Factors associated with depression among male sex workers seeking HIV infection prevention, treatment and care services: the case of Coast HIV Resource Centre-Mombasa, Kenya

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Declaration

I hereby declare that this research dissertation is my original work and to the best of my knowledge has not been presented to any other academic institution for any purpose.

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Supervisors' approval

This research dissertation has been submitted for evaluation for research and examination with our approval as University Supervisors.

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Acronyms and Abbreviations

AIDS	Acquired Immunodeficiency Syndrome
ART	Antiretroviral Therapy
CASCO	County AIDS and STIs Coordinator
CDC	Centre for Disease Control and Prevention
DIC	Drop-in Centre
FSW	Female Sex Workers
GID	Gender Identity Disorder
GFATM	Global Fund to Fight AIDS, Tuberculosis and malaria
HIV	Human Immunodeficiency Virus
IEC	Information Education and Communication
IHAA	International HIV/AIDS Alliance
LGBTI	Lesbian, Gay, Bisexual, Transgender and Intersex
MSW	Male Sex Workers
PEPFAR	Presidents Emergency Plan for AIDS Relief
PWID	People Who Inject Drugs
PWUD	People Who Use Drugs
SOGI	Sexual Orientation and Gender Identities
STI	Sexually Transmitted Infection
SMS	Short Messages Service
UNAIDS	Joint United Nations Programme on HIV and AIDS
UNDP	United Nations Development Programme
UNODC	United Nations Office on Drugs and Crime
USAID	United States Agency for International Development
WHO	World Health Organization

Definition of terms

Male Sex Worker – refers to a man who sells sex to other men for financial purposes.

Men who have sex with Men – refers to men who have sex with other men.

Sexual orientation – is the term used to describe the set of emotional, physical and romantic feelings an individual has towards other people of the same sex or of the opposite sex.

Sexual behaviour – is the manner in which people express their sexuality. Examples of this behaviour can include physical or emotional intimacy and sexual contact.

Gay man – is a man who has romantic, sexual, and/or intimate feelings for other men. Gay is generally a more commonly used term for homosexual.

Homosexuality – refers to the sexual orientation in which an individual has romantic or sexual feelings and actions towards members of the same sex.

Intersex people – this alludes to people born with a blend of both male and female regenerative organs and chromosomes.

Gender identity – refers to a person's view of self. While most people's gender matches their biological sex, someone may be born biologically male, yet have a female gender identity.

Depression – might be portrayed as a psychological state described by sentiments of pity, forlornness, low confidence and remorse which might be combined with withdrawal from social contact and sleep deprivation.

Heterosexuality – refers to the sexual orientation in which an individual has romantic or sexual feelings towards members of the opposite sex.

Bisexuality – refers to the sexual orientation in which an individual has romantic and/or sexual feelings towards both males and females.

Coming out – is a figure of speech which refers to the process of uncovering one's sexual orientation to other people.

Serodiscordant relationship – refers to a romantic or sexual relationship between two people of differing Human Immunodeficiency Virus (HIV) statuses.

Most-at-Risk Populations – refers to those most likely to be exposed to HIV and most likely to become infected. Risk is defined as the probability or likelihood that a person may become infected with HIV. Certain behaviours create, increase, and perpetuate risk. Most-at-risk populations are most often also vulnerable due to social and institutional rejection and discrimination. Depending on the context, they could include intravenous drug users, sex workers, men who have sex with men, transgender people, prisoners and others.

Abstract

As more patients infected with Human Immunodeficiency Virus (HIV) in Kenya commence antiretroviral therapy, healthcare workers have made efforts to reach out to populations that are both hidden and more prone to acquiring HIV. One of the aforementioned populations is Male Sex Workers (MSW). This study's aim was to look into the association between depression and utilisation of HIV infection prevention, treatment and care services in the midst of MSW, who exclusively sell sex to men. This study was conducted among male sex workers at the Coast HIV Resource Centre in Mombasa County.

This study was governed by four objectives: to describe the socio-demographic characteristics of MSW at the Coast HIV Resource Centre, to determine the depression status of MSW at the Coast HIV Resource Centre, to describe the utilisation of healthcare services among MSW at the Coast HIV Resource Centre in Mombasa and to determine the relationship between depression status and utilisation of HIV infection prevention, treatment and care services at the Coast HIV Resource Centre in Mombasa.

This was a cross-sectional study employing both qualitative and quantitative methods and had 281 respondents. Quantitative data were collected using structured researcher administered questionnaires and data entry done using *Epi data 3.0* and exported into *SPSS 25.0* for further analysis and presented in tables, pie charts, bar graphs, and prose form. Qualitative data were analysed using NVivo version 12 to categorise and organise information, examine relationships in the data by combining the analysis with linking, searching and modelling.

The study observed that most of the respondents were aged 20-24 and the prevalence of clinically significant depression was at 25.4%. (No depression56, Mild depression 118, moderate depression 45, severe depression 14).More than half of the respondents (52.8%) mentioned that

health provider attitudes hinder utilisation of HIV infection prevention, treatment and care. This study has found out that fear of stigma, violence and discrimination play a role in preventing male sex workers from accessing health services. Societal stigma may also have a hand discouraging the use of health services due to incidences such as verbal harassment, physical assault and blackmail. The study observed that the respondents experienced stigma from healthcare providers, reinforcing the necessity of mitigation and intervention as regards stigma.

Though the prevalence of depression among the respondents was low, the study recommends integration of mental health services to be included in the existing prevention, care and treatment services. This will benefit both their sexual and mental health. This study also recommends the sensitization and training of both government and private healthcare providers on the appropriate ways of providing health services to the MSW population. It further recommends training for police and prison officers who are likely to come in contact with these populations when they are in their custody. This training will be a critical step in not only preventing new infections, but also ensuring that those who are infected with HIV have access to the appropriate care and treatment even when in confinement.

CHAPTER ONE: INTRODUCTION

Depression is a primary cause of disability and is the fourth leading contributor to the global burden of disease [30]. In a study on effects of depression on adherence to highly active antiretroviral therapy among HIV-infected MSW patients in the United States of America, 42% had a diagnosis of depression at least once during their outpatient visit [25]. Adherence is an important component of HIV treatment which is compromised by depression.

According to the NASCOP scaling up key populations programming report in Kenya 2014, there are three significant modes of HIV transmission namely; heterosexual transmission, vertical transmission (mother to child transmission), blood transfusion and other blood products [3]. The same report goes on to add that there is new evidence that the MSW population is a community that needs to be acknowledged in Kenya as being a key contributing population to the rise of new HIV infections in Kenya. The data around MSW in Kenya remain scanty and therefore, this study aimed to shed more light on this population in respect to accessing HIV infection prevention, treatment and healthcare assistance.

Vulnerable and most-at-risk populaces are individuals that are most likely to be infected by HIV and who have a major influence on how HIV spreads. These are persons that are vulnerable to being infected or affected by HIV and whose inclusion is imperative for an operative and sustainable response to HIV [1].

According to the Kenya AIDS Progress Report (2016), the estimated annual rate of new infections amongst MSW increased by 35%. Data indicate that significant proportions of MSW in Kenya are not exclusively homosexual, and some may even be married to women [2].

Although enumeration studies and prevalence studies in Kenya have been done, data on the psychosocial health outcomes are limited. Susceptibility to HIV is an outcome of a combination of factors, comprising personal statuses for instance age, fiscal and social versatility, education and sexual orientation. Exposed populations involve individuals that access less legal, social or policy protection, which limit their capability to access or use HIV infection prevention services.

Male sex workers are particularly susceptible to violence, social and public discrimination, all of which play a role in hindering their access to healthcare. Criminalisation of the actions of these groups acts as significant hindrances in gaining access to HIV treatment services such as ARVs, prevention tools such as condoms and water based lubricants and other well-being programmes such as peer education, Information, Education and Communication materials and counselling services .[1] Laws and social traditions often overlook victimization of the populaces who are most at risk of HIV, botching endeavours to convey life-saving and well-being interventions to the affected populations as crucial partners in the HIV response.

1.2: Problem statement/ rationale of the study

The incapability of MSW to disclose their sexual behaviour to healthcare providers has been linked with instances of misdiagnosis, deferred diagnosis, and belated treatment, prompting poor health and a greater risk of transmitting HIV and other sexually transmitted infections to their sexual partners [21]. Adherence is an important component of HIV treatment which is compromised by depression.

Criminalisation of homosexuality, high levels of stigma, segregation and homophobia within healthcare institutions has also led to poor health seeking behaviour amongst MSW who ultimately put their partners (in some cases both men and women) at risk of HIV infection. In

cultural environments where criminalisation of homosexuality is common, MSW populations have been victims of blackmail, extortion, violence and discrimination. For survival purposes, MSW populations are compelled to conceal their sexual behaviour from healthcare providers, families, employers and other regular acquaintances so as to safeguard themselves and their livelihoods.

A key populations mapping study conducted by NASCOP in 2016 indicated that there were 13,019 MSW in Kenya, all who interacted with the general population. This showed that there was an increased risk of HIV transmission from MSW to the general population [2]. Data from the Kenya Modes of Transmission study (2008) indicated that significant proportions of MSW in Kenya are not exclusively homosexual, and some may even be married to women. Men in this study also reported having female spouses and female sexual partners.

A study conducted in Kenya between 2004 and 2008 in both Nairobi and Mombasa [3] revealed that MSW who exclusively sell sex to other men engage in unprotected sex, have multiple partners and have low-risk perception. [3] This study was also echoed by the NASCOP 2016 report which reported that very few MSW were aware that unprotected anal sex was highly risky. It also reported that MSW were not able to access prevention, counselling and care appropriate to their needs at clinics [2]. Information from the *Global Men's Health and Rights Study* in 2012 indicated that the negative demand of MSW to acquire lubricants, condoms, HIV testing, and HIV treatment was linked to homophobia from the community and health provider humiliation which were altogether connected with decreased access to services. On the other hand, community commitment and support with health service provider, mainly provided through MSW friendly centres, were each altogether connected with expanded access to services.

The first gap that this study sought to address is a knowledge gap in identifying whether there is an association between depression and utilization of HIV prevention, treatment and care services. Conducting this study reduced this gap by identifying these factors and through interaction with the MSW and key informants, received suggestions on how to reduce the hindrances to access to the HIV care and treatment they need.

The second gap that this study sought to address is the HIV prevention gap. It was envisaged that the findings from this study would inform HIV prevention programmes targeting MSW. If the MSW are able to protect themselves from acquiring HIV, then they would consequently protect their sexual partners.

The third gap that this study sought to address is the behaviour change gap. There is poor health seeking behaviour among MSW in Kenya. According to NASCOP 2016, only a small percentage of MSW (17% in Nairobi and 28% in Kisumu) had an interaction with a peer-educator in the year before the study [2]. This study was important in identifying the hindrances to health seeking and the findings would inform the development of programmes targeting healthcare workers on how to provide appropriate services to MSW.

The study findings will help inform policy makers at both the County and National levels to develop policies and programmes that will improve the acquisition of services to the MSW with regards to HIV prevention, care and treatment.

1.3: Research Questions

The study's goal was to answer the following research questions:

1. What is the prevalence and severity of depression amongst MSW visiting the Coast HIV Resource Centre?

2. Apart from having a safe space to meet and socialize, do MSW visiting the Coast HIV Resource Centre utilise the available HIV infection prevention, treatment and care services?

3. What is the association between depression and utilisation of HIV infection prevention, treatment and care services amongst MSW visiting the Coast HIV Resource Centre?

1.4: Study objective

1.4.1: General objective

The purpose of this study was to look into the ramifications of depression on utilisation of HIV infection prevention, treatment and care services amongst MSW who exclusively sell sex to men.

1.4.2: Specific objectives

The specific objectives were to:

1. Describe the socio-demographic characteristics of MSW at the Coast HIV Resource Centre.

2. Determine depression status of MSW at the Coast HIV Resource Centre

3. Describe the utilization of HIV prevention, treatment and care services among MSW at the Coast HIV Resource Centre in Mombasa.

4. Determine the relationship between depression status and utilisation of HIV infection prevention, treatment and care services at the Coast HIV Resource Centre in Mombasa.

1.5: Significance of the study

The findings of this study found no association between depression and utilization of services. However, this study has made some recommendations on how HIV prevention, care and treatment programmes can reach out to this population to prevent new infections and for those who are already infected, seek early treatment and care, which results in reduced infection and re-infection.

This study has also provided insights on health provider attitudes that hinder access to HIV prevention, care and treatment. The findings of the study are useful for programming that targets MSW and have opened the door for additional research in the area.

1.6: Assumptions of the study

This study was stood upon the supposition that the respondents' views would be representative of the population and that their number was adequate to draw conclusions on the effects of depression on utilisation of HIV infection prevention services in Mombasa County.

Secondly, the study assumed that the respondents would give honest, accurate and reliable information about their depression status and utilisation of health services as this study sought to report on findings on the same.

1.7: Scope of the study

The study population comprised of MSW aged 18 years and above who visit the Coast HIV Resource Centre, key informants who provide health services to MSW drawn from the Ministry

of Health, National AIDS Control Council (NACC) as well as Non-Governmental Organizations (NGO) that have MSW programmes in Mombasa.

Chapter TWO: LITERATURE REVIEW

2.1: Introduction

This section explores scholarly articles on depression in relation to HIV infection prevention among male sex workers. This chapter will review the related studies done in the global setting, regional setting and local setting as well as give a conclusion on how these studies have played a role to inform programmes to develop HIV prevention, care and treatment interventions to reach out to the MSW population. It also contains the conceptual framework which portrays the correlation between the underlying factors, intermediary factors and the outcome.

2.2: Definition of depression

The World Health Organization (WHO) describes depression as a disorder characterised by misery, lack of happiness, sentiments of blame or low self-esteem, irritation, feelings of fatigue and poor focus [4]. In major cases, depression can prompt suicide. When minor, depression can be treated without medication, however, individuals affected by depression are advised to seek professional help.

In most countries in Africa, same sex unions have been banned [5] and the topic of homosexuality is given little recognition and indeed rarely discussed. However, in the past few years, men who have sex with men (MSM) came to be identified as a major contributing factor to the growing HIV epidemic in Africa. Some of the arguments brought forward link this rise to stigma and

discrimination in accessing treatment and care. There have been limited efforts to have appropriate HIV prevention strategies amongst this group, thus high rates have been seen to occur among them [2].

2.2.1: Global Setting

In a study on corresponding factors of sexual violence in Tijuana, Mexico among 201 MSW, 39% of the respondents reported sexual violence in the previous year. It was, furthermore, reported that sexual violence also had a strong link with mental distress [39]. In particular, MSM who've experienced sexual violence are more likely to present with depressive and post-traumatic stress disorder (PTSD) symptoms. Encounters of sexual violence were also found to have a strong correlation with risky sexual behaviours. Among the MSW who participated in the study, those with more sexual partners, those who participated in more unprotected anal sex and those who had sex while intoxicated were more likely to have encountered sexual violence.

In a scenario that highlights that HIV infection risk is not limited to among the MSW only, a study in Mongolia, China reported that 32% of the MSW in the study had also engaged in unprotected heterosexual sex [40]. Furthermore, of these participants, 23.65 % tested positive for syphilis, 6.83 % tested positive for HIV, and 3.17 % tested positive for both. This is corroborated by a study conducted in the UK looking at the link between knowledge, risk behaviors, and testing for sexually transmitted infections among men who have sex with men [43]. In this study, 47.5% reported that in addition to having sex with men, they also had a steady female sexual partner while 1.3% reported having steady male and female partners. This validates previous studies that indicated that the risk of HIV infection can spread beyond the MSW population to the general population.

