# THE RELATIONSHIP BETWEEN TYPE OF HIV PREVENTION METHOD, COMMUNITY PERCEPTION AND ADHERENCE TO HIV PREVENTION METHODS, AMONG WOMEN AGED 18-49 IN EMBAKASI SOUTH-NAIROBI COUNTY

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A RESEARCH PROJECT SUBMITTED TO THE COLLEGE OF HUMANITIES AND SOCIAL SCIENCES, UNIVERSITY OF NAIROBI, IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTER DEGREE OF PSYCHOLOGY (COMMUNITY PSYCHOLOGY)

# **DECLARATION**

I declare that this research project is my original work and has not been presented for the award of any degree or diploma in any other university.

Signature.....

Date.....

MAUREEN SAMBA MUSEVE C50/5824/2017

This project has been submitted for examination with my approval as the university supervisor.

Signature.....

Date.....

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# DEDICATION

I give thanks to the almighty God for enabling me to do and complete this research project despite the challenges faced. I heartily dedicate this project to my husband Mr. Isaac Museve Wasike and my three beautiful children Bakhita, Jude and Bakanja not also forgetting my Nanny Betty for the emotional, spiritual and financial support.

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# ABBREVIATIONS

United Nations Programme on HIV/AIDS
National AIDS and STI Control Programme
United States of America
Antiretroviral
Human immunodeficiency virus
Kenya Demographic Health Survey
Sexually Transmitted Infection
World Health Organization
Center for Disease Control
National AIDS Control Council
President's Emergency Plan for AIDS Relief
Health Belief Model
Voluntary Counselling and Testing
Demographic Health Survey
Odds Ratio
Female Genital Cutting
Female Genital Mutilation
Sexually Transmitted Disease
Social Economic Status
Multi-dimensional Scale
Faith Based Organization
Multi-dimensional Health Locus of Control
Knowledge Attitude Practice
Ethiopia Demographic Health Survey
Mother to child transmission
Prevention to Mother to Child Transmission
Risky Sexual Behavior
Heath locus of control
People living with HIV
Knowledge Attitude Belief and Practice
Rotter Internal External Locus of Control
General Self Efficacy

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## ABSTRACT

Human Immunodeficiency Virus (HIV) prevention remains one of the world's top priorities for public health and development. In Kenya, despite the fact that several prevention methods have been introduced, both by the government and non-governmental organizations, to help reduce the rate of new infections, Community perceptions play a role in the utilization of any intervention. Adherence to the prevention methods will be determinant of the perception towards the prevention methods, the objective of this study was therefore, to establish the relationship between community perception and adherence with regard to various type of prevention methods in Embakasi South. Literature was reviewed in regard to employment, marital status, education, social, economic status, religion and rites of passage. The target population was 99,400. A descriptive design was used, stratified random sampling procedure was employed to come up with 380 respondents in the study. Self-administered questionnaire and focus group discussions (FGD) was utilized for data collection. To analysis collected data. Both inferential and descriptive statistics was employed. The study findings were: Multinomial logistic Regression analysis indicated that, community perception to the type of HIV prevention method used was negative for individuals using behavioral and structural methods compared to those using biomedical method (=-.0623, t=-0.85, p=0.393) and (=-.0051, t=-0.08, p=0.940) at the 5% level of significance respectively and community adherence to the type of HIV prevention method used was negative for individuals using behavioral and structural methods compared to those using biomedical method ( =-.2053, t=--2.91, p=0.004) and (=.02984), t=0.46, p=0.647) at the 5% level of significance respectively. Chi-Square test for association between the two samples. Cramer's V was used to determine the strength of the association and the perception is associated (2=0.8034, p=0.370, =0.0478). The combination was not statistically significant in the sense that the p-value was higher than 5%. As shown by the value of V of Cramer of 0.0478, the force of the association was weak. The study concluded that there is a relationship between type of prevention method, community perception and adherence to the prevention method among women in Embakasi-south. It is also seen that biomedical methods are more adhered to and perceived easy to use. Structural method and behavioral methods are less adhered to and perceived negatively. The study recommends a need to create more awareness by both government and non-governmental bodies on structural and behavioral prevention.

# CHAPTER ONE INTRODUCTION

# 1.1 Background of the Study

Over two million people acquire HIV infection globally every year, (NASCOP, 2018). The increasing rate of new infection in Kenya necessitated the President then to declare HIV/AIDS as a national disaster in 1999, (Daily Nation 2013). Currently in Kenya the rate of new infection countrywide is at 53000, (UNAIDS 2018). Half of all this new infection in adults is accounted by 5 counties out of the 9 counties. Nairobi leading with (7,159) followed by Homa Bay (4,558), Siaya (4,039), Kisumu (4,012) and Migori (2,814).Respectively, (Barasa, 2018). Embakasi, Langata and Dagoreti recorded the highest number of new infection among the sub counties at 6%, 5.6% and 5.5% respectively, Starehe registering the least number of infections at 1.9%. Women comprised of more than half of all people living with HIV here in Kenya, (UNAIDS 2017). In 2016, 910,000 out of 1.6 million people in Kenya living with HIV were women. Kenyan women are discriminated from education, occupation and medical services. Men often always make sexual decisions when it comes to sexual relationships, making women unable to practice safe sex even when aware of the risk (UNAIDS, 2018). Embakasi has continued to record a rise to the number of new infections among women of the reproductive age (18-49) years of age with recent statistics indicating HIV prevalence for women at 29.3 percent compared to that of men at 18.2. Percent, (Barasa, 2017).

Community perception plays a role in the utilization of any intervention, (Sherar, 2018) for example some Religious groups have been against some vaccinations due to their suspicion of the content of the health product hence affecting adherence. (Njeru et al, 2016). Traditions and culture shape people's perception and judgement towards health services, (Roberts et al, 2008). The people's level of fulfilment with a health service, and their evaluation of the attitude of health service providers. This determines whether they would seek the same service in future. In the context of health, perception is shaped by the level at which one feels at risk, their self-efficacy and their expected outcome, (Onyeneho et al, 2016).

Community perception can either be positive or negative. Positive community perception promotes an intervention while a negative community perception hinders success of any intervention. In the year 2015, Kenya had controversies about polio immunization where the Catholic Church questioned the safety of the vaccine. This drastically dropped the vaccine uptake and so in the subsequent years. The coverage last year dropped by eight per cent from 1,101,279 (69 per cent) immunized children in 2016 to 1,014,894 (63 per cent) in 2017, (Economic Survey, 2018). The 2017 figure is the lowest coverage since 2005 when it stood at the same level. During this period, the survey noted, most of the counties experienced a decrease in the coverage with only 10 regions recording an increase. (Merab, 2018). The boycott really impacted negatively on the critical vaccines that Kenyan children needed.

In the USA HIV prevention interventions through social media was restricted by ethical issues and low social media usage, (Tang et al., 2017). In South Africa, there was need to look closely into the social perspective of services provided and medication with elaborate description to patients, (Mashego et al., 2005) In the Democratic Republic of Congo, a number of community based health intervention services e.g. bed nets, anti-helminthic drugs, and vitamin A, adherence has been low. Despite several initiatives to improve the implementation of health interventions the uptake of the services has still been low, (Maketa et al., 2013).

To monitor the HIV pandemic, no single strategy for HIV prevention was appropriate. In order to be suitable, favorable and deliverable to populations with high levels of coverage and absorption, biomedical, behavioral and structural interventions have to be combined (Connie et al, 2011). The types of prevention methods include; Structural intervention e.g. Comprehensive sex education, stigma reduction, condom promotion, community mobilization, behavioral intervention e.g. education on sexuality, increase use of condoms, reduce number of partners, counseling and testing, decrease substance use, sexual abstinence, and Biomedical intervention.eg condoms, treatment as prevention, testing and Mother-to-child transmission prevention, Voluntary male clinical circuitry Post exposure prophylaxis, pre-exposure prophylaxis, (UNAIDs, 2010). Types of HIV prevention relate

to the perception community forms towards them as well as how the community adheres to the prevention methods. Some types of prevention may be negatively perceived by the community due to a number of reasons mostly being culture and religion. Culture determines how a person understands health and illness affecting health attitude and health seeking practices, (Airhihenbuwa, 2014).

A type of prevention that does not match the community's culture, values and beliefs is often negatively perceived and not adhered to, for example PrEP a biomedical intervention to prevent HIV a number of reasons pointed out as to why PrEP adherence is low, one being the color and the size of the pill that resembles ARVS others think it's a Viagra pill or a drug for mental health because of its blue color, (Daily nation Jan, 2018). Less than 1 in 10 people were using PrEP as a prevention method, (Jeffrey et al, 2017). Behavioral interventions such as social restrictions on sexuality have raised the susceptibility of individuals to HIV, this limitation has acted as a barrier to the search for information on HIV prevention and the availability of treatment and support for those infected and affected (Nandoya, 2014).

On the other hand, a positively perceived type of HIV prevention method is well adhered to for example Condom use appears to be well adhered to. Condom use appears to be well adhered to by men (43%) who had multiple sexual partners than women (40%). Condom also gives protection against other STIs condition unlike PrEP where it only protects one against HIV only, (KDHS, 2014). In Kenya the Catholic Church discourages condom use, which remains a controversial issue to date. Some religious bodies insist on submission of women to men which breeds gender inequality among couple, promoting women's ignorance in sexual matters decisions, stereotypes built by religion around sexuality restrict prevention attempts and increase susceptibility to HIV infection, (Nandoya, 2014). Positive perception leads to adherence while negative perception leads to non- adherence, (UNAIDS, 2017). The study sought to explore the relationship between types of HIV prevention methods and community perception with regard to community adherence to different type of HIV prevention methods among women of child bearing age in Embakasi, Nairobi County.

#### **1.2 Statement of the Problem**

In Kenya, a number of studies have been done on adherence to different types of HIV prevention. The levels of condom use have increased significantly in high HIV burden countries over the past few years, (Wamalwa et al., 2015). On the other hand, a recent study in Kenya noted demand-side barriers for condoms as a HIV preventive strategy are many. Much as the traditional barriers to condom use still exist, there are emerging barriers such as perceptions due to the knowledge that transmission risks are lower with various biomedical interventions – voluntary medical male circumcision, post-exposure prophylaxis and antiretroviral therapy, (Jaffe et al 2011). Others have been negatively perceived like Prep, adherence was challenged by complexities of daily life, in particular post-coital dosing adherence suffered from alcohol use around time of sex, mobile populations, and transactional sex work, (Mbogua et al 2013). This shows that negatively perceived interventions have not been adhered to while positively perceived interventions are well adhered to.

The way the methods have been presented, they have created biased perception, these biases have made people have preferences without following scientific guidelines. People will tend to adhere to the prevention method depending on how they evaluate the severity of the disease which is perceived severity or the benefits after engaging in the behavior which is perceived benefit according to the HBM model, (Janz and Becker, 1984). Condom use is reported to be low at 15 percent. (Azadgolia et al 2014). This biases and preference has created the challenge as to whether people will adhere to the scientific prescription of the best practice. If this situation persists then there will be setbacks in the fight against HIV among women.

Planned behavior Therapy (PBT) states that, specific attitude towards behavior can be expected to determine that behavior. Adherence of prevention method will be determined by how this method is perceived. People's perception of an intervention influences their choice to use and even adhere to the intervention. (Ajzen and Fishbein, 1980). Health Belief Model (HBM) helps understand community health behavior about whether the person feels they can refrain from a certain illness, by taking a certain action they will avoid the illness and believes that they can take a prescribed health action. (Rosenstock, 1974), Positive perception towards the different types of HIV prevention methods depends on community judgments and leads to adherence (Godfrey et al 1950).

According to Barasa, (2017), Embakasi sub-county recoded the highest numbers of new HIV infection at 6%, 5.6% in Lang'ata and 5.5% in Dagoretti as compared to Starehe Subcounty with a minimal 1.9%. The most affected are Women of childbearing age at 29.3% and men at 18.2%. Advanced efforts are in place to ensure that HIV prevention method are readily available and accessible (UNAIDS, 2017). This study sought to evaluate the community's perception towards these types of prevention methods regarding their adherence to different types of HIV prevention methods among women of childbearing age, which provided a holistic view of the situation.

# **1.3 Aim of the Study**

To determine the relationship between the type of HIV prevention method, community perception and adherence to HIV prevention methods.

# 1.4 Objectives are to;

- (i) Investigate the relationship between type of prevention methods and community perception in Embakasi South.
- (ii) Examine the relationship between type of prevention methods and adherence to prevention methods in Embakasi South.
- (iii) Establish the relationship between community perception and adherence with regard to various type of prevention methods in Embakasi South.

#### **1.5 Research Questions**

- (i) What is the relationship between types of prevention methods and community perception in Embakasi South?
- (ii) In what way does the association between types of prevention methods and adherence to prevention methods in Embakasi South?

(iii) Does community perception influence adherence with regard to various types of prevention method in Embakasi South?

