements about counselling behaviour for HAST, n=87

Statements	SD (%)	D (%)	NA/D (%)	A (%)	SA (%)
During consultation both health care workers and patients should get a chance to talk and to listen to each another	27 (31.0)	6 (6.2)	21(24.1)	33(37.9)	0
Asking the patient more questions may result in the health care worker getting a clearer picture about the patient's situation	0	0	22(25.3)	41(47.1)	24(27.6)
Health care workers know a lot about HIV and AIDS, STIs and TB.	0	3(3.4)	18(20.7)	46(52.9)	20(23.)
Naturally every health care worker can	0	0	20(23.0)	22(25.3)	45(51.7)

counsel patients even without being trained					

Code: SD = Strongly disagree; D = Disagree; NA/D = Neither Agree / Disagree; A = Agree; SA = Strongly Agree

The results indicate that HCWs were well informed about counselling behaviour for HAST as shown in the Table 7.

4.5. HCW's Beliefs about counselling behaviour for HAST

Table 8: Responses to individual belief statements about counselling behaviour for HAST, n=87)

Statements	SD (%)	D (%)	NA/D (%)	A (%)	SA (%)
No amount of counselling can help as some communities are completely helpless	14 (16.1)	41 (47.1)	25 (28.7)	7 (8.0)	0
Patients in urban areas know all about how to improve their health	46 (52.9)	29 (33.3)	9 (10.3)	0	3 (3.4)
Uneducated patients can never understand no matter how much time one spends talking to them	53 (60.9)	34 (39.1)	0	0	0
Poverty stricken patients just need treatment as they cannot do anything to improve their health	0	0	33 (37.9)	33 (37.9)	21 (24.1)

Code: SD = Strongly disagree; D = Disagree; NA/D = Neither Agree / Disagree; A = Agree; SA = Strongly Agree

Table 8 shows results which indicate that HCWs' beliefs about counselling behaviour for HAST were supportive.

4.6. Attitudes about counselling behaviour for HAST of HCWs at eThekwini District at 24 Primary Health Care clinics.

Table 9: Responses to individual attitude statements about counselling behaviour for HAST, n=87),

Statement	SD (%)	D (%)	NA/D (%)	A (%)	SA (%)
An experienced health care worker should just decide for a patient to save time	44(50.6)	16(18.4)	18(20.7)	9(10.3)	0

Health care workers should not waste time counselling patients with good adherence.	18(20.7)	39(44.8)	21(24.1)	9(10.3)	0
Patients who abuse alcohol do not benefit from counselling	54(62.1)	12(13.8)	20(23.0)	1(1.1)	0
In the clinic where I work there is sufficient space to counsel patients	41(47.1)	5(5.7)	39(44.8)	2(2.3)	0

Code: SD = Strongly disagree; D = Disagree; NA/D = Neither Agree / Disagree; A = Agree; SA = Strongly Agree

The results showed that some HCWs have negative attitudes about counselling behaviour for HAST as indicated in Table 9.

4.7. Potential Barriers to counselling behaviour for HAST

Table 10: Responses to individual statements about potential barriers to counselling behaviour for HAST, n=87

Category	**Statement**	**Response**				
		SD (%)	**D (%)**	**NA/D (%)**	**A (%)**	**SA (%)**
Time	**Health care workers have insufficient time to counsel patients properly**	31 (35.6)	31 (35.6)	25 (28.7)	0	0
Space	**In the clinic where I work there is sufficient space to counsel patients**	41(47.1)	5 (5.7)	39 (44.8)	2 (2.3)	0
Fear	**I am afraid that I may get TB whilst talking to patients**	49 (56.3)	14 (16.1)	2 (2.3)	5 (5.7)	17 (19.5.)
Confidence	**I do not feel confident to counsel HIV positive patients.**	51 (58.6)	21 (24.1)	15 (17.2)	0	0
Self efficacy	**I am confident that I have enough skills to counsel patients about HIV and AIDS, STIs and TB**	7 (8.0)	44(50.6)	28 (32.2)	8 (9.2)	0

Age	**Young patients should never be left to make choices about how to improve their health**	30 (34.5)	40 (46.0)	10 (11.5)	3 (3.4)	4 (4.6)
Gender / HIV positive	**For everybody's sake HIV positive female patients must be told how to live their lives.**	54 (62.1)	30 (34.5)	3 (3.4)	0	0
Lack of empathy	**HIV positive patients who fail to adhere to ART deserve no sympathy**	42 (48.3)	41 (47.1)	1 (1.1)	3 (3.4)	0
Geographical location	**Patients in urban areas know all about how to improve their health**	46 (52.9)	29 (33.3)	9 (10.3)	3 (3.4)	0
Marital status	**I feel safe when talking to married HIV positive patients**	49 (56.3)	14 (16.1)	23 (26.4)	1 (1.1)	0
Socioeconomic status	**Poverty stricken patients just need treatment as they cannot do anything to improve their health**	0	0	33 (37.9)	33(37.9)	21 (24.1)
Education	**Uneducated patients can never understand no matter how much time one spends talking to them**	53 (60.9)	34 (39.1)	0	0	0

Code: SD = Strongly disagree; D = Disagree; NA/D = Neither Agree / Disagree; A = Agree; SA = Strongly Agree

The results showed in Table 10 indicate that some HCWs reported factors such as poverty and alcohol as potential barriers to their counselling behaviour for HAST.

4.8. Information about training needs regarding counselling behaviour for HAST

Table 11: Responses to statements about training needs regarding counselling behaviour for HAST, n=87,

Statement	**Response**				
	SD (%)	**D (%)**	**NA/D (%)**	**A (%)**	**SA (%)**
I need more training in counselling	27	16	39	5	0

patients about TB	(31.0)	(18.4)	(44.8)	(5.7)	
I need more training in counselling patients about STIs	48 (55.2)	6 (6.9)	22 (25.3)	4 (4.6)	7 (8.0)
I need more training in counselling patients about HIV and AIDS	2 (2.3)	8 (9.2)	22 (25.3)	20(23.0)	35 (40.2)

Code: SD = Strongly disagree; D = Disagree; NA/D = Neither Agree / Disagree; A = Agree; SA = Strongly Agree

The results show that HCWs reported that they do not need more training in counselling patients about TB. The next section presents results of the statistical analysis as indicated in Table 11.

4.9. Analytical statistics

Table 12: Association between mean knowledge, beliefs and attitudes scores and HCWs' sociodemographic factors

	Beliefs about counselling		**Attitude about counselling**		**Knowledge about counselling**	
	Mean(SD)	**P-value***	**Mean (SD)**	**P value***	**Median (Min – Max)**	**P value****
Age (n)						
21-30 (50)	2.6 (0.3)	< 0.05	2.1 (0.3)	0.37	2.6 (2.3 - 3.3)	0.60
31-40 (3)	2.6 (0.3)		2.0 (0.3)		2.5 (2.5 – 3.0)	
41-50 (33)	2.9 (0.3)		2.2 (0.3)		2.9 (2.3 - 3.4)	
51-60 (1)	3.1 (0.3)		2.4 (0.4)		3.1 (3.1	
Sex						
Female	2.8(0.3)	0.29	2.2 (0.3)	0.96	2.8 (2.3 – 3.3)	0.41

Male	2.7(0.3)		1.2 (0.3)		2.7 (2.3 - 3.4)	
Level of education						
University	2.7 (0.3)	<0.05	2.1 (0.3)	0.69	2.7 (2.3 – 3.4)	0.05
College	2.8 (0.3)		2.2 (0.3)		2.9 (2.3 – 3.3)	
Place of work						
Urban	2.7 (0.3)	0.190	2.1 (0.3)	< 0.05	2.6 (2.3 – 3.3)	0.56
Rural	2.8 (0.3)		2.2 (0.3)		2.8 (2.4 – 3.3)	
Peri-urban	2.8 (0.3		2.4 (0.2)		2.8 (2.3 – 3.4)	

Code: SD = Strongly disagree; D = Disagree; NA/D = Neither Agree / Disagree; A = Agree; SA = Strongly Agree

Chi square; ** Kruskal Wallis

The results in Table 12 show that there was a statistically significant association between socio demographic characteristics such as belief scores and age (p<0,005) as well as with belief scores and the HCWs' level of education (p<0.005).