A study that focused on prevalence and correlation of depressive symptoms among gay, bisexual and other men who have sex with men in England found that majority of the study participants suffered from minority stress [41]. The study also suggested that internalised homophobia may be perpetual for someone who was a sexual minority. This may partly be caused by the relentless worry and mental exertion required to conceal their identity, which is a tremendous load to bear.

In June 2013, Russia received global reproach for endorsing an anti-Lesbian, Gay, Bisexual and Transsexual (LGBT) law which was to avert dissemination of "non-conventional sexual relations" thoughts among minors. The law was an alteration to an existing child protection law and pursued related territorial laws sanctioned since 2006. Human rights observers, LGBT activists, and global media debated its expressed aim of protecting children and customary family ethics, condemning the law for being a de facto criminalisation of LGBT culture. Some also discerned that even exhibiting LGBT symbols in the open was made unlawful by this enactment. Sections of the condemning public correspondingly conveyed a surge in anti-LGBT rhetoric, and abhorrence, a considerable lot of which utilised the law as justification [6].

During the Sochi Winter Olympics recreations held in Russia in February 2014, Vladimir Luxuria, a previous Communist administrator in the Italian parliament who turned into an unmistakable gay rights crusader, was arrested and after that, taken away by police in a vehicle with Olympic markings.

The reason for her arrest was that she was shouting “There is nothing wrong with being gay.” Her spectator ticket to watch the Olympic Games was also taken away [6].

Across the world, the following countries have legalised same sex unions: The Netherlands (2000), Belgium (2003), Canada (2005), South Africa (2006) Norway (2009), Sweden (2009),

Iceland (2010), Portugal (2010), Argentina (2010) Denmark (2012), France (2013), Brazil (2013). There are also countries where same-sex unions are partly legal such as Mexico and the United States [7]. Partly legal in this situation can be illustrated in this manner – some federal states that make up the United States of America such as Texas, Alabama, and Kentucky do not offer state level protection and do not recognize same-sex unions. On the other hand, still in the United States, states such as Washington, Illinois and California all recognize same sex unions and offer state level protection against discrimination.

2.2.2: Regional setting

A study conducted in Cote d'Ivoire to evaluate the pervasiveness of HIV infection and STIs among MSW found that depression could result in internalised stigma and limited self-efficacy, which could lead to impaired physical, social, and emotional health. In particular, depressed MSW may be more prone to use or abuse alcohol. Moreover, depression-related alcohol use showed increased sexual risk behaviors and human immunodeficiency virus [30]. This study went on to state that MSM may be at an advanced risk of depression ancillary to minority stress hypothesized as the societal environmental stressors concomitant with being a sexual minority. Additionally, alcohol use linked with depression has been shown to surge sexual risk behaviors and HIV infection in the study.

Additionally, the study found a HIV prevalence of 50.0% compared to a HIV prevalence rate of 2.9% in the general male population aged 15–49 years while 13% had *Neisseria gonorrhoeae*. In the same study, *N gonorrhoeae* was detected in 8.5% of the rectal swabs and in 5.3% of the urine samples. The rate of *N gonorrhoeae* found in the urine was relatively high. Though this study did not amass exhaustive data on whether the respondents also had female partners, it points to the

occurrence of insertive intercourse which could mean that if the MSW also had female partners, they were at risk of infection.

In a study describing common mental disorders in MSW conducted in Cape Town, South Africa, 50% of the respondents reported considerable alcohol and substance use indicators. Furthermore, all respondents were found to have at least one personality disorder [31].This study whose aim was to examine neuropsychiatric indications and conditions found that MSM are at a greater possibility of developing common mental disorders. Depression, feelings of committing suicide as well as alcohol and drug use maladies were highly predominant Granting the outcomes of this study are not generalizable to the wider MSM population, the high occurrence of depression, feelings of suicide and substance use maladies elucidate the clinical challenges in the delivery of a holistic health service in this population.

Another study detailing experiences, perceptions and readiness of healthcare providers to provide HIV services to male sex workers in Uganda highlighted how some of the healthcare providers were hesitant, saying they would prefer to dishearten men from pursuing any sexual relationship with fellow men, rather than design strategies to help them carry on with their behaviour. They however added that a better strategy would be to encourage them to seek HIV, syphilis, hepatitis testing and help from a psychologist or counselor. A key informant in the same study added that she "*would be quite uncomfortable (providing HIV services to MSW) …"* and had trouble reconciling the reason behind a man going with a man while there were women! Adamant that homosexuality was an imported culture, she went on to say that she would not be at ease either serving an MSW or telling a man not to have sex with another man, when he was already accustomed to it. [35].

These opinions submit that a number of health providers will not feel at ease assisting MSW. Most health providers pointed out that they lacked the specific skills needed to manage MSW in clinical settings, and treated them like any other patients. Some health workers proposed a training for health providers on how to effectively connect with MSW in a healthcare setting, rationalizing that it would help them care for MSW more effectively. This, according to him would require creating an environment that made MSW feel comfortable enough to seek the necessary medical help.

However, not all health providers agreed on reaching out to MSW and creating an environment where they could comfortably access services. One health provider was of the opinion that MSW generally had mental disorders and said that he wouldn't be willing to attend such a training or entertain the possibility of men having sex with men. "… *and some of them taking these drugs like marijuana; you really feel they could maybe benefit from the psychiatric nurses and doctors."*

In a study on depression and Social Stigma among MSM in Lesotho and its implications for HIV and Sexually transmitted infection prevention, the findings revealed that systemic stigma among MSW in the confines of a social context and its correlation with depression can adversely impact quality of life and aptitude to make healthy decisions, including decisions regarding HIV preventive behaviours or initiation and adherence to HIV treatment. Depression was strongly connected to ever experiencing rejection by a friend, hearing judgmental statements about MSW, fear of walking around in public, and blackmail. These findings focus on the necessity to deal with systemic and social discrimination towards MSW, which might lessen the psychosomatic inhibitions to HIV and STI prevention and care [36].

In a study looking at stigma, healthcare access, and HIV Knowledge among MSW in Malawi, Namibia, and Botswana, a strong link was relayed to be present between experiencing discrimination, including healthcare denial and sexuality-based blackmail [37].

Additionally, the study reported that in most cases, healthcare providers did not test for anal human papillomavirus (HPV) infection, among other STIs, among the MSW. Assessment for such infections could only be possible if the healthcare providers were aware that MSW were at specific risk for such infections. Taking into account the evolving proof of amplified threat of HIV transmission linked with high-risk serotypes of HPV, fear of disclosure of same-sex practices is relatable to HIV risk in MSW.

A qualitative study was organized amongst MSW and health service providers in Blantyre, Malawi to comprehend underlying issues related to disclosure and health seeking behaviours. The study revealed fears among both MSW and healthcare providers, regarding access and provision of health services to MSW. Service providers reported fear of negative repercussions as a result of providing services to men in same-sex relations. One of the study respondents recounted a broadcasted event in which a service provider reported a patient to law enforcement for homosexual practices when the patient sought after treatment for an STI in Lilongwe [38].

In a published study in Tanzania examining depression and risk of HIV amidst men who have sex with men, it was revealed that 43% of the respondents in the sample population suffered from depression. In the ensuing analysis, being HIV positive, having many sexual partners and taking part in unprotected receptive anal intercourse with multiple partners were correlated to depression [42].

In the East African Region, MSW advocates have been victims of hate attacks and in some cases, some of them have even been killed. On November 6th 2018, the Tanzanian Government formed an *anti-gay taskforce* seeking to single out and punish gay people in Dar es Salaam. The city's administrative head said that all gay people would be arrested and imprisoned for a long time [9]. In a previous report in Tanzania, a gay activist, Maurice Mjomba was found tied up, gagged and murdered. His body was found on 28th July 2012 in what was believed to be a hate attack. An eyewitness report states that he appeared to have been beaten savagely. It was reported that his private parts and his anus were injured as there was a lot of blood coming out [10]. In February 2014, Ugandan President Yoweri Museveni assented to a law forcing brutal punishments for homosexuality, resisting challenges from rights gatherings, analysis from European and United States diplomats who cautioned that this move would result in cutting off donor aid [11].

The Uganda Anti-Homosexuality Act, 2014 was formerly cited as the "kill the gays" bill in the media owing to the initially suggested death penalty clauses. However, the death penalty was let go in favour of life in prison [12].

In January 2011, Ugandan gay rights activist David Kato was pounded with a mallet after his picture appeared in one of the Ugandan newspapers on the front page as one of the top homosexuals in Uganda. The headline banner on that newspaper read "Hang them".

In Nigeria, President Goodluck Jonathan signed a bill in January 2014 that condemned same-sex unions, resisting Western pressure regarding gay rights and strained government relations with the United States [13]. The bill, which contained punishments of as long as 14 years in jail, sanctioned gay marriage, same-sex unions as well as participation of gay rights gatherings. Britain and some other Western nations indicated that they would reduce financial aid to governments that pass laws mistreating gay people, an action that has helped tone down further

enactment of similar laws in aid dependent countries like Uganda and Malawi. However, the western countries have little influence over Nigeria, whose financial plan is supported by its 2-million-barrel-per-day oil yield.

In March 2011, a gay man in Cameroon, Roger Jean-Claude Mbede was imprisoned for three years for sending a sentimental message via a mobile phone to another man. When he went to hospital to access treatment for a hernia he had developed while in prison, he was denied health services. His own family stated that he was a curse to them and that he should be left to die. His family had said that they were going to remove the homosexuality that was in him [14].

In another case, prominent Cameroonian gay activist, Eric Lembembe was murdered at his residence. His neck and feet seemed to have been broken, while his face, hands and feet were burned with an iron [15]. In other alleged homophobic assaults, the headquarters of Alternatives-Cameroun which offers HIV services was torched in June 2013. Moreover, the offices of human rights attorney Michel Togue, who represents clients accused with same-sex demeanour was broken into and his legal documents and laptop stolen. He also received death threats on electronic mail and Short Messages Service (SMS) including threats to assassinate his children.

During a February 2014 event to mark Gambia's 49th anniversary of independence from Britain, President Yahya Jammeh called homosexuals "vermin" and said that his government will handle them in the same way it handles mosquitoes [16]. Following these comments, Britain and some other Western nations threatened to cut aid to Gambia in the event they passed the anti-gay laws. However, President Jammeh said his nation would guard its sovereign power and Islamic convictions, and not respect external pressure on lesbian, gay, bi-sexual and transgender (LGBT) issues [15].

During a press conference in June 2013, Senegalese President Macky Sall publicly clashed with US President Barack Obama on the issue of decriminalizing homosexuality. In his argument, he stated that it was important for other countries to refrain from imposing their values beyond their borders [16]. Senegal's penal code levies fines of up to 3,000 US Dollars (approximately KES 300,000) for committing an inappropriate or peculiar act with an individual of the same sex. It also passes sentences of up to five years [17]. In Africa, only South Africa has legalized same sex unions. This law was passed in 2006.

In most countries in Africa, same sex unions have been banned and the topic of homosexuality is rarely discussed thus given little or no recognition [18]. However, in the past few years, MSW have been identified as a major contributing factor to the growing HIV epidemic in Africa. Some of the arguments brought forward link this rise to stigma and discrimination in accessing prevention, treatment and care services. There have been inadequate efforts to have appropriate HIV prevention strategies amongst this group and therefore high rates have been seen to occur among them [4].

2.2.3: Local setting-Kenya

NASCOP conducted the first ever behavioural assessment of key populations in 2014 and a subsequent one in 2016 [3]. This analysis measured results recommended by the WHO, along with key population-related results stated in the Kenya National AIDS Strategic Plan (KNASP) III. The assessment covered the following areas: condom use with paying clients, condom use with frequent non-paying partners, non-use of condoms with sexual partners as a result of alcohol as well as lack of access to condoms when they required them. The assessment also covered the percentage of MSW who were tested for HIV, those living with HIV and those who

are registered in the Antiretroviral Therapy (ART) programme. The assessment went further and assessed those who had tested/checked for Sexually Transmitted Infection (STI), been diagnosed with an STI, and those who acquired treatment for their STI when they needed it.

The study also sought to determine the percentage of MSW who had obtained services in the former three months from a HIV intervention programme (acquired condoms, received water-based lubricant, material on condom use and safe sex, examined for HIV and STIs), visited a drop-in centre or were approached with information by a peer educator from an organisation working in the HIV field.

The aforementioned NASCOP 2016 study reported that 23% of MSW reported having had unprotected sex as the sexual partner did not want to wear a condom, while 26% of MSW recounted having had unprotected sex in the prior month since they and/or their partner had drank alcohol. The results also revealed that in 2015, Nairobi had the greatest percentage of MSW tested for HIV in the three months prior to the survey (86 %), and Mombasa had the lowest (72 %). Additionally, the study stated that 10% of MSW recounted having ever injected heroin or other narcotics. Mombasa related the highest percentage of MSW injecting drugs (13%). Thika had the lowest (6%).

In the preceding ten years in Kenya, there has been liberal media coverage as well as awareness than there used to be of same-sex allure and sexual curiosity; also, same-sex attracted and transgender individuals are significantly more discernible in the media and public life. A case in point in Kenya that has gone public in the media is that of Audrey Mbugua (Born Andrew Mbugua) who is said to be suffering from Gender Identity Disorder (GID). She took her case to the Medical Practitioners and Dentists Council to have her male organ removed so that it could be fashioned to female genitalia as well as have access to therapy and female hormones [19].

In another example, Kenyan writer, Journalist and victor of the Caine Prize for African writing, Binyavanga Wainaina openly proclaimed that he was gay, first writing a short story that he termed as a "lost chapter" of his 2011 chronicle entitled "*I am a Homosexual, Mum*". This was in reaction to an upsurge of anti-gay legislations passed in Africa [20].

While several issues pertaining to LGBTI individuals are diverse, bias and misjudging can be a typical encounter. There is colossal pressure in our society for all and sundry to embrace the practices characteristically related with being male or female, and individuals can be exposed to scorn, intimidation and even vehemence since they do not play a part in another person's expectation of a man or a woman [22]. When an individual realizes that they are "different", sentiments about sexuality or sex can be confounding and hard to manage; they may strain to fit in to society and end up questioning or denying their orientation. This can affect their self-esteem and lead to depression, they may feel ripped between needing to tell their companions about their sentiments and rejecting or subduing them, due to dread of denunciation, they might already be feeling sadness, in the event that they figure they may lose the regard and love of their family and companions.

It is considerably tougher in cultural backgrounds where homosexuality is forbidden or have been raised within the confines of a custom or religious conviction that casts-off same-sex relations. It may, perhaps, be troublesome for them to open up with regards to their emotions and exploits – particularly if individuals at their learning institutions or places of work employ statements about same-sex relations in a disparaging way, for instance grouping individuals or items 'gay' regardless of whether they do not have anything that relates them to same-sex attraction [2].

However, it is important to note that there are some cultures that embrace homosexuality and same sex unions. Views of homosexuality are openly embraced in a number of countries in Europe, especially Spain (88%), Germany (87%), Czech Republic (80%) while in the United States, it is at 60% [17]. Despite this relative acceptance of homosexuality in some countries, youth who are known to be LGBTI are unquestionably bound to encounter harassment, verbal and physical maltreatment at school, work and in public settings [21].