# **1.6 Hypotheses**

- (i) H1: There is a relationship between types of prevention methods and community perception in Embakasi South.
- (ii) H1: There is relationship between types of prevention methods and adherence to prevention methods in Embakasi South.
- (iii)H1: There is a relationship between community perception and adherence with regard to various types of prevention methods in Embakasi South.

## **1.7 Justification**

Prior research focused primarily on knowledge, perception and adherence to Antiretroviral drugs (Raberahona, et al, 2019) with little focus on perception of the type of preventive approach in relation to adherence. The findings of this study is expected to help understand how community perception affects interventions in the community with regard to types of prevention method and how they are adhered to.

The study also intends to build on planned behavioral theory (Ajzen and Fishbein, 1980) who argued that performance of a behaviour is determined by the individual's intention to engage in it (influenced by the value the individual places on the behavior, the ease with which it can be performed and the views of significant others) and the perception that the behavior is within their control this is perceived behavioral control. The study also is expected to build on three concepts of the HBM, Kegels et al, (1950) which are Perceived susceptibility, basically explained those factors that influence and motivate people to practice healthier behavior, this determined whether an individual adheres to the prevention intervention or not by how they perceive different methods. Perceived severity, this is how individuals look at the consequences or seriousness that diseases might have on them if actions are not taken, and perceived benefit, this refers to an individual's conclusion on the value of engaging in a health-promoting behavior, this determined adherence to prevention

intervention. Therefore, this study evaluated community perception of the type of prevention method in relation to adherence to a particular prevention method.

## **1.8 Significance of the Study**

The results yielded from this study are expected to improve relational choices and adherence to prevention methods, it is also expected to contribute to the psychological understanding where bodies such as WHO, NASCOP, CDC, NACC, and PEPFAR get in the fight against HIV. It is also hoped to improve on understanding by the medical practitioner in improving their methods of persuading the women and youths into adopting the most effective methods, helping the youth on how to make informed choices. It is also hoped to help understand how community perception affects interventions in the community thus influencing policy makers. Scholars are also expected to benefit in how they design their health intervention model about HIV.

This study is expected to provide an opportunity for members of parliament have a motion on community health intervention, which further enabled proper funding and implementation of HIV prevention intervention from the government level. Institutions offering HIV services, Prevention being one of the services under the package of care, is hoped to best understand how the community perceives the types of prevention methods and offers the services appropriately considering what the community beliefs and practices entail.

# **1.9 Scope of the Study**

This study was conducted in the county of Nairobi-Embakasi South. Women of childbearing age (18-49) were targeted in this area as the potential respondents. The study sought to understand how different types of HIV prevention methods are perceived and how they are adhered to by the community.

Types of HIV prevention methods have been examined in their three main categories, these are; biomedical, structural and behavioral strategies. In the Kenyan context, structural intervention involves: comprehensive sex education, stigma reduction, condom promotion,

community mobilization. Behavioral intervention entails; education on sexuality, increase use of condoms, reduce the number of sexual partners, counseling and testing, decrease substance use, sexual abstinence. While biomedical intervention entails; condoms, treatment as prevention, testing and prevention of mother-to-child transmission, voluntary medical male circumcision, post-exposure prophylaxis and pre-exposure prophylaxis.

Community perception was examined in terms of positive or negative perceptions of HIV prevention methods. Positive perception meant that, the HIV prevention method is well accepted while negative perception meant that, the HIV prevention type is not well accepted by the community. Adherence to the types of HIV prevention methods was examined in two main categories, that is, community adherence and community non-adherence. Community adherence meant that, the HIV prevention methods are complied with by the community while non-adherence meant that the HIV prevention method is not complied by the community.

## **1.10 Limitations and Delimitations**

The study faced several limitations which were, however, addressed by the researcher. The researcher used a self-completion questionnaire as a data collection tool, some respondents were illiterate and filing the questionnaire was posing a challenge, this was addressed by the help of a research assistant. Qualitative data collected was limited due to its general nature, however, this was addressed by applying mixed methods to get in-depth data.

Stigma was evident among the respondents due to the sensitive nature of the topic, this was addressed by the help of the research assistant who convinced them of the high standard of anonymity, and also assured them of confidentiality. Since a local slang (sheng) is the commonly used language in the target area, the researcher addressed the barrier by preferring to use a local research assistant who is conversant with the language.

#### **1.11 Assumptions of the Study**

i. This study assumes that in Embakasi South, people hold certain perceptions towards types of HIV prevention methods. This is dependent on their religion,

cultural beliefs and aesthetic values. That which matches their values and culture is well received unlike that which does not match their values and culture.

- ii. The kind of perception people hold around a prevention method; influences the type of prevention method they adhere to. A positive perception formed towards a certain type of prevention method may lead to adherence. A negative perception formed on a certain type of prevention method leads to non-adherence.
- iii. Community perception affects how different HIV prevention methods are adhered to. Adherence to the type of prevention method is determined by community perception, example condom use is well adhered to while there is a non-adherence to Prep use

## **1.12 Definition of Terms**

**Perception-**Is the mechanism whereby a person chooses, organizes and measures sensory stimulation from his / her surroundings in order for meaningful encounters to be carried out for him or her.

**Community perception**- Connects individual experiences to a collective experience. **HIV prevention Method**- These are interventions aimed at stopping the spread of HIV. They are implemented either to protect individuals and their communities, or they are implemented as public health policies.

**Structural methods**- Seek to address the root factors that make individuals or groups susceptible to HIV infection.

**Behavioral method**- seek to reduce the threat of HIV infection by addressing risky behaviors.

**Biomedical interventions**-It is the use of a combination of clinical and medical approaches to reduce HIV transmission.

**Community adherence-** This means, HIV prevention methods are complied by the community members.

**Community non-adherence**-This means, HIV prevention method are not complied by the community.

**Positive perception**-HIV prevention method is well accepted by the community. **Negative perception** -HIV prevention method is not well accepted by the community

# CHAPTER TWO LITERATURE REVIEW

# **2.1 Introduction**

This section of the proposal presents the existing literature on community perception and adherence with regard to various types of HIV prevention methods; this guided the proposed study. A presentation of theoretical and conceptual framework appropriate to the study has been presented at the end of this chapter. The major confounding variables used were; Cultural practices, Employment status, marital status, Education, Social economic status and religion.

# 2.2 The Relationship between Type of Prevention Methods and Community

# Perception

This section reviewed the existing literature relating to the first objective, a research aimed at examining circumcision in Kenya, Lesotho and Tanzania linked to the prevalence of HIV among virgins and adolescents found that uncircumcised individuals are more vulnerable to HIV than uncircumcised virgins. Regardless of their sexual encounters, there was a strong connection between circumcision and HIV prevalence (Roberts Jr.et al, 2007).

In accordance with this study, the FGM and HIV / AIDS surveying (2003) Demographic and Health surveys (KDHS) of Kenyan women of reproductive age found that the FGC is not HIV related but has an indirect relationship with it in other ways. The more likely women who have undergone FGM are older parents, and the more vulnerable women to HIV. Women who have a sexual beginning before 20 years are more vulnerable than uncut women, women who have a sex debut before 20 years of age have a higher chance of HIV positive testing (Abraham 2007). Thanks to this non-sterilized procedure, FGM problems have been known, although not sufficient evidence is present, yet HIV prevalence in Sub-Saharan Africa has likely been associated with FGM (Holmes, 2007). In a different study, FGM has been shown to contribute to HIV incidence, and FGM also contributes to the spread of HIV infection across various ways (Brady, 1999) Studies have also shown a number of causes in relation to high infection rates among women, among them is culture, religion and knowledge on the type of prevention methods, (Torabi et al 2005; Nkomazana et al 2014 and Doku, 2010).

In addition a study in an aim to investigate unemployment and HIV/IDS, unemployment was found to lead to risky sexual behavior, when young people search for the means to survive harsh economic circumstances, risky behavior may lead to an increase in HIV prevalence, (Lowani et al, 2016) Consistently, the susceptibility of young people to HIV is compounded by the lack of good job opportunities and networks of social support, as there are many young graduates who are not active in Botswana and are therefore interested in risky sexual behaviors that can lead to earning a living from one diagnosed with HIV (Perker, 2011; Collins and Rau, 2000; Cohen, 1996). Unemployment and poverty are increasing the prevalence of HIV infection among young people (Jefferies et al, 2006).

However, a study in South Africa on marital status and risk of HIV infection found that the incidence of HIV infection among individuals was lower than among married persons (Zuma et al, 2004). As a result, another research exploring the effect of marital status on HIV among women in Nigeria showed that HIV prevalence among those legally married was lower than among those living single. Furthermore, another analysis exploring the effect of marital status on HIV among those legally married women in Nigeria showed that the incidence of HIV among the effect of marital status on HIV among women in Nigeria showed that the incidence of HIV among those legally married was lower than among those living alone (Idemudia et al, 2016).

Other studies revealed that marriage prevents the spread of HIV as married women pose a lower risk than those living together;, (Ankomah, 2013 and Zuma, 2004) A research on adolescence to determine the effect of HIV / AIDS social care on knowledge and perception of young people about the risk and acuteness of HIV/ AIDS, increasing awareness levels for both genders, and only in the intervention group and the younger age groups was seen the importance of postponing sexual intercourse (Marshak et al 2013). The above research was on 196-small community teenagers, which may not be applied to the entire population. The study of adolescents with a larger sample of 517 studied the general view regarding HIV and STD protection condoms in Indiana used a survey to collect data. For avoiding

HIV and other STDs, condoms are somewhat successful. Younger age and contraceptive usage over the past five years have each been linked to positive views on many of the claims relating to condoms (Torabi et al 2005).

Research conducted by 237 respondents in a remote tertiary health center in Nigeria on the connection between the socioeconomic condition and HIV infection found that HIV transmission was more prevalent among those with low economic status (Oladosu et al, 2014). The above research had a smaller size sample of 237 conducted by Nigeria, so results may not be common in other countries, and another nation's analysis will provide a certain dataset. The link between socioeconomic status and HIV infection was discussed in a 1906 retrospective analysis in South Africa. The findings showed no association between the rates of HIV infection and the presence of a substance (Bunyas et al, 2017). There is no suggestion that substance consumption is associated with HIV in Uganda. (Igulot et al., 2018).

Nonetheless, the focus of a report on Faith and HIV prevention in Botswana was on understanding HIV prevention among young people aged 12-23. The young ideally framed their HIV prevention through faith and world views, while prioritizing religious ideas built on church teachings and future focus, the young people in their world understanding the importance of HIV prevention, understanding the Community rules which increase the risk of HIV and preventive education, and recognize the importance of knowing the facts about HIV and AIDS. (Nkomazana et al 2014). The research focuses on a single name with a small population that cannot be applied to other religions and beliefs. A study of another Eastern Zimbabwe Survey aimed at measuring HIV infection change among major religious groups in the Christian Churches was lower than the spread of HIV, while the Christian infection rate decreased relative to those between men and women in other religious groups because the sexual activities and transitions among churches were low. Differences in conduct between the largest Churches in Eastern Zimbabwe have led to a shift in the faith pattern of infection (Gregson et al 2014).

# **2.3** To Examine the Relationship between Type of Prevention Methods and Adherence to Prevention Methods

The present literature on the second purpose of preventive system forms and enforcement with preventive methods was discussed in this chapter. Unprotected relationships with over one wife (Ayuku et al., 2007), to track the underlying social cleaning processes and assess the impact on HIV prevention policies, are activities to support such collaborations. In another report, widows would need to determine their HIV threat, to examine how widows cleanse and inherit Luo more women's methods of HIV prevention, while respecting the cultural requirements, ensuring that their basic needs are met and without having sex. The utilization of condoms is considered inappropriate for the implementation of culturally dictated sexual practices and especially outside the ability of the widow to consult (Onyango et al. 2014). In support of this study, non-behavioral and behavioral factors associated with sexual rituals were considered to examine the role of HIV transmission sexual cleansing in the Luo community in West Kenya. The origins for unchangeable sexual behavior refer back to a powerful traditional belief. Such convictions promote a relationship between men and women in which contraceptives have not been used and where there is no HIV screening. (Greene et al, 2008).

Nevertheless, a qualitative and evaluative report on behaviors and activities among women over the age of 18, sexually active and lived in an insecure condition found that women living with HIV / AIDS had a low educational rate, lost jobs and served in low-skilled facilities (Oliveira et al, 2015). In addition, an adolescent study found that poverty entails increased sexual hazard among young people for men (Hammarstrom, 1997)., A comprehensive research into sexual perception and practices between young youth, gender but not age differences in sexual perception and practices were identified, this survey involved a lot of sexual activity with a poor condom usage frequency (Rosenthal et al, 1995). Another analysis aimed at exploring the association among homelessness and HIV / AIDS in Trinidad and Tobago, indicated findings, the results showed that the risk of HIV / AIDS being contracted is greater for those without work and under economic condition than when a non-poor person infected with the disease loses a job and becomes poor as a consequence of the disease (Baynes et al, 2011).

