

Voicing the Voiceless: Exploring the Communicative Practices, Attitudes and Perceptions of Black Men who have Sex with Men (BMSM) in the Msunduzi Local Municipality towards Pre-Exposure Prophylaxis (PrEP)

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By

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Declaration

I, Melusi L. Mntungwa declare that:

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Date: 15 February 2019

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Okokqala, ngalemfundo nange thuba lokuzithuthukisa ngicela ukuqale ngibonge bonke abeNtungwa, Ndabezitha; oMbulazi, nina baManqamane kaNsele, nina enadla izimfe zambili kwaphum'ikhambi lalinye. Nina enithi nidla, nibe niyengúmuntu ngendaba. Lomsebenzi wezandla nenqondo yami, akukho ngobuhlakani bami kodwa kukhuselwa inina nokunxuselwa inina kuMvelinqangi, ngalokho ngithi kini beNtungwa!

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"In South Africa, I am oppressed because I am a black man, and I am oppressed because I am gay. So, when I fight for my freedom I must fight against both oppressions."

Simon Nkoli

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Abstract

Background: The approval of Truvada as Pre-Exposure Prophylaxis (PrEP) by the Medicines Council of South Africa in 2015, signalled a new beginning in the fight against HIV and AIDS especially for underserved key populations such as Men Who Have Sex with Men (MSM). Though this may be the case, there has been a protracted implementation which has been attributed to a lack of empirical research on the acceptability of PrEP amongst MSM in South Africa. This study, therefore, provides an overview of the general awareness, perceptions and attitudes and communicative practices of a sample of Black Men Who Have Sex with Men (BMSM) residing in the Msunduzi Local Municipality of KwaZulu-Natal, South Africa, hence making contributions to this area of research.

Method: The study used a cross-sectional mixed-methods approach. Firstly, a questionnaire collecting data on socio-demographics, HIV status and sexual behaviours, PrEP awareness and adoption intention, as well peer health communication practices was carried out in English or IsiZulu amongst 120 MSM (109 BMSM) around Msunduzi. Univariate and bivariate statistical analyses were conducted on questionnaire data using IBM Statistical Package for Social Sciences (SPSS). Following this, 10 in-depth, semi-structured interviews were conducted in either English or IsiZulu and analysed, using the various phases of Thematic Analysis proposed by Braun and Clarke (2006).

Results: Univariate analyses revealed that BMSM, in Msunduzi, were young, with a low Socio-economic Status (SES). Bivariate analysis established correlations between some socio-demographic characteristics, sexual behaviours and PrEP adoption intention. Although there was awareness and enthusiasm to adopt PrEP, this evolved into concerns about the implications PrEP could have on the quality of life of respondents, notably adherence self-efficacy. Dyadic communication between friends emerged as the main form of sexual health communication BMSM used to experience and validate their sexuality, discuss health prevention methods and influence behaviour change, including promoting the adoption of PrEP.

Conclusion: There is significant potential for the implementation of PrEP amongst BMSM in Msunduzi Local Municipality. For effective implementation, more information and education are needed. Furthermore, the programme should address concerns such as PrEP's impact on daily lives. Dyadic communication amongst friends and the use of social networks have the potential to encourage PrEP engagement and to increase adherence self-efficacy.

Keywords: Black Men Who Have Sex with Men (BMSM); Pre-Exposure Prophylaxis (PrEP); Msunduzi Local Municipality; Attitudes, Perceptions, Peer Health Communication

List of Acronyms

AIDS:	Acquired Immunodeficiency Syndrome
AGYW:	Adolescent Girls and Young Women
ARV:	Antiretroviral
BMSM:	Black Men Who have Sex with Men
CDC:	Centres for Disease Control and Prevention
DOH:	Department of Health DM: District Municipality
DUT:	Durban University of Technology
GLN:	Gay and Lesbian Network
H4M:	Health for Men Health Clinic
HBM:	Health Belief Model
HCW:	Health Care Worker
HIV:	Human Immunodeficiency Virus
IAI:	Insertive Anal Intercourse
KZN:	KwaZulu-Natal
LGBTI:	Lesbian, Gay, Bisexual, Transgender and Intersex
MSM:	Men who Have Sex with Men
NGO:	Non-Governmental Organisation
NSP:	National Strategic Plan
PEP:	Post-Exposure Prophylaxis
PHC:	Primary Health Care
PrEP:	Pre-Exposure Prophylaxis

RAI:	Receptive Anal Intercourse
RDS:	Respondent Driven Sampling
SA:	South Africa
SANAC:	South African National AIDS Council
SEM:	Social Ecological Model
SES:	Socioeconomic Status
STI:	Sexually Transmitted Infection
TB:	Tuberculosis
TRA:	Theory of Reasoned Action
UAI:	Condomless Anal Intercourse
UKZN:	University of KwaZulu-Natal
UNAIDS:	The Joint United Nations Programme on HIV and AIDS
URAI:	Condomless Receptive Anal Intercourse
USA:	United States of America
WHO:	World Health Organization

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Chapter One

Towards voicing Black Men who have Sex with Men (BMSM) in the Msunduzi Local Municipality in their search for preventive methods in the age of HIV/AIDS

1.1. Introduction

Three decades since its discovery, the human immune virus (HIV) and acquired immune deficiency syndrome (AIDS) epidemic continue to adversely affect the global community across spectra of health, economics, and politics. As a result, this period has been described as 30 years of devastation, struggle and loss (UNAIDS, 2014). Although there have been great strides over these past three decades to curb the effects of HIV and AIDS, these efforts have not managed to address the rising number of new infections among vulnerable groups such as Black Men Who Have Sex with Men (BMSM). The phrase 'Black Men Who Have Sex with Men' encompasses the various health disparities associated with race and ethnicity while focusing on sexual behaviour rather than on identity or sexual orientation. This includes "gay and non-gay identified men, bisexual men, men who engage in situational sex with other men (for instance, in prisons, schools, or militaries), and male sex workers, among others" (McIntyre and Struthers, 2013:9).

Black Men Who Have Sex with Men (BMSM) are a group of men who hold public health significance within South Africa due to being disproportionately affected by HIV and AIDS. A 2009 modelling study on the modes of HIV transmission in South Africa estimated that 8% of all new HIV infections occurred among the overarching group of Men Who Have Sex with Men (MSM) (Bekker, Rebe, Brown, Budnik, De Swardt, Duby, Geffen, Kanyemba, McIntyre, Myer, Scheibe, Schowalter, Sonderup, Spearman, Toledo, Tucker, Van Dyk and Van Zyl, 2012). Evidence from the South African MSM data triangulation project conducted by the University of California, San Francisco further revealed that "HIV prevalence is between 1.89 and 4.65 times higher among MSM than among non-MSM males of similar ages" (2015:14). This was supported by results from recent epidemiological studies conducted in South Africa's major cities, Cape Town, Johannesburg and Durban which revealed that the prevalence of HIV among MSM is much higher than in their heterosexual counterparts (Avert.org, 2018).

These studies paint a despairing picture about the state of affairs of MSM in relation to HIV and AIDS nationally and aptly contextualises why MSM continue to be classified as a vulnerable group.

The vulnerability of MSM to HIV and AIDS cannot be separated from the local context from which these MSM emanate. Inevitably, South Africa has one of the largest heterogeneous HIV epidemics in the world, placing MSM in the country at higher risk of HIV transmission. Prevalence studies conducted in 2017 estimated that 7.9 million people were living with HIV in South Africa. These results equate to 18.9% of the country's general population (HSRC, 2018). In the same year, 220 000 new infections were recorded, whilst 110 000 South Africans died from AIDS-related illnesses. This makes South Africa one of the sub-Saharan African countries with the highest prevalence of HIV (Avert.org, 2018). Specific estimates revealed that the country's overall prevalence differs substantially by province, with a concentration in several districts nationally. Provincially, HIV prevalence ranges from 12.6% in the Western Cape to 27.0% in KwaZulu-Natal (KZN) (HSRC, 2018). Whilst key research suggests that, as in most regions of the globe, the dominant mode of HIV transmission in South Africa is commonly linked to heterosexual sexual activity. Though this may be the case, existing local accounts suggest that the epidemic is more diverse and rather emphasise the role that sexual interactions between men play in the transmission of HIV (Baral, Burrell, Scheibe, Brown, Beyrer and Bekker, 2011; Imrie, Hoddinott, Fuller, Oliver and Newell, 2013). As it is evident from above-mentioned investigations, HIV prevalence amongst MSM tends to exceed HIV prevalence amongst adults in the same age groups of the general (heterosexual) population. Therefore, the issue of a concentrated HIV epidemic among South African MSM has grown in relevance in recent years and remains a topical and prominent area of enquiry.

1.2. Setting of study

This study focuses on the BMSM who reside within the boundaries of Msunduzi Local Municipality. The Msunduzi Local Municipality (see Figure 1, page 3) is located within the province of KwaZulu-Natal and includes the city of Pietermaritzburg (the administrative capital of the province) and surrounding peri-urban and semi-rural areas. The Msunduzi Local Municipality came into being in December 2000, following the new post-apartheid demarcation of municipal boundaries. The local municipality now forms part of a larger district municipality, the uMgungundlovu District Municipality.

With successive changes in the boundaries of the municipal area over the years, Msunduzi Local Municipality has grown substantially larger both in area and population size. This was as a result of absorbing several impoverished rural areas that formerly fell outside of its area of jurisdiction. Currently, the municipality has an estimated population of over 618 536 inhabitants, the majority of whom live in Pietermaritzburg (+/- 176 590), the township of Edendale (+/-197 320) and the semi-rural area of Vulindlela (+/-145 410). These areas which have the highest population concentrations are the areas where this study took place, including; Machibisa, Caluza, Imbali, Sobantu and Scottsville. Sex and racial population estimates indicate that fifty-four percent (54.55%) of the residents are female and forty-five percent (45.45%) are male. Black Africans constitute 81% and make up the majority of inhabitants of the municipality. Followed by Indians at 10%, a small portion of White people at 6% and coloured people at 3% (Stats SA, 2018b). The above clearly indicates that there is a substantial number of black male inhabitants in the municipality which could form part of the BMSM category.



Figure 1: Msunduzi Local Municipality Map

Source: Msunduzi Local Municipality - Google Maps

Msunduzi is the economic centre of the uMgungundlovu District Municipality, accounting for 80% of the district's turnover, which is largely influenced by the fact that Pietermaritzburg is home to the legislative and administrative functions of the provincial government. This has boosted investor confidence and resulted in the municipality's economy growing positively in previous years (Msunduzi Municipality, 2013). Historically, the economy of the municipality was based on manufacturing (35% of turnover), retail trade (23%), as well as business, finance and government services. In recent years, however, the city has experienced an economic decline, particularly in the footwear industry. This has contributed to rapidly rising unemployment rates and growing levels of poverty. Current figures indicate that of the 229 672 economically active (employed or unemployed but looking for work) people in the municipality, 33% are unemployed. The main burden of this is felt in the townships and peri-urban settlements where some settlements experience up to 75% unemployment.

Fifty percent of households in the Msunduzi Local Municipality survive on an income of below R1 500.00 per month. The implication of this for the youth of the municipality who form the biggest part of the economically active population is that 43.1% of them are unemployed (Stats SA, 2018b). This is extremely concerning for a municipality where the majority (68.4%) of the population falls within the economically active age cohort of (15 to 64 years). Furthermore, educational levels indicate that the percentage of adults over 20 years with no schooling is 5.5% and the percentage of adults with a matric qualification is 33.7%. While 13.1% of residents have qualifications higher than Matric. It is these educational qualifications which influence the possibility of this population from gaining access to employment in sectors that require employees beyond the low and semi-skilled bracket. From the above factors and before an exploration of the health disparities facing the municipality is provided, a profile of a BMSM in the municipality could be figuratively drawn. This would be a black male residing in a township or semi-rural area, of the economically active age group, whose highest level of education is Matric and who has a large possibility of being unemployed.