It has been observed that MSW have various coping strategies for managing the stressful situations that they undergo. Some of them have formed peer organisations where they have become advocates for the MSW community; some have learnt to hide their sexual orientation because they are also in marital unions with women while others abuse alcohol and other drugs in addition to engaging in high-risk sexual behaviours. In what can be attributed as the principal testimony of anal sex practice by a substantial unit of MSW in connection to HIV-1 infection in East Africa, Sanders et al emphasizes that there is a crucial need to give attention to the sexual health prerequisites of MSW and their clients [23].

A WHO, United Nations Development Programme (UNDP), and the Joint United Nations Programme on HIV and AIDS (UNAIDS) report in 2002 distinguished six levels of HIV programming that ought to be considered as core areas for MSW outreach activities [24]. These exercises are addressed and developed in the UNAIDS Action Framework for MSW. The President's Emergency Plan for AIDS Relief (PEPFAR) underpins these parts and has consolidated them into its vital service package for MSW. PEPFAR characterizes the principal constituents of an all-inclusive HIV-prevention programme for MSW to be: community-based outreach; condom and water-based lubricant distribution; HIV counselling and testing; linkages

to healthcare providers and ART; availability of information, education and communication (IEC); and STI prevention, screening and treatment.

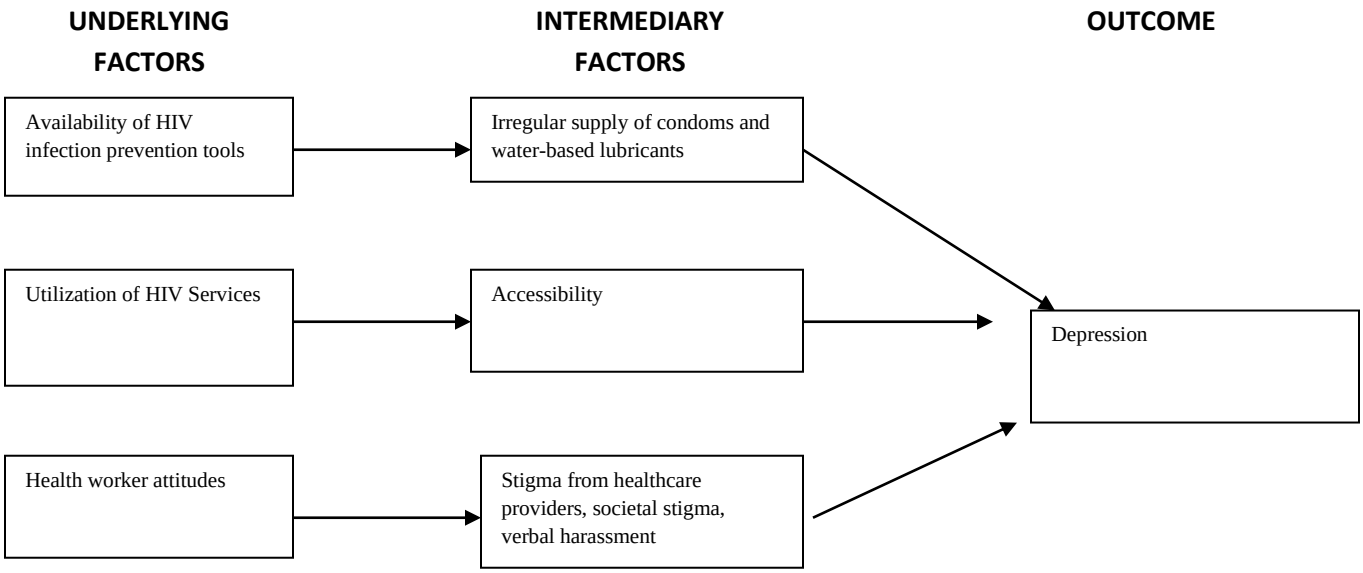
In Mombasa, community-based outreaches have largely exercised in what is commonly referred to as “moonlight outreaches” which seeks to provide health services to the key populations at night. These services have been well received by MSW mostly because they provide a level of anonymity since they access services under the cover of darkness [25]. The accomplishment of community-based outreach programmes is contingent on the reliance of peers or other reliable persons who can be able to reach members of this difficult-to-reach population in their own environs so as to involve and maintain MSW in HIV prevention and care services.

Despite high prevalence and occurrence, programme scope and coverage remains low and governments have truly distributed constrained assets to these populaces. Fear of violence, stigma and segregation can likewise avert numerous individuals of sexual minority groups from being privy to healthcare and other services.

Laws, policies and practices which add to stigma and discrimination and additionally marginalize sexual minority groups and other most-at-risk populaces, embody a key obstacle to the establishment of the permissive environment essential to commendably address HIV [1].

In summary, systemic stigma towards MSM in the society can lead to depression which affects aptitude to make healthy decisions including HIV prevention and adherence to treatment.

2.2.5: Conceptual Framework



2.2.6: Brief Description of the relationships

The underlying factors such as availability of HIV infection prevention tools, for instance condoms and water-based lubricants lead to challenges in utilisation of HIV infection prevention services. This is compounded by the fact that there are very few health facilities in Mombasa which can offer "MSW friendly" services. This provides a bleak scenario where they cannot access the products that are supposed to keep them safe from HIV and STI infection.

Health worker attitudes may play a part in utilisation of services in cases where MSW are not well treated by the healthcare worker or witnesses the healthcare worker gossiping about him, his sexual orientation and nature of health services being sought.

Societal stigma may also play a part in utilisation of health service uptake due to incidences such as verbal harassment, physical assault, blackmail and being arrested on charges of being a MSW.

Therefore, because of all these interrelated factors, the MSW are likely to face depression which will affect their utilisation of HIV infection prevention, treatment and care services.

CHAPTER THREE: STUDY DESIGN AND METHODOLOGY

3.1: Introduction

This chapter summarizes how the study was designed, gives a description of the study site as well as the background of the surrounding region, study population, sampling techniques, data collection approaches as well as procedures of data examination.

3.2 Study Design

This study was a cross-sectional study employing both qualitative and quantitative methods. This cross-sectional study provided a snapshot of the prevailing characteristics of the MSW population utilizing the Coast HIV Resource Centre. In this case, this study was used to evaluate the impact of depression on utilisation of HIV infection prevention, treatment and care services.

3.3: Study area

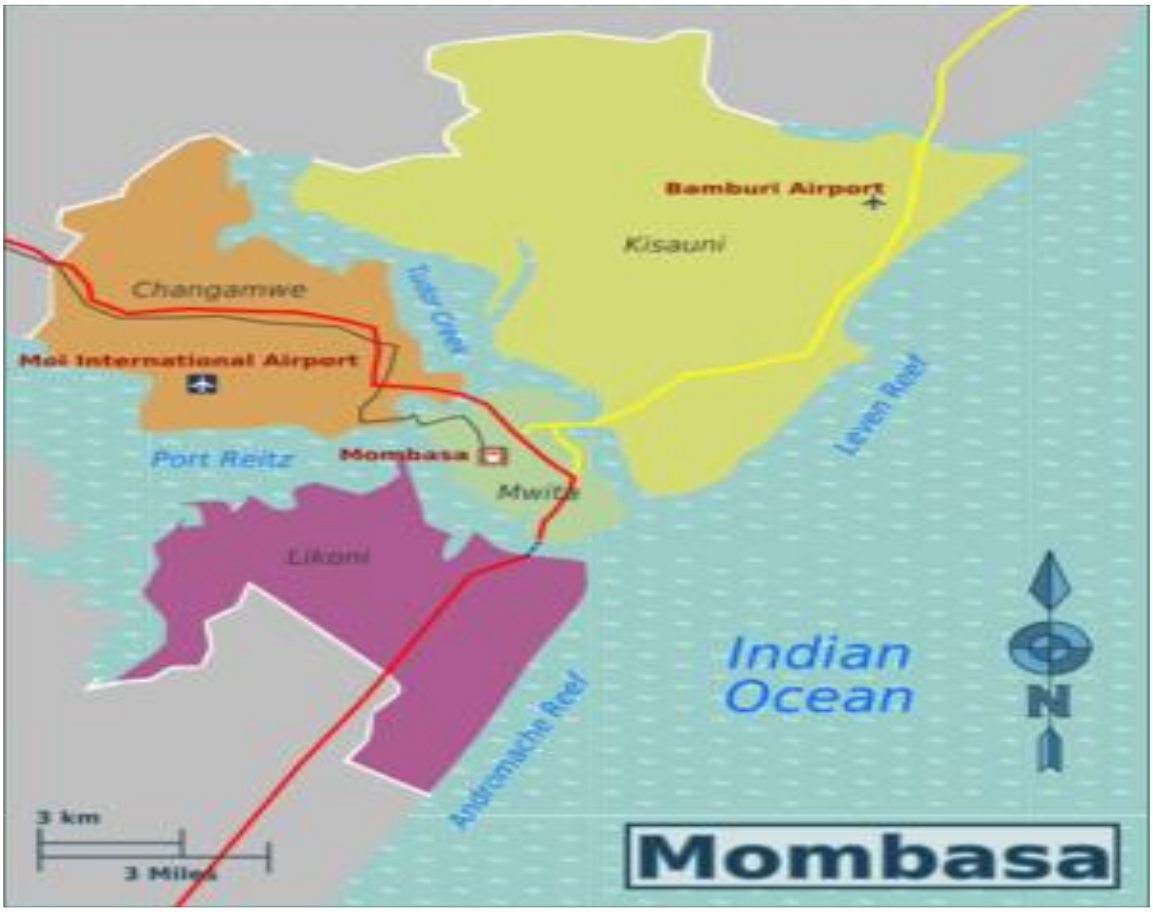
Mombasa is Kenya's second largest city and is primarily known for its warm climate and sandy beaches bordering the Indian Ocean which makes it an ideal holiday and tourist destination. Mombasa has world-class hotels, historical attractions like Fort Jesus and Old Town and a vibrant night life, all of which make it a huge tourist attraction. Administratively, Mombasa is divided into four sub-counties namely;

i. Mvita – This is the island where the city was founded and is also the main administrative station and central business district.

ii. Changamwe – This is the main entry into Mombasa city if you are coming from Nairobi. It is the main industrial part of the city. It is also where the Moi International Airport and part of the main port of Mombasa is located.

iii. Kisauni – Generally referred to as the "North Coast". This area has the largest concentration of luxury beach hotels, lodges and vacation houses popular with both local and international tourists. The largest informal settlements are also found in this division

iv. Likoni – Generally referred to as the "South Coast" also characterized by the presence of sandy beaches and mainly residential flats/apartments.



Source: Wikipedia maps

The Kenya National Bureau of Statistics 2019 census indicates that Mombasa has a population of 1,208,333 comprising of 610,257 males (50.5%) and 598,046 females (49.4%).

According to the NASCOP Kenya HIV County profiles 2016, Mombasa County contributed 5% and 3% of the new infections among children and adults respectively. Mombasa has a busy port which serves both Kenya and landlocked countries in East and Central Africa, linking them to the Ocean by rail and road. The city is also served by Moi International Airport which serves as a major transport hub for international tourists as well as the local business community.

The Coast HIV Resource Centre is a facility that was established in September 2011 and thrives on advancing the human rights of gender and sexual minorities, specifically in Mombasa. The Coast HIV Resource Centre is part of a parent organisation called HAPA Kenya (HIV & AIDS People Alliance of Kenya). It was founded after it become apparent that a considerable number of MSW living with HIV in the county were not sticking to their medication. It was from this that community members created a plan of action through which they could interpret the myths associated with HIV care and treatment, tackle other socio-cultural hindrances, gain access to treatment, including stigma and discrimination.

The Centre has been operational since December 2011 and has been well known by the local community as being a facility that offers free information, education and correspondence materials with emphasis on HIV and STI prevention.

3.4 Study Population

The study population included MSWs aged 18 years and above who visit the Coast HIV Resource Centre. The study also included key informants who provide health services to MSW drawn from the Ministry of Health, National AIDS Control Council (NACC) as well as Non-Governmental Organizations (NGO) that have MSW programmes in Mombasa.

3.5: Inclusion and exclusion criteria

3.5.1: MSWs for quantitative data

Inclusion criteria:

1. Male sex workers aged 18 years and above
2. Those who were prepared to participate in the research by giving written informed consent
3. A resident of Mombasa for the preceding 6 months

Exclusion criteria:

1. Those who were unwilling to give written informed consent
2. Those not in possession of legal documents to confirm that they are 18 years old and above which is the legal provision for providing informed consent

3.5.2: Key Informants

Inclusion criteria:

1. Senior officers working in the Ministry of Health, an NGO providing health services to Male Sex Workers or a senior official working in a MSW support group for a period of 3 or more years
2. Those who had worked with/offered services for MSW for a period of 3 or more years
3. Those who were prepared to participate in the study or share data about MSW

Exclusion criteria:

1. An officer working with the Ministry of Health, NACC or an NGO but was not authorised to share information
2. An officer who had worked with MSW for less than 3 years

3.6: Variables

Dependent variable:

1. Utilisation of HIV infection prevention services

Independent variables:

1. Depression status
2. Socio-demographics such as age, education status, employment status
3. Accessibility of health facilities

4. Health worker attitudes

5. Availability of HIV infection prevention tools

6. Fear of stigmatisation

3.7: Sampling and sample size determination

3.7.1: Sample size determination for the interviews

The sample size was estimated using the formula as suggested by Cochran (1963) to yield a representative sample size.

$n= z^2(pq) / e^2$

Whereby;

n= the desired sample size

z= the value of z found in the statistical tables which contain the area under the normal curve desired at 95% confidence interval

p= estimated proportion of the population with the desired characteristic (KAIS 2012) “p” is the estimated proportion of men reported receiving money, gifts, or favours in exchange for sex from other men. This data was only available in the Kenya AIDS Indicator Survey 2012 and not in later surveys.

q= 1-p

e=desired level of precision (i.e. the margin of error), set at 0.05

Therefore, substituting in the above formula;

$n=1.96^2 \times (0.8 \times 0.2) / 0.05^2$

Hence the minimum sample size for MSW interviewed was **estimated at 245**.

Four (4) key informants were recruited for the key informant interview while 32 discussants were recruited for the four FGDs.

3.7.2: Selection of study respondents

3.7.2.1: MSWs for interviews

The MSW population was identified through respondent-driven sampling which is most apt when reaching hidden populations. The researcher's first contact was through the staff and management of the Coast HIV Resource Centre, a centrally located health information centre which is considered "MSM friendly". Four index respondents were identified, each representing the four sub-counties of Mvita, Kisauni, Changamwe and Likoni. These four initial recruits were selected by the management of the resource centre based on their sociometric acceptance by their peers, previous experience in recruiting their peers in studies as well as interest in this particular study. Only regular MSW who are registered as visitors at this Resource Centre were included in the study.The index recruits then contacted the other participants to avail themselves at the resource centre where the focus group discussion took place as well as the administration of the structured questionnaire. Participants were reimbursed KES 500 for their transport to and from the study site.

3.7.2.2: Qualitative data collection methods: Key Informant Interviews (KII) and Focus Group Discussion (FGDs)

Key informant interviews are qualitative comprehensive interviews regarding a given topic with individuals who know what is going on in the community. The main drive of key informant interviews is to collect information from a wide range of people—including community leaders, professionals, or residents—who have first-hand knowledge about a particular community.

Key informant interviews are aimed at exploring a topic before unearthing the details.

A focus group discussion involves congregating people from related backgrounds or experiences together to talk over a particular topic of interest. It is a form of qualitative research where questions are asked about their insights, feelings, attitudes, ideologies and opinion.