According to traditional misconceptions in a partnership that people can't use condoms to prevent HIV, condoms are small in a different study of couples (Chepngeno et al., 2003). A condom situation assessment in Malawi does not matter in support of marriage use of condoms. There is a fascinating controversy between people and their social networks regarding condoms. In the scope of HIV / AIDS control, all contraceptives debate by both sexes are outside sex and a debate on the use of condom to help prevent marital transmission intrudes into the domestic sphere (Chimbiri et al, 2007).

A study of HIV / AIDS information, perspective and sex as determinants of the use of condoms by young people in Croatia showed that both genders are critical in predicting condom use in the past and consistently, with the use of condoms in their first intercourse with sex and with a positive perspective towards condom use. Between women, the frequent use of condoms is connected to having friends that have a less conventional view regarding sexuality (Graham, 2005). The study based on young adults between 18 and 24 years of age, who never looked at the most vulnerable populations that are females of reproductive age and thus could not represent the whole community. Another research on mother-to-child experience of HIV transmission in Ethiopia. The Ethiopian Demographic Health Survey (EDHS) 2011 carried out a cross-cutting analysis of 16,515 women aged 15-49. The study found that Ethiopian women were generally given very low (34.9 percent) information about MTCT and PMTC (Tanget al 2017).

There have been several misunderstandings in a Spanish report on HIV prevention and low-income between Chilean women; lack of distinction between HIV and AIDS; means of infecting and viral transmission. It causes dilemmas about how to avoid and cope with HIV positive misconceptions. Which adds to dilemmas. Women expect a person infected to become sick. Therefore, they didn't think they were at risk, unless they interact with someone who seems safe. (Germany, 2008). The above research also aimed at white low-income people with a small sample of 50 participants. All the races and socioeconomic groups cannot be identified. An analysis of HIV attitudes, awareness and sexual behaviors among the Black Middle Class population in Atlanta used a survey of 60 women in the

Middle Class. Inconsistent use of condoms in the mid-black women (Heath, 2016) was identified in the report.

In addition, the analysis of sex, spiritual participation and HIV prevention, an interreligious research in peri-urban settlements of Mozambique have shown that awareness of danger from HIV / AIDS, the perception of threat of themselves and the use of contraceptives confirms the hypothesis that there are differences between gender and possible risk between women in the healing churches rather than in traditional turquoises. Women's insecurity Nevertheless, the insecurity of both social views within Churches and the perception of HIV / AIDS that has been prevalent in the cultures did not change (Agadjanian, 2005).

# 2.4 The Relationship between Community Perception and Adherence with Regard to Various Types of Prevention

This section reviewed the existing literature relating to the third objective, Returns (55 percent decreased), agreed with condition (29 percent) and approved (16 percent) in a test to chart the Mosambiian perspective on the acceptability of this rite. Written response suggested that (12%) supports the termination of the practice and (61%) shift for good (27%) would proceed. Sandra et al. 2018). In south Mozambique, sampling 67 people showed a wide ritual acceptance variance. While it was acceptable, traditional beliefs and values were favorable to public health concerned (Gruz, 2015). To avoid curses and social stigma, Widow participated less when she got a curse. Nevertheless, they felt the rite would benefit them, but opted to undergo purification (Monteiro 2011; Gruz G 2015 and Passodor 2010).

A study in Canada investigating the spread and HIV risk awareness among the Black, Caribbean and African women, indicated that group members perceived no dander majorly in sexuality. Health care providers quote unfaithfulness in marriage, way of life and religion restricted utilization of condoms in women for protection. Those in impoverishment majorly refrained from sex and condom utilization. Condom utilization in those with permanent jobs was minimal. (Baidoobonso et al, 2013). To support this study, condom-free in Botswana, it was shown that workers do not use contraceptives much as the unemployed, as the unemployed do not have a chance to test the health of each other for HIV (Malema, 2012) (Malama, 2012).

Nevertheless, a research study on HIV / AIDS sensitively between couples found that, although the income and schooling of the cohort one were high, there is no knowledge of HIV infection in cohort 2, the distribution of age among cohorts is comparable. The results of this study are not accessible. The use of contraceptives as a protective measure throughout the trials. Couples ' commitment helped to make less use of condoms. I felt it was more fragile to women. The study found that although the study participant has HIV / AIDS data, the sample was susceptible to the risk of contracting HIV (Freitas et al, 2008).

This study used convenience sample which is not portrayal of the larger population. A qualitative approach to investigate difficulty communicating sexual preventive measures among different types of families in southeastern Tanzania, results suggested that due to their social rules guiding marriages, marital infidelity, marriage disagreement and type of family faced difficulties in sex communication between couple's especially sexual preventive measures among families in Ifakara town, this research utilized comfort populations that are not reflected by the larger population. Results from a qualitative approach to the problem of sex prevention between different kinds of families in south eastern Tanzania suggested the difficulties of the sexual communication among married couples in Ifakara, particularly the sex preventive measures among families in Ifakara because of their social rules governing marriages, marital disputes and families. (Mtenga et al, 2016). Such results are consistent with a study conducted in Zimbabwe and Malawi that the condoms do not indicate that the two parties have any affection, so that preventive measures in marital life were called into question (Person, 2015; Chimbiri, 2007). Marriage infidelity hindered communication between the two parties of safe sex (Sibeko et al, 2014). Social discourse had an impact on many societies ' laws (Gragnon & Simon 2005). In many married couples, the use of condoms posed a challenge because of their fixed mentality about marital matters.

Moreover, a cross-sectional quantitative analysis on HIV / AIDS (KABP) in Manipur in India found that respondents were well trained with HIV / AIDS diagnosis and prevention evidence amid some misinterpretations. There were clear inconsistencies in perception, viewpoint and knowledge. The company thought about it. Misconceptions was brought about mainly by the rumors in the community and the church teachings hence stigmatization by the members of the community. The gossip in the Society and the teachings of the Church are mainly responsible for misunderstanding. The members of the community were thus stigmatized. Due to the limited use of the HIV prevention process, the research sample was considered susceptible (Singh et al, 2016). The above study used 100 participants to study HIV / AIDS awareness, opinion and action changing in married women, with a larger sample of 350 respondents in Mumbai-India. The results of this study were contrary to other studies. The study included 100 participants. In this study there was no apprehension of transmitting HIV in the family, rather than a study carried out in India on expectant women who feared the contract with HIV, which included 13 states, the HIV tolerance of this population was important as it included the use of contraceptives (Hosain et al, 2006).

A study carried out in India to examine awareness of HIV / AIDS among various socioeconomic groups. A cross-sectional study of gender ages 20-50 years was conducted. More than 95% of specimens had HIV gender transmitting information, 86,3% and 87,2% understood infection by blood infection / exchange of needles and mother to infection, respectively. The prevalence of HIV / AIDS in middle and upper classes was noticeable relative to the lower social class (Kadtane et al, 2014). Consistency has shown that more girls are disadvantaged and more prone to be the disease, while poorer people have lower HIV incidence led by middle and upper economic status, by study of social economic disparities and HIV in South Africa. African blacks are also more fragile than other groups. It was also noted. High social-economic status. The HIV / AIDS program needs to be aggressively improved to improve the lower-class services and women's initiatives (Taffa et al, 2013). Investigating the faithful who lived in the urban area and actively engaged in sex, the aim was to study the effects of HIV / AIDs between single women and women aged between 15 and 30 years of age on the use of contraceptives for young adults in the church in Ile Ife in Nigeria. The result was that a number of young people were seen to adhere to the rules of the Church openly, but to engage in sex. (Ayotunda 2009). 2009.

#### 2.5 A Summary of the Literature Review

Knowledge and awareness of HIV/AIDS plays a significant part in the transmission of HIV/AIDS, it is evident that only awareness on HIV is not enough in reducing the prevalence. Despite the knowledge of HIV stoppage among the wedded couples, condom use has been reported to be low, attributed to the cultural norms that a married couple should not resort to condoms. (Torabi et al 2005; Nkomazana et al 2014 and Doku, 2010) People have got good knowledge of HIV prevention but a lot of misconception, discrepancy was felt between knowledge and attitude, knowledge and behavior, social cultural and religious misconception about the disease and prevention methods among the adolescence. Unemployment contributes to risky sexual behavior (Oladosu et al, 2014). Rites of passage in some communities has played a part in the transmission of HIV, female Cutting contributes to spread to HIV and this is regardless of sexual experience, HIV is also transmitted through other avenues such as non-sterile technique and complications of FGM. During widow cleansing, widows have got no right to negotiate for safer sex, abstinence and condom use and HIV testing is rejected. (Brady, 1999)

Different religions have got different doctrines in as far as HIV prevention is concerned, most of the religious groups have emphasized on HIV and prevention education, Catholics discourage condom use, other religious groups advocate for condom use together with other preventive measures like awareness/education., (Njeru et al, 2016). However other studies indicated that, being religious does not really mean one adheres fully to the Doctrine of the group. On the other hand, upper social economic status has an access to HIV information as opposed to individual in low social economic status. However, studies have shown there is no relation between social economic status and HIV infection (Kadtane et al, 2014; Taffa et al, 2013). Locus of control contributes significantly to risky sexual behavior, those with internal restrictions appear to be vulnerable to HIV owing to their

physical condition and accident, and this is because of the unsafe lifestyle, which is therefore probably not good enough to look after their own wellbeing. Individuals who have an internal locus of control appear to be more vigilant and diligent with their wellbeing, making better health choices and are more likely to report contraceptive use during sex between young people with inner HLC. (Wallston 1981; Kartzk 1991). Culture also influences HIV/AIDS prevention. Despite awareness on prevention measures, culture supersedes, hence hinders individuals from taking up preventive measures. (Onyango et al. 2014). Awareness of HIV needs to be emphasized and misconception demystified especially in cultural setting, in accessibility to HIV information and HIV/AIDS services among low social economic status such determining HIV infection, national HIV/AIDS response needs to maximize on the programs focusing the poor more so the women.

#### **2.6 Theoretical Framework**

## 2.6.1 Theory of Planned Behavior (PBT)

This theory came about after trying to determine the inconsistency between attitude and behavior. It projects intentional behavior because behavior can be designed, it also holds that attitude towards action examined is expected to project that action. Personal norms of people are well measured, how significant others would judge their action in place, to project someone's objective, knowing these beliefs can be as important as knowing the person's attitudes, and lastly perceived behavioral control impacts intention. General rule, high perceived control is attribute by more conducive attitude and personal norms hence the more likely the individual's intention to perform a given behavior. Ajzen and Fishbein (1980). This model has got 6 constructs; Attitudes which comprise of a factored results performed action. Behavioral intention which refers to the driving needs, the stronger the urge to carry out the behavior the higher chances the behavior is likely to be performed. Subjective norm is when one's belief about significant others to the person determine the behavior to be performed. Social norms which is the cultural rule on how to behave in a group or a larger cultural context. Perceived behavioral control is when an individual's point of view of how easy or difficulty a behavior in questioned is behaved, (Ajzen and Fishbein, 1980). In this study this model will help understand how people perceive certain types of prevention methods and factors which makes them either adhere to them or not.

However, fear, threat, mood, or past experience have not been considered in to behavioral intention, an example of a study that used this theory; determining the condom use behavior among college students (Mathew2015)

#### 2.6.2 Health Belief Model

In this study the Health Belief Model (HBM) will be applied. This model helps us understand how different types of HIV prevention methods are perceived by the community and how the community adheres to them; the authors of this theory were Hochbaum, Rosenstock and Kegels (1950), It came about as a reaction of the downfall of public medical preventive services, at that time and more specifically for explaining and predicting health-related behaviors more so concerning the adherence of health services, (Janz and Becker, 1984).HBM argues that a person's belief about health related problems, perceived advantages of actions and hindrances to actions as well as ability to act explain people's involvement or no involvement in health-empowering behaviors. Additionally, a stimulus to action is as good in triggering health-empowering actions, (Rosenstock, 1974).

HBM has eight constructs of which six are primary and two others that were added much later. The latter are important components in explaining health seeking behaviors. These are; Perceived susceptibility, explains those factors that influence and motivate people to practice healthier behavior. These include the beliefs and opinions of individuals regarding the chances of contracting an illness. People who perceive themselves as vulnerable to a health condition will have actions that bring down their chances of building up a problem, (Rosenstock, 1974), Perceived severity, this is how individuals look at the consequences or seriousness that diseases might have on them if actions are not taken. This is highly influenced by their previous experiences with illness. Previous experiences with illness can include evaluation of the medical as well as social and economic outcome of getting an illness, (Rosenstock et al.,1988), Perceived threats, this component of HBM refers to a mixture of factors from perceived vulnerability and the perceive a health issue as serious and can have severe effects to their lives. They will continue with care if only there is a

perceived threat (Orji, 2012), Perceived benefit, this is a person's own deductions on the value of participating in a health-empowering behavior. It involves the individual's thoughts to examine if the new health action is better than the one they are already practicing and their assessment of whether the new behavior will decrease risk to disease (Janz and Becker, 1984), Perceived hindrances, comprise of the evaluations of individuals concerning what would stop them from taking over a new behavior (Hayden, 2013).