Despite being a prominent site in the KZN province, Msunduzi is not free from the marginalisation that is experienced by peripheral localities when it comes to health research. This is especially the case about when it comes to recent epidemiological data relating to the incidence and prevalence of HIV among the general population, let alone MSM and particularly BMSM. Comprehensive data which referred to HIV prevalence in

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the region only dates back to 2003, with topical data presented in recent years. What those initial statistics revealed was that Msunduzi had a high HIV prevalence. More particularly, this is the picture that these statistics revealed about HIV and AIDS in the municipality: approximately 18% of the population were HIV positive, which was the equivalent of 88 000 inhabitants. Fifty-five to sixty-five percent (55% - 65%) of patients in medical wards in Pietermaritzburg public hospitals were HIV positive, which lead to an estimated 250 AIDS-related deaths per month, most of these which happened amongst individuals between the ages of 20 – 39 years. The above painted a bleak picture of the HIV and AIDS epidemic in the municipality. More recent detailed figures have been few and far between. Although Msunduzi lacks recent epidemiological data, the uMgungundlovu District Municipality, which is the "mother" district, has a wealth of data. Estimates can be gleaned from this data considering that 60% of the district's population resides in the Msunduzi sub-district. Therefore, this study has relied on overall district data to provide a context of the Msunduzi Local Municipality's HIV and AIDS epidemic. In 2010, the uMgungundlovu District Municipality had the highest prevalence of HIV and AIDS in KwaZulu-Natal province, as well as in South Africa, according to the annual Department of Health ante-natal survey undertaken at state hospitals (Msunduzi Municipality, 2013). From this report, a trajectory of HIV prevalence in Msunduzi over the preceding years could be identified (see Figure 2, page 5), which illustrates a growing number of incidences each year that resulted in increasing prevalence annually.

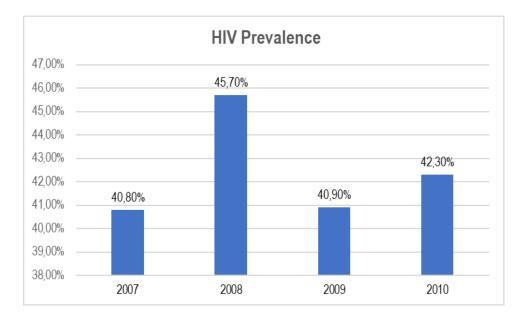


Figure 2: HIV/AIDS Prevalence Rates in Msunduzi Local Municipality from 2007 to 2010

Source: Adapted from Msunduzi Municipality Integrated Development Plan (IDP) Review for 2013/2014

A scarcity of epidemiological estimates follows these above figures that were reported in 2011. What is alternatively available in following years is data pertaining to the uMgungundlovu District Municipality. The *uMgungundlovu District Health Plan for 2015/2016* revealed that during the 2012/2013 financial year the uMgungundlovu District, which houses the Msunduzi Local Municipality experienced an HIV prevalence of 40.7%. This prevalence was reported to be highest amongst the youth, with those within the 15 to 24-year age group most vulnerable. This consequently led to high levels of exposure to HIV which resulted in this age group being the most burdened by HIV (Department of Health, 2015). Recent uMgungundlovu District HIV prevalence figures presented as part of the *uMgungundlovu DIP Plus* at the SA AIDS Conference (uMgungundlovu District Municipality, 2017) referred to Msunduzi Local Municipality figures. These figures highlighted that 20.24% of first-time antenatal visitors tested positive for HIV, alluding to a high incidence of HIV in the region. The report argues that this is because the Msunduzi Local Municipality has a concentration of high transmission areas, which include informal settlements, taxi ranks, truck stops, institutions of higher learning and sex worker hotspots (uMngungundlovu District Municipality, 2017).

Figures presented above aptly revealed that not only is the general population of MSM in the Msunduzi Local Municipality relegated when it comes to comprehensive HIV and AIDS research but BMSM are also completely ignored with no mention of this key population in any of the sparse HIV and AIDS research available. This erasure of BMSM as a high-risk group within the HIV landscape is apparent even in official municipal health documents such as the uMgungundlovu DIP Plus Report. This erasure was further highlighted by a lack of peer-reviewed research exploring this population's risk behaviours testing patterns. Statistics presented by the South Africa National AIDS Council (2016) indicated that Pietermaritzburg had very high incidences of HIV infection amongst men aged 15-24, which is guite alarming. Most concerning is fact that efforts to make PrEP available to key populations take place against the backdrop of a dearth of knowledge regarding local key populations like BMSM, which is further suppressed by an ailing health system that is not accessible to BMSM in the area because of erasure. This is supported by conclusions made by Greehy (2016) in a study that explores the accessibility to mainstream Primary Health Centres (PHC) by MSM in the Imbali area of Msunduzi. In her study, Greehy found that health care workers cannot effectively provide non-discriminatory physical and emotional health services to MSM individuals in the area because of prejudiced views on their sexual behaviours (2016). What is more, this lack of inclusive and adequate health care is exacerbated by structural factors.

For example, with the increase of life expectancy for all individuals, there will be an increase in the cost of health service delivery especially in Msunduzi Local Municipality which carries a large proportion of the population as well as the bulk of the health facilities (Department of Health, 2015). Therefore, it is evident that BMSM in this municipality are not acknowledged and included in current healthcare interventions and are at risk of not being included in the future, especially with regards to PrEP because of structural and social factors.

1.3. Background and context of the study

Despite the recognition that South Africa was experiencing a concentrated epidemic amongst MSM, the need for comprehensive epidemiological data on this population constrained the growth of research and the development of accessible health prevention programmes. The lack of epidemiological data pertaining to MSM in South Africa could be ascribed to this group's diversity and the fact that many MSM continue to be counted within the general population, due to non-disclosure. Consequently, this necessitated for populational HIV prevalence studies such as Simbayi, Rehle, Naidoo, Cloete, and Ntsepe (2014) and University of California (2015) to be conducted. Which was essential to develop a systematic resource of data on this group.

The University of California (2015) highlighted in the rationale of their MSM triangulation project, "to date neither a national MSM population size estimation nor a large-scale multisite epidemiological study among MSM has been conducted." Results from these studies revealed that MSM in South Africa were at a high risk of HIV infection and were therefore disproportionately affected by the HIV epidemic. Furthermore, they highlighted that MSM were underserved by the country's national HIV and AIDS response, alas contributing significantly to the high number of new infections annually. They concluded by deducing that the epidemic was not stabilising but instead was intensifying (Simbayi *et al* ., 2014, University of California, 2015). This validated the decision by the government to categorise MSM as a key population in the National Strategic Plan (NSP) (University of California, 2015). The NSP is the country's master plan which outlines how South Africa will respond to the prevention and treatment of HIV and AIDS, TB and STIs over a period of five years.

In response to the intensifying epidemic amongst key populations, inclusive of MSM, South Africa became the second country in the world after the United States to fully approve PrEP as a preventive method (DeBarros,2015). This is owing to the mounting evidence about PrEP's efficacy since it was first approved by the United States Food and Drug Administration (FDA) in 2012. This pill drastically reduces the susceptibility of HIV negative individuals to HIV infection. PrEP's approval in the USA saw revived hope for the fight against and changing the trajectory of new infections, especially amongst MSM (Kubicek, Arauz-Cuadra and Kipke, 2015). As a result, PrEP became the mainstay of new biomedical innovations in HIV and AIDS prevention in the developed world. Considering the increased enthusiasm and in line with the outcomes posited in the National Strategic Plan 2012 – 2016, the Medicines Control Council of South Africa officially registered the combination of Tenofovir disoproxil fumarate and Emtricitabine (Truvada) as PrEP in 2015 (Hugo, Stall, Rebe, Egan, De Swardt, Struthers and McIntyre, 2016).

This decision by the South African government aimed to reduce the incidences of HIV infections through the provision of expanded prevention methods. Whilst this approval theoretically has great potential to change the face of the HIV epidemic amongst MSM, its implementation has been stalled, especially when considering that PrEP is currently available in certain parts of South Africa. Health24 (2017) reported that at the end of 2016 there were two Health 4 Men (H4M) sites providing PrEP for MSM, one in Cape Town and another one in Johannesburg. Systematically, this stalled provision of PrEP is inadvertently based on a lack of knowledge on the impact that nationwide accessibility will have on key populations such as MSM. This speaks to a research gap that needs to answer to the uncertainty about a nationwide response towards PrEP and its acceptability among a larger population of MSM. Therefore, this study aims to reduce current uncertainties and contribute to this area of research by providing an overview of the general awareness, attitudes and perceptions of BMSM in the Msunduzi Local Municipality towards PrEP.

A catalyst for the scarcity of comprehensive nationwide data into PrEP acceptability amongst MSM is the imbalanced trajectory that MSM focused HIV and AIDS research takes and ow this characterises the current landscape. Research into the HIV epidemics among MSM in South Africa has largely focused on the country's major cities — Cape Town, Johannesburg, Pretoria and Durban — with scant consideration for the behaviours and HIV epidemics among MSM who reside beyond the urban areas (Imrie *et al.*, 2013; Lane,

Osmand, Marr, Shade, Dunkle, Sandfort, Struthers, Kegeles, McIntyre and Graham, 2014). The Marang Project, one of the largest South African HIV and AIDS prevalence studies focusing on MSM, was the first to provide epidemiological data on this population. Even then, the Marang Project only focused on large cities and was conducted in Johannesburg, Cape Town, and Durban among 925 MSM. Data from the Marang Project revealed that Durban had the highest HIV prevalence, accounting for 48.2% of its respondents while Cape Town was at 22.3% and Johannesburg at 26.8% (Simbayi *et al* ., 2014). A study of Sowetan men conducted in 2008 estimated that there was a 33.9% HIV prevalence rate among MSM who were gay-identified in Soweto (Lane, Raymond, Dladla, Rasethe, Struthers, McFarland and McIntyre, 2011). These are just two studies in a wide range of South African studies (Cloete, Simbayi, Kalichman, Strebel and Henda, 2008; Burrell, Mark, Grant, Wood and Bekker, 2010; Baral et al., 2011; Rispel, Metcalf, Cloete, Reddy and Lombard, 2011a). That focused exclusively on the risk factors and HIV epidemics among MSM in the country's large cities.

The plethora of research that focuses solely on the major metropolitan areas indicates the skewed nature of currently available MSM epidemiological data. The availability of only such investigations is unsatisfactory because these resources do not offer a representative picture of all regions in the country. The ramifications of this could be the erasure of certain sub-groups of MSM particularly those in either rural or peri-urban areas, especially in relation to health prevention programmes. Another fundamental problem that this trajectory of research highlights is a disconnect with and lack of understanding of how the current path infections and prevalence amongst MSM cannot be divorced from the politics of race, class and gender that have characterised the country's history (Mantell, Tocco, Osmand, Sandfort and Lane, 2016).

South Africa is imbued in a racially and structurally separatist history that left many individuals in nonmetropolitan areas excluded and erased from development and improvement initiatives. This deficiency of research on MSM in non-metropole areas highlights how structural and social exclusion continues to manifest itself by further relegating some MSM in society to the periphery. There are arguments that MSM have been disproportionately affected by the HIV epidemic due to a range of biological, social, structural and economic factors that increase their vulnerability to HIV infection (Rispel, Metcalf, Cloete, Moorman and Reddy, 2011b). This brings to the fore the characteristic issue that exists within research, which is the social relegation and ultimately the erasure of those MSM who may be more at risk of infection due to being forgotten.

Much like the non-inclusion of individuals who reside outside the metropoles as a focus of prevalence and incidences studies, so is the exclusion of racial majorities and a reflection on how the social and structural elements of ethnicity and race exacerbate their vulnerability. This study focuses on BMSM, a category that forms the majority of MSM based on the population composition of the country and are thus at most risk (Stats SA, 2018a). It can be argued that BMSM are disproportionately affected by the HIV epidemic because of social vulnerability which they experience because of poverty and the lack of resources (Knox, Sandfort, Yi, Reddy and Maimane, 2011). These compounded issues are characteristic of this population because they are the remnants of their racially subjugated past. Although BMSM remain one of the most at-risk populations for HIV infections, the number of studies that attempt to better understand this population have been limited until recently (Masvawure, Sandfort, Reddy, Collier and Lane, 2015; Mantell *et al.*, 2016).