Focus group discussions are frequently used as a qualitative approach to advance a detailed understanding of social issues. The technique aims to attain data from a particular group of individuals from the similar background being studied rather than from a broader population. The focus group discussions were conducted in English and where need arose, the questions were translated verbally in Kiswahili for any participant who needed clarification.

3.7.2.3: Key Informants

The key informants were drawn from the National AIDS Control Council, NGOs working with MSW namely, HIV & AIDS people Alliance of Kenya (HAPA Kenya), Persons Marginalized and Aggrieved in Kenya (PEMA Kenya) and Kenya AIDS NGOs Consortium (KANCO). The key informant interviews were conducted at their respective offices.

3.7.2.4: Focus Group Discussants

There were peer-to-peer community mobilizers who are MSW who reached out to members of the 4 divisions in Mombasa namely; Mvita, Changamwe, Likoni and Kisauni.

3.8: Data collection

Data was gathered using Beck's Depression Inventory 1 English version scale to measure the levels of depression. Key informant interviews guides as well as focus group discussions guide were used in the study to find out the social factors associated with the delay or lack of access to treatment and care.

The Beck Depression Inventory 1 English version (BDI), generated by Aaron T. Beck, is a 21-question multiple-choice psychometric test used to measure the degree of depression. Overall score of 0-9 is viewed as a minimal range, 10-18 is mild, 19-29 is moderate, and 30-63 is severe.

The tally was added up for each of the 21 queries by tallying the number to the right of each question marked. The maximum conceivable total scores for the complete test was sixty-three and the least conceivable tally for the test was nil. Depression can be evaluated as follows.

Total Score Levels of Depression

0-9 = Minimal depression

10-18 = Mild depression

19-29 = Moderate depression

30-63 = Severe depression

The socio-demographic questionnaire and Beck's depression Inventory scale was administered to 245 MSW who were not to participate in the FGDs. Four FGDs consisting of 8 MSW each were conducted to document individual or case narratives. A total of 32 respondents were reached in the FGDs. Four key informant interviews were also conducted.

No	Organisation	Position
1	National AIDS Control Council	Coast Regional Coordinator
2	Deputy Project Director	HAPA Kenya
3	Kenya AIDS NGOs Consortium	Regional Coordinator
4	PEMA Kenya - an MSW CBO	Programme Coordinator

In summary, 32 MSW respondents were reached through the FGDs, 245 MSW respondents filled in the questionnaire while there were 4 key informant interviews. Total respondents were therefore 281.

3.8.1: Pilot testing

In order to minimize the errors/biases, expert opinion was sought from the supervisors to check for validity of the content. The questionnaire was then pre-tested in Mtwapa, Kilifi County among 10 MSW who were mobilized by their support group and randomly selected to participate in the pre-test. The main intention of the pilot study was to identify inconsistencies and test the clarity of the questionnaire after which the instruments were consequently revised.

3.8.2: Data Analysis

The filled researcher administered questionnaires were first checked for completeness and consistency before data entry. The responses from each question were coded using the Statistical Products and Service Solutions (SPSS) version25 which was used to conduct the analysis for quantitative data and the results demonstrated in form of bar charts, frequency tables, pie charts and histograms.

Descriptive figures such as proportions and frequencies were utilised to summarize categorical variables while measures of central tendency namely; mean, median and standard deviation were determined for continuous variables. Chi-square tests of significance were used to assess the difference in utilisation of health services across variables. Multivariate analysis was used to test for the association between depression and utilisation of HIV infection prevention, treatment and care services. Statistical level of significance was set at p value of ≤ 0.05.

Qualitative statistics were analysed using NVivo version 12 to categorise and organize information, examine relationships in the data by combining the analysis with linking, searching and modelling. Using NVivo, the principal investigator was able to identify trends and cross examine information.

3.8.3: Ethical considerations

Ethical clearance was required from the Kenyatta National Hospital and University of Nairobi Ethics & Research Committee and permission got from the Coast HIV Resource Centre Management.

Involvement in this study was completely volitional. The respondents could change their mind and stop participating without giving a reason for withdrawal even if they had agreed to participate earlier.

Before embarking on data collection, the procedures and the objectives of the study were explained to each participant when seeking for approval to take part in the study. Confidentiality of the respondents' responses was emphasized. Names of the study respondents were not recorded.

CHAPTER FOUR

STUDY RESULTS

4.1: Introduction

This section outlines the outcomes on examination of data collected in regard to the effect of depression on utilisation of HIV infection prevention, treatment and care services among male sex workers at the Coast resource Centre in Mombasa County, Kenya. The analyses of the results are presented in agreement with the specific objectives of the research.

281 respondents were sampled for this research where 245 respondents filled in the questionnaires, 32 participated in focus group discussions while 4 were key informants. Out of the sample, a total of 245 questionnaires administered, 12 were incomplete, leaving a final tally of 233 which represented a 95.1% feedback rate. In reference to Mugenda and Mugenda [28], a 50% feedback rate is acceptable, 60% good and above 70% rated very good.

4.1: Socio-Demographic Characteristics

The socio-demographic profile consists of age, academic level, marital status, religion, respondents' employment status and their type occupation. The results were presented in table 4.1.

Table 4.1: Socio-demographic profile of the respondents (n=233)

Variable	**Frequency**	**Percent (%)**
Age in years		
<20 years	1	0.4
20-24 years	122	52.4
25-29 years	82	35.2
>30 years	28	12.0
Marital Status		
Single	175	75.1
Married	16	6.9
Separated	6	2.6
Cohabiting	32	13.7
Divorced	4	1.7
Religion		
Protestant	70	30.0
Catholic	62	26.6
Muslim	88	37.8
Tradition	3	1.3
Atheist	3	1.3
Other (not specified)	7	3.0

Highest level of Education		
Primary	43	18.5
Secondary	129	55.4
College	54	23.2
University	7	3.0
Employment status		
Employed	77	33.0
Not Employed	156	67.0
Type of employment/ Occupation (n=77)		
Skilled	25	32.5
Unskilled	22	28.6
Business	30	39.0

4.1.2 Age of the respondents

The age range of the respondents was 19 years to 38 years with a mean age of 25.08 years; median 24 and standard deviation of 3.7 years. The study found out that slightly more than half of those interviewed (52.4%) were within the age group of 20-24 years; followed by those aged 25-29 years(35.2%); those over 30 years of age were (12.0%) while only one participant (0.4%) was 19 years.

4.1.3 Religious affiliation

From the study findings, 30% were Protestants, 26.6% were Catholics, 37.8% were Muslims, Traditional believers and Atheists were both 1.3%, while those who stated other religious affiliation were 3.0%.

4.1.4 Level of Education of the assenters

The outcome indicated that 18.5% of the participants had attained primary education, 55.4% reported having secondary level of education, 23.2% had college level while 3% had university level of education.

4.1.5: Marital status

Three quarters of the respondents (75.1%) reported that they were single and only 6.9% were married, 13.7% of the respondents were cohabiting, while 2.6% reported that they were separated while 1.7% said that they were divorced.

4.1.6 Employment status

About two-thirds (67.0%) of the respondents noted that they did not have any form of livelihood compared to 33.0% who reported some form of livelihood. For those who reported that they had some form of livelihood, 10.7% were engaged in skilled employment, while 9.4% reported that they were unskilled. 12.9% were involved in some form of business as a means of livelihood.

4.2: Sexual Practices

4.2.1 Number of sexual partners in the last six months

The study required to identify the number of sexual partners the participants had interacted with. From the study findings, only 1.3% had not involved themselves with any sexual partner, 8.6% of the respondents had at least one sexual partner, 35.2% had between 2-5 partners while those who had between 6-10partners were 33.0%. Those who mentioned that they had more than 10 partners were 21.9%.

4.2.2 Awareness of both individual and partner's HIV status

A majority of the study respondents (87.1%) knew of their HIV status. Less than 20% (12.9%) of respondents were unaware of their HIV status. About 61% of the respondents were unaware of their partner's HIV status while only 39.1% knew of their partner's HIV status (See table 4.2). Through the focus group discussions, respondents indicated that they were able to access HIV testing and counselling services at the drop-in centres.

Those who tested HIV positive were put on ARV treatment while those who were negative were provided with information on HIV infection prevention options such as PrEP. In addition to providing HIV testing services, the key informants confirmed that the Ministry of Health, through the office of the County AIDS and STIs Coordinator (CASCO) provided additional

services such TB screening and referrals for other tests whenever complex cases emerged. Additionally, it was noted that the office of the CASCO as well as NGO partners had also increased their efforts in ensuring the availability of HIV self-test kits commonly known as "selfie".

Table 4.2: Awareness of HIV status of self and partners' (n=233)

	Frequency	**Percent (%)**
Aware of your HIV status?		
Yes	203	87.1
No	30	12.9
Know your partners HIV status?		
Yes	91	39.1
No	142	60.9

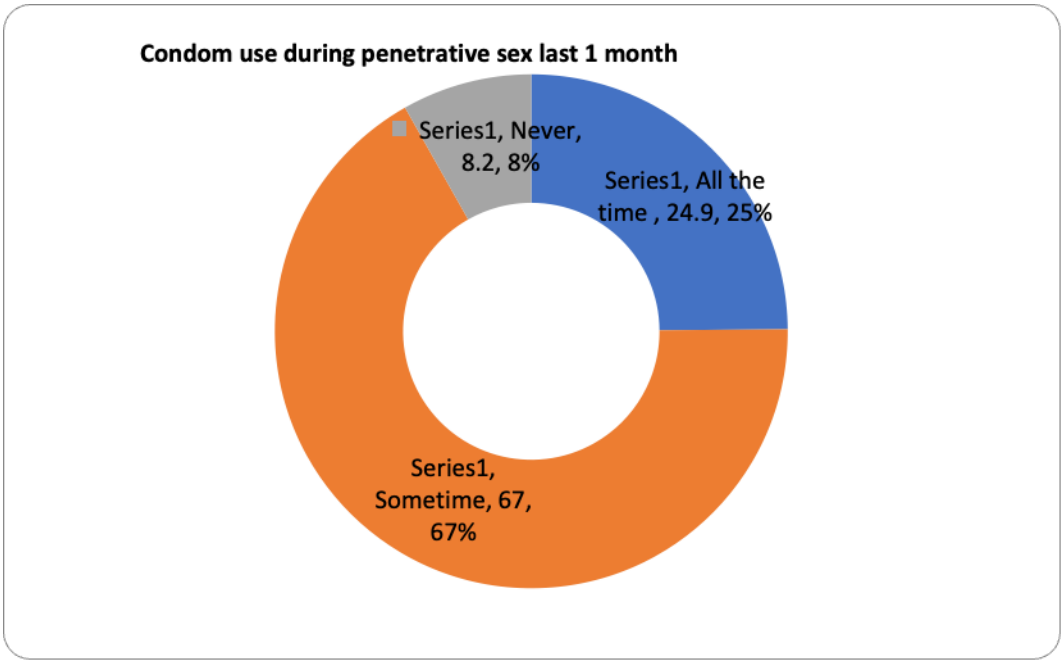
4.3.3: Condom use practices

4.3.3.1: Use of condom during penetrative sex in the previous one month

The study aimed to find out how often the respondents had used condoms during penetrative sex in the preceding one month. Overall, 24.9% of respondents had used condoms all the time during penetrative sex in the preceding one month. Two-thirds (67.0%) noted that they used condoms during penetrative sex sometimes, while less than 10% (8.2%) had never used condoms during penetrative sex in the preceding one month (see chart 4.3).

The key informants reported that in the third and fourth quarter of 2019, there was a countrywide shortage of condoms and water-based lubricants. During this period where the country experienced shortages of the aforementioned supplies, focus group discussants reported substituting the lubricants for cooking oil, shampoo and body lotion.

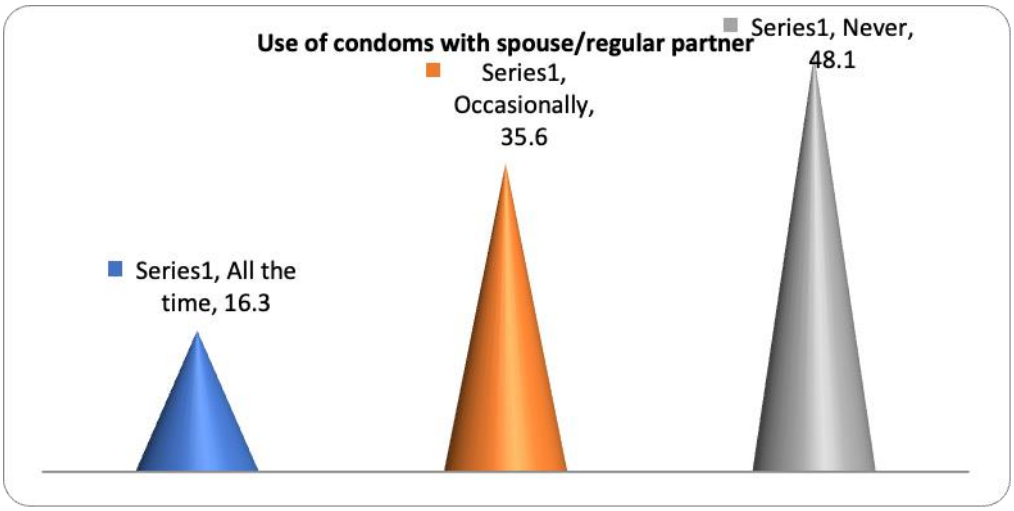
Chart 4.3: Condom use during penetrative sex previous one month (n=233)



4.3.3.2: Use of condom with spouse/ regular sexual partner

Slightly less than half of the respondents (48.1%) reported that they had never used condoms with spouse or a regular sexual partner by the time the study was conducted. Only 16% reported that they had used condoms with their spouse or regular partner all the time while those who had used condoms with their spouse or with a regular sexual partner occasionally comprised of 35.6% of the respondents (see chart 4.4).

Chart 4.4: Use of condom with spouse/ regular sexual partner (n=233)



4.4: Health seeking behaviour

In as much as (n=144, 61.8%) of the respondents reported that they sought treatment whenever they suspect to have a sexually transmitted infection, (n=80, 34.3%) sought treatment for STI's occasionally while (n=9, 3.9%) never sought for STI treatment whenever they suspect to have an infection. With regard to seeking treatment, 48.1% preferred private clinics. Those who preferred seeking treatment from the government facilities were (n=59, 25.3%) compared to (n=29, 12.4%) whose ideal place was the chemist. 13.7% of the respondents noted that in case of any

suspicion of a STI, they resulted to self-medication and only one person 0.4% sought traditional medication (see table 4.3).

Most of the focus group discussants reported that they were afraid to present themselves at a health facility due to the hostile reception from the healthcare providers. *"Some providers are homophobic and therefore before disclosing yourself to such a provider you gauge their attitude"*. Other times due to the state of the ailment of an MSW, one is forced to disclose their sickness even when they don't want. *"Sometimes you do not hide because in some cases you might have a serious case of an anal STI and might be in pain. In such a case, you cannot hide because the situation can get worse"*.