People won't go to seek care if they are not faced with factors that would disfavor them or stop them. This also applies to compliance to a treatment/health care, modifying behavior; this can be understood as the individual's own characteristics that can affect their adoption of a new health behavior. These characteristics may include; one's culture, education, skills, past experiences among many more. The latter influence perceptions (perceived severity, susceptibility, barriers, threats and benefits), (Rosenstock, 1974), this element, self-efficacy, originally not included in HBM, but was introduced by Rosenstock and others much later in 1988. It stems from the social learning theory of Albert Bandura. This means the confidence of people in their ability to practice effectively wellness behavior, i.e., the trust in self-efficacy. Automatic efficiency is achieved when perceived advantages outweigh the barriers.

This component also argues for people who only believe they can try new behaviors (Champion and Skinner 2008) signs to action, this was also introduced much later. These are those things that trigger people's adoption to new health behaviors as well as medication use, (Glanz et al., 2008). Hints to action can be categorized twice; internal and external hints. Example of an internal hint is when the pain and symptoms which originate from one's own body, example of external hint includes information from the media, health care providers or people closer to you advancing participation in health-related action, (Janz and Becker, 1984) an example of a thesis using the principle above. A review as to why people choose to eliminate or resist their ovaries to reduce their cancer risk (Anthony Proietto et al 2018). In brief Health Belief Model (HBM), modifying behaviors, ability to perform a behavior and hints to action directly affect our perceptions of susceptibility, severity, threats, barriers, benefits and eventually our health seeking behavior.

The study employed 2 theories, planned behavioral theory (Ajzen and Fishbein, 1980) who argued that performance of a behaviour is determined by the individual's intention to engage in it, adherence to the prevention methods will be determined by perception, and perception that the behavior is within his/her control, perceived behavioral control. Health Belief Model (HBM) Kegels et al, (1950) looked into how the community perceives the prevention methods, perceived susceptibility, basically explained those factors that influence and motivate people to practice healthier behavior, this determined whether an individual adheres to the prevention intervention or not by how they perceive different methods.

## **2.7 Conceptual Framework**

A demonstration of the relationship between type of HIV prevention method on community perception and adherence to HIV prevention methods in Embakasi south sub county is presented below. The major confounding variables used were; Cultural practices, Employment status, marital status, Education, Social economic status and religion. It illustrates the link between variables that guide the study, it assumes that community perception influences adherence to different type of HIV prevention methods.



**Figure 1: Conceptual Framework** 

# CHAPTER THREE RESEARCH METHODOLOGY

# **3.1 Introduction**

This section discusses research methodology the researcher used in this study, these constituted of the research design, target population, sample size, sampling procedure, methods of data collection as well as methods of data analysis, in addition, it discusses the ethical consideration, validity and reliability was also observed.

## 3.2 Research Design

The research design is descriptive research design, Qualitative and quantitative data was collected. Qualitative because the researcher focused on description of the perceptions of the community towards different types of HIV prevention methods. The sample was selected using proportionate stratified random sampling to make it representative of the population. Data analysis used was both qualitative and quantitative, Qualitative sought to establish the trends and different in-depth understanding of what the qualitative mean for the individual. Quantitative sought for the general trends in the population.

## 3.3 Variables

## 3.3.1 Independent Variables

The independent variable was one, which is the type of HIV prevention method that included; Structural intervention, behavioral intervention and biomedical intervention.

## **3.3.2 Dependent Variables**

There are two dependent variables: which included; community perception which was examined in terms of positive or negative community perception, and adherence which was examined in terms of adherence and non-adherence to the type of HIV prevention method.

# 3.3.3 Confounding Variable

The confounding variables included; Cultural practices, Employment, Marital status, Education, Social economic status and religion.

## 3.4 Area of the Study

This is Nairobi, Kenya, Embakasi South. Embakasi South is divided in to 5 wards which are; Pipeline, Kwa Njenga, Kwa Reuben, Imara Daima and Kware, Majority of people living in this community are a blend of middle class and low class (people from the slums). This area was chosen for the study since the recent statistic showed that Embakasi recorded the inflated number of new HIV infection at 6%, as opposed to other sub counties Lang'ata at 5.6% then Dagoretti at 5.5%, (Barasa, 2017) despite the fact that this prevention methods are available from various Government and Non-Governmental Health Centers, women still engage in sexual risky behavior due to economic hardships in the slums to enable them earn a living, and also high levels of illiteracy in the slums has made people so much afraid to try new prevention methods like PrEP. (See Appendix VIII).

#### **3.5 Target Population**

The target population was women of child bearing age between 18-49.in Embakasi South regions. According to DHIS 2019.The population of women of child bearing age (18-49 in Embakasi South 99,400 (DHIS, 2019).

## **3.6 Sample Size Determination**

The researcher targeted a sample size of 380 participants for the study. The sample was apportioned between interviews and Focus Group Discussions (FDGs) using the probability proportionate approach. The formula used in arriving at the entire sample size is given below:

$$n = \frac{Nt^2 \cdot p \cdot q}{d^2 + p \cdot q \cdot t^2}$$

Where:

N (Total population size) = 
$$99,400$$

t (95% confidence interval) = 1.96

p (possibility of an event to occur) = 0.5

q (possibility of an event not to occur) = 0.5

d (acceptable error rate) =0.05

n (sample size) = 380
### **3.7 Sampling Procedure**

Proportionate Stratified random sampling procedure was employed for quantitative data. This was based on the demographic variables. The intention for this was to provide an equal chance within the sub-groups to be selected, the study sample consisted of 380 respondents in 5 wards, including Imara Daima, Kwa Njenga, Reuben, Kware and Pipeline in Embakassi Sub County. The number of respondents was distributed equally across the districts, each with 76 respondents. 38 of the respondents were married and 38 were not married. Of all the non-married, 19 were Christians and 19 were Muslims. 9 of the Christian respondents were not employed while 10 were employed. The same was true of all the Muslim participants, 9 of the respondents were not employed and 10 of the respondents were employed. Among the unemployed, 3 were between the ages of 15 to 24 years old, 2 were between the ages of 25 to 34 years old, 2 were between the age of 35 to 44 years old and 2 were aged more than 44 years old. Purposive sampling was employed to select the respondents for the focus group discussions. (See Appendix III).

# **3.8 Data Collection Instrument**

# **3.8.1 Quantitative Instrument**

The main instrument to collect quantitative data in this study was a questionnaire. The questionnaire was self-generated. Questionnaires had three sections. Part A.had a set of 12 questions on perception, each type of prevention method having 4 questions, starting from; structural, behavioral and biomedical strategies, responses were in likert scale of 1-5.1-strongly agree,5-strongly disagree. Part B. had aset 12 questions on adherence. Questions, 1-4 covered structural prevention methods, 5-8 covered behavioral methods and 9-12 covered biomedical prevention method, where the first section captured demographic data of the respondents, the second section captured the respondents' perceptions towards types of HIV prevention methods, the third section captured adherence to different types of HIV prevention. (See Appendix I).

# **3.8.2 Qualitative Instrument**

The main instrument in this study to collect qualitative data was FGD. Focus group discussions was used to discuss underlying issues in the topic. The participants were guided

by a moderator who was a woman, the FGD had structured questions that guided the discussions, and this took between 60-90 minutes. 5 FGD was conducted each consisting a 15 respondent on average where each ward had 1 FGDS. (See Appendix II.)

### **3.9 Data Collection Procedure**

A research permit was acquired to carry out the research from (NACOSTI) after a receipt of letter of approval from the University, questionnaires were administered by the researcher with the help of a trained research assistant to the sample population. The research assistant assisted the participants to complete the questionnaire due to literacy level, Completed questionnaire were collected on the same day or within the period of data collection. Focus Group Discussions (FGD) had a female moderator who guided the participants using the structured guide. (See Appendix VI)

# 3.10 Data Analysis

The researcher counter- checked and edited collected data. The data was coded to facilitate analysis using the Stata software for the quantitative data while means, frequency distributions and dispersions was used for descriptive data, multinomial logistic regression analysis was used to test the hypothesis. Chi-square was used to test the strength of the association, and phi crammer's v to test the strength of the relationship, Multinomial logistic regression analysis showed how cultural practices employment status, marital status, education, socioeconomic status and religion contribute to community perception and adherence to different types of HIV prevention methods.

# 3.11 Validity and Reliability

This Questionnaire was piloted prior to fieldwork, piloting was performed in Embakasi East Sub County on 25 persons from the general population who were chosen using purposive random sampling, and those who engaged in the piloting exercise were not included in the actual study. The results of the pilot experiment told the investigator whether or not the participants had answered the questions right, and therefore the adjustment of the questionnaire was guided by the result of the study .FGD guide was also tested and the credibility of the FGD was established using inter rater concordance using

Fliess Kappa by 3 professionals (1 psychologist and 2 from public health) Kappa= 0.8.Validity is concerned with the design and the methods reflecting whether the findings is a true representation of what needed to be measured., On the other hand reliability is the extent to which methodology used produce consistent results. (Berry, 2002). The Cronbach's Alpha was used to measured validity and reliability of the research methodology and design in this this research. A Cronbach's Alpha of .80 was deemed adequate for validity and reliability to be achieved.

# **3.12 Ethical Considerations**

Informed consent was sought from all participants, and only those willing to give their informed consent by signing a consent form were recruited for the study. All the participants were informed about the project and their right to withdraw from participation at any stage, if they wish to. In addition, the study also assured the participants of the confidentiality of the information they provided and efforts were made to respect their desires and wishes. Anonymity and privacy for the respondents was observed and the respondents were assured that their names will not be divulged at any point of the study and that the information will only be used for academic purposes. Lastly, an official letter from the relevant authorities was acquired. (See Appendix VI)

# CHAPTER FOUR DATA ANALYSIS

# 4.1 Introduction

This chapter analysis data collected with the aim of establishing the relationship between type of HIV prevention method community perception and adherence to HIV prevention methods among women aged 18-49 in Embakasi South-Nairobi County.

This study focused on the relationship between type of HIV prevention method on community perception and adherence to HIV prevention methods among women aged 18-49 in Embakasi South-Nairobi County. The first objective was to investigate the relationship between type of prevention methods and community perception in Embakasi South. The second objective sought to examine the relationship between type of prevention methods and adherence to prevention methods in Embakasi South, and the third objective was to establish the relationship between community perception and adherence with regard to various type of prevention methods in Embakasi South. The study's first hypothesis was to test and prove if there is a relationship between types of prevention methods and community perception. The second one examined whether there is a relationship between types of prevention methods and adherence to prevention methods. The third one assessed whether there is a relationship between community perception and adherence with regard to various types of prevention methods. Sampling procedure used was proportionate stratified sampling for quantitative data, for qualitative data, Purposive sampling was employed to select the respondents for the focus group discussions. Qualitative data was coded and analyzed for emerging themes and present them through narrations. Standardized primary instruments for collecting information used include; Questionnaires which were used were of closed ended questions and Focus group discussions.

The researcher counter-checked and edit collected data. The data was coded to facilitate analysis using Stata software for the quantitative data while means, frequency distributions and dispersions used for descriptive data for the three hypotheses. Chi-square and phi crammer's v to tested the strength of the relationship, Multinomial logistic regression analysis showed how cultural practices, employment status, marital status, education,

socioeconomic status and religion contribute to community perception and adherence to different types of HIV prevention methods.

#### 4.2 Summary/Descriptive Statistics

Table 1	1: Summar	y/Descr	iptive S	Statistics
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Variable	Observations	Minimum	Maximum
Age bracket	376	1	4
Highest level of education	373	1	4
Marital status	374	1	4
Social economic status	358	1	4
Employment status	370	1	4
Religion	376	1	4
Determinant of prevention method			

Table 1, presents the summary statistics on the variables used in carrying out the analysis. Since the data is categorical in nature, the mean and standard deviation do not have any special meaning. What has meaning is the number of observations per variable and the minimum and maximum values respectively. Age had 376 observations with minimum and maximum values being 1 and 4 respectively where 1, 2, 3, and 4 represent 15-24, 25-34, 35-44, and 45 and above years respectively. Based on the highest level of education, there were 373 observations where the minimum and maximum values were 1 to 4 respectively with 1, 2, 3 and 4 representing no education, primary level education, secondary level and other level of education respectively. Marital status had 374 observations with minimum and maximum values being 1 and 4 respectively where 1, 2, 3 and 4 represent married, single, separated and others respectively. There were 358 observations on social economic status with minimum and maximum values being 1 and 4 where 1, 2, 3 and 4 represent an income of less than 10,000, 10,000-55000, 56000-75000, 76000 and above respectively. Employment status had 370 observations with 1 and 4 as the minimum and maximum values respectively where 1, 2, 3 and 4 represent employed for wages, casuals, selfemployed and others respectively. Religion had 376 observations with minimum and

maximum values 1 and 4 respectively where 1, 2, 3, and 4 represent Christian, Muslim, Hindu and others respectively.