Table 13: Association of mean scores of knowledge, beliefs and attitudes scores and HCWs' daily patient load, n=87

Category			**Mean Score**	**SD of Scores**	**P value**
Age	1	< 40 years	2.59	0.18	0.0019
	2	> 40 years	2.72[1]	0.20	0.0019
Educational Level	1	College	2.63	0.17	0.53
	2	University	2.65[2]	0.22	0.53
Gender	1	Male	2.63	0.23	0.74
	2	Female	2.64	0.17	0.74

Number of Patients	1	>100 patients/day	2.64	0.20	0.94
	2	<100 patients/day	2.64	0.20	0.94

Age appears to be the most significant distinguishing factor in the responses, followed by the level of education. Respondents who are at least forty years have the highest average score. Respondents (HCWs) with university education scored higher than those who have college level education. HCWs seeing more than 100 patients per day had higher average scores than those who see less than 100 patients per day.

T-test

The t-test for the age of the HCWs is 0.0019(< 0.05) and therefore the difference is statistically significant. As far as the other constructs (gender, educational level, and number of patients seen per day) are concerned, there appears to be insignificant statistical differences, judging by the fact t-test score was greater than 0.05.

Table 14: Comparison of HCWs' mean knowledge, beliefs and attitude scores about counselling behaviour for HAST, n=87

Counselling behaviour	**Mean score**	**Standard deviation(SD)**	**Median**	**Minimum**	**Maximum**
Knowledge	4.1	0.5	4.0	3.3	5.0
Beliefs	2.8	0.3	2.7	2.3	3.4
Attitudes	2.2	0.3	2.2	1.5	2.7
Barriers	2.4	0.3	2.3	1.8	3.0

Code: SD = Strongly disagree; D = Disagree; NA/D = Neither Agree / Disagree; A = Agree; SA = Strongly Agree

Table 14: The mean scores of HCWs' knowledge were high followed by those of beliefs and attitudes about counselling behaviour for HAST.

Table15: Comparison of mean knowledge, beliefs and attitudes scores and the HCW's training needs

Training needs for HIV	**Beliefs about counselling**		**Attitude about counselling**		**Knowledge about counselling**	
	Mean(SD)	**P-value**	**Mean (SD)**	**P - value**	**Median (Min – Max)**	**P -value**
Strongly Disagree	2.5	<0.05	2.2(0.2)	0.64	4.5(4.0 - 5.0	0.06
Disagree	2.8(0.3)		2.2(0.2)		3.8(3.7 – 4.3)	
Neither Agree / Disagree	2.9(0.2)		2.3(0.3)		4.0(3.3 - 5.0)	
Agree	2.8(0.3)		2.1(0.3)		4.0(3.3 - 5.0)	
Strongly Agree	2.7(0.3)		2.1(0.3)		4.3(3.3 - 5.0)	
Training needs for STIs						
Strongly Disagree	2.8(0.3)	0.27	2.1(0.3)	0.34	4.0(3.3 – 5.0)	0.63
Disagree	2.9(0.1)		1.9(0.3)		4.3(3.3 – 4.3)	
Neither Agree / Disagree	2.7(0.3)		2.2(0.3)		4.0(3.7 – 5.0)	
Agree	2.6(0.3)		2.2(0.3)		4.0(3.7 - 4.3)	
Strongly Agree	2.9(0.1)		2.3(0.1)		4.0(3.3 – 4.7)	
Training needs for TB						
Strongly Disagree	2.6(0.1)	<0.05	1.9(0.2)	<0.05	4.0(3.3-5.0)	0.52
Disagree	2.9(0.2)		2.2(0.3)		4.0(3.3-5.0)	

Neither Agree / Disagree	2.8(0.3)		2.3(0.3)		4.0(3.3-5.0)	
Agree	2.9(0.3)		2.3(0.2)		4.3(4.0 – 4.7)	
Strongly agree	-		-		-	

Code: SD = Strongly disagree; D = Disagree; NA/D = Neither Agree / Disagree; A = Agree; SA = Strongly Agree

Chi square; ** Kruskal Wallis

The results in Table 15 have shown that no statistically significant association was found between the HCWs' knowledge of HAST and their training needs for HIV and AIDS and STIs.

Chapter 5: Discussion

5.1. Introduction

This chapter discusses the implications of the findings as presented in the previous chapter, and the discussion will include HCWs' sociodemographic details and the implications of their knowledge, beliefs and attitudes about counselling for HAST. The statistical analysis of the results that are discussed in relation to the research methods used and the study limitations. The reliability, validity and generalizability of the research findings are considered in relation to the literature pertaining to counselling behaviour for HAST.

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5.2. Sociodemographic profile, HCW training and Health System factors

Due to financial constraints and moratoriums and new policies which are introduced and implemented without recruitment of dedicated staff and minimum retention strategies HCWs attend to more patients than the previously acceptable norm of 34 patients per HCW per day as found in this study most HCWs reported attending to more than 100 patients per day. An attempt to establish the accuracy and adequacy of the HCWs' establishment met with challenges as the organograms for health facilities at all levels are being revised in line with service restructuring. Reports state that the number of staff required to fulfill service delivery is far below what can be reasonably accepted for an effective and efficient service delivery programme (Shisana et al. 2004). This may influence HCWs' counselling behaviour and they may not carry out their intention to counsel patients for HAST.

The study found that HCWs with a university qualification were more than those with a college qualification and this may have contributed to the study finding that most HCWs' knowledge about counselling behaviour for HAST was adequate. The government's response of introducing policies to address the increasing HIV burden of disease may also be a contributing factor. Since the launch of the Comprehensive Care Management and Treatment programme in 2004 aimed at rolling out ARVs, most HCWs have undergone training about HAST (NDOH 2004). The study results showed that 95.4% reported that they were trained in HAST. Yet some HCWs reported that they need more training about counselling patients for HIV and AIDS

and STIs but not for TB despite the study findings that their counselling for HAST is adequate. This highlights the need for provision of ongoing training about counselling for HAST

This section discusses the implications of the study findings about HCWs' knowledge, beliefs and attitudes about counselling for HAST. The discussion of the implications of the findings of the descriptive statistics is first followed by the discussion of the implications of the findings of the analytical statistics.

5.3. The HCWs' knowledge about counselling behaviour for HAST

As in other studies like Bwambale et al (2008), this study found that HCWs have a high level of knowledge about HAST. HCWs were knowledgeable about the fact that during consultation both the HCW and the patient must be afforded a chance to talk as well as a chance to listen to one another. This finding is in keeping with literature that promotes the use of motivational interviewing during consultation (Mash 2008). HCWs also knew that they already have all the skills that are required to communicate effectively with patients. However, less than half of the respondents (38%) agreed that during consultation both health care workers and patients should get a chance to talk and to listen to each another with the majority of HCWs (50%) choosing to disagree with the statement. This is a concern as studies reported that HCWs judged a patient's HIV status by how they dress and even denied them health care (Reis et al. 2005). This finding is also a concern especially when most respondents (77%) knew that health care workers are trained to counsel patients even without extra training. Besides being nurses by profession most respondents (95.4%) had undergone training for HAST. Thus despite having the skills to counsel which HCWs obtain as part of their basic nursing training skills as well as adequate knowledge about counselling behaviour for HAST, this study found that this knowledge did not translate into practice where HCWs afforded patients good counselling behaviour. The HCWs' lack of knowledge may be a barrier to their intention to implement the HCT and PICT policy.

5.4. HCWs' beliefs about counselling behaviour for HAST

While the results show that HCWs disagreed with belief statements that were not in favour of counselling behaviour for HAST, some HCWs' responses revealed that HCWs' beliefs about the patients' socioeconomic status may hamper the HCW from rendering good counselling behaviour for HAST. Results show that (61%) HCWs believed that, "Poverty stricken patients just need treatment as they cannot do anything to improve their health". Similarly, studies also reported that HCWs believed that treating HIV positive patients is a waste of time. HCWs discriminated against HIV positive patients (diagnosed by their poor appearance) as they believed that treating they were being punished for contracting the HI virus (Reis et al. 2005). Even though the association between HCWs' beliefs and counselling behaviour was significant the findings suggest a gap in HAST training which could address the HCWs' about the effect of beliefs on intentions and practice.