These issues of relegation become proliferated for BMSM who reside in non-metropole areas, with even fewer studies undertaken which categorically interrogated the racial and ethnic disparities that influence the risk behaviours, as well the health preventative preferences of these BMSM. Despite the gradual change in the trajectory of research which has been catapulted by recent studies such as Kaighobadi, Knox, Reddy and Sandfort (2014); Sandfort, Lane, Dolezal and Reddy (2015); Lee, Sandfort, Collier, Lane and Reddy (2017), this lack of research can be understood as the de-voicing of these BMSM in non-metropole areas. By not including BMSM in non-metropole areas in research studies on HIV risk behaviours, prevalence and health prevention methods, this silences this sub-group of MSM and ultimately erases them from the national discourse on HIV and AIDS.

A ripple effect of this lack of research characterises itself in the ultimate exclusion of MSM from prevention programmes (McIntyre, Jobson, Struthers, De Swardt and Rebe, 2013). Although it must be noted that, in good faith, BMSM under the auspices of all MSM have been included in the previous two NSPs (2007 – 2011) and (2012 – 2016). However, this inclusion revealed a lack of operational guidelines and specific policy measures at both national and provincial level to ensure that targets outlined in the plans are implemented.

This signalled the lack of availability of necessary nationwide information to successfully create and implement appropriate prevention programmes (McIntyre et al., 2013). Which translated into the absence of messages directed at this population in major national HIV prevention campaigns and treatment programmes. Again, this can be recognised as another form of de-voicing of high-risk populations. Which exhibits how the remnants of historically entrenched structural marginalisation manifest themselves through research outputs and ultimately affect the development of necessary health prevention programmes for BMSM in South Africa (Rispel and Metcalf, 2009a). Therefore, there is a need for a "voicing project" to take place in future research with a specific focus on those categories of MSM that have been previously excluded from mainstream research, particularly BMSM in non-metropole areas. This is vital to better understand the context-specific factors that influence their vulnerability to HIV and to understand the saliency of new preventative methods for them.

South Africa lacks a comprehensive resource of nationwide research which explores the views, perceptions and attitudes of MSM towards PrEP, especially black men. The implications of this are visible in the lack of fast-tracked implementation of policy and programmes that will target this group which could impact the trajectory of the HIV and AIDS epidemic in South Africa. Taking this into consideration, Kubicek *et al.* (2015) maintain that it is important to understand the attitudes and perceptions of this vulnerable group towards new and emerging preventative methods as they would be ideal candidates for these interventions.

Furthermore, Hugo *et al.* (2016) assert that to best understand how to implement new HIV prevention methods it is vital that we understand how men will use these tools and their ability to adhere to them. Through this outlook, this study will grow knowledge about BMSM, specifically their sexual behaviours, attitudes and perceptions towards HIV prevention methods while exploring the communicative ecology that influences their perceptions towards health promotion. This primarily focuses on the intersectionality of peer communication and attitudes and perceptions; focusing particularly on how peer interpersonal communication affects the development of attitudes and perceptions towards sexual health and PrEP. Furthermore, by highlighting the narratives of these BMSM from Msunduzi Local Municipality, the study gives voice to a group that has previously been disregarded and is missing from the research landscape.

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Finally, by exploring the various elements, the study expounds on the feasibility of a PrEP implementation programme for BMSM within the Municipality and offer insights on this preventative strategy.

Utilising a dual theoretical frame that combines the Health Belief Model (HBM) proposed by Hochbaum (1958) and Rosenstock (1966) and the Intersectionality Theory proposed by Kimberlé Crenshaw (1989). This study robustly integrates these two theories of which when combined provide a reciprocal lens through which the lived experiences of BMSM and their resultant marginalisation can be understood. This kind of theory triangulation is used to explain the health behaviours of BMSM as well as their choices regarding HIV prevention. The Health Belief Model is one of the oldest of the individual behavioural theories and is a widely used theory in public health, while the Intersectionality Theory, though still emerging is fast becoming a cornerstone of sociological thought and is increasingly being used by health researchers. This makes this combination a solid lens through which to better understand how perceptions are formed and the communicative practices that foster these attitudes and perceptions towards HIV preventative methods.

1.4. Research Aims and Objectives

The main objective of this study is to develop an understanding of the communicative practices, attitudes and perceptions of BMSM in the Msunduzi Local Municipality towards PrEP. This study functions within the discipline of Media and Cultural Studies, under the auspices of health communication. Its focus on the communicative practices of BMSM is to elucidate the role that communication plays in informing and improving health behaviour and ultimately the choice of preventative methods. Therefore, a holistic approach is employed by this dissertation to better understand BMSM preferences for preventative health methods and to establish if there is a feasibility of a PrEP implementation programme in the municipality, with a special focus on how communication can play a role in disseminating information on this implementation programme to relevant BMSM. By exploring the communicative practices, attitudes, and perceptions of BMSM in non-metropole Msunduzi Local Municipality, the study aims to give a voice to these previously relegated BMSM. Particularly to advise on their willingness to adopt PrEP as a strategy to mitigate HIV incidence. Therefore, the overarching aim of the study is to establish if it is feasible to develop a PrEP implementation project for BMSM in the Msunduzi Municipality.

To achieve these aims and objectives, the following secondary objectives are addressed;

- <u>Establish the generalisable awareness of PrEP amongst BMSM in the Msunduzi Local Municipality</u>. To competently understand the perceptions and attitudes toward PrEP, establishing awareness levels of this preventative method is crucial. Therefore, this involves establishing the knowledge or lack of knowledge about the PrEP that exists among this population as an indicator of their attitudes and perceptions.
- 2. <u>Explore the acceptability of PrEP amongst BMSM in the Msunduzi Local Municipality in order to determine the feasibility of its implementation.</u> The feasibility of a communication driven implementation programme for PrEP is determined by the acceptability of the preventative method. Therefore, this will establish if there is a willingness to adopt the method, to better understand if there is a promise for uptake and use, foregrounding the existence of established attitudes and perceptions.
- 3. <u>Identify the barriers and motivators which influence the willingness of BMSM to utilise and adhere to PrEP.</u> This involves the establishment of possible barriers and motivators that influence the willingness of BMSM to utilise PrEP. Furthermore, to identify if there is any link between demographics, socio-economic and behavioural factors and the willingness to adhere and utilise PrEP and the influence that any of these factors has on willingness. These constructs form the foundation of the reasoning that confirms the attitude and perceptions of these BMSM
- 4. <u>Explore the role that peer sexual health communication has on the attitudes and perceptions of BMSM toward PrEP.</u> Communication cannot be divorced from the decision-making process, so the type of communication that occurs between BMSM can potentially influence sexual behaviours and preventative health choices. Here, these communicative practices are explored focusing on the type of communication, its barriers and its influence on sexual behaviour and ultimately, one's willingness to take PrEP. This will also influence how best to communicate uptake to BMSM in the future.

Considering the above objectives, this dissertation, therefore, asks the following questions.

Central Question

What are the perceptions and attitudes of Black Men who have sex with Men (BMSM) in the Msunduzi Local Municipality area towards Pre-Exposure Prophylaxis (PrEP)?

Sub-questions

- 1. In what ways are Black Men Who Have Sex with Men (BMSM) in the Msunduzi Local Municipality aware of Pre-Exposure Prophylaxis, and its benefits?
 - 1.1. Do BMSM know how to use this preventive method?
- 2. Are BMSM in the Msunduzi Local Municipality willing to take one pill a day in the form of PrEP as a preventative measure against HIV infection?
 - 2.1. What measures are BMSM currently taking to prevent HIV infection?
- 3. What factors would influence or prevent Black Men Who Have Sex with Men (BMSM) from taking PrEP as a preventative measure against HIV infection?
- 4. How does communication amongst BMSM influence their attitudes and perceptions toward sexual health and ultimately their willingness to utilise PrEP?

1.5. Structure of Dissertation

Chapter One is the introductory section and provides an overview of the HIV and AIDS epidemic in South Africa to position MSM within this setting. This chapter then proceeds to explore current HIV related research that focuses on MSM to problematise its skewed nature and lack of representivity of subgroups at high risk, such as BMSM who reside in non-metropole areas. Furthermore, the chapter explicates how this skewed research is unresponsive to the current changes in the HIV prevention landscape in the country which have been characterised by the availability of biomedical technologies. Finally, it concludes by making the argument that there is a need for extensive research into 'at higher risk' groups such as BMSM in the age of PrEP if these preventative methods are to be successful. Therefore, there is a need to better understand the knowledge, attitudes and perceptions of BMSM towards PrEP as well as their communicative practices.

Chapter Two's review of previous literature provides the context for this study. This review firstly explores the complexities of the category MSM and highlights the ethnic disparities that necessitated the formulation of the category BMSM. A discussion on the marginalisation that BMSM experience is linked to an exploration of the social, structural, biological and economic factors that impact the vulnerability of BMSM towards HIV and AIDS. This discussion is contextualised through the current situation and composition of the epidemic in the country. Subsequently, the shift towards biomedical preventative methods is interrogated and an overview of PrEP and its acceptability amongst BMSM at a glocal level is explained in this chapter. Reference is made to highlight the dearth of research about the acceptability of PrEP by South African BMSM. In conclusion, this section underscores its discussion of the abovementioned constructs at the intersection of peer communication and attitudes and perceptions specifically interrogating how peer interpersonal communication affects the development of attitudes and perceptions and influences the change of sexual behaviour and community health norms among MSM.

Chapter Three explores the Health Belief Model and Intersectionality Theory which form the theoretical foundation for this study. The Health Belief Model can be employed to predict health behaviour, in relation to this study, it is anticipated that the model will predict the circumstances under which MSM decide to uptake or not uptake PrEP. Therefore, this section explores the various constructs of the Health Belief Model that influence health choices. After this, Intersectionality Theory which explores the various social constructs that intersect to form an individual subjective identification is discussed, with the intent to better understand how the social categories of race, class, gender and sexuality cultivate lived experiences and can offer a nuanced understanding of how BMSM construct their choices for preventative methods. In conclusion, this section reflects on the relationship between intersectionality and the Health Belief Model as modes for better understanding the health decisions of BMSM in non-metropole areas.

Chapter Four outlines the methodological toolkit that was employed in this study, reflecting on the study objectives and research questions that need to be answered, as well as exploring the study's paradigmatic foundation and its research design. Furthermore, it includes the sampling frame which details how participants were recruited for this study. Following this is a discussion on the techniques used in the data

collection and data analysis. This section concludes by engaging the considerations on validity and reliability as well as the ethical deliberations underpinning this study.

Chapter Five presents and analyses the quantitative data that was collected through self-administered questionnaires. This quantitative data was analysed through a variety of statistical tests using the Statistical Package for Social Sciences (SPSS) version 24.0. The results from these tests are present through various synopsis tables and through a detailed analytical discussion. The Health Belief Model and Intersectionality Theory as a theoretical base are applied to guide the inferences made from this data. A reflection on the previous literature forms an integral part of the discussion to synthesise what is currently in the field and what has been generated in this study. This discussion elucidates this study's contribution to the scholarship of South African BMSM. This chapter forms the basis of the following chapter.

Chapter Six presents the results and analyses the qualitative data that was collected through in-depth, semistructured interviews. It begins with a detailed presentation of the themes that emerged from the analysis of data. Followed by a discussion on the interpretation of these results, this will reflect on a synthesis of what previous literature has proved and how the current study's findings either support or diverge from these. The theoretical dimensions of the Health Belief Model and Intersectionality Theory further provide a vantage point through which this discussion occurs, concluding with a comprehensive summary of findings from both the quantitative and qualitative data.

Chapter Seven concludes this dissertation by synthesizing what has been discussed in the preceding chapters, specifically focusing on the study's outcomes. Furthermore, the findings are synthesised to reflect on how this study contributes new insights or reinforces existing discussions in the scholarship of knowledge, attitudes and perceptions of BMSM towards PrEP. This chapter concludes with a discussion on recommendations for BMSM preventative health where necessary and an outline of possible research developments relating to the study.