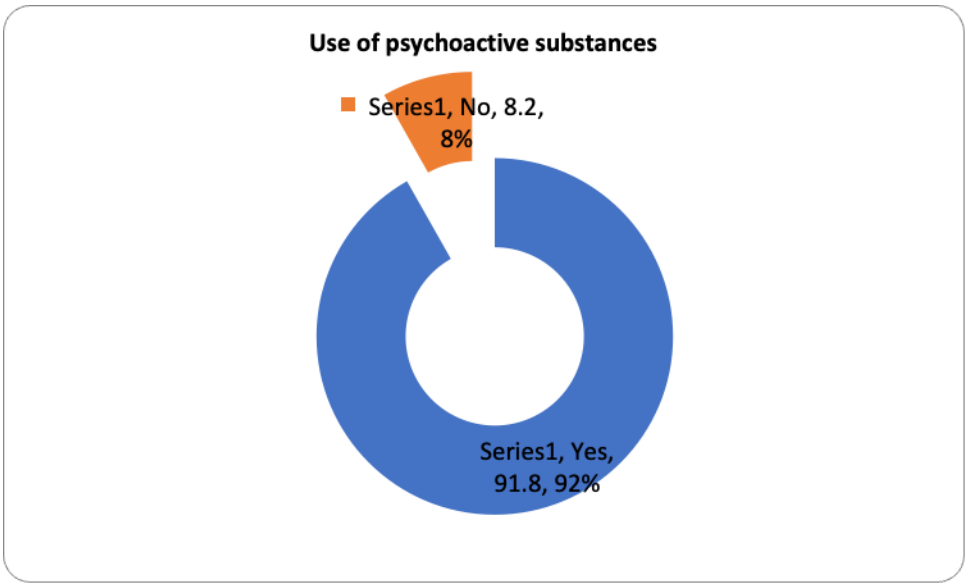
Table 4.3: Health seeking behavior of study participants (n=233)

Sought treatment whenever you have suspected to have a sexually transmitted infection		
All the time	144	61.8
Occasionally	80	34.3
Never	9	3.9
Facility from which treatment was obtained		
Self –Treatment	32	13.7
Chemist	29	12.4
Traditional	1	0.4
Private clinic	112	48.1
Government Facility	59	25.3

4.5: Use of psychoactive substances

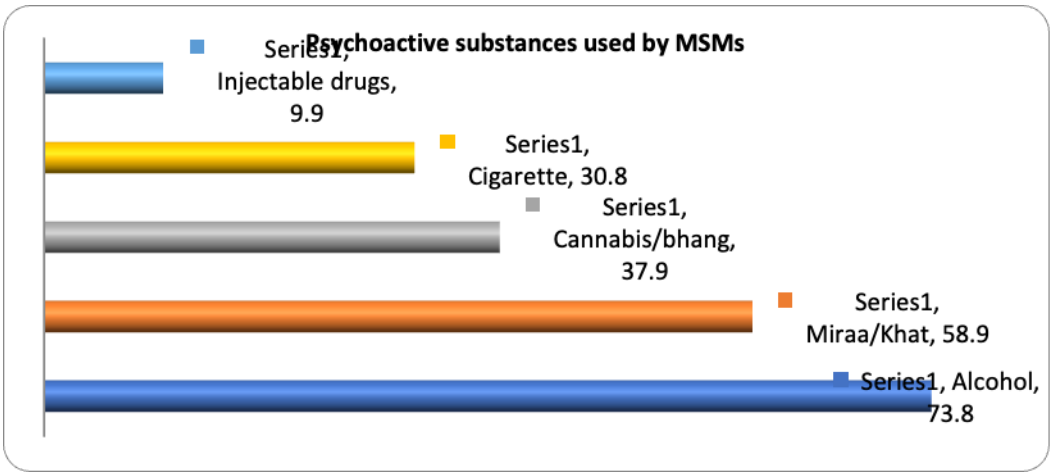
The study sought to identify who among the study respondents used any psychoactive substances. Almost all respondents (91.8%) consumed some form of psychoactive substances and (8.2%) reported that they had no history of psychoactive substance use. Their responses are reported in chart 4.5.

Chart 4.5: Use of psychoactive substances (n=233)



Among the psychoactive substances used by the respondents interviewed in the study was the use of alcohol with a majority of (n=158), followed by the use of miraa/khat which attracted (n=126) of the study respondents. Those who reported that their preference was cannabis/bhang were (n=81), while (n=66) preferred cigarettes. Only 10% (n=21) of those interviewed reported that they use injectable drugs (see chart 4.6).

Chart 4.6: Types of psychoactive substances used by respondents (n=214)



4.6: Knowledge and Attitudes

4.6.1: Knowledge of HIV infection prevention, treatment and care services

The study was geared to ascertain if the respondents had some knowledge on HIV infection prevention, treatment and care services. The key informants stated that cultural and societal issues had created barriers for MSW to seek services. There was still a lot of stigma associated with being a MSW in the community. The CASCO reported that one of the MSW service providers within Mvita sub-county had to relocate due to hostility from the community after they discovered that the MSW were receiving services at that particular DIC. Another key informant from PEMA Kenya stated that they also do not openly advertise their offices or their building, again due to the stigma that exists against MSW. To advertise, they use word of mouth to pass on information.

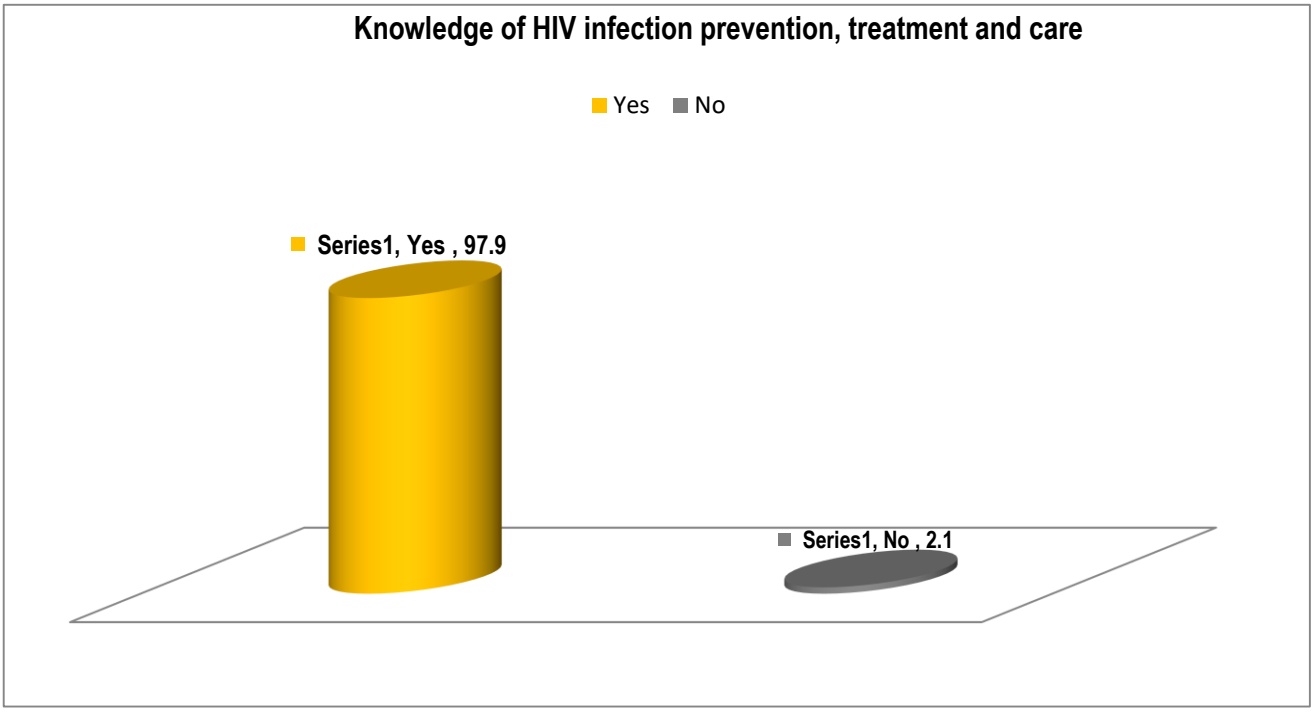
"We do not openly advertise our offices or our building about the services we offer to MSW, however, those who need our services know where to find us mostly by referral via word of mouth".

In addition, HAPA Kenya stated that the registration of the organisation was not done as an MSM focused organisation. It was registered as a youth community based organisation dealing with matters related to HIV. This was again due to stigma from the general community and registration authorities. Their offices were also not branded because of the criminalisation of homosexuality in the constitution. They noted that branding would endanger their clients, thus the need to hide the fact that they were providing services to MSW. On the other hand, KANCO noted that they had no fear and they do not hide because as an institution, they specifically focused on HIV and AIDS information dissemination over the past 20 years as part of their core mandate.

The focus group discussants reported that there was a lot of hostility from the general community. It was felt that if community members knew where the DICs were, they would storm the facilities. A discussant shared the story of how his friend was beaten up and stoned in Mombasa, an act commonly referred to as "*being Londened*". Majority of the discussants felt that the community had not yet accepted the LGBTI community and there was still a lot of discrimination and stigmatisation. *"The general community sees the MSW acts as not culturally appropriate and a sin. It becomes difficult for the community to appreciate the LGBTI".*

One of the key informants – CASCO reported that there had been a challenge in that once the MSW were arrested, they disappeared and hid from the police as they continued with their sex work activities while in hiding. A discussant who had a short stint in prison stated that MSW feared being arrested because when one was arrested and taken into remand, there would be poor adherence for those on PrEP, PEP or ARVs. Those who never revealed their HIV status yet they were HIV positive or were on treatment, tended to spread the virus further while in prison.

Chart 4.7: Knowledge of HIV infection prevention, treatment and care services (n=233)



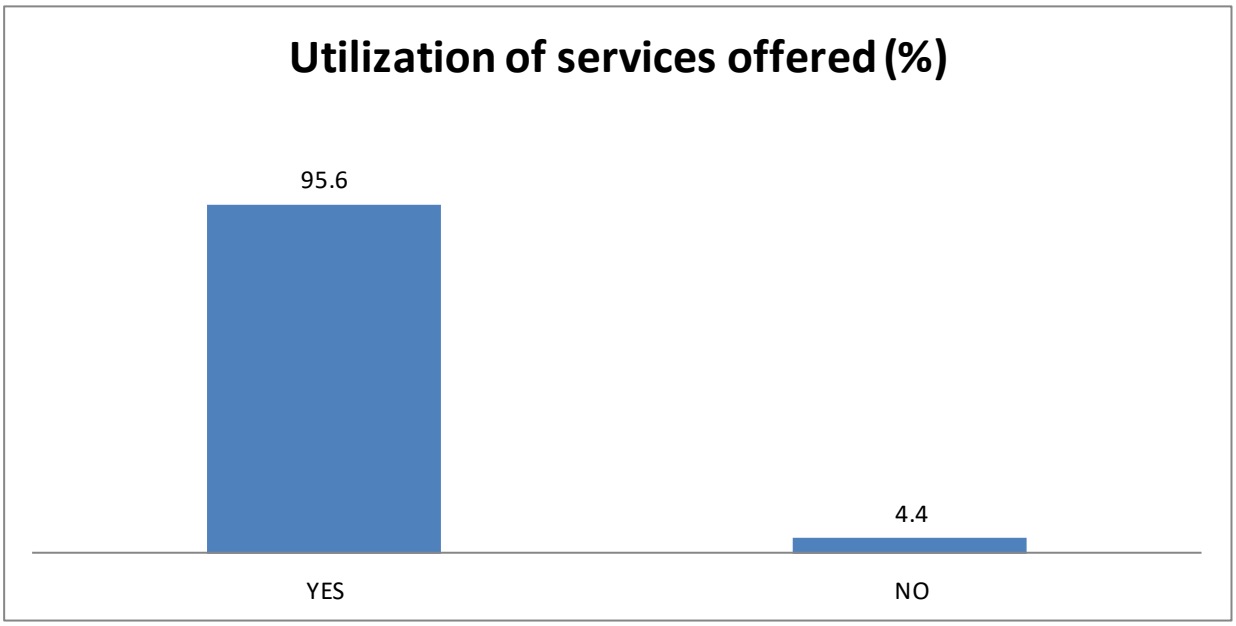
4.6.2: Utilisation of services offered

For the respondents who acknowledged that they knew of HIV infection prevention services, a follow-up question was put to them-seeking to find out if they utilised the services. Almost all (95.6%) confirmed that they had utilised the services and only 4.4% had not utilised the services though they knew about their availability. (See chart 4.8)

The respondents who reported non-utilisation of services stated that they experienced fear of being arrested during random police swoops as well as insecurity and uncertainty of being attacked by members of the public at the DICs. Most discussants stated that they preferred DICs because they felt that it was a safe space to meet, chat and access treatment-all in a friendly environment. The discussants felt that the society looked down on them and made them fear going to public health facilities for the services they needed. One discussant added; *"I was once*

evicted from the area I lived before because I was discovered to be a MSW. Where I live today, I am in hiding, because if I am discovered, I will be kicked out again".

Chart 4.8: Utilisation of services offered (n=228)



4.6.3: Respondents perception of health workers' attitude towards them

The study also sought to understand if the health service providers' attitudes hindered the utilisation of HIV infection deterrence, care and treatment services. About two-thirds of the respondents (67.4%) reported that the healthcare providers' attitudes were a hindrance to seeking services and about a third (32.6%) felt that the health providers' attitude was not an issue in seeking health services. (See chart 4.9) Some of the reasons given for poor utilisation of health services included the use of abusive language by healthcare providers, lack of confidentiality, stigmatisation and use of harsh tones in the health facility.

The discussants had different experiences at the hands of healthcare workers. Some discussants shared how they had encountered very supportive healthcare providers at public hospitals while a

majority of the discussants shared their dissatisfaction with the services they provided at the public health facilities. One discussant added, *"Some of the healthcare providers are not very friendly and especially those from the government facilities. At times you will see them whispering to each other talking about you or gossiping about you with their colleagues".*

Some discussants reported that they had suffered from not accessing services due to negative attitude from health providers. One discussant added; *"Sometimes one is in so much pain and when you start explaining, the health worker stares in disbelief and it becomes difficult to share your problems".* Another discussant reported how a nurse in a government facility asked him very stigmatizing questions and at the end refused to examine his anus for a suspected anal STI and told him to go home and seek salvation from God. In comparison, discussants felt that the health workers at the DICs were friendly towards them and that the facilities were functional with relevant accessible services such as STI screening and treatment.

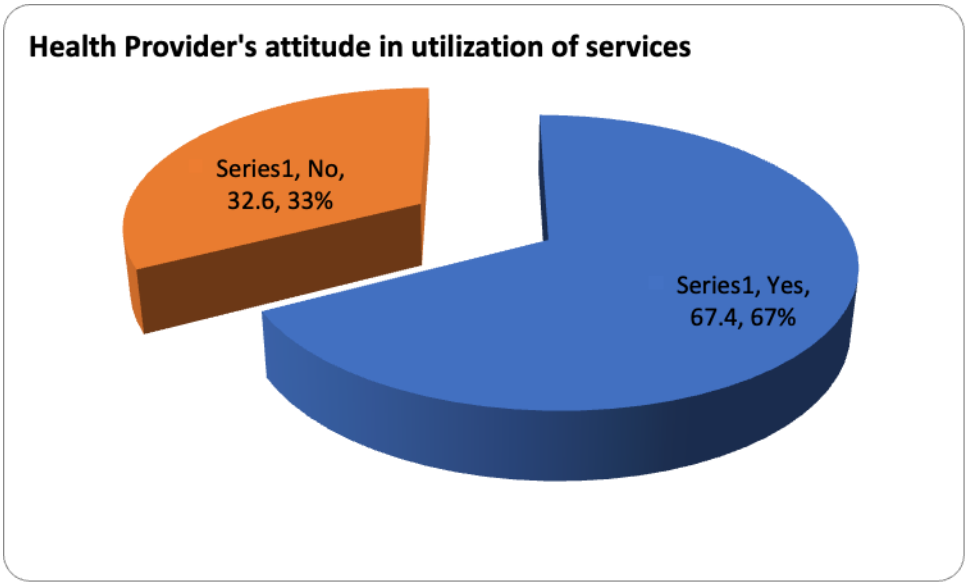
The key informants from the Ministry of Health and NGO service providers acknowledged that there had been training for healthcare providers commonly referred to "key population champions" from both the private and public sector. This training was conducted for the healthcare providers who were interested in working with key populations including MSW. However, there were some cases where these champions were transferred to other departments or even to other counties. This posed a major challenge because not all health providers in the government facilities had been trained on gender or sexuality issues especially regarding MSW.