Prevention		Observations	Total
	Biomedical	114 (31.58%)	361 (100%)
	Behavioral	103 (28.53%)	-
	Structural	144 (39.89%)	-
		·	
Adherence			359 (100%)
	Non	174 (48.47%)	-
	Adherence		
	Adherence	185 (51.53%)	
	<u>]</u>		
Perception	Negative	164 (45.68%)	359
	Positive	195 (54.32%)	

Table 2: Total observation based on prevention, perception and adherence tovarious HIV prevention methods

Table 2 shows that structural method of HIV prevention had most respondents of 144 and behavioral method had the lowest number of respondents of 103. 185 respondents adhered to various HIV prevention methods while 174 did not adhere to any method of HIV prevention. The table also shows that 195 respondents had positive community perception on various HIV prevention methods while 164 had negative perception on the various HIV prevention methods.

# 4.3 Analysis of General Information

Table 3: Variation between type of HIV prevention method, age bracket, adherenceto HIV prevention method and community perception of using various methods ofHIV prevention method

<b>Prevention (IV)</b>	Confounding	Adherence (DV)		Perception(DV)	
	variable				
Biomedical	Age (In years)	Non-	Adherence	Negative	Positive
		adherence	(1)	(0)	(1)
		(0)			
	15-24	13.64%	20.63%	14.89%	21.88%
	25-34	52.27%	42.86%	42.55%	51.56%
	35-44	27.27%	25.4%	27.66%	23.44%
	45	6.82%	11%	14.89%	3.13%
Total responses		44	63	47	64
Total (%)		100.0%	100.0%	100.0%	100.0%
Behavioral					
	15-24	30.77%	30.56%	32.08%	31.91%
	25-34	44.63%	36.11%	37.74%	42.55%
	35-44	12.31%	27.78%	13.21%	23.4%
	>44	12.31%	5.56%	16.98%	2.13%
Total responses	L	65	36	53	47
Total (%)		100.0%	100.0%	100.0%	100.0%
Structural					
	15-24	16.13%	24.69%	11.48%	31.91%
	25-34	69.35%	44.44%	57.38%	42.55%
	35-44	12.9%	18.52%	22.95%	23.4%
	>44	1.61%	12.35%	8.2%	2.13%
Total responses		62	81	61	47
Total (%)		100.0%	100.0%	100.0%	100.0%

Out of the total respondents aged 15-24, 20.63% adhered to biomedical method of HIV prevention while 13.64% did not adhere to biomedical method. Out of the same population 14.89% had negative perception of biomedical method of HIV prevention method while 21.88% had positive perception towards biomedical method of HIV prevention. Most

respondents who adhered 52.27% to HIV prevention methods and a positive perception 51.56% belonged to age bracket 24-34. The respondents aged 45 and above had lowest community perception and adherence to HIV prevention method.

From the above table 20.63%,42.86%25.4% and 11% of respondents aged 15-24, 25-34,35-44 and >44 respectively, adhered to HIV prevention methods and used biomedical method of prevention. In the behavioral method of HIV prevention had 44.63% and 42.55% adherence and community perception respectively as the highest values and the structural method had 69.35% and 42.55% and 25-34.

Table 4: Variation between type of HIV Prevention method, Education, Adherenceto HIV prevention method and community Perception of using various HIVprevention methods

Prevention	Education	Adherence		Perception	
Biomedical		Non-	Adherence	Negative(0)	Positive(1)
		adherence(0)	(1)		
	None	2.27 %	7.94 %	10.64 %	3.13 %
	Primary	22.73 %	6.35 %	19.15 %	7.81%
	Secondary	27.27 %	38.10 %	36.17 %	32.81 %
	Others	47.73 %	47.62 %	34.04 %	56.25 %
Total response	S	44	63	47	64
Total (%)		100.0%	100.0%	100.0%	100.0%
Behavioral					
	None	3.17 %	2.78 %	3.92%	2.13 %
	Primary	4.76 %	13.89 %	3.92 %	12.77 %
	Secondary	28.57 %	38.89 %	37.25 %	25.53 %
	Other	63.49 %	44.44 %	54.90 %	59.57 %
Total response	S	63	36	51	47
Total (%)		100.0%	100.0%	100.0%	100.0%
Structural					
	None		6.25 %	3.28 %	3.90 %
	Primary	22.58%	15.00 %	22.95 %	12.99 %
	Secondary	40.32%	42.50 %	39.34 %	44.16 %
	other	37.10	36.25%	34.43 %	38.96 %
Total response	s	62	80	61	77
Total (%)		100.0%	100.0%	100.0%	100.0%

Out of total respondents for biomedical method, 47.73% with education above secondary school level did not adhere to biomedical method of HIV prevention and 2.27% who had no education did not adhere to the same HIV prevention method. Those with primary and secondary school prevention. For behavioral method of HIV prevention 63.49% with education above secondary level didn't adhere to this method and 3.1% with no education not adhering to the same method.

Based on perception, 56.25% with education above secondary level had positive community percent about biomedical method of HIV prevention, where as those with no education only 3.13% had similar perception. Those with secondary education had 36.17% which was the highest level of negative perception and 10.64% with no education had similar perception for biomedical method of HIV prevention.

Prevention	Marriage	Adherence		Perception	
		Non-adherence(0)	Adherence(1)	Negative(0)	Positive(1)
Biomedical	Married	50.00%	28.57%	40.43%	31.75 %
	Single	43.18 %	53.97%	40.43 %	58.73 %
	Separated	6.82 %	11.11%	10.64 %	9.52%
	Others		6.35%		
Total respon	ises	44	63	47	63
Total (%)		100.0%	100.0%	100.0%	100.0%
Behavioral					
	Married	40.00%	30.56%	35.85 %	36.17%
	Single	49.23 %	41.67%	47.17 %	48.94 %
	Separated	3.08%	16.67%	5.66 %	8.51 %
	Others	7.69%	11.11%	11.32 %	6.38 %
Total respon	ises	65	36	53	47
Total (%)		100.0%	100.0%	100.0%	100.0%
Structural					
	Married	50.82%	44.44 %	55.00 %	42.31 %
	Single	40.98 %	48.15%	40.00 %	48.72%
	Separated	6.56%	7.41%	5.00 %	7.69 %
	Others	1.64 %			1.28 %
Total respon	nses	61	81	60	78
Total (%)		100.0%	100.0%	100.0%	100.0%

Table 5: Variation between type of HIV Prevention method, Marriage, Adherenceto HIV prevention method and community Perception of using various HIVprevention methods

# Table 6: Variation between type of HIV Prevention method, Economic status,Adherence to HIV prevention method and community Perception of using variousHIV prevention methods

Based on marriage as the confounding variable, most married people did not adhere to biomedical, behavioral and structural method of HIV prevention indicated by 50%, 40% and 50.82% respectively with most separated people adhering to all methods of HIV prevention.

Prevention	Economic Status	Adherence		Perception	
Biomedical		Non-adherence(0)	Adherence(1)	Negative(0)	Positive(1)
	Less than 10,000	35.71%	18.64 %	28.26 %	22.03 %
	10,000- 55,000	50.00%	54.24 %	52.17 %	54.24 %
	56,000- 75,000	14.29 %	15.25 %	13.04 %	15.25%
	76,000 and above	-	11.86%	6.52%	
Total respon	ises	42	59	46	59
Total (%)		100.0%	100.0%	100.0%	100.0%
Behavioral					
	Less than 41.54% 10,000		38.89%	33.96%	46.81 %
	10,000- 55,000	44.62 %	41.67 %	49.06 %	38.30%
	56,000- 75,000	10.77%	13.89 %	13.21 %	10.64 %
	76,000 and above	3.08 %	5.56 %	3.77%	4.26%
Total respon	ises	65	36	53	47
Total (%)		100.0%	100.0%	100.0%	100.0%
Structural					
	Less than 10,000	28.81 %	30.26 %	23.33 %	33.33 %
	10,000- 55,000	62.71%	55.26%	65.00 %	54.17 %
	56,00 <mark>0-</mark> 75,000	8.47 %	9.21 %	10.00%	8.33%
	76,000 and above	-	5.26 %	1.67 %	4.17 %
Total respon	ises	59	76	60	72
Total (%)		100.0%	100.0%	100.0%	100.0%

Based on economic status as the confounding variable, 50% of respondents earning less than10,000-55,000 did not adhere to biomedical method of HIV prevention compared to 54.24% who adhered to the same method. The community had a high positive perception of 54.24% on biomedical method of HIV prevention.

Table 7: Variation between type of HIV Prevention method, Employment,Adherence to HIV prevention method and community Perception of using various

Prevention	Employment	Adherence		Perception		
		Non- adherence(0)	Adherence(1)	Negative(0)	Positive(1)	
Biomedical	Employed for wages	25.00%	57.38 %	34.04 %	50.00 %	
	Casuals	29.55 %	13.11 %	19.15 %	19.35%	
	Self- employed	38.64%	13.11%	29.79	17.74 %	
	Others	6.82 %	16.39 %	17.02 %	12.90 %	
Total respon	ises	44	61	47	62	
Total (%)		100.0%	100.0%	100.0%	100.0%	
Behavioral						
	Employed	40.00 %	19.44 %	32.08 %	34.04 %	
	for wages					
	Casuals	29.23 %	36.11 %	32.08 %	31.91 %	
	Self- employed	18.46 %	22.22 %	18.87 %	21.28 %	
	Others	12.31 %	22.22 %	16.98 %	12.77 %	
Total respon	ises	65		53	47	
Total (%)		100.0%	100.0%	100.0%	100.0%	
Structural						
	Employed for wages	26.23 %	30.77 %	36.07 %	22.97 %	
	Casuals	27.87 %	25.64 %	27.87 %	27.03 %	
	Self- employed	42.62 %	23.08%	24.59 %	37.84 %	
	Others	3.28 %	20.51 %	11.48 %	12.16 %	
Total respon	ises	61	78	61	74	
Total (%)		100.0%	100.0%	100.0%	100.0%	

**HIV** prevention methods

Table 7, above shows most people employed for wages in Embakasi South adhered to biomedical method of HIV prevention, which is showed by 57.38% compared to 25% who did not adhere and attracted a higher positive community perception of 50% compared to 34.04% negative community perception. The behavioral method had people employed for wages being the highest population of respondents not adhering to it at 40% with a higher positive community perception of 34.04%. The community had a higher perception to structural method of HIV prevention of 37.84% with a negative perception of 24.59% for self-employed people .42.62% of self-employed people adhered to structural method of HIV prevention which was higher compared to 23.08% who did not adhere to the same method.

Table 8: Variation between type of HIV Prevention method, Religion, Adherence toHIV prevention method and community Perception of using various HIV preventionmethods

Prevention	Religion	Adherence		Perception		
Biomedical		Non-adherence(0)	Adherence(1)	Negative(0)	Positive(1)	
	Christian	93.18 %	90.48 %	85.11 %	96.88%	
	Muslim	4.55 %	9.52 %	12.77 %	3.13 %	
	Hindu	-	-	-	-	
	Others	2.27 %	-	2.13 %	-	
Total respons	ses	44	63	47	64	
Total (%)		100.0%	100.0%	100.0%	100.0%	
Behavioral						
	Christian	86.15%	80.56%	83.02 %	87.23 %	
	Muslim	7.69%	11.11%	9.43%	6.38%	
	Hindu	-	-	-	-	
	Others	6.15 %	8.33%	7.55 %	6.38 %	
<b>Total respons</b>	ses	65 36		53	48	
Total (%)		100.0%	100.0%	100.0%	100.0%	
Structural						
	Christian	82.26 %	93.83 %	88.52 %	87.18%	
	Muslim	16.13%	3.70 %	8.20 %	11.54 %	
	Hindu	-	1.23 %	-	-	
	Others	1.61%	1.23 %	3.28%	1.28 %	
Total		62	81	61	78	
responses						
Total (%)		100%	100%	100%	100%	

From table 8, with confounding variable religion, most Muslims adhered to HIV prevention methods compared to those who did not adhere unlike Christians whose population of adherence and non-adherence has small variation. 93.18% of Christian did not adhere to biomedical method of HIV prevention, while 90.48% adhered to the same method. The community has 96.88% positive perception for biomedical method of HIV prevention and 85.11% negative perception on the same method.

 Table 9: Variation between type of HIV Prevention method, determination of HIV

 prevention method, Adherence to HIV prevention method and community Perception

 of using various HIV prevention methods

Prevention	HIV	Adherence		Perception	
Biomedical		Non-	Adherence(1)	Negative(0)	Positive(1)
		adherence(0)			
	No	27.27%	17.74%	25.53 %	24.68 %
	Yes	72.73 %	82.26%	74.47%	75.32%
Total respon	ises	44	62	47	77
Total (%)		100.0%	100.0%	100.0%	100.0%
Behavioral					
	No	33.33%	17.74 %	44.00%	21.28%
	Yes	66.67%	82.26%	56.00 %	78.726.38%
Total respon	ises	63	62	50	47
Total (%)		100.0%	100.0%	100.0%	100.0%
Structural					
	No	22.58%	35.44%	40.00%	24.68 %
	Yes	77.42%	64.56%	60.00 %	75.32%
Total		62	79	60	77
responses					
Total (%)		100%	100%	100%	100%

From table 9 above, most respondents decide on the type of HIV prevention method to use. Out of the respondents on biomedical method of HIV prevention, 72.73% determine the type of method to use and did not adhere to the biomedical method of HIV prevention. The community had positive perception of 75.32% on people who decided to adhere to biomedical method of HIV prevention.