Chapter Two

Black Men who have Sex with Men (BMSM) and PrEP in the age of HIV and AIDS, reflections and critiques on the current body of knowledge

2.1. Introduction

At an initial glance, it is evident that this study falls within the broad and diverse scope of HIV and AIDS prevention research. There is a substantial body of literature undertaken by various scholars, epidemiologists, healthcare workers and specialists in the field of HIV and AIDS prevention, focusing specifically on BMSM. This compendium of literature forms the base for the conceptual and contextual framework of this study and is explored in this chapter to provide a foundation for the study and to elaborate on its necessity and relevance. The framework entails a detailed account on HIV and AIDS in South Africa, focusing specifically on BMSM. Furthermore, it provides an overview of PrEP, as well as the relationship between PrEP and BMSM including the role played by sexual health communication amongst peers in promoting health behaviours and changing at-risk groups' sexual behaviours. Initially, an extensive overview of the MSM terminology and concept is undertaken to foreground the development of the sub-category of BMSM. This is followed by a comprehensive discussion on the marginalisation faced by the BMSM population in Africa. Subsequently, the HIV epidemic is reviewed with a special focus on the South African landscape and the epidemic's effect on BMSM. Having explored the conception of BMSM and their disparity to the HIV epidemic in South Africa, a close review of quantitative and qualitative research relating to PrEP, its history, and relevance to the fight against HIV amongst BMSM is explored to better understand its acceptability amongst BMSM both locally and globally. This chapter uses the categories MSM and BMSM fluidly when emphasising each population and to underscore the latter's inclusion within the larger category of MSM.

Since the approval of Truvada as PrEP in South Africa in 2015, there is has been a minimal effort by the Department of Health to implement and distribute this preventative medication to key populations such as BMSM. On the contrary, efforts have focused on research and implementation strategies directed at female sex workers and adolescent girls and young women (AGYW) (Khoza, Scorgie, Ramskin, Makgamathe, Baron and Delany-Moretlwe, 2018).

This is the case even though BMSM as a sub-group of MSM have been identified as a key population in the National Strategic Plan (NSP) 2017 – 2022. This is due to BMSM being at high risk of HIV transmission and the new infections that are exponentially growing among this group. This population remains underrepresented in the government's prevention strategies and communication initiatives (SANAC, 2012; SANAC, 2017) As a result, there is a paucity of studies which focus on BMSM and PrEP, especially on the perceptions and attitudes of BMSM towards PrEP, including studies which explore how best to distribute PrEP among BMSM.

Intriguingly, there have been more studies (Mutchler and McDavitt, 2011; McDavitt and Mutchler, 2014) conducted, which explore the role that sexual health communication plays in the establishment of sexual health norms among peers. At a theoretical level, these studies explore how regularly communicating about sexual health, that is inclusive of past sexual experiences can potentially change future sexual health decisions. Evidence from these studies offers an opportunity to reflect on how communicative practices can form a basis for the development of attitudes and perceptions towards sexual health and further explore how these may intersect with risk concerns to influence the attitudes and perceptions of BMSM towards PrEP. Therefore, this chapter explores the role played by previous studies to better understand the perceptions and attitudes of BMSM towards PrEP.

Furthermore, it reflects on how the practice of communicating about sexual health amongst peers influences improved sexual behaviours, focusing especially on the insights that can be gleaned with relation to the formation of attitudes and perceptions towards PrEP. This allows for an improved understanding of the landscape within which this study is situated. Subsequently, this study is positioned within a larger context of HIV prevention studies to better understand the inadequacies of previous studies and highlighting how this study improves on this body of knowledge.

2.2. Men Who Have Sex with Men: the complexities of the name

The phrase, Men Who Have Sex with Men (MSM) has been used consistently in Public Health discussions since it was coined by Glick, Muzyka, Salkin, and Lurie (1994) in the early twentieth century. This technical phrase was conceptualised "to describe an epidemiological category of men with behaviours that potentially put them at higher risk of acquiring HIV and other STIs". This was during the height of the HIV epidemic in the United States of America (UNAIDS, 2014:119). It consequently became a mainstay of epidemiological research during this period and continues to be broadly used to describe this social grouping of men. There is a relationship between the conception of the phrase MSM and HIV. Ever since the conceptualisation of MSM and through to its continued use within HIV research, it is evident that the degree of separation between these two concepts is narrow. Therefore, there cannot be a discussion about MSM without it linking to HIV (McKenna, 1996; Young and Meyer, 2005). This is especially relevant for this study that explores these two interconnected concepts and interrogates the intersectionality of the two within modern society. The elevation of MSM as a descriptor in epidemiological research was because it was a less stigmatising concept than the terms gay, homosexual and bisexual, all of which had become irrationally attached to HIV and AIDS discourse at the time (MSM Initiative 2008; Young and Meyer, 2005).

Though the popularity of the phrase MSM is widely recorded and it continues to be extensively used globally across diverse research, academic and social settings there is continued uncertainty about who is included in this category. Particularly relating to which exact sexual behaviours result in an individual being classified as an MSM (Young and Meyer, 2005; Prestage, 2011; Kaplan, Sevelius and Ribeiro, 2016). Contrary to its popularity, the concept is problematised for being limiting and for failing to acknowledge the varying diversities and the intersectional (social, economic, political and cultural) determinants that define an individual's self-identification (Boellstorff, 2011).

The University of California, San Francisco offer a simplistic definition for the phrase Men Who Have Sex with Men (MSM) when they state that the concept is used to describe "men who have sex with men, regardless of social identity (gay, bisexual, heterosexual) or whether they also have sex with women" (2015:4). The elements described above also appear in several other definitions for MSM, which are provided by academics, epidemiologists and multinational organisations (Prestage, 2011; UNAIDS, 2014).

When unpacking this definition, it is apparent that there are two aspects which make up the concept. Firstly, is biological maleness and the elevation of the biological maleness as a defining factor for the conception of MSM. The focus on biological maleness in defining this category is crucial for a deeper understanding of the diverse emotional, psychological and physical health risks that are a result of gender constructions. Secondly is the engagement in same-sex activity, same-sex sexual behaviour in its various manifestations is a key defining factor of MSM, regardless of self-identification. This element restricts the relevance of sexual and social identity as defining factors for MSM.

The above view is supported by UNAIDS (2014), who argue that the MSM category was introduced to echo the idea that individual behaviours, rather than sexual identities, are largely responsible for placing people at risk of HIV infection. Hence, the definition of MSM emphasises the population's sexual behaviours and excludes personal identity, the motivation for partaking in sex, or identification with any sexual orientation. Aptly put, being gay is a chosen identity whereas MSM is a description of a form of sexual behaviour (UNAIDS 2011). Tom Boellstorff best encapsulates this when he asserts that, "it's not who you are, it's what you do" (2011: 291). This elevation of sexual behaviour over identity is robustly contested by various scholars (Young and Meyer, 2005; Prestage, 2011; Kaplan *et al.*, 2016; Parker, Aggleton and Perez-Brumer, 2016) and will form part of further discussions in this chapter which will elucidate the complexities in conceptualising the category MSM. The elucidation is beneficial for understanding the nature of the category MSM, as its resonance amongst BMSM will be interrogated within this study, to better comprehend if the functionality of this category will be beneficial for the development of a PrEP implementation plan.

Contestations to the reductionist nature of homogenous categories like MSM include that they reduce identity to sexual behaviour and overlook important social dimensions of sexuality (Prestage, 2011). This subsequently perpetuates confusion and solidifying a dichotomy between behaviour and identity. It is worth noting that individuals are different and so are the decisions that underpin their behaviours. These include the ascription of meaning to the act of sexual intercourse, negating risks and how partners perceive each other, all of which are factors that define the negotiations that MSM encounter and therefore cannot be understood in isolation (Meyer, Costenbader, Zule, Otiashvili and Kirtadze, 2010). As a result, the phrase MSM risks oversimplifying the diversity of relationships, identities and behaviours in which men participate,

and thus fails to sufficiently describe variations in sexual behaviour but also undermines the rights of gay, and bisexual men to self-label (Young and Meyer, 2005: Meyer *et al.*, 2010; Prestage, 2011).

This argument is aptly articulated by Garrette Prestage (2011:3) who maintains that;

the term MSM strips gay communities of visibility and relevance, failing to acknowledge gay men's social relations through identity, culture and history, and reducing them to a mere behavioural category. It conceals the extent to which they have been affected by HIV and their contribution to the response against HIV, and risks distorting prevention efforts. It reduces the importance of gay communities and associated with human rights agendas. The emphasis on the term 'MSM' implies that all homosexually active men are equally at risk, diminishing the importance of the risk to gay men.

Applying the phrase MSM solely as a sexual behaviour category, risks reducing an entire population of people with differing and complex realities into a simple behavioural category and limits important narratives of selfhood into a behaviour (Young and Meyer, 2005; Boellstorff, 2011; Prestage, 2011; Kaplan *et al.*, 2016, Aggleton and Parker, 2015).

The above argument is also especially relevant for HIV research and specifically BMSM as the foci of this study because its use potentially erases certain identities, important sexual behaviours, practices and routes of HIV transmission (Kaplan *et al.*, 2016). Acknowledging this presents this study with the opportunity to interrogate the decision to use the category BMSM instead of socially identifiable categories such as gay, or bisexual, which will be elaborated on later in this section. To competently execute this, it is necessary to explore the arguments around the applicability of MSM in HIV discourse as this will illuminate the utility of the category MSM in this study. This is especially crucial considering the inter-connectedness of MSM and their relationship to HIV research, which was alluded to above. Firstly, it is evident that even in HIV research there are contestations to the use of MSM as a category, because not only does it exclude a range of social determinants of sexual behaviour, its reductionist focus on behaviour assumes that all MSM are at equal risk of HIV transmission. By doing this it presumes that MSM are a homogenous group with a single set of sexual behaviours which translates to the same level of risk, an argument that is simplistic epidemiologically.

misleading socially and conceals the specific nature of the HIV epidemic amongst this group (Prestage, 2011).

In the above previous, arguments presented have highlighted that there is a wide network of relations that exist in any MSM sexual encounter which are defined not only by behaviour but by identification and the relation between these two variables. Further arguments highlight that through these skewed assumptions of behaviour and a homogenous group of individuals, the continued use of MSM as categorisation in these instances has made it difficult to respond to specific communities that are at risk, which has thus hindered the progress of HIV prevention among sexual minorities (Kaplan *et al.*, 2016).

More arguments which highlight the problematic nature of the MSM category are presented by several authors (McKenna, 1996; Meyer, Costenbader, Zule, Otiashvili and Kirtadze, 2010). Their arguments aim to develop an understanding of MSM within the context of the developing world, as well as the racialisation of dominant sexuality concepts used to describe identity. Neil McKenna (1996) presents a prominent argument where he maintains that research on MSM which was conducted since its inception, whether from a behavioural or identity vantage point was done so from a Western context. This equates being categorised as MSM with Western ethnicity and whiteness. McKenna (1996) problematised this perspective because it was not applicable to the developing world as it failed to acknowledge the structural, economic and political issues which define this environment.

The above argument was supported by Meyer *et al.* (2010) who also argued that the tendency to employ Western sexual identity labels, rather than locally meaningful categories of identity, made it difficult to identify local MSM. This exclusion which thus has detrimental consequences for Health Promotion and prevention campaigns that were designed to reach this group. This exercise of racialisation obscures the realities of MSM in developing countries and potentially erases the finer nuances of this group. These ideas of the social, structural, economic and political issues are a prominent cue, presented by Kimberlé Crenshaw in her popular theory of Intersectionality, which is a theoretical lens this study utilises (Crenshaw, 1989). Though developments expanded the use and applicability of the concept to these developing communities, this shift was also problematic as Tom Boellstorff (2011:305) argues that "efforts to 'export' Western sexual identities

(lesbian, gay, bisexual) to different places and contexts have been recognized as deeply flawed and potentially neglectful of other important categories of identity".