5.4. HCWs' attitudes about counselling behaviour for HAST

Most HCWs disagreed with statements that were not in favour of positive attitudes about counselling behaviour for HAST including a statement, "An experienced HCW should just decide for a patient to save time". However some HCWs' responses showed that they have negative attitudes about counselling for HAST. HCWs were unsure and only 1% agreed about statements that were in favour of positive attitudes and counselling behaviour for HAST including the statement, "Patients who abuse alcohol do not benefit from counselling". Findings of negative attitudes amongst HCWs were also found in other studies where HCWs concluded that treating HIV positive patients is a waste of time (Reis et al. 2005). HCWs negative attitudes may be In keeping with reports that knowledge does not translate to practice. This shows that other factors besides knowledge including attitudes must be addressed during training for HAST in order to assist HCWs to deal with negative attitudes towards counselling for HAST. The next section discusses the implications of the statistical analysis.

5.5. Statistical analysis

5.5.1. Association between sociodemographic factors and knowledge, beliefs and attitudes about counselling for HAST

There was statistical significance found for the association between age and beliefs about counselling behaviour for HAST. Older HCWs had a higher score compared to younger HCWs. Age may contribute to older HCWs being more knowledgeable and or programmed. Influenced by age HCWs' beliefs about counselling for HAST may lead to action which is a move beyond contemplation. Coupled with the HCWs' high knowledge about counselling for HAST age is an important factor necessary to contribute to provision of professional and non-judgmental counselling behaviour. As the epidemic is prevalent among all factors including HCWs' age must be the focus in the training about counselling for HAST.

There was also statistical significance found between beliefs about counselling behaviour for HAST and the level of counselling, Scores for HCWs with university education were higher than those of HCWs with college education. Education contributed to beliefs or energy that was supportive of professional counselling behaviour. Training may help to translate this energy to the desired action of provision of HAST counselling for patients. There was no significant association found with other sociodemographic factors such as marital status, gender and place of work. This is in keeping with other studies about HIV where no association was found between marital status and attitudes (Shisana et al. 2004; Thior et al. 2007)

5.5.2. Association between knowledge, beliefs, attitudes about counselling behaviour for HAST

The score for knowledge was higher than the score for beliefs and the score for attitudes and HCWs were found to have high knowledge about counselling for HAST. Knowledge is however not enough and may be influenced by factors such as fear which according to Kalichman et al (2003) does affect counselling behaviour for HAST.

There was statistical significance found between attitude and training needs for TB while no statistical significance was found between beliefs and training needs for HIV and AIDS. This indicates that this finding did not happen by chance and is in

keeping with the findings that HCWs have negative attitudes that could influence counselling behaviour for HAST (Reis et al. 2005). Other studies report that HCWs may exhibit negative attitudes about HIV and AIDS in order to protect their self-image (Triandis 1971). Attitudes which are described as complex mental state are important determinants of intention (Peltzer et al. 2004). Training must focus on equipping HCWs with skills involving use of the models of counselling and theories such as the change cycle theory in order to change negative attitudes about HIV and AIDS. Training to change negative attitude must be prioritized to complement the high knowledge of HCWs about HAST which on its own is not enough to bring about the desired counselling behaviour for HAST. Change in attitude results in change in intention which is a good initial step to change in behaviour (Ikechebelu et al. 2006; Iliyasu et al. 2006).

CHAPTER 6: Conclusions and recommendations

6.1 Introduction

In this chapter presentation of the conclusion and the recommendations based on the study findings was made.

6.2. Conclusion

This research aimed to describe knowledge, beliefs and attitudes regarding counselling behaviour of eThekwini HCWs. Sociodemographic factors such as age and a higher level of education were found to contribute to provision of professional counselling behavior. The findings were that HCWs were well informed about knowledge regarding HAST counseling behavior for HAST but there were still gaps in HCWs' knowledge were that HCWs did not know that during consultation both they and patients should get a chance to talk and to listen to each other.

The conclusion is that HCWs' beliefs were found to be supportive even though some HCWs believed that poverty stricken patients need treatment only, not counselling. This is worrying as the literature review also reported that poor patients spend less time during consultation. This study also found that HCWs lack of time and patients' socio-economic status are potential barriers to counselling patients. This is a concern as HCT and PICT policy implementation requires committed HCWs in order to achieve greater quality and to increase the low HCT uptake.

The findings that showed that HCWs had supportive attitudes regarding counselling behaviour are encouraging. This study also found that not all HCWs were sympathetic to those who abuse alcohol. However, some HCWs' responses showed that they had negative attitudes towards counselling for HAST. This is a concern is other studies made similar findings. Negative attitudes may be a barrier to the intention to provide patients with good HAST counselling behaviour.

Using statistical techniques for the analysis of the quantitative research method chosen in this study also promotes reliability and generazability (Cooper & Schindler 2005). Thus through the University statistician the right sample size was determined and sampling also took into considerations the age, race, and job categories to

ensure that the sample was representative. The design of the questionnaire was based on well established theories in the literature provided the opportunity for the student to find out whether the results were supported by other studies. As a whole these activities aimed to improve the validity and reliability and the goal of generalization of the study results beyond the confines of the sample size, a desired goal of a study that uses the quantitative research method was achieved (Strunig et al. 2001).

6.3. Bias, limitations of the research findings

According to Bowling (2002) non-response bias is bias due to a difference in characteristics between responders and non-responders and failure to respond is a concern as it could mean that the non-responders have something valuable to hide. In this study 43 HCWs refused to respond by answering the questionnaires. Reasons cited varied from time limit and fear that patients may be rude and or violent to HCWs if they take time away from attending to them in order to respond to the questions. Some HCWs declined stating that participating equals giving permission for more work for the remaining skeleton nursing staff. Other HCWs were away on study leave or on maternity leave or attending NIMART training. This is a concern as only 87 HCWs submitted completed questionnaires whilst 32 questionnaires were returned incomplete and were discarded and not included in data analysis. Further declining to respond may also indicate lack of understanding and or acceptance of task sharing and fear of future consequences, such as additional work. Thus the estimated sample size was not achieved limiting the generalization of the study results.

Of concern was the truthfulness of the responses from the study participants especially since the questions asked were of a personal nature. However, it was not possible to triangulate as the observations of HCWs during consultation were not permitted by eThekwini Health Department authority and were not performed as part of the methodology. Each respondent was allowed 20 minutes to respond to the questionnaire only. Observation of how HCWs counsel patients had been planned and aimed to help verify responses to the questionnaire and to promote validity, reliability and generalizability of the study. However, management did not permit observation of patients.

Other HCWs were away on study leave or were on maternity leave or attending NIMART training. Some managers also did not participate in the study citing time constraints. Some reported that there were a lot of vacant posts. This is a concern both because of the reduced sample size.

Recall bias is defined as assessments which depend on the respondents' recollection and reporting (Cooper & Schindler 2005). Yet, recall bias is a concern in this study as respondents may not remember. However, accuracy and self-disclosure were enhanced by designing instruments to enhance the correctness of what respondents report.

In conclusion, reliability and validity of this study appears to be acceptable, and these results may be applicable to other Primary Health Care clinics to contribute to baseline information about knowledge, beliefs and attitudes and counselling behaviour for HAST.

6.4. Recommendations

The HCT Policy Guidelines were developed in order to promote the culture of HIV testing. HCT should be offered to every patient, children, youth and adults who come to access healthcare in the public and private health facilities. Implementation of the HCT guidelines requires that all service providers, those who manage HIV and AIDS programmes and all HCWs must be poised to enable HCT implementation. Commitment and consistency to implementation of the HCT policy requires that measures to ensure that HCWs' attitudes are positive are prioritized. Considering that attitudes are a complex state of mind and are important as the initial element towards changing intention, it is recommended that mechanisms to change HCWs' be put in place and to include

Attitudes

The persons who convey the knowledge must preferably be experts in the field of AIDS and must have a positive attitude regarding the nursing of HIV positive patients as well as knowledge about treatment and improving the quality of life of HIV positive patients

- Knowledge conveyed must include information on counselling and its role to adherence.

PLHWA

- Persons who themselves are HIV positive but are reasonably healthy because of effective treatment, could address nurses regarding the value of counseling must facilitate training in order to promote internalization of knowledge regarding counselling behaviour for HAST including use of a credible source of knowledge.
- Training on the learning-theoretical approach in order for nurses to be made aware of the consequences of their behaviour.