#### **4.4 Analysis of Focus Group Discussions**

Five focus group discussions were held during the process of data collection. Content analysis was used to make sense of information obtained from the discussions. Half the women in the group had visited a V.C.T for HIV testing while some said that they knew their status during their maternal clinics and others had never been tested for HIV before. Almost all women were in agreement that HIV affects married couple since HIV doesn't know boundaries and any one can be infected when exposed to the virus.

Very few women acknowledged that they have an idea about PrEP and PEP, some acknowledged that they only know about PEP and others had no idea about both PEP and PrEP Those who knew about PrEP were able to confirm to others that PrEP medication reduces the chances of getting infected but taking the medication is a bit of a task for them. All the women were able to come to an agreement that HIV pregnant women can prevent their unborn babies from getting infected through clinic instructions.

In the discussion all the women also confirmed that stigma is high among HIV infected people and it should be treated with so much confidentiality. The common reason they gave was that everyone fear discrimination once two or more people get to know HIV status of someone. As per the age group 18-24 at least put condom into use, unlike the age group of 25 and above, mainly because they are married or in a stable relationship. Most married women and those who are in a stable relationship are not in a position to negotiate with their couples/ partners on condom use since their partners have excuse like; condoms reduce sexual pleasure, they are not cheating so why use condoms, condoms are unnatural, condoms sometimes are not readily available.

Majority of the women in the group acknowledged having unprotected sex and also confirmed that there is no difficulty in being faithful to their partners. A small number of them acknowledged that they know their spouses'/partner HIV status. According to the women, abstinence is practical depending on the situations in life and age. Half of the women had the idea of circumcision reduces the chances of getting infected.

# 4.5 Relationship between Type of HIV Prevention Method and Community Perception

Table 10: Regression analysis on the relationship between type of HIV preventionmethod and community perception in Embakasi south

Perception	S	SE S	t – statistic	P-Value	95% CI
Prevention					
Behavioral	0623	.0728	-0.85	0.393	[2056, .0811]
Structural	0051	.06736	-0.08	0.940	[1376, .1275)
Age					
25-34	0714	.0812	-0.88	0.380	[2312, .0884]
35-44	1660	.1021	-1.63	0.105	[3670, .03493]
44+	3453	.1240	-2.79	0.006	[5892,1013]
Education					
Primary	.0573	.1575	0.36	0.716	[2527, .3672]
Secondary	.0410	.1455	0.28	0.778	[2452, .3273]
Others	.1559	.1467	1.06	0.289	[1327, .4446]
Marriage					
Single	.0787	.0647	1.22	0.225	[0487, .2061]
Separated	.1236	.1103	1.12	0.264	[0935, .3406]
Others	0888	.1542	-0.58	0.565	[3923, .2146]
Status					
10,000 -55,000	1221	.0739	-1.65	0.099	[2675, .0233]
56,000-75,000	1003	.1069	-0.94	0.349	[3107, .1101]
76,000 and	.0077	.1482	0.05	0.958	[2838, .2993]
above					
Employment					
Casuals	0182	.0803	-0.23	0.821	[1762, .1398]
Self –employed	.0606	0.733	0.83	0.409	[0837, .2048]
Others	1290	.1031	-1.25	0.212	[3318, .0738]
Religion					
Muslim	.0250	.1012	0.25	0.805	[1742, .2243]
Hindu	.3410	.5102	0.67	0.504	[6629, 1.3450]
Others	1473	.1679	-0.88	0.381	[4776, 1831]
HIV	.1911	0.642	2.98	0.003	[.06472, 3175]
_cons	.4598	.1693	2.72	0.007	[.1266, 7930]
$R^2$	0.1089				
Observations	326				

Note

To investigate the relationship between type of prevention methods and community perception in Embakasi South.

The first hypothesis was tested to investigate the relationship between type of HIV prevention method and community perception in Embakasi South. The Linear Probability Model was estimated at the 5% level of significance in a bid to answer this objective. The fitted model was a good fit (F=1.77, P=0.0212) since the p-value of .0212 was less than the 5% level of significance. Community perception to the type of HIV prevention method used was negative for individuals using behavioral and structural methods compared to those using biomedical method ( =-.0623, t=-0.85, p=0.393) and ( =-.0051, t=-0.08, p=0.940) at the 5% level of significance respectively. The effect was however, not statistically significant as indicated by the p-values that are greater than the 5% level of significance. Specifically, community perception to the type of HIV prevention method was 6.23% less among individuals using the behavioral method of prevention compared to those using biomedical method.

4.6 The Relationship between Type of HIV Prevention Method and Community Adherence

 Table 11: Regression analysis on the relationship between type of HIV prevention

 method and community adherence in Embakasi south

Adherence	S	SE S	t – statistic	P-Value	95% CI
Prevention					
Behavioral	2053	.0706	-2.91	.004	[3442,0664]
Structural	.02984	.0651	0.46	0.647	[0983, .1580]
Age					
25-34	02714	.0779	-0.35	0.728	[1804, .1262]
35-44	.1049	.0984	1.07	0.287	[0887, .2985]
44+	.1366	.1183	1.15	0.249	[0962, .3695]
Education					
Primary	4485	.1516	-2.96	0.003	[7468,1501]
Secondary	2400	.1406	.1.71	0.089	[5166, .03655]
Others	3442	.1415	-2.43	0.016	[6226,0658]
Marriage					
Single	.0676	.06213	1.09	0.278	[0547, .1898]
Separated	.1856	.1037	1.79	0.075	[0186, .3897]
Others	.0022	.1483	0.01	0.988	[2896, 2939]
Status					
10,000 - 55,000	.0831	.0714	1.16	0.246	[0574, .2237]
56,000 -75,000	.0853	.1028	0.83	0.407	[1170, .2877]
76,000 and	.3879	.1425	2.72	0.007	[.1075, .6683]
above					
Employment					
Casuals	0589	.0773	-0.76	0.446	[2110, .0931]
Self-employed	1408	.0703	-2.00	0.046	[2791,0025]
Others	.2597	.0980	2.65	0.008	[.0668, .4526]
Religion					
Muslim	0642	.0973	-0.66	0.510	[2556, .1272]
Hindu	.2047	.4915	0.42	0.677	[7625, 1.1719]
Others	.0195	.1619	0.12	0.904	[2990, .3380]
HIV	0608	.0622	-0.98	0.329	[1831, .0615]
_cons	.7947	.1630	4.87	0.000	[.4739, 1.1155]
$R^2$	0.1743				
Observations	327				

Source: STATA

To examine the relationship between type of prevention methods and adherence to prevention methods in Embakasi South.

The table above represents the regression analysis results on the type of HIV prevention methods and community adherence to HIV prevention methods. The model had  $R^2$  of .1743 meaning the proportion of variation in HIV prevention methods and adherence to HIV prevention methods is 17.43%. The implication is that there is a strong relationship between community adherence to HIV prevention and the type of HIV prevention method. The Linear Probability Model was estimated at the 5% level of significance in a bid to answer this objective. The fitted model was a good fit (F=3.07, P= 0.0000) since the pvalue of 0.0000 was less than the 5% level of significance. Community adherence to the type of HIV prevention method used was negative for individuals using behavioral and structural methods compared to those using biomedical method (=-.2053, t=-2.91, p= **0.004**) and (=.02984), t= 0.46, p= 0.647) at the 5% level of significance respectively. The effect was however, not statistically significant as indicated by the p-values that are greater than the 5% level of significance. Specifically, community adherence to the type of HIV prevention method was 20.53% less among individuals using the behavioral method of prevention compared to those using biomedical method. Similarly, community adherence was **2.984** % greater among individuals using structural method of prevention compared to those using biomedical method.

# 4.7 The Relationship between Community Perception and Adherence with Regard to Types of HIV Prevention Methods

Table 12: Chi-square analysis on the relationship between community perceptionand adherence with regard to types of HIV prevention methods in Embakasi south

Perception	Adherence			
	Degrees of	Chi-Square	P-value	Cramer's V
	Freedom (DF)	<i>Statistic</i> ( <sup>2</sup> )		
	1	0.8034	0.370	0.0478

The third hypothesis was tested establish the relationship between community perception and adherence with regard to various types of prevention methods in Embakasi South. This objective was analyzed using Chi-Square test for association between the two samples. Cramer's V was used to determine the strength of the association and the perception is associated (2=0,8034, p=0,370, =0,0478). However, the combination was not statistically significant in the sense that the p-value was higher than 5%. As shown by the value of V of Cramer of 0.0478, the force of the association was weak.

# CHAPTER FIVE SUMMARY OF FINDINGS, DISCUSSION, CONCLUSION AND RECOMMENDATIONS

### 5.1 Introduction

This chapter deals with the summary of the findings, conclusion and recommendations to those who would be implementers of the research findings, the study has examined the relationship between type of HIV prevention method community perception and adherence to HIV prevention methods among women aged 18-49 in Embakasi South-Nairobi County. The specific objectives included; to investigate the relationship between type of prevention methods and community perception in Embakasi South, to examine the relationship between type of prevention methods and adherence to prevention methods in Embakasi South, to establish the relationship between community perception and adherence with regard to various type of prevention methods in Embakasi South. The data from 376 respondents was analyzed to determine individual responses.

# **5.2 Internal and External Validity**

There was one independent variable classified into 3 categories (Biomedical, Behavioral and structural methods), two dependent variables (Community perception and adherence to the prevention methods. Six factors were identified as the most relevant for the study (Cultural practices, education, religion, Employment status, social economic status and marital status). The proposal was piloted prior to fieldwork to establish the validity and reliability of the instruments using 25 items. The Cronbach's Alpha for validity and reliability of the study was 0.854. Stigma was evident among the respondents due to the sensitive nature of the topic, this was addressed by the help of the research assistant who convinced them of the high standard of anonymity, and also assured them of confidentiality.

# **5.3 Summary of Findings**

Relationship between type of HIV prevention method and community perception in Embakasi South 0.212 was less than the 5% level of significance. Community perception to the type of HIV prevention method used was negative for individuals using behavioral and structural methods compared to those using biomedical method (=-.0623, t=-0.85, p=0.393) and (=-.0051, t=-0.08, p=0.940) at the 5% level of significance respectively. The effect was however, not statistically significant as indicated by the p-values that are greater than the 5% level of significance. Specifically, community perception to the type of HIV prevention method was 6.23% less among individuals using the behavioral method of prevention compared to those using biomedical method. Similarly, community perception was 0.51% less among individuals using structural method of prevention compared to those using biomedical method.

The model had  $R^2$  of .1743 meaning the proportion of variation in HIV prevention methods and adherence to HIV prevention methods is 17.43%. The implication was that there is a strong relationship between community adherence to HIV prevention and the type of HIV prevention method. Community adherence to the type of HIV prevention method used was negative for individuals using behavioral and structural methods compared to those using biomedical method ( =-.2053, t=--2.91, p= 0.004) and ( = .02984), t= 0.46, p= 0.647) at the 5% level of significance respectively.

The effect was however, not statistically significant as indicated by the p-values that are greater than the 5% level of significance. Specifically, community adherence to the type of HIV prevention method was20.53% less among individuals using the behavioral method of prevention compared to those using biomedical method. Similarly, community adherence was 2.984 % greater among individuals using structural method of prevention compared to those using biomedical method.

Cramer's V was used to determine the strength of the association and the perception is associated (2=0,8034, p=0,370, =0,0478). However, the combination was not statistically significant in the sense that the p-value was higher than 5%. As shown by the value of V of Cramer of 0.0478, the force of the association was weak.

# **5.4 Discussion**

In this section, a detailed of findings per objective is presented based on findings from literature review and the theoretical frameworks that informed this study.

# 5.4.1 The Relationship between Type of Prevention Methods and Community Perception

The first objective sought to determine the extent to which the type of prevention method influences perception in Embakasi South-Nairobi County. In Table 10, regression analysis on the relationship between type of prevention and community perception, community perception was negative for individuals using behavioral and structural methods compared to those using biomedical methods, In the recent past, people dint prioritize for HIV seminars, this kind of seminars received low attendance, because of fear of stigmatization. Perceived benefit, people didn't see the benefit of attending seminars rather they prefer going to get that which benefits them directly, the ease or difficulty in performing the behavior depending with the situation. Similarly, community perception was 0.51% less among individuals using structural method of prevention compared to those using biomedical method. Consistently, Abraham BK (2007)), found that Female Genital Cutting (FGC) is not associated with HIV but is implicitly, hence positive perception towards circumcision on women. Inconsistent with the findings Study by Holmes (2007) indicates that FGM practice contributes to HIV prevalence, this is due to non-sterile technique, FGM risks are well-known, despite poor FGM evidence, but it can fairly be proposed that FGM may be associated with an increase in HIV prevalence in Sub-Saharan Africa. However, Brady (1999) found that FGM also plays a significant role in the transmission, by various methods, of HIV infection.