Counter to negative arguments that problematised the use of the category MSM, there is scholarship which supports MSM and its applicability to social and health environments. These supporting arguments also closely relate to the issue of racialisation discussed above. Scholars, Rebecca Young and Ilan Meyer (2005) and Boellstorff (2011) argue that a chief benefit of the MSM category in its current manifestations is that it is inclusive of people of colour, poor people, or racially and ethnically diverse groups that exist outside the constructs of gayness which were closely associated with privilege and whiteness. The category MSM as Boellstorff (2011) contends, worked to narrow the scope of conflating the idea of being "gay" with whiteness and Westernisation. For centuries, gayness was linked to whiteness to the point that a description of a gay man would be a white man who was much better off (financially) than other men. This is a notion that the development of the category MSM worked to counter by allowing for new identities to be included in the fold (McKenna, 1996; Boellstorff, 2011). This is particularly relevant for naming and including voices of individuals who experience same-sex desire but had been excluded from discourses on health because of their ethnicity and social class that did not connect them with notions of gayness that are imbued in white privilege. Black Men Who Have Sex with Men (BMSM) in a non-metropole city may find resonance in public health discourses through this category.

Young and Meyer (2005) contend that the category MSM was developed to implicitly refer to people of colour, poor people, or racially and ethnically diverse groups outside the perceived mainstream gay. In its current manifestations, the category MSM gives voice to men who were disenfranchised by the identity marker "gay" and gives diverse groups from various backgrounds the autonomy to function when they were previously unaccounted for. In her book exploring sub-Saharan sexual identities, Chantal Zabus best articulates this transition considering African same-sex identities by asserting that, "African homosexuality's can never be comfortably slotted within identity politics carved out of Western gay...liberation struggles..." (2013:159).

This social exploration uses the category BMSM from a fluid point by acknowledging and considering the diversity of MSM their sexuality, relationships, identities and the behaviours in which they participate. This study uses the terms homosexual or other terms such as sexual minorities, and same-sex behaviours, interchangeably to describe MSM with the intention to prominently emphasise men of colour, poor individuals and minorities that have previously lacked representation. This choice is intended to ensure that this study considers the many complex sexual and social interactions between MSM, as well as to unpack and understand the complex nature of encompassing male-to-male sexual behaviours that become tricky and difficult to understand when the focus is on all-encompassing categories like straight, bisexual and gay.

2.3. The need for an ethnically and culturally aware category – The advent of BMSM

Although there were many conflicting assertions regarding the category MSM, many scholars praised it for its inclusivity of people of colour and previously erased sexual minorities that fell outside the privileges of the category "gay". Even with this support for the category questions remained about its actual representivity. There is a depth of research that interrogates how ethnicity and race are compounding factors for the increased ill health and mortality of people of colour relating to a range of diseases and in the provision of health care (Farmer and Ferraro, 2005; Williams and Jackson, 2005; Williams and Mohammed, 2009). What these studies reveal is that racial differences and particularly the historical and current socio-economic status of particularly black people place them at higher risk of illnesses and mortality which is further compounded by unequal health care provision. Within the American context, David Williams and Selina Mohammed (2009:20) assert that, "for most of the 15 leading causes of death including heart disease, cancer, stroke, diabetes, kidney disease, hypertension, liver cirrhosis and homicide, African Americans (or blacks) have higher death rates than whites." This highlights the need for racially specific research which considers the disparities that lead to this effect on black people.

In South Africa, a report on the changing face of health in the country highlighted that social, and economic inequalities remain for the majority of black South Africans, resulting in poor health care (Mayosi, Lawn, Van Niekerk, Bradshaw, Karim, Coovadia and Lancet SA, 2012). Therefore, these unequal eventualities cannot be divorced from the struggles of MSM, who form part of these communities and who are at times at higher

risk of contracting diseases such as HIV and developing AIDS. What this reveals regarding MSM is the need for a specific category to address racial and ethnic disparities that affect health outcomes of MSM.

The development of the phrase Black Men Who Have Sex with Men (BMSM), was born of the need to address the health disparities associated with race and ethnicity. The conceptualisation of BMSM that this study adopts, emphasises and encompasses the various health disparities associated with race and ethnicity while focusing on sexual behaviour rather than on identity or sexual orientation. This includes "gay and non-gay identified men, bisexual men, men who engage in situational sex with other men (for instance, in prisons, schools, or militaries), and male sex workers, among others" (McIntyre and Struthers, 2013:9). A growing body of literature has investigated the disproportionate effect that race has on how BMSM experience risk related to HIV and AIDS. Borne in the United States of America (USA) where BMSM are disproportionately affected by HIV in comparison to their white counterparts, the concept of BMSM has become the mainstay for investigating the cumulative effects that place this population at risk.

The Centre for Disease Control and Prevention in the USA estimated in 2012 that BMSM accounted for the biggest portion (51%) of new HIV infections amongst the general black population and 72% amongst the population of black men (Centres For Disease Control and Prevention, 2012). This establishes the risk profile of this population of men; therefore, it is evident that the development of the category BMSM, was necessitated by the need to better understand the vulnerability of these men to HIV and to address these risk factors effectively. Commenting on the need for this category, Truong, Perez-Brumer, Burton, Gipson, and Hickson (2016: 938), propose: "to understand risk and vulnerability to HIV for Black men, an acknowledgement of the intersections between race, class, gender, sexuality, and power are necessary to inform their lived reality. A keen starting point is with the category BMSM". This further emphasises the potential that the category BMSM holds for further research and how its use assumes an intersectional outlook.

The establishment of the category BMSM has led to a proliferation of research focused on BMSM with the intention to better explain this group. This research has revealed that there is an unambiguous relationship between the vulnerability of BMSM to HIV and racial discrimination, individual-level hardships such as social,

economic and legal hardships, homonegativity and culturally prominent norms that value notions of masculinity and constructs of manhood as well as HIV and AIDS risks and behaviours (Jeffries, Marks, Lauby, Murrill and Millett, 2013; Irvin, Wilton, Scott, Beauchamp, Wang, Betancourt, Lubensky, Wallace and Buchbinder, 2014; Fields, Bogart, Smith, Malebranche, Ellen and Schuster, 2015; Nelson, Wilton, Moineddin, Zhang, Siddiqi, Sa, Harawa, Regan, Dyer, Watson, Koblin, del Rio, Buchbinder, Wheeler and Mayer, 2016).

A similar trajectory can be identified in the African diaspora and in South Africa, with the disproportionate effects of HIV and AIDS well recorded. These emphasise the need for a category that addresses and better contextualises the factors leading to this vulnerability. Therefore, this study employs this category to explicate the perceptions, attitude and communicative practices to respond to what Kaighobadi, Knox, Reddy, and Sandfort (2014) refer to as the inadequate number of empirical studies needed to add to an improved comprehension of the population in South Africa.

2.4. Marginalisation and its legal Implications for MSM on the African continent

The African continent has been reported to have laws stipulating that criminal charges should be instituted against men who are caught engaging in sexual relations with other men. In countries such as Uganda, Tanzania, Sudan, Sierra Leone, and Mauritania, MSM can face from 14 years to life imprisonment. These laws can have physical, psychological and sexual violence related implications for MSM. The manifestations of this criminalisation of MSM on the African continent are varied, from being ostracised socially, to loss of employment, being forced to move and leave their birthplaces (extensional exile), as well as being a victim to "hate crimes" and ultimately death (McKenna, 1996). It is obvious how these risks encompass what Mohan Dutta (2008) describes as being peripheral to the dominant system of the day – when presenting a definition for marginalisation.

Men Having Sex with Men (MSM) on the African continent are grossly marginalised and are faced with a variety of punishments should they publicly live out their same-sex desires. The plethora of punishments for being found guilty of engaging in same-sex acts range from being fined to short and lifelong incarceration, strenuous manual labour, obligatory psychiatric treatment, banishment, lashing, as well as death by public

stoning (Arreola, Santos, Beck, Sundararaj, Wilson, Hebert, Makofane, Do and Ayala, 2015). The enactment and reinforcement of this marginalisation of MSM is therefore performed using punitive laws and by perpetuating what Phumla Gqola (2015:58) refers to as the "Fear Factory", in this case, it can be understood as a Homosexual Fear Factory.

This Homosexual Fear Factory is enacted in a two-fold manner, firstly it teaches citizens to fear and not want to be associated with MSM. Secondly, MSM constantly live in fear of being exposed, imprisoned and killed with many 'going underground'. This successfully erases MSM from society and cements their position of marginalisation. As a result, many of these men live out their lives caught up in a complicated web of legal, social, religious and moral contempt, with the ever-present threats of harassment, intimidation, arrest, imprisonment, and even death, hovering over their heads, which increases their vulnerability to negative health and other outcomes (McKenna, 1996; Zahn, Grosso, Scheibe, Bekker, Ketende, Dausab, lipinge, Beyrer, Trapance and Baral, 2016).

The Panos research project indicated that in 1993, Africa had 24 countries out of a total of 44 (55%) which had laws against sex between men. At the time, there was information on laws in nine countries, with 11 countries making no mention of sex between men in their penal codes (McKenna, 1996). As recently as 2007, the International Lesbian, Gay, Bisexual, Trans and Intersex Association (ILGA) performed a world survey on the legal status of same-sex practices. The findings revealed that 75% of the African nations, (40 of the 53), deemed same-sex practices to be illegal. This is evidence that Africa continues to have the highest rates of intolerance towards same-sex practices. The number has marginally decreased over the past decade, as statistics revealed in the 2016 Report written by Aengus Carroll (2016) on behalf of ILGA. In 2016, 37 countries had laws which prohibited same-sex acts between consenting adults. This structural and legislative discrimination is based on the belief that homosexuality is "un-African" and is a European imposed practice that arrived with the colonisers and has no place in African history (Aggleton and Parker, 2015).

The above idea was supported by the then African Union (AU) Chair and former Zimbabwean President Robert Mugabe who asserted at a United Nations General Assembly meeting that, "We reject attempts to prescribe new rights that are contrary to our values, norms, traditions and beliefs. We are not gays." (News24,

2015: para 2). Former President Mugabe vehemently argued that his country and Africa would not accept homosexuality as it did not form part of African values. This is an example of the common "us versus them" rhetoric used by politicians attempting to garner popular support for anti-LGBT policies (Kretz, 2013; Biruk, 2014). Evidently, statements like these reflect the views of 69% of African leaders and have salient effects on the levels of discrimination experienced by MSM in most of the countries on the continent (Biruk, 2014).

Though the above arguments are centred on "Africanity" and its value, there is a growing scholarship which problematises this notion and links the current understanding of this kind of Africanity to colonial inheritances and ideals (Fanon, 1967; Biko, 1977; Tshaka, 2007; Mpofu, 2013; Rebe, De Swardt, Struthers and McIntyre, 2013). The foundation for the beliefs and the laws which ultimately criminalise the existence of MSM are effectively the legal codification of moral, religious and social taboos (McKenna, 1996). It can be argued that these are a critically weak foundation for the marginalisation of an entire community of people. Many of these laws are firmly founded on religious beliefs and prescripts which define the legal and the social construct of the relevant countries. What is especially awkward is that organised religion in its current form is understood to be another form of colonial influence on the native citizens of the African continent and has no place in the continent's pre-colonial history.

Research indicates that the prohibition on homosexual activity dates back to colonial penal codes; British colonial laws banning homosexuality remain on the books in nearly two-dozen nations and although Britain has repealed its sodomy statutes, many of its former colonies have simply retained these laws, which are generally referred to in the penal codes as moral codes or indecency laws (Kretz, 2013; Semugoma, Nemande and Baral, 2012).

Ironically, this exhibits the effects of coloniality on the African continent and therefore, the use of a colonial inheritance to define and govern the way African states function is a matter tantamount to perpetuating the neo-colonial rule. Consequently, this presents the current study with an opportunity to select a fluid, all-encompassing African perspective of same-sexuality from a decolonial vantage point. Such a decision is exhibited in the choice to use the encompassing phrase MSM, and thus avoid identification descriptors such as Gay which, as highlighted above continue to be associated with whiteness, affluence and privilege.

In contrast, the acronym MSM is encompassing of men of colour that may be poor and underprivileged. This will ensure a better understanding of the intersectional existence of a range of BMSM who reside in the Msunduzi Local Municipality. This will further allow for a more nuanced exploration of what informs their choices, especially with regards to disease prevention strategies and the role that communicative acts play in influencing these choices.