As a result, when the MSW friendly health workers were transferred, their patients also stopped going to access health services at the government facilities. A discussant noted; *"Some of the clinicians ask very demeaning questions, sometimes they could call their colleagues to come and*

see an anal STI and then ask embarrassing questions such as what I was thinking when having anal sex".

In an effort to ensure that there are key population champions in all government facilities in Mombasa, one of the key informants- HAPA Kenya reported that they organize training on a quarterly basis for both government and private health facilities to sensitize them on matters concerning MSW and the type of services that they require.

Chart 4.9: Health provider attitude hindering the utilisation of HIV infection prevention and treatment care services (n=233)



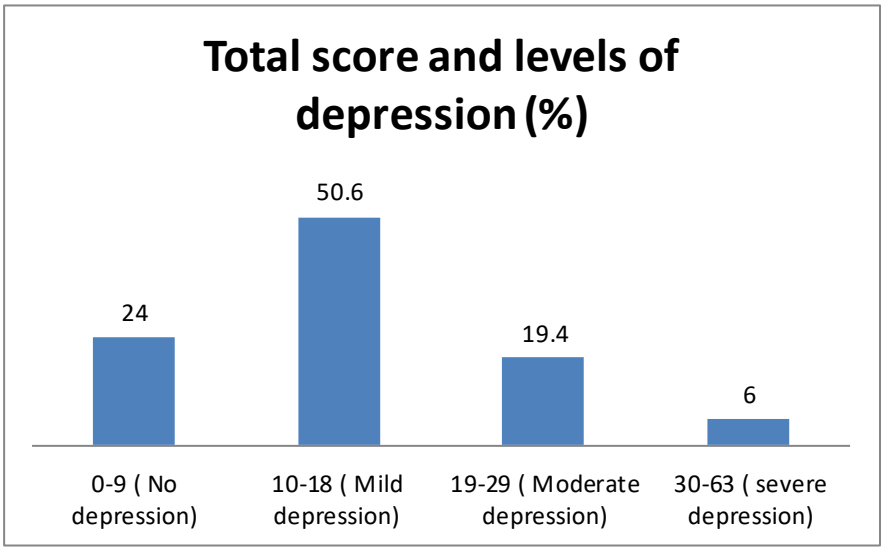
4.7: Assessment of depression

Depression was assessed using the Beck Depression Inventory 1 English version. The score was added up for each of the 21 questions by tallying the number to the right of each question marked.

Table 4.4: Prevalence of depression (n=233)

Variable	Frequency	Percent
Depression:		
Depressed	**177**	**76.0**
Not Depressed	**56**	**24.0**
Depression Categorization		
No depression	**56**	**24.0**
Mild depression	**118**	**50.6**
Moderate Depression	**45**	**19.4**
Severe Depression	**14**	**6.0**

Chart 4.10: Total Score and Levels of Depression



On the BDI scale, twenty-one statements were given to the respondents. From the BDI scale, the result was that 24% of the respondents had no depression while 19.4% had moderate depression while 6% had severe depression. According to Hasin DS et al 2017[44], most lifetime major depression disorders were either moderate or severe. Mild depression was found to be not clinically significant.

The prevalence of clinically significant depression among the study respondents (moderate – severe) was therefore 25.4%. For the general population, major depressive disorder (moderate-severe depression) represents depression of clinical significance.

From the study findings, 97.9% (228) knew of any HIV infection prevention, treatment and care services in Mombasa County and 95.6% (218) of them utilised the services. Overall, 67.4% of the respondents interviewed mentioned that the health provider attitudes hinder utilisation of HIV infection prevention, care and treatment in Mombasa County.

4.8: Relationship between depression and respondent characteristics

The relationships between depression and respondent characteristics were conducted and the outcome is presented in the following tables.

Table 4.5: Relationship between depression and respondent characteristics

Characteristic	Categories	Number (% Depressed)	χ^2	p-value
Age	19-24 (n=123) 25 and above (n=110)	90 (73.2%) 87 (79.1%)	1.115	0.184
Marital status	Not living in union (n= 185) Living in union (n=48)	135 (73%) 42 (87.5%)	4.405	0.024
Religion	Christian (132) Muslim(88) Other (13)	93 (70.5%) 72 (81.8%) 12(92.3%)	5.748	0.044
Education level	Primary and Secondary (n=172) College & University (n=61)	127 (73.8%) 50 (82%)	1.630	0.134

Employment	Employed (n= 77) Unemployed (n=156)	54 (70.1%) 123 (78.8%)	2.145	0.097
Partners in the last 6months	1 partner (n= 20) Multiple (n=210)	14 (70%) 160 (76.2%)	0.380	0.353
Condom use in the last 1 month	Always (n= 58) Sometimes/Never (n= 175)	37 (63.8%) 140 (80%)	6.267	0.011
Sought treatment for STIs	Always (n=144) Sometimes/Never (n= 89)	106 (73.6%) 71 (79.8%)	1.145	0.181
Do you know the HIV status of your partner?	Yes (n= 91) No (n = 142)	71 (78.0%) 106 (74.6%)	0.346	0.335
Do you use psychoactive substances?	Yes (n= 214) No (n = 19)	165 (77.1%) 12 (63.2%)	1.859	0.140

Use of alcohol	Yes (n= 158) No (n = 56)	122 (77.2%) 43 (76.8%)	0.004	0.541
Use of cigarettes	Yes (n= 66) No (n = 148)	52 (78.8%) 113 (76.4%)	0.153	0.419
Use of cannabis/bhang	Yes (n= 81) No (n = 133)	66 (81.5%) 99 (74.4%)	1.415	0.153
Use of khat/miraa	Yes (n= 126) No (n = 88)	96 (76.2%) 69 (78.4%)	0.144	0.417
Use of injectable drugs	Yes (n= 21) No (n = 192)	17 (81%) 147 (76.6%)	0.206	0.444
Depression	Utilise health services (n= 218) Do not utilise health services (n= 10)	164 (94.8%) 9 (5.2%)	1.140	0.258

In this study, 87.5% of the respondents living in union were depressed as opposed to 73% of respondents who did not live-in union. This variation was statistically significant (p=0.024).

Respondents with other affiliations apart from Christianity and Islam were more depressed at 92.3% when compared with Christianity (70.5%) and Islam (81.8%) This dissimilarity was statistically significant (p=0.044).

In relation to condom use, 80% of the respondents who reported not using condoms in the preceding one month were depressed as compared to 63.8% of the respondents who had always used condoms in the same period. This disparity was statistically significant (p=0.011).

4.9 Results of logistic regression

Logistic regression is a calculated model that is used where the response variable is categorical. The impression of logistic regression is to find a relationship between features and probability of particular outcome.

Confounding is defined as a probable basis of bias in studies in which an unmeasured third variable is connected to the contact of interest (though not causally) and causally interconnected to the outcome of interest. The possible confounding factors that were controlled for included use of psychoactive substances that could induce a cognitive or communication loss, undiagnosed mental health issues such as fretfulness and bipolar disorder and finally second language considerations.

In order to check for the strength of association while avoiding confounding effects, logistic regression was conducted. Only variables found significant in bivariable analyses were included.

Table 4.6: Logistic regression analysis including only variables significant in bivariable analysis

Characteristic	Categories	Number depressed	Std error	Sig
Marital Status	Not living in union (n= 185)	135 (73%)	0.024	0.010
	Living in union (n=48)	42 (87.5%)		

Religion	Christian (132) Muslim (88) Other (13)	93 (70.5%) 72 (81.8%) 12 (92.3%)	0.021	0.011
Condom use in the preceding one month	Always (n=58) Sometimes/ Never (n= 175)	37 (63.8%) 140 (80%)	0.049	0.022

The result of the logistic regression confirmed the earlier statistical significance of variables that were being analysed- marital status, religion and condom use in the preceding one month. Since the p values were all less than the significance level, it follows that there is a statistically significant relation.

4.10 Relationship between utilisation of health services and respondent characteristics

Table 4.7: Relationship between utilisation of health services and respondent characteristics

Characteristic	Categories	Number (% Who utilise health services)	χ^2	p-value
Age	19-24 (n=119) 25 and above (n=109)	114 (95.8%) 104 (95.4%)	0.020	0.570
Marital status	Not living in	170 (94.4 %)	2.789	0.089

	union (n= 180) Living in union (n=48)	48 (100%)		
Religion	Christian (128) Muslim(87) Other (13)	126 (98.4%) 82 (94.3%) 10(76.9%)	13.647	0.010
Education level	Primary and Secondary (n=167) College & University (n=61)	157 (94 %) 61 (100%)	3.820	0.041
Employment	Employed (n= 75) Unemployed (n=153)	71 (94.7%) 147 (96.1%)	0.239	0.428
Partners in the last 6months	1 partner (n= 20) Multiple (n=206)	18 (90%) 199 (96.6%)	2.078	0.184
Condom use in the last 1 month	Always (n= 53) Sometimes/Never (n= 175)	51 (96.2%) 167 (95.4%)	0.062	0.578
Sought treatment for STIs	Always	143 (99.3%)	12.701	0.001

	(n=144) Sometimes/Never (n= 84)	 75 (89.3%)		
Do you know your partner's HIV status?	Yes (n= 91) No (n = 137)	88 (96.7%) 130 (94.9%)	0.428	0.381
Do you use psychoactive substances?	Yes (n= 209) No (n = 19)	201 (96.2%) 17 (89.5%)	1.864	0.198
Use of alcohol	Yes (n= 155) No (n = 54)	149 (96.1%) 52 (96.3%)	0.003	0.659
Use of cigarettes	Yes (n= 63) No (n = 146)	59 (93.7%) 142 (97.3%)	1.558	0.193
Use of cannabis/bhang	Yes (n= 76) No (n = 133)	71 (93.4%) 130 (97.7%)	2.456	0.118
Use of khat/miraa	Yes (n= 124) No (n = 85)	120 (96.8%) 81 (95.3%)	0.300	0.421
Use of injectable drugs	Yes (n= 21) No (n = 187)	21(100%) 179 (95.7%)	0.934	0.420

Respondents with other affiliations apart from Christianity and Islam utilised health services less at 76.9% when compared with Christianity (98.4%) and Islam (94.3%). This variance was statistically significant (p=0.010).

Respondents with college and university education utilised health services more (100%) as compared to the respondents with primary and secondary education (94%). This difference was statistically significant (p=0.041).

With regard to seeking treatment for STIs, the respondents who reported either occasionally or never seeking treatment for STIs utilised health services less (89.3%) as compared to 99.3% of the respondents who reported that they always sought treatment for STIs. This variation was statistically significant (p=0.001).

4.11: Multivariate Analysis

Logistic regression was performed to assess factors associated with depression among respondents seeking HIV services.

Factors associated with depression among patients seeking HIV services

Factors assessed	N (%)	Crude Odds Ratio, C. I	p-value	Adjusted Odds Ratio, C. I	p-value
Participants HIV status awareness					
Yes	203(87.1)	0.8(0.30- 2.0)	0.58	0.7(0.24 - 2.13)	0.551
No	30(12.9)	1		1	
Number of sexual partners in the last 6 months					
None	3(1.3)	1		1	
One Partner	20(8.6)	0.6(0.2 - 2.06)	0.456	0.6(0.15 - 2.06)	0.379
2 - 5 partners	82(35.1)	0.9(0.37 - 2.0)	0.708	0.7(0.28 - 1.74)	0.443
6 - 10 partners	77(33.1)	0.8(0.36 - 1.95)	0.685	0.7(0.3 - 1.71)	0.449
More than 10 partners	51(21.9)	1		1	
Awareness of sexual partners HIV status					
Yes	91(39.1)	1.2(0.65 - 2.25)	0.557	1.6(0.78 - 3.33)	0.194
No	142(60.9)	1		1	

Use any psychoactive substances					
Yes	214(91.9)	2.0(0.73 - 5.26)	0.179	1.6(0.57 - 4.76)	0.355
No	19(8.1)	1		1	
Awareness of HIV services in locality facility					
Yes	228(97.8)	1		1	
No	5(2.2)	1.3(0.14 - 11.62)	0.831	1.0(0.08 - 12.93)	0.971
HIV health provider attitude					
Yes	157(67.4)	1.5(0.79 - 2.75)	0.223	1.5(0.77 - 3.04)	0.22
No	76(32.6)	1		1	

The logistic regression assessed the variables that were being analysed-respondents HIV status awareness, number of sexual partners in the last 6 months, awareness of sexual partners HIV status, use any psychoactive substances, awareness of HIV services in locality facility and HIV health provider attitude. Since the p values were all more than the significance level, it follows that there was no statistically significant relation.

CHAPTER FIVE

SUMMARY DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1: Introduction

This section gives a summary of the study findings, conclusion and recommendations. Primary and secondary data were used to study the effect of depression on utilisation of HIV infection prevention, treatment and care services among male sex workers at the Coast HIV Resource Centre, Mombasa. A sample of 281 respondents provided the primary data for this study.

5.2: Limitations of the study

This study can only represent the views of MSW in Mombasa and a comparison cannot be made with MSW from rural areas who are also actively involved in sex work. Due to time and financial limitations, this study was not able to cover MSW outside Mombasa.

In order to minimize the errors/biases, the questionnaire was pre-tested in Mtwapa, Kilifi County among 10 MSW who were mobilised by their support group and randomly selected to participate in the pre-test. Being that they are from a different county, they did not participate in the actual study.

5.3: Summary of the findings

The first goal was to describe the socio-demographic characteristics of the study respondents visiting the Coast HIV Resource Centre. The study reported that majority of the respondents (75%) of the study were single and had secondary education while 33% had some form of employment. Majority of the respondents (87%) were aware of their HIV status, but only 39%

were aware of their partner's HIV status. 22% of the study respondents had more than 10 sexual partners. On condom use, only 16% used condoms all the time with either their spouse or regular partner. Almost all of the respondents (92%) reported using psychoactive substances with alcohol at 74%, cigarette 31%, bhang 38%, miraa/khat 59% and injectable drugs at 10%.
Regarding depression status, only 24.0% did not depict any form of depression. However 50.6% of the respondents portrayed mild depression, 19.3% had moderate depression while 6.0% portrayed severe depression.

The third objective was to describe the utilisation of healthcare services among the study respondents. Almost all respondents (98%) noted that they knew of HIV infection prevention, treatment and care service in Mombasa County and 96% had utilised the services offered. However, over 67% noted that the healthcare providers hinder utilisation of HIV infection prevention, care and treatment. 62% of the respondents maintained that they sought treatment whenever they suspected to have a sexually transmitted infection. Among the respondents, only 25% sought treatment in government facilities while the majority sought treatment from private clinics, chemists or self-treatment. From the focus group discussions the healthcare provider's attitude made it hard for the respondents to access treatment from the government facilities.