Training

- Guidelines for an attitude change with regard to counselling behaviour incorporated in all HCWs HAST training.
- More than one method of attitude change can be used and media could be utilized to reinforce the message.
- Promoting training of nurses in the counselling of HIV positive patients as an opportunity for nurses to mean something to the HIV positive patient and reduce the perception that "nothing can be done for HIV positive patients"
- Training about the attractiveness of counselling which could also be promoted by effective verbal and non-verbal communication skills, personal neatness and self-confidence.
- Role model ship is important when attempts are made to change attitudes of nurses, and own attitudes, values and meanings with regard to the consistent use of universal preventive measures may be conveyed.
- Role models must be enthusiastic regarding counselling behaviour for HAST as a part of the combination prevention approach.
- Group discussions may be used because a change in group norms could possibly also give rise to a change in attitude.
- Contrasting opinions about counselling may be addressed by conducting debates during training.

- The reward that the consistent use of counselling may have for nurses and the consequences of inconsistent use may be shown to nurses.
- The consequences of cognitive dissonance for both nurses and HIV positive patients may be shown to nurses, and they could be assisted in changing their attitudes so that dissonance can be reduced and internal discomfort alleviated.

Patients' rights

- Training should also explain that it is the duty of HCWs to promote patients' rights.
- Training should involve promoting confidentiality.
- A workshop with the theme: "AIDS, my rights and duties as a nurse" may be presented, and by focusing on the rights and duties of nurses, feelings of having been wronged may be reduced in nurses.
- A change in attitude can be encouraged by a change in behaviour when systems are implemented where patients' rights are respected. If nurses are of the opinion that the patients' right to confidentiality do not conflict with their own rights and those of the community, they may act as spokespersons for the patients. In this way they express their attitudes and commit themselves in public, all of which, according to Zimbardo et al (1997) bring about a change in attitude.
- Adequate opportunity for the verbalization of feelings regarding confidentiality and HIV positive patients is necessary because emotions are controlled by being aware of them, accepting them, giving direction to them and verbalizing them

Coping mechanisms

- Existing coping mechanisms may be identified and evaluated for effectiveness.
- An environment of unconditional positive acceptance may facilitate this process.

- Guidelines to change nurses' attitudes by equipping them to deal with internal discomfort by them learning more effective coping mechanisms
- Information regarding the expansion of coping mechanisms can be offered.

- It may also be of value to identify support systems and then to suggest ideas regarding their optimal utilization.
- A healthy self-image and the promotion of rational thought may increase self-confidence.
- The learning of effective problem-solving skills and relaxation techniques may also be of value.
- Effective coping mechanisms may be strengthened by positive feedback and ineffective coping mechanisms discouraged by ignoring them.

Promoting a therapeutic relationship

- HCWs must be trained about how to promote the development of a therapeutic relationship with HIV positive patients.
- Effective communication, mutual acceptance and support are also essential skills for interpersonal relationships (Mash 2008) and a course in interpersonal skills may be of great value to nurses.
- Effective conflict management and problem-solving are necessary in order to build up therapeutic relationships with HIV positive patients, and these skills can be practised by means of role-plays.
- Training should equip HCWs to practice motivational interviewing and how to give guidance to the patients.
- Empathy must be promoted by addressing the HCWs ‘denial of own risk.
- Role-play may used with HCWs as "patients" who are more or less in similar positions as they are, and this could possibly bring home to the nurse the idea of personal risk.
- HCWs should identify the implications of AIDS in their personal lives, and how to protect themselves in all areas.
- Humour may be used to encourage relaxation, and an environment in which both nurses and patients feel comfortable to share personal aspects.

- HIV positive speakers with whom nurses can identify could be invited to address them regarding their experiences of being HIV positive.

Further research should be done about what HIV positive patients require in terms of nursing care. The nursing curriculum should also focus on work ethics regarding AIDS to guide nurses about how to conduct themselves as they work with HIV positive patients. Lastly, nurses must be afforded a non-judgmental environment where they vent their concerns regarding working with HIV positive patients as well as how to cope with the knowledge that they are also at risk of contracting AIDS in their private lives. The workplace must also avail debriefing sessions for nurses as part of a coping mechanism.

Based on findings of this study recommendations are that HCWs training should be designed to address negative attitudes to counselling behaviour for HAST and should prioritize:

- Training to change the attitude of nurses and how they handle HIV positive patients.
- Supportive supervision of implementation of guidelines towards attitude change with regard to counselling behaviour for HAST.
- Mentoring to promote internalization of knowledge regarding counselling by nurses.
- Further studies to assess barriers to counselling which could influence counselling to understand further how HCWs handle this potential barrier to counselling behaviour.

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APPENDIX A

QUESTIONNAIRE

Confidential

- This questionnaire seeks to gather data about how your counseling behaviour and HIV & AIDS, STIs and TB(HAST)
- Please give us your honest opinion and not what other people may think
- This questionnaire is completely confidential
- No names of clinics will be used in all reports from the study
- There are no marks to identify that you filled in this questionnaire and your name does not appear on it

1. Please fill in Your Personal Details

1. Health District: South / North / West **……**
2. Age **……..**
3. Sex: Male / Female……..
4. Marital status: Single / Married / Divorced / Widow / er / Living with Partner**……**
5. Facility type: Urban / Rural / Peri – urban **……**
6. How long have you worked at current facility **……**
7. Job Category **……..**
8. Highest Academic Qualification: High school / College / University**……..**
9. Any training in HIV & AIDS, STIs, TB in the past five years? Yes / No**.....**

10. If Yes, What year**? .....**

11. How long was the training? Number of days / hours**.....**

12. How many patients do you see per week? 10, 20, 40, 60, more than 100 **……..**

2. Knowledge / Attitude / Perceptions and beliefs about counseling behavior and HAST

Please indicate how strongly you agree or disagree with each of the following statements by placing a X over the statement of your choice.

1. **During consultation both health care workers and patients should get a chance to talk and to listen to each another.**

a) Strongly disagree b) Disagree c) Neither agree nor disagree d) Agree e) Strongly agree

2. Asking the patient more questions may result in the health care worker getting a clearer picture about the patient's situation.

a) Strongly disagree b) Disagree c) Neither agree nor disagree d) Agree e) Strongly agree

3a. Health care workers know a lot about HIV and AIDS, STIs and TB.

a) Strongly disagree b) Disagree c) Neither agree nor disagree d) Agree e) Strongly agree

3b.Naturally e**very health care worker can counsel patients even without being trained.**

a) Strongly disagree b) Disagree c) Neither agree nor disagree d) Agree e) Strongly agree

4. Health care workers should ask patients about how best to help them.

a) Strongly disagree b) Disagree c) Neither agree nor disagree d) Agree e) Strongly agree

5. Health care workers should assist patients to understand health information.

a) Strongly disagree b) Disagree c) Neither agree nor disagree d) Agree e) Strongly agree

6a. Patients may ask a lot of questions.

a) Strongly disagree b) Disagree c) Neither agree nor disagree d) Agree e) Strongly agree

6b. Counseling patients can assist them to change their behavior to improve their health.

a) Strongly disagree b) Disagree c) Neither agree nor disagree d) Agree e) Strongly agree

7. I am afraid to care for patients who look HIV positive.

a) Strongly disagree b) Disagree c) Neither agree nor disagree d) Agree e) Strongly agree

8. I am afraid that I may get TB whilst talking to patients.

a) Strongly disagree b) Disagree c) Neither agree nor disagree d) Agree e) Strongly agree

9. Health care workers may get HIV infected whilst talking to HIV positive patient who fail to adhere to ART.

a) Strongly disagree b) Disagree c) Neither agree nor disagree d) Agree e) Strongly agree

10. I feel safe when talking to married HIV positive patients.

a) Strongly disagree b) Disagree c) Neither agree nor disagree d) Agree e) Strongly agree

11a. Counseling a lot of TB patients puts my own life in danger.

a) Strongly disagree b) Disagree c) Neither agree nor disagree d) Agree e) Strongly disagree

11b. Counseling HIV positive patients is difficult.

a) Strongly disagree b) Disagree c) Neither agree nor disagree d) Agree e) Strongly agree

11c. I do not feel confident to counsel HIV positive patients.

a) Strongly disagree b) Disagree c) Neither agree nor disagree d) Agree e) Strongly agree

12. Health care workers know what patients should do to improve their health.

a) Strongly disagree b) Disagree c) Neither agree nor disagree d) Agree e) Strongly agree

13. No amount of counseling can help as some communities are completely helpless.

a) Strongly disagree b) Disagree c) Neither agree nor disagree d) Agree e) Strongly agree