Particularly relevant to this study is the association between this marginalisation and access to health care. Below is an exploration that will illuminate how the narrative of same-sexuality being "un-African" translates into the enforcement of punitive laws which as a result marginalise BMSM. This ultimately places them at a higher risk of HIV transmission and simultaneously limits their opportunities to access the necessary health facilities and services to prevent this. In their study on Human Rights violations among MSM in Southern Africa, Zahn et al. (2016) postulate that the criminalisation of same-sex acts and the deep-rooted stigmatisation of homosexuality disadvantages MSM economically by preventing them from securing employment. Employment provides MSM with the financial means to access the necessary health services. particularly proper counselling, treatment and care for a range of mental and physical health risks, including HIV. The United Nations Programme on HIV and AIDS-UNAIDS (2009) supports this when they assert that where the legal and social environments punish, stigmatise and discriminate against key populations such as MSM, these individuals are less likely to have sufficient awareness of HIV risks, access to HIV prevention services, including regular voluntary testing and access to preventative commodities such as condoms and water-based lubricants. Furthermore, these men are also less likely to organise and participate meaningfully in the design of HIV programmes, peer outreach or other community-level initiatives, thus leaving them vulnerable to negative health outcomes (UNAIDS, 2014; UNAIDS, 2016). This act of marginalisation has specific reference for this study which explores the availability and motivators by MSM to access HIV preventative methods.

2.5. Marginalisation and healthcare for Men Who have Sex with Men in South Africa

Black Men Who Have Sex with men, in South Africa, are still vilified and socially marginalised in the same way as their counterparts across the African continent. Even in nations that have decriminalised homosexuality and instituted anti-discrimination measures (Kretz, 2013), and those with progressive

constitutions, these legal liberties do not reflect the lived experiences (especially related to healthcare) of MSM in those countries. Many MSM experience discrimination and marginalisation based on their sexual orientation and gender identity (Wells and Louise, 2006; Lane *et al.*, 2008a; Mavhandu-Mudzusi and Ganga-Limando, 2014). This is especially concerning when exploring the data presented in the MSM Data Triangulation Project which revealed that MSM exist in all provinces within South Africa and come from a wide range of socio-economic and racial backgrounds (University of California, 2015).

Relevant to this study's exploration are issues related to healthcare, as identified in the above section. The South African healthcare landscape mirrors the continental landscape by being inaccessible to MSM (Rispel and Metcalf, 2009a). This is a factor that has been identified by local health authorities which thus necessitated the development of an LGBT HIV Framework. The main issue identified at its conceptualisation was that Health services are inadequate and inaccessible as some health care workers (HCWs) display negative and stigmatising attitudes towards MSM or do not have adequate clinical skills to provide targeted LGBTI health care (SANAC, 2016). Therefore, BMSM experience public health care services that are unfriendly and prejudiced, which creates a barrier to accessing such services (Lane *et al.*, 2008a, Rebe *et al.*, 2013). Compounding this issue is that MSM do not trust HCWs in their residential vicinities to be confidential. Thus, many are not willing to attend these facilities (Rebe *et al.*, 2013). This discrimination and poor treatment at health care facilities in South African are drawn attention to by a respondent in a study by Lane *et al.* (2008a) which explored the experiences that BMSM in South African Townships had with HCWs. The respondent stated, "I once went to the clinic and there were two gay men at the clinic, apparently one of them had an STD, then a nurse said to them she anticipated that she wasn't expecting them to have flu but an STD, because they sleep around, and God is punishing them" (2008: 431).

This above statement is an example of the marginalisation and mistreatment that BMSM in townships experience. This highlights the reason why many BMSM opt to not seek medical attention and thus increase their vulnerability to health risks rather than get treated. As highlighted above, this discrimination is enacted on the backdrop of one of the world's most progressive constitutions that protect against discrimination based on sexual orientation. This is an example of the discord between the conceptualisation of laws and the implementation of these laws which require a change in societal values and ideals (SANAC, 2016).

In addition to the ill-treatment by HCWs, there is structural inaccessibility of the necessary preventative measures required by BMSM to minimise their risk of HIV transmission. An example of this is that preventative tools such as condom-compatible lubricant are not available at public health care centres. McIntyre, Jobson, Struthers, de Swardt, and Rebe (2013) argue that social exclusion due to homophobic cultural and social contexts limits the ability of BMSM to access care and appropriate HIV prevention materials, such as condoms, water-based lubricants, and MSM-specific risk reduction information, which in turn increases their HIV infection risk. This negatively affects MSM because even if they were to attend these local; facilities, important preventative tools that cater to protecting against the transmission of HIV are not available. This is an example of how MSM are marginalised and their existence is erased from the healthcare system.

2.6. The vulnerability of MSM to HIV and AIDS

As discussed much earlier in this dissertation, there is a relationship between MSM and the HIV epidemic. Furthermore, there is a high prevalence and incidence of HIV and AIDS among BMSM across affected regions, from high, middle to low-income countries. Research with South African MSM has found that their risk of HIV infection is driven by multiple personal, interpersonal, and structural factors (Lane *et al.*, 2011; Tun, Kellerman, Maimane, Fipaza, Sheehy, Vu and Nel, 2012; Arnold *et al.*, 2013). McIntyre *et al.* (2013) further assert that there is a mix of factors that combine to increase MSM's HIV risk. These include a myriad of issues such as social exclusion, direct experiences of homoprejudice, lack of access to power and resources and lack of access to income-earning opportunities. It is crucial to understand these various factors which influence MSM and increase their vulnerability to HIV, especially in a study of this nature. Exploring the perceptions and attitudes of these BMSM towards preventative methods such as PrEP against the contextual backdrop upon which MSM negotiate their existence and make decisions on prevention and care, is fundamental.

The structural factors that drive the risk of South African BMSM transmitting HIV, include high levels of stigma and discrimination from multiple sources (Lane *et al.*, 2008a; Rispel *et al.*, 2011; Vu, Tun, Nel and Nel, 2011); cultural and religious beliefs about the unacceptability of homosexuality (McIntyre *et al.*, 2013); and lack of

access to appropriate HIV prevention, treatment and care (Lane *et al.*,2008a; Rispel., 2011). Scheibe, Kanyemba, Syvertsen, Adebajo, and Baral (2014) note the importance of considering both poverty and increasing levels of inequity as drivers of HIV risk among MSM in Cape Town. In contrast, Arnold *et al.* (2013) note an increase in HIV risk associated with higher income levels among BMSM in Soweto, which may point to the dual role of poverty and local level income inequality as interacting factors affecting HIV risk. Firstly, a deeply rooted stigmatisation of homosexuality has been shown to obstruct this population's access to proper counselling, treatment and care for several mental and physical health risks, including HIV (Meyer *et al.*, 2010; Wilson and Peggy, 2016). This is supported by Chris Beyrer (2007) who best contextualises this by arguing that when MSM remain hidden and their behaviour remains illegal, HIV infection epidemics among this group are bound to continue.

More so, gay men and other BMSM, often due to homophobic environments and social contexts, have limited access to the necessary HIV education and support for sexual risk reduction as well as important prevention material, such as condoms and water-based lubricants (Millett, Jeffries, Peterson, Malebranche, Lane, Flores, Fenton, Wilson, Steiner and Heilig, 2012; Jeffries *et al.*, 2013). This is mainly due to many not accessing healthcare facilities for fear of stigmatisation and discrimination by healthcare providers at mainstream health services (Lane *et al.*, 2008a; Rispel *et al.*, 2011a; Arnold *et al.*, 2013; Rebe *et al.*, 2013). An important aspect within this structural factor that was described by Rebe *et al.* (2013) is the lack of appropriate skills training of health professionals to deal with MSM, which signposts structural marginalisation and its effect can be manifested in community engagement and how these affect MSM's risk. Baral *et al.* (2011) found that human rights violations were common among MSM in Cape Town and that being blackmailed was significantly associated with HIV infection, highlighting the multimodal way through which discrimination increases the risk of HIV transmission.

Secondly, behavioural and interpersonal factors which directly affect MSM's risk of HIV infection include the intimate relationships they sustain. In their discussion of contextual factors associated with condomless anal sex in a sample of BMSM from Soweto, Arnold *et al.* (2013) found that rates of condomless anal intercourse were significantly higher with partners described as 'regular', and the authors suggested that a focus on trust, love and the regularity of anal intercourse in HIV prevention interventions for MSM may be a useful

complement to other HIV prevention initiatives. Some studies have found that general correct knowledge about HIV and other sexually transmitted infections (STIs) was lower than desirable amongst MSM. Perceptions that anal sex poses no risk of HIV transmission, and that such behaviours might be actively sought after because of this misconception has also been documented (Muraguri, Temmerman and Geibel, 2012).

Further, the contexts in which MSM live are important in understanding their vulnerability to HIV. In a review of BMSM research in Sub-Saharan Africa, Muraguri *et al.* (2012) suggested that the existence of multiple concurrent male sexual partnerships in lieu of inconsistent or no condom increases the risk of HIV transmission among BMSM.

The living conditions of basically educated, unemployed and disenfranchised BMSM, such as the picture painted about them in Chapter One, cannot be divorced from their HIV risk profile. Hence, it is important to study BMSM in non-metropole areas like Msunduzi Local Municipality. This view was supported by Karuga, Njenga, Mulwa, Kilonzo, Bahati, O'Reilley, Gelmon, Mbaabu, Wachihi, Githuka, and Kiragu (2016), who argued that the community in which MSM live has been documented as key in driving the HIV epidemic due to concurrent heterosexual relationships with the general population. These factors and their effects can be assumed to be as a primary result of the biological factors that disproportionately position BMSM at risk. Condomless receptive anal intercourse (URAI) is the main risk factor for sexual transmission of HIV among BMSM (Merrigan, Azeez, Afolabi, Chabikuli, Onyekwena, Eluwa, Aiyenigba, Kawu, Ogungbemi and Hamelmann, 2011). The high concentration of rectal cells vulnerable to HIV-1 infection (macrophages, T-cells and dendritic cells) and the single-cell layer of rectal mucosa, results in a per-act risk for HIV transmission that is 10 - 20 times greater than condomless vaginal intercourse, thus biological susceptibility (efficiency of rectal HIV transmission) influences this vulnerability (Bekker *et al.*, 2012).

The socio-economic and the cultural aspects of the lives of MSM may also increase their vulnerability to HIV transmission. Cultural and religious contexts that include intolerance of homosexuality by the community may contribute to HIV risk directly and indirectly through various causal paths. Indirectly, these contextual factors may result in internalised homophobia.

Vu *et al.* (2012) reported high levels of internalised homophobia in their sample of MSM from Tshwane (Pretoria) and noted an association between internalised homophobia and HIV related misinformation, which in turn affects the individuals' likelihood to engage in risky behaviours. Importantly, these personal factors are also affected by MSM's relationships with each other and with the communities they live in may contribute to depression and lower self-esteem, which have been linked to increased rates of condomless anal intercourse.

Economic and political factors also, directly and indirectly, affect individual risks of acquiring HIV through multiple causal pathways (Gupta, Parkhurst, Ogden, Aggleton and Mahal, 2008). There are great disparities in access to HIV services and commodities among gay men and other MSM within the country based on their economic standing (Masvawure, Sandfort, Reddy, Collier and Lane, 2015). This is evident from the fact that MSM with higher incomes are several times more likely to access lubricants and antiretroviral therapy compared to those with the lowest income levels. This systematically leaves MSM with lower socio-economic status (SES) at risk of not getting access to the necessary materials, not seeking medical attention in mainstream health facilities and thus finding themselves in interpersonal relationships where they are unable to negotiate safe sex with their partners who may be in a concurrent heterosexual relationship with a woman (Mantell *et al.*, 2016).

The final structural factor which is of central importance to the vulnerability of MSM to HIV transmission is the policy context of the countries in which they live. National commitments to respond to the HIV epidemic among MSM lags behind those for other populations, even though, MSM typically share a disproportionate burden of HIV infection. It is important that governments recognise this bias and set it aside in the interest of national public health. As Scheibe *et al.* (2014) note, while the broad policy context in South Africa is supportive of MSM rights, the ability to enjoy the freedoms enshrined in the Constitution is still linked to individuals' power and resources. Further, the degree to which the constitutional enshrinement of individuals' rights is reflected in the policies and programmes implemented by government departments at national, provincial and local level varies and consequently affect MSM's vulnerability to HIV transmission.