Regarding the fourth objective which was aimed at determining the relationship between depression status and utilisation of HIV infection prevention treatment and care services, 67.4% of the respondents mentioned that negative health provider attitudes hindered utilisation of health services in Mombasa County.

5.4 Discussion

From the study findings, there was a lot of negativity and hostility towards male sex workers in Kenya. The study respondents felt that they would not feel safe if the wider community knew where they received their services. The respondents felt that at the community level there were those who had accepted the MSW and others had not and spoke ill of them, while others gossiped about them. Most study respondents preferred drop-in centres because they considered them a safe space to meet, chat with fellow MSW and access treatment, all in a friendly environment. Majority of the respondents felt that the society looked down on them and made them fear to visit government health facilities to get services. These findings are consistent with studies in Lesotho [36], Malawi [38] and Tanzania [42].

Consistent condom use has been advocated as one of the methods of HIV infection prevention. The study investigated the use of the same among the study respondents. Despite condoms being provided at no cost at the drop-in centres, less than 30% had used condoms all the time during penetrative sex in the month preceding the study. Over 60% noted that they only used condoms sometimes while less than 10% had never used condoms during penetrative sex in the month prior to the study. This was in line with the NASCOP 2016 study which reported that 23% of male sex workers reported having unprotected sex because their sexual partner refused to wear a condom. These findings however differ with the Abidjan study [30] where 69% of MSW conveyed frequently using a condom with their clientele. This difference could possibly be attributed to the outcome in this study which showed that the participants who reported not using condoms all the time utilised health services (where condoms and lubricants are available at no cost) less than the respondents who used condoms all the time. Additionally, periodic stock out

of water-based lubricants could also have been a contributing factor to low condom use amongst MSW in Mombasa County.

Various studies have shown that use of psychoactive substances can hinder decision-making on condom use. This study reported that nearly all study respondents consumed some form of psychoactive substances and only less than 10% maintained that they had no history of psychoactive substance use. These results concurred with the Cape Town study [31] which showed that substance and alcohol use disorders had a particularly negative bearing on ART adherence.

The goal of this research was to scrutinize the effect of depression on utilisation of HIV infection prevention, treatment and care services amongst male sex workers at the Coast HIV resource centre. The study found that a quarter of the respondents suffered from clinically significant depression. Though the severity of depression was low the study provides other insights on factors that may hinder utilization of HIV services by MSW.

Stigma and discrimination against male sex workers seeking healthcare was common. The study found that over 60% reported that the healthcare providers' attitudes were a hindrance to seeking services and only about 30% felt that the health providers' attitude was not an issue on seeking of services. For those who specified some of the reasons why they felt that the health provider's attitude hindered the utilisation of the services offered, they noted that some of the health providers were rude, others were harsh, some used bad language, lacked confidentiality, gossiped with other healthcare providers in their presence and having to be attended to by female health providers as opposed to male health workers whom they felt would understand their needs better. This finding is consistent with the Cote d'Ivoire study [30] which reported that MSW had

experienced healthcare-enacted stigma coupled with unreceptive settings that triggered manifold forms of stigma and discrimination including suboptimal healthcare.

This study has found out that though there is no significant relationship between depression and utilisation of health services, fear of violence, stigma and discrimination play a role in preventing MSW from accessing health services. Societal stigma may also affect utilisation of health services due to incidences such as verbal harassment, physical assault and blackmail. The key informants provided insights into some of the issues that affect utilisation of healthcare services by male sex workers. Among them was very low tolerance to sexual minorities by the wider society due to stigma and discrimination. The current law in Kenya criminalises the same sex relationships including sex work and cases of human rights violations against the male sex worker community are common. These findings are consistent with the study conducted in Uganda which highlighted the health providers' unwillingness to serve MSW in Uganda [35].

This study revealed that cultural and societal issues have created barriers for the study respondents in seeking services. There still is a lot of stigma associated with being a male sex worker in the community today. These views are supported by the Lesotho study [36] which reported that the strongest links with depression were observed with having experienced rejection by a friend, hearing prejudicial remarks about MSW, crippling fear of walking from place to place in open, and being threatened. All of these encounters were observed as being due to one's sexual orientation or gender identity. These results emphasise the necessity to give attention to universal and social discrimination towards MSW, which may aid to lessen the psychosomatic inhibitions to HIV and STI prevention and care.

Due to the level of stigma, the respondents felt they needed to hide the fact that they were MSW when getting services at the public facilities. At the public facilities, they hid who they were as there was a possibility of meeting with their neighbours or family members who did not know who they were. Some of the study respondents reported that they consulted with their peers who sought treatment on which medication they were prescribed for and instead of visiting the health facility they preferred buying similar medication from a chemist, not considering that the condition being treated could be different from what their peer was suffering from. This self-diagnosis could lead to further sickness and depression because of lack of appropriate healthcare.

5.5: Conclusions

The following are the conclusions from this study:

1. The study found that most of the respondents were aged between 20-24 years, single, Christian, their highest level of education was Secondary school and were not employed.

2. The study found that 25.4% of the respondents had clinically significant depression.

3. The study showed that two-thirds of the respondents reported that healthcare providers' attitudes were a hindrance to seeking health services. Some of the reasons given for poor utilisation of health services included the use of abusive language by healthcare providers, lack of confidentiality, stigmatisation and use of harsh tones at the health facilities. The study also documented the result of stock out of essential supplies such as water-based lubricants for this population. When this happens as was the case in the third and fourth quarter of 2019, the respondents resorted to using substitutes such as liquid cooking oil, shampoo and body lotion.

4. The study revealed that the respondents who were not depressed utilised health services more than those who were depressed.

5.6: Recommendations

The study investigated the effects of depression on utilisation of HIV infection prevention, treatment and care services among male sex workers at the Coast resource center in Mombasa County. The following are the recommendations:

1. Organizations working with the MSW community should integrate mental health services into the MSM services.

2. It is recommended that a training manual targeting police officers and prison warders to be developed. This manual will include sessions on what to do when they encounter hidden populations who might either be vulnerable to HIV infection or might be on HIV treatment and care and might need the same when under police custody.

3. It is recommended that the gender-based violence policy should be updated, including key issues on treatment, gender issues in relation to the MSW community, as well as sensitisation and training targeting both government and private healthcare providers on appropriate ways of providing services to this key population.

4. The Ministry of Health should put in place measures to ensure the regular supply of water-based lubricants alongside condoms, especially for the key population drop-in centres so as to avoid cases where MSW are using lubricating substances that are not safe such as shampoo, cooking oil and body lotion as reported by the study respondents.

The researcher recommends further studies on ways to improve utilisation of health services among MSW in Mombasa, Kenya.

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Appendices

Appendix 1: Informed Consent Explanation for MSWs

Introduction

My name is Patrick Mwai Muchai, a Masters of Public Health student at the University of Nairobi. I am conducting a study on the association between depression and utilization of HIV infection, treatment and care services among male sex workers. You do not have to decide today whether or not you will participate in the research. Before you decide, you can talk to anyone you feel comfortable with about your participation in this study.

Purpose of the study

Studies have shown that there are many cases of new HIV infections amongst male sex workers. It has also emerged that for those who test positive for HIV, it takes a long time for them to decide to go for treatment and care. It is because of this that we would like to know the reasons for not seeking treatment and care early. We would also like to know how they feel about disclosing that they are sex workers, how they are treated by healthcare providers as well as finding out what would motivate them to access HIV prevention, treatment and care services.

Procedure

This research will involve your participation in a group discussion that will take about one and a half hours. The group discussion will start with me making sure that you are comfortable. We can also answer questions about the research that you might have. Then we will ask you questions about HIV and give you time to share your knowledge. The questions will be about HIV prevention, access to prevention tools for male sex workers.

You will be required to fill out a questionnaire which will be provided and collected by me. You may answer the questionnaire yourself, or it can be read to you after which you can respond verbally indicating the answer that you would want to be written down.

If there are any questions you feel are uncomfortable to answer in the survey, you may skip them and move on to the next question. The information recorded is confidential, your name is not being included on the forms, only a number will identify you, and no one else except me and my supervisors will have access to the forms.

We will also talk about health seeking behaviour more generally because this will give us a chance to understand more about access to HIV treatment and care as well as health provider attitudes. You do not have to share any knowledge that you are not comfortable sharing.

The discussion will take place at the Coast HIV resource Centre and no one else but the people who take part in the discussion guide or me will be present during this discussion. The entire discussion will be tape-recorded, but no-one will be identified by name on the tape. The tape will be kept safely in a lockable cabinet. The information recorded is confidential, and no one else except researcher or the supervisors will have access to the tapes. The tapes will be erased after 6 Months.

Participant selection

You are being invited to take part in this research because we feel that your experience can contribute much to our understanding and knowledge of provision of HIV prevention, treatment and care services for key populations at risk.

Voluntary participation

Your participation in this study is entirely voluntary. It is your choice whether to participate or not. If you choose not to participate all the services you receive at this Centre will continue and nothing will change. You may change your mind later and stop participating without giving a reason for your withdrawal even if you agreed earlier.

Risks

We are requesting you to share with us some very personal and confidential information, and you may feel uncomfortable talking about some of the topics. You do not have to answer any question or take part in the discussion/interview/survey if you don't wish to do so. You do not have to give us any reason for not responding to any question, or for refusing to take part in the interview.

Benefits

There will be no direct benefit to you, but your participation is likely to help healthcare providers and policy makers to find out more about how to improve access to HIV prevention, treatment and care for Male sex workers. Those found to be suffering from depression will be referred for appropriate help.

Reimbursements

You will not be provided any incentive to take part in the research. However, KES 500 will be given for your transport reimbursement.

Confidentiality

We will ask you and others in the group not to talk to people outside the group about what was said in the group. We will ask each of you to keep what was said in the group confidential. You should know, however, that we cannot stop or prevent participants who were in the group from sharing things that should be confidential.

Sharing the Results

The information you give us today will not be shared with anybody outside the study team, and nothing will be attributed to you by name. The knowledge that we get from this research will be shared with you and your community before it is made widely available to the public. After we share the results of this study with you, we will publish the results so that other interested people may learn from the study.

Contacts of the principle researcher

If you wish to ask questions later, you may contact me on the following contacts:

Name: Patrick Mwai Muchai

Telephone: 0714-470 500

Email: pmwaimuchai@yahoo.com

This proposal has been reviewed and approved by the Kenyatta National Hospital/University of Nairobi Ethics Research Committee, whose task it is to make sure that research participants are

protected from harm. If you have any issues related to participating in the study, you can contact the Kenyatta National Hospital- University of Nairobi Ethics and Research Committee on:

The Secretary,

KNH-UON Ethics and Research Committee

P.O BOX 20723-00100, Nairobi. Tel: 020-27 26 300/27 16 450

Consent declaration form

I have read the above information, or it has been read to me. I have had the opportunity to ask questions about it and any questions I have asked have been answered to my satisfaction. I consent voluntarily to be a participant in this study

Print Name of Participant:…….

Signature of Participant:……

Date (Day/month/year):…….

Statement by the researcher/person taking consent

I have accurately read out the information sheet to the potential participant, and to the best of my ability made sure that the participant understands what the study will entail. I hereby confirm that the participant was given an opportunity to ask questions about the study, and all the questions

asked by the participant have been answered correctly and to the best of my ability. I confirm that the individual has not been coerced into giving consent, and the consent has been given freely and voluntarily.

A copy of this Informed Consent Form has been provided to the participant.

Print Name of Researcher……

Signature of Researcher /person taking the consent:……..

Date (Day/month/year):…….

Appendix 2: Informed consent for key informants

Introduction

My name is Patrick Mwai Muchai, a Masters of Public Health student at the University of Nairobi. I am conducting a study on the association between depression and utilization of HIV infection, treatment and care services among male sex workers .You do not have to decide today whether or not you will participate in the research. Before you decide, you can talk to anyone you feel comfortable with about your participation in this study.

Purpose of the study

Studies have shown that there are many cases of new HIV infections amongst male sex workers. It has also emerged that for those who test positive for HIV, it takes a long time for them to decide to go for treatment and care. It is because of this that we would like to know the reasons for not seeking treatment and care early. We would also like to know how they feel about disclosing that they are sex workers, how they are treated by healthcare providers as well as finding out what would motivate them to access HIV prevention, treatment and care services.

Procedure

This research will involve your participation as a key informant that will take about one hour. If you do not wish to answer any of the questions included in the survey, you may skip them and move on to the next question. The entire discussion will be tape-recorded, but no-one will be identified by name on the tape. The tape will be kept safely in a lockable cabinet. The information recorded is confidential, and no one else except researcher or the supervisors will have access to the tapes. The tapes will be erased after 6 Months.

Participant selection

You are being invited to take part in this research because we feel that your experience can contribute much to our understanding and knowledge of provision of HIV prevention, treatment and care services for key populations at risk.

Voluntary participation

Your participation in this study is entirely voluntary. It is your choice whether to participate or not. You may change your mind later and stop participating without giving a reason for your withdrawal even if you agreed earlier.

Risks

You do not have to answer any question or take part in the discussion/interview/survey if you don't wish to do so. You do not have to give us any reason for not responding to any question, or for refusing to take part in the interview.

Benefits

There will be no direct benefit to you, but your participation is likely to help healthcare providers and policy makers to find out more about how to improve access to HIV prevention, treatment and care for Male sex workers. Those found to be suffering from depression will be referred for appropriate help.

Reimbursements

You will not be provided any incentive to take part in the research.

Confidentiality

The information you give us today will not be shared with anybody outside the study team, and nothing will be attributed to you by name. The knowledge that we get from this research will be shared with you and your community before it is made widely available to the public. After we share the results of this study with you, we will publish the results so that other interested people may learn from the study.

Contacts of the principle researcher

If you wish to ask questions later, you may contact me on the following contacts:

Name: Patrick Mwai Muchai

Telephone: 0714-470 500

Email: pmwaimuchai@yahoo.com

This proposal has been reviewed and approved by the Kenyatta National Hospital/University of Nairobi Ethics Research Committee, whose task it is to make sure that research participants are protected from harm. If you have any issues related to participating in the study, you can contact the Kenyatta National Hospital- University of Nairobi Ethics and Research Committee on:

The Secretary,

KNH-UON Ethics and Research Committee

P.O BOX 20723-00100, Nairobi. Tel: 020-27 26 300/27 16 450

Consent declaration form

I have read the above information, or it has been read to me. I have had the opportunity to ask questions about it and any questions I have asked have been answered to my satisfaction. I consent voluntarily to be a participant in this study

Print Name of Participant:…….

Signature of Participant:……

Date (Day/month/year):…….

Statement by the researcher/person taking consent

I have accurately read out the information sheet to the potential participant, and to the best of my ability made sure that the participant understands what the study will entail. I hereby confirm that the participant was given an opportunity to ask questions about the study, and all the questions asked by the participant have been answered correctly and to the best of my ability. I confirm that the individual has not been coerced into giving consent, and the consent has been given freely and voluntarily.

A copy of this Informed Consent Form has been provided to the participant.

Print Name of Researcher……

Signature of Researcher /person taking the consent:……..

Date (Day/month/year):…….

Appendix 3: Informed consent form for Focus Group Discussants

Introduction

My name is Patrick Mwai Muchai, a Masters of Public Health student at the University of Nairobi. I am conducting a study on the association between depression and utilization of HIV infection, treatment and care services among male sex workers. You do not have to decide today whether or not you will participate in the research. Before you decide, you can talk to anyone you feel comfortable with about your participation in this study.