Based on education and perception, 56.25% with education above secondary level had positive community perception about biomedical method of HIV prevention, whereas those with no education only 3.13% had similar perception, People who are educated were more aware of the prevention methods as opposed to those who were less educated. Consistent with the findings, a survey has shown that many participants have firmly and

marginally accepted that advice on the correct use of condoms for HIV and STD prevention should be given in public high schools,(Marshak, et al 2013;Torabi et al 2005).

The implication is that those with more knowledge have a positive community perception towards the type of prevention method; this means one is able to evaluate benefit of prevention methods based on the knowledge they have about the types and build a positive perception towards the prevention methods, which HBM model highlights as perceived benefit.

Based on marriage as the confounding variable in table 5, most married people did not adhere to biomedical, behavioral and structural method of HIV prevention which is unlike separated people who adhere to all methods of HIV prevention. This is because the separated understand their vulnerability and thus evaluate the consequences of getting the HIV infection which is termed as perceived power in the PBT theory. This indication proved a negative perception towards the prevention method by married couples, supporting the above finding, a study by, (Ankomah, 2013) It was reported that many pairs were conscious of HIV prevention methods although most pairs did not follow HIV prevention, due to the fact that pairs do not find HIV prevention measures the rate of infidelity, low condominium use and poor HIV screening between pairs, themselves as vulnerable to contacting the infection, termed as perceived susceptibility in the HBM model. Couples also believe that they have the ability to determine their actions based on the ease or difficulty of the behavior in question thus do not perceive themselves as culprits of sexual risky behavior that can lead to infection, termed as behavior control in the PBT theory. Consistently and (Zuma, 2004) The results show that marriage plays an important role in stopping HIV transmission, since it was observed that married women had low prevalence of HIV in contrast to married women. Chepngeno et al, (2003) also indicated that spouses do not accept the use of contraceptives because husbands and women have generally assumed that this method of marriage is unable to be used. In accordance with the study, HIV incidence was higher for unmarried people (Idemudia et al, 2016; Zuma et al. 2004) than for married people.

On economic status as the confounding variable in table 6, those earning less than 10,000-55,000 had a negative perception of 28.26% compared to 22.03% who had a positive perception. Where those that earned between 10,000-55,000 had a positive perception of 54.24% and a negative perception of 52.72%, those that earned between 56,000-75,000 had also a high positive perception towards the prevention method, the results showed that those with a low social economy status have a positive perception of the prevention process, as opposed to those with a low social economic status. Certain results suggest a significant negative link among prevalent HIV infection and earnings was observed (Bunyasi et al., 2017), Igulot et al. (2018) in Uganda, and the results of a study identified no substantial relationship between the income status and HIV prevalence, for both. Inconsistent with this employment status work showed no significant association with HIV infection (Oladosu et al, 2014) This study results showed associations between the level social economic status and perception towards the prevention methods, unlike several other studies, it's because this study targeted women and majority were of low social economic power. People in low social economic status easily engage in risky sexual behavior to earn a living.

In table 7 above shows most people employed for wages in Embakasi South adhered to biomedical method of HIV prevention, which is showed by 57.38% compared to 25% who did not adhere and attracted a higher positive community perception of 50% compared to 34.04% negative community perception. Positive perception was high among those employed, because they have a source of income thus less likely to engage in sexual risky behavior. In support of the above findings, a study by Lowani et al, (2016) indicated, unemployment may lead to risky sexual behavior, when young people search for the means to survive harsh economic circumstances, risky behavior may lead to an increase in HIV prevalence. Studies by (Perker, 2011; Collins and Rau, 2000; Cohen, 1996) Their findings are aligned with the results above, which suggested that the lack of decent employment prospects and a social support network causes youth susceptibility to HIV as many young graduates do not become involved in the labor market in Botswana and therefore are forced to engage in risky sexual activity, which may contribute to one HIV virus to become alive (Jefferies et al. 2006) have observed that the incidence of HIV among young people is

increasing with unemployment and poverty. Botswana and are therefore forced to engage in risky sexual behavior, which could lead to one contracting HIV virus in order to earn a living. (Jefferies et al, 2006) also found that unemployment and poverty are increasing the prevalence of HIV among young people.

In this study based on religion, the community has 96.88% positive perception for biomedical method of HIV prevention and 85.11% negative perception on the same method. This implies majority of Christians had a positive perception on the prevention method, this can be attributed by the Christian values in the church where morality is handled hence a positive perception-are not able to decide the behavior based on the ease and the difficult. A study suggested that young people in church should interpret their HIV treatment from both faith-oriented and secular-oriented perspectives to endorse this conclusion, while first suggesting faith-oriented principles focused on church guidance and potential emphasis. The young people in the church have accepted the importance of learning the truth on HIV and AIDS through their secular-oriented interpretation of HIV treatment, recognizing social standards that increase risk of HIV and educating prevention. (Nkomazana et al, 2014). In another study, Christian denominations were famously discovered over the years, the commonest churches were Spiritualist, for men, Traditional religion was not popular while no religion became more popular, at the follow-up (2003–2005), the spread of HIV had diminished in all religious groups (Gregson et al 2014).

In this analysis, people with internal control locus had a negative perception of 25.53 percent, while positive perception of 24.68 percent, those with external control locus had a negative perception of 74.47 percent, and 75.32 percent had a positive perception, which had no statistical significance. In support of the above results Noah (2003) investigating the effect of auto-efficacy and locus control on the sexual behavior of female college students in Nebrasa, Omaha, and the findings showed that there was a negative and negligible association between locus control and high auto-efficiency, no auto-efficacy and responsible behavior.

Further support from Leone and Burns (2000) found that, although the effectiveness of the action may be presented by individuals, the results of the action may not be controlled, in addition, the conception that the degrees of self-efficacy do not depend on an external or internal locus of control. According to PBT, one chooses the type of prevention according to the ease or difficulty they perceive in taking the prevention method to avoid HIV infection, this shows an internal locus of control. How one perceives the benefit of a prevention method also determines which method they adhere to. This means biomedical method is perceived positively and easy to use than behavioral and structural method.

# 5.4.2 The Relationship between Type of Prevention Methods and Adherence to Prevention Methods

According to this analysis, community adherence to the type of HIV prevention method used was negative for individuals using behavioral and structural methods compared to those using biomedical method. This means that, biomedical methods has been more adhered to than structural and behavioral method, those who use biomedical have a positive perception, and this because HIV prevention methods have gained popularity slowly especially behavioral and structural methods, thus the sample population was quite unaware of the HIV prevention methods and their benefits so based on perceived benefits of biomedical which is readily available and more aware of it, is gaining the highest adherence, inconsistently Ayuku et al (2007) aiming at documenting the underlying social cleansing rituals and to evaluate its effect on HIV prevention approaches.

The findings indicated that the ritual encourages unprotected sex with multiple partners. This implies low adherence on condom use which is a biomedical method, the community had a negative perception towards condom use because the community encourages unprotected sex, and the ritual had a negative perception towards the prevention method. Inconsistently a study by Onyangoet, al (2014) The findings show that widows must balance their risk of being HIV-borne with meeting cultural expectations and that sexual abstinence contradicts the cultural expectations of widows, whereas the use of condoms in prescribed cultural sexual practices, frequently outside the ability of the widow to negotiate, is considered inappropriate. Greene et al, (2008), Unlike this research, the

underlying factors of unchanging sexual behavior also have their origins firmly in the mainstream community-backed values. In this research the bio-medical approach has more than been followed by the structural method since the sample population consisted of female children and in recent past people have attended clinics and follow up on therapy. Their approach allows women to have several sexually active partner settings in which contraceptive use is discouraged and little HIV testing is done.

Women have chosen to take up the test and HIV counselling services since they have evaluated the severity of the disease thus take measures to prevent themselves from contacting the disease. And protecting the unborn According to the HBM model, perceived severity means that one has evaluated the severity of the condition and its consequences thus decides to adhere to the prevention method to avoid the negative consequences. According to PBT, one who has perceived power over behavior is able to evaluate the severity of the consequences of a given behavior and thus take measures to avoid getting infected with the virus. The effect was however, not statistically significant as indicated by the p-values that are greater than the 5% level of significance. Specifically, community adherence to the type of HIV prevention method was 20.53% less among individuals using the behavioral method of prevention compared to those using biomedical method, behavioral method was adhered less by this sample population since these women are of child bearing age hence abstinence may not apply, Similarly, community adherence was 2.984 % greater among individuals using structural method of prevention compared to those using biomedical method. This is because women of child bearing age attend clinics and seminar in the clinics for antenatal and health talks must be attended in the clinic.

Out of the total respondents for biomedical method, 47.73%, with education above secondary school level did not adhere to biomedical method of HIV prevention, this is because of perceived behavioral control, a person's perception of the ease or difficulty in performing the behavior, and 2.27% had no education did not adhere to the same HIV prevention method, this group of have no information nor understanding on this prevention methods, For behavioral method of HIV prevention 63.49% with education above secondary level didn't adhere to this method and 3.1% with no education not adhering to

the same method, consistent with the above finding a study indicated that the overall correct knowledge of Ethiopian women about MTCT and PMTC, was very low (34.9%) (Tang et al 2017). As shown in table 5, on marriage as the confounding variable, most married people did not adhere to biomedical, behavioral and structural method of HIV prevention indicated by 50%, 40% and 50.82% respectively with most separated people adhering to all methods of HIV prevention, Supporting the above findings, (Chirwa et al 2011) suggested that most pairs are aware of solutions to HIV prevention and that both parties are promoting HIV prevention interaction between partners. Depending on the knowledge, most spouses did not adopt the HIV preventive protocol, and the general belief that husbands and women cannot use the device in marital marriages was that couples did not favor the use of condoms. Chepngeno et al, (2003) said that couples did not like the use of condoms.

Based on economic status as the confounding variable in table 6, 50% of respondents earning less than10,000-55,000 did not adhere to biomedical method of HIV prevention compared to 54.24% who adhered to the same method, the indication is that no much statistical significance on those who adhered and those not adhered, a study consistent to this finding indicates that inconsistent condom use among the sample of middle class black women, (Heath, 2016).

In table 7 employment as a confounding variable, shows most people employed for wages in Embakasi South adhered to biomedical method of HIV prevention, which is showed by 57.38% compared to 25% who did not adhere and attracted a higher positive community perception of 50% compared to 34.04% negative community perception. This study showed lack of awareness on behavioral methods since structural methods was better adhered to by employed people, in Embakasi sub county, majority of those employed work in industries and have access to medical intervention through the medical covers, thus have an opportunity to get a health talks in the clinics. In support of a report by Oliveira et al. (2015), it was observed that the HIV / AIDS profile for women was defined by inadequate training, job loss and low skilled jobs. Furthermore, Hammarstrom (1997) added that there was a positive correlation between the duration of unemployment and increasing risk

taking over the era, but there was a negative correlation for women. He added that the length of unemployment had a positive correlation and that there had been an increase in risk over the time period. Unemployment therefore means that adolescents ' sexual risk is increased. Baynes et al (2011) have also indicated that if you are unemployed or poor, you are more vulnerable to HIV / AIDS, and the time it takes for a non-poor person who has a disease to become unemployed and poverty-stricken due to the infection is shortest.

In religion most Muslims adhered to HIV prevention methods compared to those who did not adhere unlike Christian whose population of adherence and non-adherence has small variation. 93.18% of Christian did not adhere to biomedical method of HIV prevention, while 90.48% adhered to the same method. Christians have different denominations with different doctrines, example Catholics do not adhere to condoms, while Protestants have no issue with condom use, the community has 96.88% positive perception, for biomedical method of HIV prevention and 85.11% negative perception on the same method, majority of this women are married and so condom use not so popular. Similar to this finding, the awareness of the dangers of HIV / AIDS, perceptions of risk and preventive condoms generally support assumptions that gender divide would be much lower, and the disadvantage of women would be greater in healing Churches than in traditional Churches. In response to both political messages outside the Churches and information related to HIV / AIDS circulating inside congregations, no discrepancies were found (Agadjanian 2005).