2.7. HIV and AIDS treatment in South Africa

According to UNAIDS (2014), almost 12.9 million people were receiving Antiretroviral Therapy (ART) globally at the end of 2013. The percentage of people living with HIV who are not receiving antiretroviral therapy had been reduced from 90% in 2006 to 63% in 2013. Of these 12.9 million people, 5.6 million were added since 2010. The rapid increase in antiretroviral access has primarily occurred in a few countries. One-third of the increase in the number of people receiving antiretroviral therapy was in South Africa, followed by India at 7%, Uganda 6%, and in Nigeria, Mozambique, the United Republic of Tanzania and Zimbabwe 5%. Three of four people receiving HIV treatment are living in sub-Saharan Africa, where the need is most acute (UNAIDS, 2014). The gains in treatment are largely responsible for a 26% decline in AIDS-related deaths globally since 2010, from an estimated 1.5 million in 2010 to 1.1 million in 2015 (UNAIDS, 2014; UNAIDS, 2016a). This shift to a comprehensive global treatment campaign is part if the Fast-Track approach. In just the last two years, the number of people living with HIV on antiretroviral therapy has increased by about a third, reaching 17.0 million people—2 million more than the 15 million by 2015, a target set by the United Nations General Assembly in 2011(UNAIDS, 2016b).

South Africa has the largest HIV treatment programme in the world, with the highest number of people on HIV treatment. More than 2.6 million people were on treatment at the end of 2015 (UNAIDS, 2016a). This is best understood in the context of the history of the country's ART programme. ART was launched in 2004, two decades after the first cases of HIV were reported. The national public-sector ART programme has shown a serious commitment to reach eligible People living with HIV (PLHIV) with lifesaving ART. South Africa's ART services have undergone dramatic expansion in recent years, in keeping with the World Health Organization's (WHO) changing guidelines. In 2016, South Africa implemented 'test and treat', whereby everyone with a positive diagnosis was eligible to start treatment. This has meant that the number of people eligible for treatment has increased from 3.39 million in the middle of 2015 to 7.1 million in 2016 – more than doubling in just one year. This access to treatment and new prevention strategies has resulted in a positive outlook, such as a decrease in AIDS-related deaths as well as impressive gains in adult life expectancy which have been achieved because of scaling up the provision of antiretroviral therapy to people living with HIV (UNAIDS, 2015). Though there have been good improvements in accessing the ART programme, retention in care remains sub-optimal, reported to be about 48.3% at 60-months - against a target of 70% (Avert.Org, 2018).

2.8. Towards a biomedical approach to prevention - Pre-Exposure Prophylaxis (PrEP)

For a study which explores the general awareness, attitudes and perceptions of BMSM towards PrEP focusing on a South African non-metropole area, it is imperative to explore biomedical preventative methods to best contextualise the study. Biomedical methods of prevention present a new opportunity for the transformation of prevention and treatment; methods like male condoms and compatible lubrication, Post-exposure prophylaxis (PEP), Pre-exposure prophylaxis (PrEP), STI screening and early access to ART are all worthy interventions that have the potential to change the HIV epidemic's trajectory in the country (Bekker *et al.*, 2012). Therefore, the field of HIV prevention at a global level is shifting from behavioural interventions to biomedical methods (Kubicek *et al.*, 2015). This rejuvenated hope in biomedical approaches to prevention is supported by Sullivan, Carballo-Diéguez, Coates, Goodreau, McGowan, Sanders, Smith, Goswami, and Sanchez (2012) who argue that biomedical prevention strategies hold a strong potential to reduce the incidence of HIV. Furthermore, studies have shown that by implementing a strategic biomedical shift and using antiretroviral therapy as pre-exposure prophylaxis this can protect sexual partners and reduce new infections. It is estimated by the UNAIDS (2016a) that pre-exposure antiretroviral prophylaxis can reduce the risk of HIV transmission by more than 40% among gay men and other men who have sex with men.

Therefore, currently one of the most prominent and modern biomedical innovations which are under review in many countries is PrEP. Avert.Org provides the most simplistic definition for PrEP when they describe it as "a course of HIV drugs taken daily by HIV-negative people most at risk of HIV to reduce their risk of HIV infection" (2017: para 1). Approved in 2012 by the United States Food and Drug Administration as Truvada, a single pill that adults at risk of HIV infection can take to reduce their susceptibility to HIV infection (Kubicek *et al.*, 2015). This a combination of Tenofovir disoproxil fumarate (TDF) with Emtricitabine (FTC). It was selected as pre-exposure prophylaxis due to its ability to prevent the duplication of the HIV strain, its safety, its high barrier to generating resistant virus and minimal side-effects (Bekker *et al.*, 2012). Davies, Ustianowski, and Fox (2016:413) best encapsulate this observation when they state that "PrEP can be a highly effective HIV prevention strategy to be added to the toolbox of HIV prevention".

Despite increasing evidence of PrEP's efficacy, access remains limited. The roll-out of PrEP has been notably slow and coverage is nowhere near what will be required for the optimal use of this new preventive approach globally (Avert.Org,2018). As of June 2016, PrEP had received regulatory approval in only seven countries, with more countries implementing or planning pilot projects to facilitate its approval (Avert.Org, 2018). The PrEP access era cannot truly be said to have begun anywhere except in the USA, where prescription numbers remain quite low relative to the large number of potential users. To exhibit this, a national study of US retail pharmacy data estimated that fewer than 2,000 people in the USA had been prescribed TDF–FTC for use as PrEP in early 2013, two years after this regimen was demonstrated to be efficacious (Krakower and Mayer, 2015; Davies *et al.*, 2016).

Other countries worth noting are Australia, Brazil, Canada, France, Israel, Kenya, Malaysia, South Africa, and Thailand who have either approved PrEP use or initiated PrEP projects to facilitate approval of its use by their key populations including MSM (Beyrer *et al.*, 2016). Potential barriers to the implementation of PrEP such as low awareness levels and uncertainty about adherence in 'real-world' settings exist globally and remain the main challenge to access (Krakower and Mayer, 2015). Previous work on PrEP implementation suggests that delivery programs will need to meet several requirements to be effective, including prioritisation of groups at higher risk of infection and the delivery of PrEP in combination with other prevention services (Eisingerich, Wheelock, Gomez, Garnett, Dybul and Piot, 2012).

2.9. PrEP in South Africa

In December 2015, South Africa became the second country in the world after the United States of America, to fully approve PrEP as a preventive method to protect HIV-negative individuals before potential exposure to the virus (DeBarros, 2015). Owing to the mounting evidence on the efficacy of PrEP and in line with their National Strategic Plan 2012-2016, the Medicines Control Council of South Africa officially registered the combination of Tenofovir disoproxil fumarate and Emtricitabine (Truvada) as PrEP (Hugo *et al.*, 2016). This position by the South African Government was aimed to reduce the incidence of HIV infection in South Africa through the provision of expanded prevention and treatment options. However, the implementation of PrEP has not been as expeditious as obtaining medical approval. The Department of Health (2016) stipulated in their National Policy on HIV Pre-Exposure Prophylaxis and the Test and Treat campaign that in South Africa,

full implementation will be accomplished over time, targeting prioritised populations in phased approaches. Furthermore, it was also highlighted that the model was initially intended for sex workers and AGYW, who have the highest HIV prevalence in South Africa and face high levels of stigma and discrimination (UNAIDS, 2016b). The above assertion accounts for the current low drive in implementing.

Following the approval of Truvada as PrEP in South Africa, there have been stalled efforts to implement and distribute this preventative method to MSM. Even though MSM have been identified as a key population in the National Strategic Plan (NSP) 2012-2016, due to being at a higher risk of HIV transmission. This population remains underrepresented in the Department of Health's prevention strategies and communication initiatives even though the number of new HIV infections continue to grow exponentially. At present little is known about the willingness of South African men to use PrEP, or what the most effective delivery systems would be.

The availability of MSM targeted services, in specialised sites, research sites and in primary health care, provides an opportunity to move into a pilot programme of PrEP delivery (McIntyre *et al.*, 2013). In 2017, it was estimated that between 30,000 and 35,000 individuals were being targeted with PrEP in ongoing and planned projects across South Africa (PrEP Watch, 2018). The 2017-2022 National Strategic Plan aims to expand this, so that PrEP becomes available to all those who are most likely to benefit, including adolescents, sex workers, men who have sex with men and intravenous drug users, their projections are that 85 858 more people from the most affected groups will be initiated onto PrEP by 2022 (SANAC, 2017). In line with the intended rollout plan highlighted above, an initial trial of PrEP was conducted among South African women in 2015. Results showed an adherence rate of 76% among the trial population, demonstrating that women in South Africa were both able and willing to use PrEP (Bekker, Hughes, Roux, Amico, Hendrix, Anderson, Dye, Elharrar, Stiratt and Grant, 2015). These results paved the way for the wider implementation of PrEP.

A study that interrogates awareness of and willingness to uptake new HIV prevention methods such as PrEP by men and women in three of the highest HIV prevalence districts in KZN namely, eThekwini, uMgungundlovu and the uThungulu district was conducted by Govender and Abdool Karim (2018). In their study they found that "women are willing to consider HIV prevention options that align with their current sexual and reproductive health routines, offers the longest duration of protection, and requires minimal/no partner involvement, in contrast most men were not supportive of their partners using of any form of PrEP, irrespective of dosing strategies and formulations as it raised questions of infidelity and side effects on men" (Govender and Abdool Karim, 2018:1311). This reveals that preliminary work is being done around understanding PrEP better which prioritises women as a priority group in South Africa and adversely marginal focus is placed on MSM and men who engage in non-normative sexual behaviours.

2.10. Pre-Exposure Prophylaxis (PrEP) and MSM

The efficacy of daily oral PrEP has been established in several randomised studies, and existing research supports this medication being dispensed to individuals at risk of HIV infection (Krakower and Mayer, 2015). It has shown that PrEP can reduce HIV transmission among men who have sex with men by 92%. What emerged from these and other trials such as Pre-Exposure Prophylaxis Initiative (iPrEx), Partners PrEP and PROUD was the efficacy of PrEP and the potential it has for curbing new infections amongst MSM (Bekker *et al.*, 2012; Krakower and Mayer, 2015; Jaspal, Daramilas, Lee, 2016). The World Health Organization (WHO) states that use of PrEP has to be scaled up, an estimated 20% to 25% of new HIV infections among this population could be prevented (Avert.Org, 2018). The iPrEx trial was a double-blind, placebo-controlled study which accessed the efficacy of the daily Truvada-based PrEP in MSM and transgender women from six different countries, exhibited that PrEP had the potential to decrease HIV prevalence among MSM who are at risk (Davies *et al.*, 2016). These results offered a new opportunity for HIV prevention amongst vulnerable groups. It is worth noting though that even with successful trials and FDA approval, very few countries have adopted PrEP as a preventative method for their vulnerable groups such as MSM.

Few PrEP clinical trials targeting MSM have been executed in South Africa, including the Sibanye Project of 2014 which investigated the use of PrEP as part of a cohort of other prevention methods. This pilot was executed amongst a sample of 200 MSM in Cape Town and Port Elizabeth. Results of this trial are not

available to date and thus cannot be assessed and measured (McNaghten, Kearns, Siegler, Phaswana-Mafuya, Bekker, Stephenson, Baral, Brookmeyer, Yah, Lambert, Brown, Rosenberg, Blalock Tharp, de Voux, Beyrer and Sullivan, 2014). Other projects that focused on MSM included the Elton John AIDS Foundation (EJAF PrEP), Demonstration Project for MSM. The EJAF PrEP Demonstration Project was not a clinical trial but a demonstration project assessing the feasibility of delivering nurse-driven PrEP at primary health care (PHC) facilities. This aimed at providing as part of combination HIV preventative methods to a cohort of 300 MSM in Johannesburg and Cape Town. This demonstration project revealed that there is a high demand for uptake of PrEP, even beyond their projected numbers. It also revealed that nurses were able to provide PrEP but that to successfully execute this, they would need training for three days or longer and needed the compilation of operational manuals and tools that they could refer to. It was also identified that the implementation plan would require oversight and mentoring especially in the first month (Rebe, 2017).