14. Patients can never learn.

a) Strongly disagree b) Disagree c) Neither agree nor disagree d) Agree e) Strongly agree

15. What patients need is treatment not counseling.

a) Strongly disagree b) Disagree c) Neither agree nor disagree d) Agree e) Strongly agree

16. Very few patients benefit from health talks.

a) Strongly disagree b) Disagree c) Neither agree nor disagree d) Agree e) Strongly agree

17. Patients in urban areas know all about how to improve their health.

a) Strongly disagree b) Disagree c) Neither agree nor disagree d) Agree e) Strongly agree

18. Most patients are just blank about how to improve their health.

a) Strongly disagree b) Disagree c) Neither agree nor disagree d) Agree e) Strongly agree

19. For everybody's sake HIV positive female patients must be told how to live their lives.

a) Strongly disagree b) Disagree c) Neither agree nor disagree d) Agree e) Strongly agree

20. Young patients should never be left to make choices about how to improve their health.

a) Strongly disagree b) Disagree c) Neither agree nor disagree d) Agree e) Strongly agree

21. HIV positive patients who fail to adhere to ART deserve no sympathy.

a) Strongly disagree b) Disagree c) Neither agree nor disagree d) Agree e) Strongly agree

22. Poverty stricken patients just need treatment as they cannot do anything to improve their health.

a) Strongly disagree b) Disagree c) Neither agree nor disagree d) Agree e) Strongly agree

23. Health care workers should always be careful when counseling patients as it is not easy to tell whether a patient is HIV positive or not.

a) Strongly disagree b) Disagree c) Neither agree nor disagree d) Agree e) Strongly agree

24. Uneducated patients can never understand no matter how much time one spends talking to them.

a) Strongly disagree b) Disagree c) Neither agree nor disagree d) Agree e) Strongly agree

25. An experienced health care worker should just decide for a patient to save time.

a) Strongly disagree b) Disagree c) Neither agree nor disagree d) Agree e) Strongly agree

26. Health care workers should not waste time counseling patients with good adherence.

a) Strongly disagree b) Disagree c) Neither agree nor disagree d) Agree e) Strongly agree

27. Patients who abuse alcohol do not benefit from counseling.

a) Strongly disagree b) Disagree c) Neither agree nor disagree d) Agree e) Strongly agree

28. Counseling may help health care worker obtain information needed to help patients.

a) Strongly disagree b) Disagree c) Neither agree nor disagree d) Agree e) Strongly agree

29. To save time health care workers should just give their opinions to summarize for patients.

a) Strongly disagree b) Disagree c) Neither agree nor disagree d) Agree e) Strongly agree

30. Smiling health care workers may encourage patients to share more about their problems.

a) Strongly disagree b) Disagree c) Neither agree nor disagree d) Agree e) Strongly agree

31. Patients may understand more when health care workers look genuinely interested in them.

a) Strongly disagree b) Disagree c) Neither agree nor disagree d) Agree e) Strongly agree

32. Blaming patients for their health condition may prevent them from opening up.

a) Strongly disagree b) Disagree c) Neither agree nor disagree d) Agree e) Strongly agree

33. Privacy is necessary when talking to a patient about their individual situations.

a) Strongly disagree b) Disagree c) Neither agree nor disagree d) Agree e) Strongly agree

34a. Health care workers should always explain instructions given to patients.

a) Strongly disagree b) Disagree c) Neither agree nor disagree d) Agree e) Strongly agree

34b. Counseling patients is an important part of a nurse's duties.

a) Strongly disagree b) Disagree c) Neither agree nor disagree d) Agree e) Strongly agree

34c. Health care workers have insufficient time to counsel patients properly.

a) Strongly disagree b) Disagree c) Neither agree nor disagree d) Agree e) Strongly agree

35a. I like counseling patients

a) Strongly disagree b) Disagree c) Neither agree nor disagree d) Agree e) Strongly agree

35b. I avoid counseling patients

a) Strongly disagree b) Disagree c) Neither agree nor disagree d) Agree e) Strongly agree

35c. I find that counseling patients is very stressful

a) Strongly disagree b) Disagree c) Neither agree nor disagree d) Agree e) Strongly agree

36a. I need more training in counseling patients about HIV and AIDS

a) Strongly disagree b) Disagree c) Neither agree nor disagree d) Agree e) Strongly agree

36b. I need more training in counseling patients about STIs

a) Strongly disagree b) Disagree c) Neither agree nor disagree d) Agree e) Strongly agree

36c. I need more training in counseling patients about TB

a) Strongly disagree b) Disagree c) Neither agree nor disagree d) Agree e) Strongly agree

37a. I am confident that I have enough skills to counsel patients about HIV and AIDS, STIs and TB.

a) Strongly disagree b) Disagree c) Neither agree nor disagree d) Agree e) Strongly agree

37b. In the clinic where I work most nurses counsel patients

a) Strongly disagree b) Disagree c) Neither agree nor disagree d) Agree e) Strongly agree

37c. In the clinic where I work there is sufficient space to counsel patients

a) Strongly disagree b) Disagree c) Neither agree nor disagree d) Agree e) Strongly agree

37d. In the clinic where I work there is no time to counsel patients.

a) Strongly disagree b) Disagree c) Neither agree nor disagree d) Agree e) Strongly agree

37e. I intend to spend more time counseling patients.

a) Strongly disagree b) Disagree c) Neither agree nor disagree d) Agree e) Strongly

Isithasiselo B – Ihlelo Lemibuzo

Ubumfihlo

- Lelihlelo lemibuzo lihlose ukuthola imidanti ngokuthi ukhulumisana futhi uzeluleka kanjani izinguli mayelana ne HIV kanye ne AIDS, IZIFO ZOCANSI EZITHATHELANAYO kanye NESIFO SOFUBA
- Sicela usinikeze umbono wakho othembekile futhi hhayi lokho abantu abangakucabanga
- Lelihlelo lemibuzo liyimfihlo ngokuphelele
- Awekho amagama emitholampilo ayosetshenziswa kuyo yonke imibiko etholwe ocwaningweni
- Awekho amaphuzu ayokhomba ukuthi wena ugcwalise lelihlelo lemibuzo futhi igama lakho aliveli kulona

1. Siza ugcwalise Imininingwane Yakho

13. Isifunda Sezempilo: eNingizimu / eNyakatho / eNtshonalanga **……**
14. Iminyaka yobudala **……**
15. Ubulili: Owesilisa / Owesifazane…….
16. Isimo sokuganana: Awushadile / Ushadile / Uhlukanisile / Ungumfelwa / Ungumfelokazi / Uyahlalisana**……**
17. Uhlobo lwendawo: Edolobheni / Emakhaya / Indawo eseduze kwasedolobheni **……**
18. Singakanani isikhathi osisebenzile kulendawo okuyo njengamanje **……**
19. Isigaba Somsebenzi**……**
20. Ibanga Lemfundo Eliphakeme: Esikoleni Samabanga Aphakeme /Ekholegi /Enyuvesi**……**
21. Uke wakuthola ukuqeqeshwa nge HIV kanye ne AIDS, IZIFO ZOCANSI EZITHATHELANAYO kanye NESIFO SOFUBA eminyakeni emihlanu eyedlule? Yebo /Cha**……**
22. Uma kuwu Yebo. Ngamuphi unyaka? **……**
23. Ukuqeqeshwa kwathatha isikhathi esingakanani?Inani lezinsuku /amahora/ Amasonto/Okunye**……**
24. Zingaki iziguli ozibona ngesonto? 10/ 20/40/ 60, zingaphezu kwe 100 **……**

2. Ukwazi / Isimo / Ukubona/ Ukuziphatha

Siza ukhombise ukuthi uvumelana kakhulu kangakanani noma uphikisana kanganani naleso naleso sitatimende kulezi ezilandelayo ngokubeka uphawu X, ngaphezu kwesitatimende osikhethayo.