Inconsistent with this study, not everyone who publicly adheres to religious doctrines does so in their private, where most sexual acts are arranged and performed (Ayotunde 2009). Majority of the respondents had internal locus of control, they decide on the type of HIV prevention method to use. Out of the respondents on biomedical method of HIV prevention, 72.73% determine the type of method to use and did not adhere to the biomedical method of HIV prevention. The community had positive perception of 75.32% on people who decided to adhere to biomedical method of HIV prevention. The women had the power to determine whether to use prevention method or not, they also evaluated the benefits of using this prevention methods, in support studies by Heather Cecil and Steven Pinkton (2000) Heather Cecil and Steven Pinkton (2000) point to a negative, insignificant correlation of control locus and high self-efficacy, a correlationship of self-efficacy and responsible conduct, and a link between control locus and responsible sexual conduct between college women. Additional support from Leone and Burns (2000) find that although individuals can face the usefulness of conducting an intervention, they may not feel a sense of power over the outcomes of that operation; in addition, they may have ideas that self-efficacy levels are not based on internal or external locus control.

Incompatible with the findings, people with an external control locus are shown to be more vulnerable to HIV / AIDS than entities with an externally controlled locus. This research may also have the benefit that (Wallston 1981; Kartzk 1991) those who have internal control locus are conscious of their own wellbeing in contrast to those who have external control locus that believe that destiny and chance dictates health, their claim may be confirmed by (Mutua et al 2016), but this analysis has showed that the bulk of HIV / AIDS positives have an individual control locus. (Gwandure2008; Bates RC et al 1992), also had a similar finding that individuals with external control loci, their health was less careful and cautious, while the interns were cautious and took deliberate steps to protect their health.

# **5.4.3** The Relationship between Community Perception and Adherence with Regard to Various Types of Prevention Method

Objective three sought to establish whether the community perception on the type of prevention method has a relationship to the adherence to particular prevention method in Embakasi south.

The findings indicated that there is association between perception and adherence though the association seemed weak, This is consistent with findings on cognition, behavioral changes, and connections between information, perception of threats, and behavioral changes (Hosain et al, 2006) and is slightly different from other research the threat to the local community's health was lower in this research than those who perceived a risk from a study among pregnant women conducted in 13 Indian states with ever-married women and strong positive associations were observed in a low degree of awareness, knowledge and condom use among the AIDS population. Freitas et al (2008), suggests faith and belief that use of condoms undermines passion, restricted safer sex agreements and married partners ' experience (Person S 2015; Chimbiri 2007), other similar findings show a good level of HIV / AIDS awareness and prevention but misconceptions remain, the disparity between awareness and disposition and information and behavior / practice persisted. Socio-cultural and religious misunderstandings concerning the disease and those living with HIV / AIDS (PLHA) predominate over medical facts (Singh et al., 2016). In terms of employment as a confounding factor, in line with the above, Malema's study (2012) The explanation is that those jobs have had more checks on HIV than the working and other professions, and people are trustful.) Starting the skilled legislative / managerial staff and workers, professional/ technicians have less often used condoms than people without work, can be contrary to standards. (Taffa et al, 2014; Kadtane et al.) Further found out a similar finding on socioeconomic status which indicates, people in the upper social economic status reported high numbers of HIV testing compared to people of low social economic status, there was also a clear awareness of direct HIV danger among the vulnerable and a significant decline in that knowledge among the upper social economies.

The study concluded that the elderly is further vulnerable due to lack of access to HIV or HIV / AIDS care, such as HIV screening. The federal HIV / AIDS approach is urgently needed to improve programs that focus more on the vulnerable as well as women. This study also found that, contrary to this Heather Cecil and Steven Pinkton (2000), many women in this field did not rely on their husbands to choose a preventive strategy for them but rather had the ability to choose for themselves on the basis of perceived power, the results show that there was a negative non-significant connection between a control locus and high self-efficacy, no link between self-efficacy and responsible action, and no link between the control locus and appropriate gender conduct between women students in college. More guidance from Leone and Burns (2000) showed that although people can show the performance of the behavior, they may not feel any sense of command over its outcomes, as well as the idea that levels of self-output are not dependent on the locus of internal or external influence.

The study had limitations that deserve mention, the study collected data from only one Sub County, and these findings may not translate to all the communities. However the results might still be widely applicable in helping the communities in HIV prevention, a suggestion on future work from a greater geographical area, in addition, the researcher's sample size was 380 considering the target area, most respondents were not easily found in their residents since most of them are casual workers and always on the move, finding the sample size was a challenge, the researcher had to get research assistant based in the community who understood their working patterns so as to get the complete data.

# **5.5 Conclusion**

Women in Embakasi-south have a significant impact on public understanding and how we implement the preventive process. Community perception plays a large part in the success of every intervention which shows that it determines the use of any intervention in the community and depends on the perception that people perceive the services and affordability of the decision to use available health services.

The study concludes that there is a relationship between type of prevention method, community perception and adherence to the prevention method among women in Embakasi-south. It is also seen that biomedical methods are more adhered to and perceived easy to use. Structural method and behavioral methods are less adhered to and perceived negatively.

This study assumes that community perception influence adherence of HIV prevention methods, this means that positive perception towards a type of prevention method shall be adhered well, a negative perception will lead to a non-adherence.

## **5.6 Recommendations**

Both governmental and non-governmental organizations should endeavor to improve their methods of persuading the general population especially the youths and women into adopting the most effective methods.

Bodies concerned with HIV prevention, should allocate funds appropriately from an informed point of view in as far as HIV prevention is concerned.

Scholars should purpose to come up with design on Health intervention models about HIV prevention.

Policy maker in the health sector should come up with policies that factor in community perception in as far as HIV prevention is concerned.

# **5.7 Areas of Further Studies**

- i. Future work to be done from a greater geographical area.
- ii. Further studies on the community perception towards HIV prevention methods involving the general public (Men, women and youths).

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### APPENDICES

### **APPENDIX I: QUESTIONNAIRE**

Dear respondent. The researcher is a student of psychology at University of Nairobi and the research is for academic purpose only and will be treated with outmost confidentiality. The research. This study will seek to evaluate the community's perception towards types of prevention methods in regard to their adherence to different type of HIV prevention methods among women of child bearing age in Embakasi South. Kindly provide correct and useful data and fill appropriately as logically guided.

## SECTION A: GENERAL INFORMATION

- 1. Indicate by ticking your age bracket Indicate by ticking your age bracket
  - a. 15-24 years ()
  - b. 25-34 years ()
  - c. 35-44 Years ()
  - d. 44+ years ()
- 2. Kindly indicate your highest level of educational qualification (tick)
  - a. No education ()
  - b. Primary ()
  - c. Secondary ( )
  - d. Others ()
- 3. Indicate your marital status
  - a. Married ()
  - b. Single ()
  - c. Separated ()
  - d. Others ()
- 4. Kindly indicate your Family Social economic status:
  - a. Less than 10,000 ()
  - b. 10,000-55000 ( )
  - c. 56000-75000 ( )
  - d. 76000 and above ()

- 5. Indicate your employment status;
  - a. Employed for wages ()
  - b. Casuals ( )
  - c. Self-employed ()
  - d. Others ()
- 6. Kindly specify your religion.
  - a. Christian ()
  - b. Muslim ( )
  - c. Hindu ()
  - d. Others ()
- 7. I determine the kind of prevention method to use.
- 8. Other people determine the kind of prevention method to use.

## SECTION B: PERCEPTION TOWARDS THE PREVENTION METHODS

	ITEM	Strongly	Disagree	Neutral	Agree	Strongly
		agree				disagree
1	Do you support HIV seminars?					
2	Do you think condom promotion					
	is essential					
3	Do you think community					
	mobilization on HIV testing is					
	important?					
4	Stigma discrimination is not ok.					
5	Do you support intensive					
	behavioral counselling?					
6	Do you believe in having one					
	sexual partner					
7	Is HIV counselling and testing					
	important.					
8	Do you think abstinence is					
	practical					
9	Do you think condom use is					
	practical					
10	Do you think treatment for HIV					
	as prevention works					
11	Do you think PMTCT is practical					
12	Do you think PEP and PrEP are					
	effective prevention methods?					

# SECTION C: ADHERENCE TOWARDS PREVENTION METHODS.

	ITEM	Always	Sometimes	Often	Never	Not applicable
1	Do you attend any of the HIV seminars					
2	Do you ever engage in community mobilization activities/support?					
3	Do you advocate/use condoms					
4	Do you ever participate in curbing HIV stigma					
5	Do you have one sexual partner					
6	Have you ever gone for HIV testing and counselling.					
7	Have you ever gone for intensive behavioral counseling					
8	Do you ever abstain when necessary					
9	Do you ever use condoms?					
10	Have you ever used/heard about PEP and PrEP medications.					
11	Have you ever used ARVs as Treatment as prevention					
12	Have you ever engaged in PMTCT before					

## **APPENDIX II: FOCUSED GROUP DISCUSSION GUIDE**

- 1. Do you support HIV seminars?
- 2. Do you think condom promotion is essential
- 3. Do you think community mobilization on HIV testing is important?
- 4. Stigma discrimination is not ok.
- 5. Do you support intensive behavioral counselling?
- 6. Do you believe in having one sexual partner
- 7. Is HIV counselling and testing important.
- 8. Do you think abstinence is practical
- 9. Do you think condom use is practical
- 10. Do you think treatment for HIV as prevention works
- 11. Do you think PMTCT is practical
- 12. Do you think PEP and PrEP are effective prevention methods?
- 13. Do you attend any of the HIV seminars
- 14. Do you ever engage in community mobilization activities/support?
- 15. Do you advocate/use condoms
- 16. Do you ever participate in curbing HIV stigma
- 17. Do you have one sexual partner
- 18. Have you ever gone for HIV testing and counselling.
- 19. Have you ever gone for intensive behavioral counseling
- 20. Do you ever abstain when necessary
- 21. Do you ever use condoms?
- 22. Have you ever used/heard about PEP and PrEP medications.
- 23. Have you ever used ARVs AS Treatment as prevention
- 24. Have you ever engaged in PMTCT before

		380						
APPENDIX III: SAMPLE FRAME								
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MARITAL STATUS (M=Married NM=Non-Married.)								
M 38 NM 38	M 38 NM	38 M 38 NM	M 38 M 38 NM 38	M 38 NM 38	3			
RELIGION (C=Christians M=Muslims)								
C         M         C         M           19         19         19         19	C M C 19 19 M	M C M I 19 19 19	C M C M 19 19 19 19	C M C 19 19 19	M C M 19 19 19			
EMPLOYMENT STATUS (E=Employed, NE=Not Employed.								
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## APPENDIX IV: LETTER FROM UNIVERSITY TO CARRY OUT RESEARCH



#### UNIVERSITY OF NAIROBI FACULTY OF ARTS DEPARTMENT OF PSYCHOLOGY

Telegrams: Varsity Nairobi Telephone: 3318262 ext.28439 Telex: 22095 P.O. BOX 30197 NAIROBI KENYA

14/06/2019,

Embakasi South Sub-County Nairobi

RE: MAUREEN SAMBA MUSEVE - C50/5824/2017

The above named is a student in the Department of Psychology undertaking a Masters degree in Psychology at the University of Nairobi. She is doing a project on "The relationship between type of HIV prevention method community perception and adherence to HIV prevention methods among women aged 18-49 in Embakasi South County." The requirement of this course is that the student must conduct research project in the field and write a Project.

In order to fulfill this requirement, I am introducing to you the above named student for you to kindly grant him permission to collect data for him Masters Degree Project.

Yours Sincerely OF PSYCROL

Dr. Luke Odiemo Chairman Department of P sychology Rait

# APPENDIX V: LETTER TO CARRY OUT RESEARCH FROM MINISTRY OF EDUCATION



## APPENDIX VI: LETTER FROM NACOSTI TO CARRY OUT RESEARCH



### NATIONAL COMMISSION FOR SCIENCE, **TECHNOLOGY AND INNOVATION**

Telephone:+254-20-2213471, 2241349,3310571,2219420 Fax:+254-20-318245,318249 Email: dg@nacosti.go.ke Website : www.nacosti.go.ke When replying please quote

NACOSTI, Upper Kabete Off Waiyaki Way P.O. Box 30623-00100 NAIROBI-KENYA

Ref. No. NACOSTI/P/19/24013/31718

Date: 24<sup>th</sup> July, 2019.

Mourine Samba Museve University of Nairobi P.O Box 30197-00100 NAIROBI.

### **RE: RESEARCH AUTHORIZATION**

Following your application for authority to carry out research on "The relationship between type of HIV prevention method community perception and adherence to HIV prevention methods among women aged 18 to 49 in Embakasi South Nairobi County." I am pleased to inform you that you have been authorized to undertake research in Nairobi County for the period ending 23rd July, 2020.

You are advised to report to the County Commissioner, and the County Director of Education, Nairobi County before embarking on the research project.

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit a copy of the final research report to the Commission within one year of completion. The soft copy of the same should be submitted through the Online Research Information System.

#### Ralens

GODFREY P. KALERWA., MSc, MBA, MKIM. FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner Nairobi County.

The County Director of Education Nairobi County.

National Commission for Science, Technology and Innovation Is (SO900):2008 Certified

COUNTY COMMISSIONEL

NAIROBI COUNTY

NBI

## APPENDIX VII: PERMIT FROM NACOSTI





## **APPENDIX VIII: MAP OF EMBAKASI**