Purpose of the study

Studies have shown that there are many cases of new HIV infections amongst male sex workers. It has also emerged that for those who test positive for HIV, it takes a long time for them to decide to go for treatment and care. It is because of this that we would like to know the reasons for not seeking treatment and care early. We would also like to know how they feel about disclosing that they are sex workers, how they are treated by healthcare providers as well as finding out what would motivate them to access HIV prevention, treatment and care services.

Procedure

This research will involve your participation in a group discussion that will take about one and a half hours. The group discussion will start with me making sure that you are comfortable. We can also answer questions about the research that you might have. Then we will ask you questions about HIV and give you time to share your knowledge. The questions will be about HIV prevention, access to prevention tools for male sex workers.

You will be required to fill out a questionnaire which will be provided and collected by me. You may answer the questionnaire yourself, or it can be read to you and you can say out loud the answer you want me to write down.

If you do not wish to answer any of the questions included in the survey, you may skip them and move on to the next question. The information recorded is confidential, your name is not being included on the forms, only a number will identify you, and no one else except me and my supervisors will have access to the forms.

We will also talk about health seeking behavior more generally because this will give us a chance to understand more about access to HIV treatment and care as well as health provider attitudes. You do not have to share any knowledge that you are not comfortable sharing.

The discussion will take place at the Coast HIV resource Centre and no one else but the people who take part in the discussion guide or me will be present during this discussion. The entire discussion will be tape-recorded, but no-one will be identified by name on the tape. The tape will be kept safely in a lockable cabinet. The information recorded is confidential, and no one else except researcher or the supervisors will have access to the tapes. The tapes will be erased after 6 Months.

Participant selection

You are being invited to take part in this research because we feel that your experience can contribute much to our understanding and knowledge of provision of HIV prevention, treatment and care services for key populations at risk.

Voluntary participation

Your participation in this study is entirely voluntary. It is your choice whether to participate or not. If you choose not to participate all the services you receive at this Centre will continue and nothing will change. You may change your mind later and stop participating without giving a reason for your withdrawal even if you agreed earlier.

Risks

We are requesting you to share with us some very personal and confidential information, and you may feel uncomfortable talking about some of the topics. You do not have to answer any question or take part in the discussion/interview/survey if you don't wish to do so. You do not have to give us any reason for not responding to any question, or for refusing to take part in the interview.

Benefits

There will be no direct benefit to you, but your participation is likely to help healthcare providers and policy makers to find out more about how to improve access to HIV prevention, treatment and care for Male sex workers. Those found to be suffering from depression will be referred for appropriate help.

Reimbursements

You will not be provided any incentive to take part in the research. However, KES 300 will be given for your transport reimbursement.

Confidentiality

We will ask you and others in the group not to talk to people outside the group about what was said in the group. We will ask each of you to keep what was said in the group confidential. You should know, however, that we cannot stop or prevent participants who were in the group from sharing things that should be confidential.

Sharing the Results

The information you give us today will not be shared with anybody outside the study team, and nothing will be attributed to you by name. The knowledge that we get from this research will be shared with you and your community before it is made widely available to the public. After we share the results of this study with you, we will publish the results so that other interested people may learn from the study.

Contacts of the principle researcher

If you wish to ask questions later, you may contact me on the following contacts:

Name: Patrick Mwai Muchai

Telephone: 0714-470 500

Email: pmwaimuchai@yahoo.com

This proposal has been reviewed and approved by the Kenyatta National Hospital/University of Nairobi Ethics Research Committee, whose task it is to make sure that research participants are protected from harm.

If you have any issues related to participating in the study, you can contact the Kenyatta National Hospital- University of Nairobi Ethics and Research Committee on:

The Secretary,

KNH-UON Ethics and Research Committee

P.O BOX 20723-00100, Nairobi. Tel: 020-27 26 300/27 16 450

Consent declaration form

I have read the above information, or it has been read to me. I have had the opportunity to ask questions about it and any questions I have asked have been answered to my satisfaction. I consent voluntarily to be a participant in this study

Print Name of Participant:…….

Signature of Participant:……

Date (Day/month/year):…….

Statement by the researcher/person taking consent

I have accurately read out the information sheet to the potential participant, and to the best of my ability made sure that the participant understands what the study will entail. I hereby confirm that

the participant was given an opportunity to ask questions about the study, and all the questions asked by the participant have been answered correctly and to the best of my ability. I confirm that the individual has not been coerced into giving consent, and the consent has been given freely and voluntarily.

A copy of this Informed Consent Form has been provided to the participant.

Print Name of Researcher……

Signature of Researcher /person taking the consent:……..

Date (Day/month/year):…….

Appendix 4: MSW questionnaire

ASSOCIATION BETWEEN DEPRESSION AND UTILIZATION OF HIV PREVENTION, TREATMENT AND CARE SERVICES AMONG MALE SEX WORKERS WHO VISIT THE COAST HIV RESOURCE CENTER, MOMBASA, KENYA

AREA OF COVERAGE:----------

PARTICIPANT NO…….DATE:……..

ENUMERATOR: ----------Date: --------/------/-------

Part I SOCIAL DEMOGRAPHIC QUESTIONNAIRE

1. Age (In years) : ----------
    a) 18-22
    b) 23-30
    c) 31-38
    d) 39-46
    e) 47-54

Age Group	Frequency	Percent	Cumulative Percent

2. Marital Status:

a) Single…….

b) Married……..

c) Separated……..

d) Cohabiting…….

e) Divorced……

f) Widowed……

Marital Status	Frequency	Percent
Single		
Married		

Separated		
Cohabiting		
Divorced		
Widowed		

3. Religion

    a) Protestant……

    b) Catholic……..

    c) Muslim…….

    d) Hindu……...

    e) Tradition……

    f) Other (Specify)…….

Religion	Frequency	Percent
Protestant		
Catholic		
Muslim		

Hindu		
Traditional believer		
Other		

4. Highest level of Education

a) Primary……

b) Secondary……

c) College…….

d) University…….

e) Other (Specify)…….

5. Employment

a) Are you employed ? Yes……..No……..

6. If Yes, Type of occupation……

a) Skilled……

b) Unskilled……

c) Business……..

d) Unemployed……..

Occupation	Frequency	Percent
Skilled		
Unskilled		
Business		
Unemployed		

PART II: SEXUAL PRACTICES, ATTITUDES AND CHALLENGES

1. How many sexual partners have you had in the last 6 months?

    a) None

    b) 1

    c) 2-5 partners

    d) 6-10 partners

    e) More than 10 partners

Number of partners	Frequency	Percent
None		
1		
2-5 partners		

6-10 partners		
More than 10 partners		

2. Are you aware of your HIV status

   Yes (record specific reason mentioned) …….

   No……

   Don't Know……..

Knowledge of HIV status	Frequency	Percent
Yes		
No		
Don't Know		

3. Do you know your HIV status of your partner? (You don't have to say whether you are +ve or –ve)

Yes……

No……..

Knowledge of HIV status of partner(s)	Frequency	Percent
All partners		
Some partners		
None		

4. How many penetrative sexual acts have you engaged in the last one month?

    a) Zero

    b) 1-5 sex acts

    c) 6-10 sex acts

    d) 11-20 sex acts

    e) More than 20 sex acts

Number of sex acts	Frequency	Percent
zero		
1-5		
6-10		
11-20		

More than 20		

5. How often did you use condoms during penetrative sex in the previous one month?

Condom use	Frequency	Percent
All the time		
Some time		
Never		

6. How many times has a condom burst or got lost in your partner during penetrative sexual intercourse?

Number of sex acts	Frequency	Percent
zero		
1-5		
6-10		
11-20		
More than 20		

7. How often do you use condoms with your spouse/ regular sexual partner?

Condom use with spouse/ regular sexual partner	Frequency	Percent
All the time		
Occasionally		
Never		

8. Have you sought treatment whenever you have suspected to have a sexually transmitted infection?

Treatment seeking behaviour for STIs	Frequency	Percent
All the time		
Occasionally		
Never		

9. If yes, facility from which treatment is obtained?

Facility from which treatment is obtained	Frequency	Percent
Self-treatment		

Chemist		
Traditional		
Private clinic		
Government Facility		

10. Do you use any psychoactive substances?

Psychoactive substance use	Frequency	Percent
Not using any		
Alcohol		
Cigarette		
Cannabis/ bhang		
Miraa/Khat		
Injectable drugs		
Other substances		

Appendix 5: Beck Depression Inventory

The Beck Depression Inventory (BDI), created by Aaron T. Beck, is a 21-question multiple-choice psychometric test used to measure the severity of depression. Total score of 0-9 is considered minimal range, 10-18 is mild, 19-29 is moderate, and 30-63 is severe.

The score will be added up for each of the 21 questions by tallying the number to the right of each question marked. The maximum conceivable total for the whole test would be sixty-three and the least conceivable score for the test would be zero. Depression can be evaluated according to the Table below.

Total Score Levels of Depression

0-9 = Minimal depression

10-18 = Mild depression

19-29 = Moderate depression

30-63 = Severe depression

Beck's depression inventory scale (BDI)

In our day to day lives, we feel a mixture of emotions. Sometimes we feel happy, sometimes sad and sometimes we don't know exactly how we feel. Kindly give your honest opinion of which statement correctly describes how you have been feeling in the past two weeks including today.

1. **Sadness**

I do not feel sad 0

I feel sad much of the time 1

I am sad all of the time 2

I am so sad or unhappy that I can't stand it ...3

2. **Pessimism**

I am not discouraged about my future 0

I feel more discouraged about my future than I used to be. 1

I do not expect things to work out for me.....2

I feel my future is hopeless and will only get worse.....3

3. **Past Failure**

I do not feel like a failure 0

I have failed more than I should have.....1

As I look back, I see a lot of failures 2

I feel I am a total failure as a person.....3

4. **Loss of Pleasure**

I get as much pleasure as I ever did from the things I enjoy 0

I do not enjoy things as much as I used to..... 1

I get very little pleasure from the things I used to enjoy 2

I cannot get any pleasure from the things I used to enjoy 3

5. Guilty Feelings

I do not feel particularly guilty 0

I feel guilty over many things I have done or should have done 1

I feel quite guilty most of the time.....2

I feel guilty all of the time 3

6. Punishment Feelings

I do not feel I am being punished.....0

I feel I am being punished 1

I expect to be punished 2

I feel I am being punished 3

7. Self -Dislike

I feel the same about myself as ever 0

I have lost confidence in myself 1

I am disappointed in myself 2

8. Self-Criticalness

I do not criticize or blame myself more than usual.....0

I am more critical of myself than I used to be 1

I criticize myself for all of my faults 2

I blame myself for everything bad that happens 3

9. Suicidal Thoughts

I do not have any thoughts of killing myself 0

I have thoughts of killing myself, but I would not carry them out 1

I would like to kill myself 2

I would kill myself if I had the chance 3

10. Crying

I don't cry any more than I used to 0

I cry more than I used to 1

I cry over every little thing 2

I feel like crying, but I cannot cry.....3

11. Agitation

I am not more restless or wound up than usual.....0

I feel more restless or wound up than usual.....1

I am so restless or agitated that it is hard to stay still 2

I am so restless or agitated that I have to keep moving or doing something .3

12. Loss of Interest

I have not lost interest in other people or activities 0

I am less interested in other people or things than before.....1

I have lost most of my interest in other people or things.....2

It is hard to get interested in anything.....3

13. Indecisiveness

I make decisions about as well as ever 0

I find it more difficult to make decisions than usual 1

I have much greater difficulty in making decisions than I used to ...2

I have trouble making any decisions 3

14. Worthlessness

I do not feel I am worthless 0

I do not consider myself as worthwhile and useful as I used to 1

I feel more worthless as compared to other people.....2

I feel utterly worthless 3

15. Loss of Energy

I have as much energy as ever…… 0

I have less energy than I used to have…….....1

I do not have enough energy to do very much……2

I do not have enough energy to do anything……..3

16. Changes in Sleeping Pattern

I have not experienced any change in my sleeping pattern 0

I sleep somewhat more than usual 1

I sleep a lot less than usual 2

I wake up 1-2 hours early and can't get back to sleep 3

17. Irritability

I am no more irritable than usual… 0

I am more irritable than usual 1

I am much more irritable than usual 2

I am irritable all the time 3

18. Changes in Appetite

I have not experienced any change in my appetite 0

My appetite is somewhat less than usual 1

My appetite is much greater than usual 2

I crave food all the time 3

19. Concentration

I can concentrate as well as ever 0

I cannot concentrate as well as usual 1

It is hard to keep my mind on anything for very long 2

I am irritable all the time 3

20. Tiredness or Fatigue

I am no more tired or fatigued than usual 0

I get more tired or fatigued more easily than usual 1

I am too tired or fatigued to do a lot of the things I used to do.....2

I am too tired or fatigued to do most of the things I used to do.....3

21. Loss of Interest in Sex

I have not noticed any recent change in my interest in sex 0

I am less interested in sex than I used to be 1

I am much less interested in sex now.....2

I have lost interest in sex completely.....3

Total Score and interpretation of Levels of Depression

0–9: indicates minimal depression

10–18: indicates mild depression

19–29: indicates moderate depression

30–63: indicates severe depression.

Appendix 6: Interview guide questions for the Key Informants

1. What services do you offer to MSW and where can they be found? (Probe whether mental health services are also offered in the facilities they mention)
2. What is the attitude of the community towards service provision for MSW?
3. As a service provider, do you feel the need to hide the fact that you are providing services to MSW?
4. What has been the effect of media coverage on MSW?
5. What has been the effect of publicized MSW arrests on the provision and uptake of HIV related services?
6. After such arrests, do you feel safe providing HIV prevention services?
7. What is the result of such public arrests among MSW who are living with HIV in relation to accessing education, treatment and care?

Appendix 7: Guide questions for Focus Group Discussion

1. What health services and where can you access as a MSW in Mombasa County?
2. What is the attitude of the community towards health service provision for MSW? How does it make you feel mentally?
3. What is the attitude of health workers towards providing health services to MSW? How does it make you feel mentally?
4. While accessing health services, do you feel the need to hide the fact that you are a MSW?
5. What has been the effect of media coverage on MSW?
6. What has been the effect of publicized MSW arrests on the provision and uptake of HIV related services?
7. After such arrests, do you feel safe accessing HIV prevention services?
8. What is the result of such public arrests among MSW who are living with HIV in relation to accessing education, treatment and care?

Appendix 8: Budget

Item	Quantity	Unit Price	Total KES
Printing, Photocopying and stationery	1	20,000.00	20,000.00
Participants transport reimbursement	281	500.00	140,500.00
Communication (phone airtime)	2	1,000.00	2,000.00
Data Statistician	1	50,000.00	50,000.00
Post graduate charges for ERC services	1	2,000.00	2,000.00
TOTAL			**214,500.00**
Bus Transport from Mombasa to KNH/UoN for review	3 return trips	4,000.00	12,000.00
Transport within Mombasa	2	5,000.00	10,000.00
Miscellaneous costs		10,000.00	10,000.00
TOTAL			**32,000.00**
TOTAL EXPENSES			**246,500.00**

Appendix 9: Timeline

ACTIONS	2019				
	Aug	**Sept**	**October**	**November**	**December**
Submission to KNH-UON Ethics Committee					
Data Collection					
Data Compilation and Analysis					
Report Writing					
Report Submission					