1. Ngesikhathi sokubonisana isisebenzi esinakekela impilo kanye nesiguli kumele ngamunye athole ithuba lokukhuluma kanye nokulalela omunye. a)Angivumelani nakho kakhulu b)

Angivumelani c) Akukho engivumelana nakho futhi akukho engingavumelani nakho d) Ngiyavumelana e) Ngivumelana nakho kakhulu

2. Ukubuza imibuzo eminingi kungaholela ekutholeni isithombe esicacile ngesimo sempilo yesiguli.

a) Angivumelani nakho kakhulu b) Angivumelani c) Akukho engivumelana nakho futhi akukho engingavumelani nakho d) Ngiyavumelana e) Ngivumelana nakho kakhulu

3a.Isisebenzi esinakekela impilo sazi kabanzi mayelana ne HIV kanye ne AIDS, IZIFO ZOCANSI EZITHATHELANAYO kanye NESIFO SOFUBA

a) Angivumelani nakho kakhulu b) Angivumelani c) Akukho engivumelana nakho futhi akukho engingavumelani nakho d) Ngiyavumelana e) Ngivumelana nakho kakhulu

3b. Nempela, noma yisiphi isisebenzi esinakekela impilo singazeluleka ngokwengqondo iziguli mayelana ne HIV kanye ne AIDS, IZIFO ZOCANSI EZITHATHELANAYO kanye NESIFO SOFUBA

a) Angivumelana nakho kakhulu b) Angivumelani c) Akukho engivumelana nakho futhi akukho engingavumelani nakho d) Ngiyavumelana e) Ngivumelana nakho kakhulu

4. Isisebenzi esinakekela impilo kufanele sibuze isiguli ukuthi singasisiza kanjani ukwenza ngcono impilo yaso.

a)Angivumelani nakho kakhulu b) Angivumelani c) Akukho engivumelana nakho futhi akukho engingavumelani nakho d) Ngiyavumelana e) Ngivumelana nakho kakhulu

5. Isisebenzi esinakekela impilo kumele sisize isiguli ukuqonda ulwazi oludingekayo ukwenza ngcono impilo yaso.

a) Angivumelani nakho kakhulu b) Angivumelani c) Akukho engivumelana nakho futhi akukho engingavumelani nakho d) Ngiyavumelana e) Ngivumelana nakho kakhulu

6a. Isiguli singabuza imibuzo eminingi ngesikhathi silungiselela ukuguqukela ekwenzeni ngcono.

a) Angivumelani nakho kakhulu b) Angivumelani c) Akukho engivumelana nakho futhi akukho engingavumelani nakho d) Ngiyavumelana e) Ngivumelana nakho kakhulu

6b. Ukweluleka iziguli kungasiza ukuphendula imikhwa kwenze impilo engcono

a) Angivumelani nakho kakhulu b) Angivumelani c) Akukho engivumelana nakho futhi akukho engingavumelani nakho d) Ngiyavumelana e) Ngivumelana nakho kakhulu

7. Ngiyesaba ukunakekela isiguli esibonakala sesuleleke nge HIV

a) Angivumelani nakho kakhulu b) Angivumelani c) Akukho engivumelana nakho futhi akukho engingavumelani nakho d) Ngiyavumelana e) Ngivumelana nakho kakhulu

8. Ngiyesaba ukuthi ngingathola ISIFO SOFUBA ngesikhathi ngeluleka isiguli.

a) Angivumelani nakho kakhulu b) Angivumelani c) Akukho engivumelana nakho futhi akukho engingavumelani nakho d) Ngiyavumelana e) Ngivumelana nakho kakhulu

9. Isisebenzi esinakekela impilo singathola ukwesuleleka ngesikhathi seluleka isiguli esesuleleke nge HIV esibika ukuthi sona asiwusebenzisi umuthi waso oyikhambi le ARV zikhathi zonke

a) Angivumelani nakho kakhulu b) Angivumelani c) Akukho engivumelana nakho futhi akukho engingavumelani nakho d) Ngiyavumelana e) Ngivumelana nakho kakhulu

10. Ngizizwa ngiphephile ngesikhathi ngeluleka isiguli esishadile mayelana ne HIV kanye ne AIDS, IZIFO ZOCANSI EZITHATHELANAYO kanye NESIFO SOFUBA

a) Angivumelani nakho kakhulu b) Angivumelani c) Akukho engivumelana nakho futhi akukho engingavumelani nakho d) Ngiyavumelana e) Ngivumelana nakho kakhulu

11a. Ukweluleka iziguli eziningi ezesuleleke nge HIV kubeka impilo yami engozini.

a) Angivumelani nakho kakhulu b) Angivumelani c) Akukho engivumelana nakho futhi akukho engingavumelani nakho d) Ngiyavumelana e) Ngivumelana nakho kakhulu

11b. Kulukhuni ukweluleka iziguli ezesuleleke ngeHIV

a) Angivumelani nakho kakhulu b) Angivumelani c) Akukho engivumelana nakho futhi akukho engingavumelani nakho d) Ngiyavumelana e) Ngivumelana nakho kakhulu

12. Isiguli sizwa ngesisebenzi esinakekela impilo esaziyo ukuthi yini okufanele yenziwe yisiguli mayelana ne HIV kanye ne AIDS, IZIFO ZOCANSI EZITHATHELANAYO kanye NESIFO SOFUBA

a) Angivumelani nakho kakhulu b) Angivumelani c) Akukho engivumelana nakho futhi akukho engingavumelani nakho d) Ngiyavumelana e) Ngivumelana nakho kakhulu

13. Maqondana ne HIV kanye ne AIDS, IZIFO ZOCANSI EZITHATHELANAYO kanye NESIFO SOFUBA eminye imiphakathi ithothongene futhi akukho kwelulekwa okungayisiza ukwenza ngcono impilo yayo.

a) Angivumelani nakho kakhulu b) Angivumelani c) Akukho engivumelana nakho futhi akukho engingavumelani nakho d) Ngiyavumelana e) Ngivumelana nakho kakhulu

14. Akukho ukwelulekwa okungasiza iziguli

a) Angivumelani nakho kakhulu b) Angivumelani c) Akukho engivumelana nakho futhi akukho engingavumelani nakho d) Ngiyavumelana e) Ngivumelana nakho kakhulu

15. Iziguli zidinga nje umuthi njengoba akukho ukwelulekwa okungazisiza.

a) Angivumelani nakho kakhulu b) Angivumelani c) Akukho engivumelana nakho futhi akukho engingavumelani nakho d) Ngiyavumelana e) Ngivumelana nakho kakhulu

16. Zimbalwa kakhulu iziguli ezihlomula ngokwelulekwa nge HIV kanye ne AIDS, IZIFO ZOCANSI EZITHATHELANAYO kanye NESIFO SOFUBA.

a) Angivumelani nakho kakhulu b) Angivumelani c) Akukho engivumelana nakho futhi akukho engingavumelani nakho d) Ngiyavumelana e) Ngivumelana nakho kakhulu

17. Iziguli ezisezindaweni ezisemadolobheni zazi konke mayelana ne HIV kanye ne AIDS, IZIFO ZOCANSI EZITHATHELANAYO kanye NESIFO SOFUBA.

a) Angiivumelani nakho kakhulu b) Angivumelani c) Akukho engivumelana nakho futhi akukho engingavumelani nakho d) Ngiyavumelana e) Ngivumelana nakho kakhulu

18. Iningi leziguli azazi lutho ngokuthi kwenziwa njani ukuvikela ukusatshalaliswa kwe HIV kanye ne AIDS, IZIFO ZOCANSI EZITHATHELANAYO kanye NESIFO SOFUBA.

a) Angivumelani nakho kakhulu b) Angivumelani c) Akukho engivumelana nakho futhi akukho engingavumelani nakho d) Ngiyavumelana e) Ngivumelana nakho kakhulu

19. Ukutshela iziguli zabesifazane ezesuleleke nge HIV ukuthi ziziphathe kanjani kuyokwenza sizuze sonke.

a) Angivumelani nakho kakhulu b) Angivumelani c) Akukho engivumelana nakho futhi akukho engingavumelani nakho d) Ngiyavumelana e) Ngivumelana nakho kakhulu

20. Iziguli ezisezincane kumele zitshelwe nje ukuthi kumele zenze njani nge HIV kanye ne AIDS, IZIFO ZOCANSI EZITHATHELANAYO kanye NESIFO SOFUBA.

a) Angivumelani nakho kakhulu b) Angivumelani c) Akukho engivumelana nakho futhi akukho engingavumelani nakho d) Ngiyavumelana e) Ngivumelana nakho kakhulu

21. Akukho sihawu okumele sikhonjiswe ezigulini ezesuleleke nge HIV ezehluleka ukubambelela umuthini.

a) Angivumelani nakho kakhulu b) Angivumelani c) Akukho engivumelana nakho futhi akukho engingavumelani nakho d) Ngiyavumelana e) Ngivumelana nakho kakhulu

22. Iziguli ezikhungethwe wubuphofu zidinga nje umuthi njengoba zingeke zenza lutho maqondana ne HIV kanye ne AIDS, IZIFO ZOCANSI EZITHATHELANAYO kanye NESIFO SOFUBA.

a) Angivumelani nakho kakhulu b) Angivumelani c) Akukho engivumelana nakho futhi akukho engingavumelani nakho d) Ngiyavumelana e) Ngivumelana nakho kakhulu

23. Isisebenzi esinakekela impilo njalo kufane siqaphele uma sikhuluma nesiguli njengoba kungelula ukubona ukuthi isiguli sesuleleke nge HIV noma asesulelekile.

a) Angivumelani nakho kakhulu b) Angivumelani c) Akukho engivumelana nakho futhi akukho engingavumelani nakho d) Ngiyavumelana e) Ngivumelana nakho kakhulu

24. Iziguli ezingafundile ngeke zakwazi ukuqonda nge HIV kanye ne AIDS, IZIFO ZOCANSI EZITHATHELANAYO kanye NESIFO SOFUBA noma ngabe yisikhathi esingakanani esichithwa ngumuntu ekhuluma nazo.

a) Angivumelani nakho kakhulu b) Angivumelani c) Akukho engivumelana nakho futhi akukho engingavumelani nakho d) Ngiyavumelana e) Ngivumelana nakho kakhulu

25. Ukonga isikhathi isisebenzi esinakekela impilo esinolwazi kumele nje sinqume ukuthi yini okumele yenziwe yisiguli maqondana ne HIV kanye ne AIDS, IZIFO ZOCANSI EZITHATHELANAYO kanye NESIFO SOFUBA.

a) Angivumelani nakho kakhulu b) Angivumelani c) Akukho engivumelana nakho futhi akukho engingavumelani nakho d) Ngiyavumelana e) Ngivumelana nakho kakhulu

26. Isisebenzi esinakekela impilo akumele sichithe isikhathi ngokweluleka isiguli esihambisana kahle namakhambi okwelapha ama ARVs.

a) Angivumelani nakho kakhulu b) Angivumelani c) Akukho engivumelana nakho futhi akukho engingavumelani nakho d) Ngiyavumelana e) Ngivumelana nakho kakhulu

27. Isiguli esesuleleke nge HIV esiphuza ngokweqile utshwala ngeke sazuza ngokwelulekwa.

a) Angivumelani nakho kakhulu b) Angivumelani c) Akukho engivumelana nakho futhi akukho engingavumelani nakho d) Ngiyavumelana e) Ngivumelana nakho kakhulu

28. Ukweluleka kungasiza isisebenzi esinakekela impilo ukuthi sithole ulwazi oludingekayo ukusiza isiguli ukuthi simelane ne HIV kanye ne AIDS, IZIFO ZOCANSI EZITHATHELANAYO kanye NESIFO SOFUBA.

a) Angivumelani nakho kakhulu b) Angivumelani c) Akukho engivumelana nakho futhi akukho engingavumelani nakho d) Ngiyavumelana e) Ngivumelana nakho kakhulu

29. Isisebenzi esinakekela impilo singanikeza ngombono waso ukwenzela isiguli iqoqo elifingqiwe.

a) Angivumelani nakho kakhulu b) Angivumelani c) Akukho engivumelana nakho futhi akukho engingavumelani nakho d) Ngiyavumelana e) Ngivumelana nakho kakhulu

30. Ukumamatheka kwesisebenzi esinakekela impilo kungakhuthaza isiguli ngokuthi sixoxe kabanzi ngenkinga yaso.

a) Angivumelani nakho kakhulu b) Angivumelani c) Akukho engivumelana nakho futhi akukho engingavumelani nakho d) Ngiyavumelana e) Ngivumelana nakho kakhulu

31. Isiguli singaqonda kabanzi uma sikhuluma nesisebenzi esinakekela impilo esibonakala sinothando ngeqiniso kusona.

a) Angivumelani nakho kakhulu b) Angivumelani c) Akukho engivumelana nakho futhi akukho engingavumelani nakho d) Ngiyavumelana e) Ngivumelana nakho kakhulu

32. Ukugxeka isiguli ngesimo sempilo yaso kungasivimbela ukuthi sivuleleke.

a) Angivumelani nakho kakhulu b) Angivumelani c) Akukho engivumelana nakho futhi akukho engingavumelani nakho d) Ngiyavumelana e) Ngivumelana nakho kakhulu

33. Ubumfihlo buyadingeka lapho kukhulunywa nesiguli maqondana ne HIV kanye ne AIDS, IZIFO ZOCANSI EZITHATHELANAYO kanye NESIFO SOFUBA.

a) Angivumelani nakho kakhulu b) Angivumelani c) Akukho engivumelana nakho futhi akukho engingavumelani nakho d) Ngiyavumelana e) Ngivumelana nakho kakhulu

34a. Isisebenzi esinakekela impilo kumele zikhathi zonke sichaze imiyalelo enikezwa isiguli,

a) Angivumelani nakho kakhulu b) Angivumelani c) Akukho engivumelana nakho futhi akukho engingavumelani nakho d) Ngiyavumelana e) Ngivumelana nakho kakhulu

34b. Ukweluleka iziguli kusemqomka kwizisebenzi ezinakekela impilo

a) Angivumelani nakho kakhulu b) Angivumelani c) Akukho engivumelana nakho futhi akukho engingavumelani nakho d) Ngiyavumelana e) Ngivumelana nakho kakhulu

34c. Kasikho impela isikhathi sokweluleka iziguli

a) Angivumelani nakho kakhulu b) Angivumelani c) Akukho engivumelana nakho futhi akukho engingavumelani nakho d) Ngiyavumelana e) Ngivumelana nakho kakhulu

35a. Ngineme uma ngeluleka iziguli

a) Angivumelani nakho kakhulu b) Angivumelani c) Akukho engivumelana nakho futhi akukho engingavumelani nakho d) Ngiyavumelana e) Ngivumelana nakho kakhulu

35b. Kanginaso isikhathi sokweluleka iziguli

a) Angivumelani nakho kakhulu b) Angivumelani c) Akukho engivumelana nakho futhi akukho engingavumelani nakho d) Ngiyavumelana e) Ngivumelana nakho kakhulu

35c. Kuyakhathaza ukweluleka iziguli

a) Angivumelani nakho kakhulu b) Angivumelani c) Akukho engivumelana nakho futhi akukho engingavumelani nakho d) Ngiyavumelana e) Ngivumelana nakho kakhulu

36b. Ngisadinga uqeqesho ngokweluleka iziguli mayelana ne ZIFO ZOCANSI EZITHATHELANAYO

a) Angivumelani nakho kakhulu b) Angivumelani c) Akukho engivumelana nakho futhi akukho engingavumelani nakho d) Ngiyavumelana e) Ngivumelana nakho kakhulu

36c. Ngisadinga uqeqesho ngokweluleka iziguli mayelana NESIFO SOFUBA

a) Angivumelani nakho kakhulu b) Angivumelani c) Akukho engivumelana nakho futhi akukho engingavumelani nakho d) Ngiyavumelana e) Ngivumelana nakho kakhulu

37a. Ndinogqozi futhi ndiyazethemba ngokweluleka iziguli mayelana ne HIV kanye ne AIDS, IZIFO ZOCANSI EZITHATHELANAYO kanye NESIFO

a) Angivumelani nakho kakhulu b) Angivumelani c) Akukho engivumelana nakho futhi akukho engingavumelani nakho d) Ngiyavumelana e) Ngivumelana nakho kakhulu

37b. Iningi lezisebenzi bayazeluleka iziguli mayelana ne HIV kanye ne AIDS, IZIFO ZOCANSI EZITHATHELANAYO kanye NESIFO

a) Angivumelani nakho kakhulu b) Angivumelani c) Akukho engivumelana nakho futhi akukho engingavumelani nakho d) Ngiyavumelana e) Ngivumelana nakho kakhulu

37c. Sikhona impela isikhathi sokweluleka iziguli mayelana ne HIV kanye ne AIDS, IZIFO ZOCANSI EZITHATHELANAYO kanye NESIFO

a) Angivumelani nakho kakhulu b) Angivumelani c) Akukho engivumelana nakho futhi akukho engingavumelani nakho d) Ngiyavumelana e) Ngivumelana nakho kakhulu

37d. Kanginaso iskhathi sokweluleka iziguli mayelana ne HIV kanye ne AIDS, IZIFO ZOCANSI EZITHATHELANAYO kanye NESIFO

a) Angivumelani nakho kakhulu b) Angivumelani c) Akukho engivumelana nakho futhi akukho engingavumelani nakho d) Ngiyavumelana e) Ngivumelana nakho kakhulu

37e. Ngokuzayo ngiyochitha iskhathi ngeluleka iziguli mayelana ne HIV kanye ne AIDS, IZIFO ZOCANSI EZITHATHELANAYO kanye NESIFO

a) Angivumelani nakho kakhulu b) Angivumelani c) Akukho engivumelana nakho futhi akukho engingavumelani nakho d) Ngiyavumelana e) Ngivumelana nakho kakhulu

APPENDIX C

INFORMATION LEAFLET

Study title: A study of Knowledge, Attitudes, Perceptions, Behaviour (KAPB) of eThekwini Municipality Health care workers regarding counseling patients about HIV&AIDS, STIs and TB.

Greeting: I am Dr Ntlangula – Principal Investigator of the study

Introduction:

We, the Department of Public Health in association with eThekwini Municipality Health, Safety and Social Services Cluster Health Unit, are doing research on Knowledge, attitudes, perceptions and beliefs and Counseling Behaviour of eThekwini health care workers. Research is just the process (indlela) to learn the answer to a question. In this study we want to learn about health care workers Knowledge, attitudes, perceptions and beliefs and Counseling Behaviour. This is a study involving research and not routine care. This study is being done because it is important to know what health care workers know and their attitudes, perceptions and beliefs regarding good counseling behaviour and HIV & AIDS, STIs and TB(HAST). Armed with this information, interventions to promote good counseling behaviour may be introduced. This study may also serve to emphasize how important good counseling behaviour is regarding HAST.

Invitation to participate: : We are inviting you to take part in a research study designed to investigate eThekwini Municipality Primary Health Care Clinics health care workers' counseling behaviour about HAST.

What is involved in the study: This is an epidemiological cross sectional study design. All health care workers at 24 Primary Health care clinics which form the sample will be invited to participate in the study. Those that agree voluntarily will sign a consent form. Refusal to participate will involve no penalty or loss of benefits to which the subject is otherwise entitled and participants may discontinue participation at any time without penalty or loss of benefits to which they are otherwise entitled.

This study is being done because eThekwini Municipality Health, Safety and Social Services Cluster Health Unit management would like a situational analysis of eThekwini Municipality Public Primary

Health Care clinics' health care workers' counseling behaviour regarding HAST. A random sample of 24 clinics has been selected and all health care workers are asked to complete a questionnaire.

Health care workers will take part by completing a questionnaire, an instrument used to gather data about each participant's knowledge, attitudes, perceptions and beliefs and Counseling Behaviour and HAST. The questionnaire is completely confidential .No names of clinics will be used in all reports from the study. There are no marks to identify which participant filled which questionnaire and participant name does not appear on it. Each participant will seal his / her questionnaire in an envelope before handing it over to the Principal Investigator.

The Principal Investigator will also observe health care workers during consultation with pateints. Convenient sampling will be used to determine the number of observations per Primary Health clinic based on considerations like clinic context, number of patients, number of health care workers and workload. Observations will serve to verify that what health care workers say is what they do. The aim will be to collect all the data from each clinic on one day. The Principal Investigator will collect data in the first phase and in the second phase so as to minimize observer bias.

Armed with this information, interventions to promote good counseling behaviour may be introduced. This study may also serve to emphasize how important good counseling behaviour is regarding HAST

Risks of being involved in the study: Participants may be harmed by breach of confidentiality. However, in this study extra care has been taken to make sure that confidentiality is not breached. No participant name will appear on the questionnaire and no marks will be used to identify who filled a questionnaire. Participants will also seal their filled questionnaires into an envelope before handing them over to the Principal Investigator. Participants may also be distressed if they find that their KAPB are below standard. In this study provision has been made for this. Reports from this study will anonymise names of clinics in all reports.

Benefits of being in the study: The information obtained from this study may be used to introduce interventions to promote good counseling behaviour. This study may also serve to emphasize how important good counseling behaviour is regarding HAST

Participation is voluntary, refusal to participate will involve no penalty or loss of benefits to which you are otherwise entitled, you may discontinue participation at any time without penalty loss of benefits to which you are otherwise entitled.

Reimbursement for "out of pocket" expenses. Not applicable**.** There will be no out of pocket expenses as participants will be involved in the study at the facilities where they work.

Confidentiality: Efforts will be made to keep personal information confidential. Absolute confidentiality cannot be guaranteed. Personal information may be disclosed if required by law.

Organizations that may inspect and/or copy your research records for quality assurance and data analysis include groups such as the Biomedical Research Ethics Committee. If results are published, may lead to cohort identification.

Contact details of researcher/s **– for further information / reporting of study related adverse events.**
Professor Taylor at 031 2604499 or Professor Jinabhai at 031 2604386

Contact details of BREC Administrator or Chair – for reporting of complaints/ problems:

Biomedical Research Ethics, Private Bag X54001, Durban 4000

Telephone: +27 (0) 31 260 4769 / 260 1074

Fax: +27 (0) 31 260 2384

Email: BREC@ukzn.ac.za

APPENDIX D

INFORMED CONSENT

CONSENT DOCUMENT

Consent to Participate in Research

You have been asked to participate in a research study.

You have been informed about the study by the Principal Investigator, Dr M N Ntlangula

Where applicable: You have been informed about any available compensation or medical treatment if injury occurs as a result of study-related procedures;

You may contact Professor Taylor (Study Supervisor) at 031 2604499 or Professor Jinabhai(Head of School of Public Health) at 031 2604386 or the Principal Investigator any time if you have questions about the research.

You may contact the **Biomedical Research Office** on **031-260 4769 or 260 1074** if you have questions about your rights as a research subject.

Your participation in this research is voluntary, and you will not be penalized or lose benefits if you refuse to participate or decide to stop.

If you agree to participate, you will be given a signed copy of this document and the participant information sheet which is a written summary of the research.

The research study, including the above information, has been described to me orally. I understand what my involvement in the study means and I voluntarily agree to participate.

_____ _____

Signature of Participant **Date**

_____ _____

Signature of Witness **Date**

(Where applicable)

_____ _____

Signature of Translator **Date**

(Where applicable)

BIOMEDICAL RESEARCH COMMITTEE ETHICS APPROVAL

UNIVERSITY OF KWAZULU-NATAL

BIOMEDICAL RESEARCH ETHICS ADMINISTRATION

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Tel: 27 31 2604769 - Fax: 27 31 2604609

Email: BREC@Ukzn.ac.za

Website: ht p://research.ukzn.ec.za

21 January 2010

Dr Margaret Ntlangula

15 Monza, Anton Hartman Street

Midrand

1684

Dear Dr Ntlangula

'PROTOCOL: A Study of Knowledge, Attitudes, Perceptions, Behaviour (KAPB) of eThekwlnl Municipality Primary health care workers. Dr Ntlangula Margaret Nokuzola. Department of Public Health. Ref No:BF077/08.

The Biomedical Research Ethics Committee (BREC) has considered the abovementioned application.

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The study was approved by a quorate meeting of BREC on 08 July 2008 pending appropriate responses to queries raised. Your responses dated 27 October 2009 to queries raised on 29 July 2008 have been noted by a sub-committee of the Biomedical Research Ethics Committee.

The conditions have now been met and the study is given full ethics approval and may begin as from

21 January 2010.

The study protocol and related study documents have been reviewed and approved:

This approval is valid for one year from 21 January 7.010. To ensure uninterrupted approval of this study beyond the approval expiry date, an application for recertification must be submitted to BREC on the appropriate BREC form 2·3 months before the expiry date.

Any amendments to this study, unless urgently required to ensure safety of participants, must be approved by BREC prior to implementation,

Your acceptance of this approval denotes your compliance with South African National Research

Ethics Guidelines (2004), South African National Good Clinical Practice Guidelines (2006) (if applicable) and with UKZN BREC ethics requirements as contained in the UKZN BREC