This demonstration project overall indicated that there was potential for the expansion for PrEP to more sites, beyond the three that it was available in for MSM at the end of 2017 (Van Niekerk, 2017). In their study exploring the global response to HIV among MSM, Beyrer *et al.* (2016) argue that slow and irregular roll-out of this new antiretroviral-based prevention method that has with proven efficacy and for the prevention of HIV between MSM is a failure. They further assert that the medical fraternity needs to fast track its response if it is to heed the call to decrease new infections which was made in 2012. Therefore, a study of this nature which aims to gain in-depth knowledge of the attitudes of one of South Africa's vulnerable groups towards PrEP has significance and implications for the proposed implementation of the national PrEP programme.

2.11. Acceptability of PrEP among MSM – A global view

When gauging the acceptability of PrEP amongst MSM around the world, there is ample research from different parts of the globe which has similar overarching themes. An overview of the findings in studies gauging the acceptability of PrEP which were conducted in the developed countries (Eisingerich *et al.*, 2012; Gredig, Uggowitzer, Hassler, Weber & Nideröst, 2016; Kwakwa, Bessias, Sturgis, Mvula, Wahome, Coyle & Flanigan, 2016; Kesler, Kaul, Myers, Liu, Loutfy, Remis and Gesink, 2016; Jaspal *et al.*, 2016; Mitchell, Lee, Woodyatt, Bauermeister, Sullivan and Stephenson, 2016) found that participants across the various states showed high levels of acceptability towards PrEP.

In a study exploring sexual risk as an indicator for willingness to take PrEP amongst MSM in Canada, Kesler *et al.* (2016) found that 55% of HIV-negative MSM were willing to use PrEP if available. Kesler *et al.* (2016) could identify similarities and link their findings to previous studies conducted in Toronto which also indicated a consistent willingness to take up PrEP. Results from a study of BMSM in Los Angeles revealed that BMSM were likely to adopt PrEP, with the younger population more prone to adopt PrEP in comparison to older BMSM (Brooks, Landovitz, Regan, Lee and Allen, 2015). While results from a study on MSM in England indicated that participants were generally eager to accept PrEP and adopt it as soon as it is available (Eisingerich *et al.*, 2012).

These above sentiments were shared by other MSM in the rest of the Western world. The common consensus of these findings is that, although the levels of awareness vary from country to country, MSM have a high level of acceptability towards PrEP and they indicated a willingness to take the medication and to adhere to it once availability is widespread. These encouraging findings suggest that vulnerable groups i.e. MSM in various states can be assumed to adhere to a comprehensive PrEP program and are also motivated to enrol for this treatment which offers renewed hope for decreasing new infections (Eisingerich *et al.*, 2012).

When exploring concerns about the barriers and motivators for the adoption of PrEP amongst MSM in developed Western countries, what emerged was that the acceptability of PrEP is not only determined by the usefulness or expected performance of PrEP, but it is influenced by the individual's personal HIV protection strategy and is weighed considering the individual's evaluation of anticipated experiences with it (Gredig *et al.*, 2016). Links were identified between actual sexually oriented HIV risk and the willingness to take PrEP. In the studies conducted by Eisingerich *et al.* (2012) and Kesler *et al.* (2016), individuals with high sexual risk behaviours were more likely to accept PrEP, supporting the notion that the most resilient predictor of willingness to take PrEP was actual sexual HIV risk rather than general HIV risk or perceived risk. While the most significant motivator for PrEP adoption was the protection against HIV transmission, another factor included the opportunity to have condomless sex (Brooks, Kaplan, Lieber, Landovitz, Lee and Leibowitz, 2011: Eisingerich *et al.*, 2016).

Supplementary to these motivators, the concerns and barriers to the acceptance and enrolment of PrEP that was identified, was the burden of taking a pill daily, uncertainty regarding the side-effects, adverse effects of not using PrEP correctly, and the perceived high costs of PrEP. These are some of the issues affecting MSM with low disposable incomes, which results in them being uninsured. This is relevant when considering the apprehension these individuals have about accessing PHC because of the discrimination they experience particularly in a health care system that is not sensitised to health issues relating to homosexuality or samesex desire (Brooks *et al.*, 2011; Eisingerich *et al.*, 2012; Gredig *et al.*, 2016; Mitchell *et al.*, 2016). A BMSM specific concern that emerged in the USA where black people were the minority, was that of race-based scepticism that members of this population had with the medical fraternity as a whole (Eaton, Driffin, Smith, Conway-Washington, White & Cherry, 2014; Lelutiu-Weinberger and Golub, 2016). This led to BMSM in various American communities raising concerns about the actual efficacy of PrEP and if it was not an "untrustworthy" medication given to them.

2.12. Acceptability of PrEP amongst MSM in Africa

Within an African context, a study conducted in Kenya (Karuga *et al.*, 2016) revealed a high willingness to take PrEP among the MSM, (83%) of their respondents were willing to take PrEP. Unlike in the developed countries, the cost was the major barrier for Kenyan MSM to take PrEP. Participants in this study indicated that the subsidisation of PrEP could influence their decision to enrol for PrEP once it is available. This barrier needs to be understood within the context of the African continent's level of economic development and the level of poverty in Kenya. This presently indicates that the context of PrEP's acceptability and willingness to enrol for PrEP will be vastly different based on the context of the country, its constitutional freedoms and the economy. Furthermore, respondents who identified as bisexual in this study reported significantly higher levels of willingness to take PrEP compared to those who identified as gay. This is possibly because MSM in bi-sexual relationships identify themselves to be at higher risk of infections which hence translates into higher levels of willingness to add PrEP to their prevention armamentarium. This finding mirrors the findings identified in the above section concerning the link between perceived higher sexual risk and the willingness to take up PrEP.

There is a paucity of South African research into MSM's perceptions of PrEP, hence the importance of a study such as this which will add to this area of research. In their local study about adherence to Post-Exposure Prophylaxis and awareness of Pre-Exposure Prophylaxis in Cape Town, Hugo *et al.* (2016) found that most of their sample (90%) had heard about PrEP and that 75 % were willing to take PrEP should it be available to them, unfortunately this is where their findings were limited to. This presents this study with the opportunity to develop in-depth content on the acceptability, motivators and barriers that influence MSM within a South African city to take up and adhere to PrEP.

2.13. Peer health communication and BMSM health behaviours

Communication in health takes place at various levels, namely; the individual, group, organisation, community or mass-media level (Corcoran, 2007b). Communication forms an integral part of health, whether communication occurs in the form of health messages that are disseminated through the media or interpersonal dyads between health professionals and patients, family member or friends. It is a vital feature of maintaining, promoting and managing health behaviours.

This study explores the communicative practices, which largely rely on interpersonal communication. Interpersonal communication is best used as a vehicle for information exchange, education and social support in dyadic relationships (Kreps and Bonaguro, 2009). Interpersonal communication is crucial for this study as it is directly linked the focus of this study, which is to explore the role of communication in the development and strengthening the attitudes and perceptions of BMSM towards PrEP.

There are a variety of strategies which can influence the change of attitudes towards health and these include teaching new skills, challenging existing attitudes and peer education. The efficacy of these strategies depends on the exchange of information. Campbell (2003) highlights the role of dialogue when attempting to positively influence health behaviours among groups particularly when he argues that the dynamic underlying condition for successful peer-led interventions is that the collective debate and argument serve as precondition for the development of new norms, highlighting the role of communication in influencing peers in various settings. This shift from an individualistic approach to HIV prevention towards a focus on the wider social context is because this focus is efficacious at changing social norms and community narrative values, which ultimately centres around the above-mentioned appeal for changing attitudes and perceptions.

With regards to PrEP knowledge and the role of communication, Eaton, Driffin, Bauermeister, Smith and Conway-Washington (2015:428) argue that there is value in "integrating conversations about PrEP within HIV test counselling. These interactions provide opportunities for BMSM to learn about advances in HIV prevention and care, and to discuss whether PrEP would be suitable and appropriate based on their sex behaviours". This emphasises the role that interpersonal dyadic communication can play in driving PrEP engagement.

2.14. Friendship dyads as an interpersonal communicative practice for health improvement

In exploring the intersection of peer communication attitudes and perceptions, especially how peer interpersonal communication affects the development of attitudes and perceptions towards PrEP and overall willingness to adopt PrEP, it is worth noting that there is a paucity of research within a South African context particularly that which explores peer communication amongst MSM. Prominent authors in peer sexual health communication amongst young gay men, Mutchler and McDavitt have done several studies exploring this phenomenon and the intersectionality of peer sexual communication and biomedical preventative methods within the US context (Mutchler and McDavitt, 2011; McDavitt and Mutchler, 2014; Mutchler *et al.*, 2015). In their most recent study, Mutchler *et al.* (2015:491) highlight the benefits of peer communication among MSM when they state that "sexual communication among peer groups has the potential to create change in sexual behaviour perception and actions" thus making it important to assess current conversations and perceptions among MSM about PrEP.

The above assertion has influenced the outlook to explore the role that peer communication plays in the development of perceptions and attitudes towards PrEP. The authors further support their argument by asserting that supportive peer sexual communication about safer sex norms is one way that MSM and their peers may influence each other to engage in safer sexual behaviours (Mutchler and McDavitt, 2011; Mutchler *et al.*, 2015). Hence, exploring the role that communication plays in the development of perceptions and attitudes towards PrEP will elucidate the intersectionality of communication and MSM sexual behaviours. This can especially explain how peer communication amongst MSM could influence the health decisions of vulnerable groups in a South African metropolitan area and how this can have an influence on the development of HIV prevention initiatives which are directed at a key vulnerable population like MSM.

2.15. Conclusion

Through a comprehensive review and exploration of various literature in the disciplines of HIV and AIDS, Health Promotion and Health Communication, the chapter has illuminated and laid a foundation for this study. The contested and changing concept and use of the phrase MSM was explored, revealing its multifaceted nature. From its limiting nature of being used to describe sexual behaviour; delimiting sexual identification, relationships and intersectionality is a disparity for the use of MSM in social research. This may be countered by its development, which allowed for a more applicable use in developing contexts by reconfiguring previously held notions of identification. These notions were closely linked to Western perceptions and personifications; therefore, the choice and continued use is a negotiated process to best configure the category's applicability to any study.

This study has delaminated these parameters as the inclusion of a great focus population will lead to a more robust exploration and data generation. Marginalisation is enacted and manifested in various ways both across the African continent and locally. This enactment adversely affects the marginalised and places MSM at varied health and emotional risk. Especially relevant is the HIV risks that are laden because of the marginalisation. It is worth noting that this marginalisation can be manifest not only structurally and more saliently through not only the use of punitive laws and punishments but also through a failure to educate and encourage a review of social and moral outlook in the communities where at-risk groups such as MSM exist.

The discussion of marginalisation above sets the appropriate contextual backdrop upon which this study could be executed. What was apparent in the remainder of the review is that the HIV epidemic is still deeply associated with the African continent and the continent is thus pathologised through this. Although the epidemic is gradually moving towards changing and improving the lives of those infected and affected, what is worth noting is that this is not apparent for many key populations such as BMSM that remain behind and continue to be adversely affected by the epidemic both internationally and locally. The introduction of more biomedical prevention methods holds great hope for changing the trajectory of the HIV and AIDS pandemic.

The launch and approval of Truvada as PrEP held great hope for this changing landscape but has conversely not been received optimally in most countries, with a gradually growing amount of literature and research to establish feasibility in most countries. South Africa became the first African country to approve Truvada but adversely has failed to swiftly implement any distribution plans for the greater community and key populations such as MSM, despite that MSM are highlighted to be at greater risk of transmission in the country. The paucity of research to address key populations such as MSM indicates a salient issue of marginalisation enacted by the South Africa government against vulnerable sexualities. This study thus establishes the potential that a shift in outlook would mean and the feasibility of implementation and execution of a PrEP programme amongst BMSM in the Msunduzi Local Municipality in the future.

Chapter Three

Health Beliefs and the Intersection of Race, Gender, Sexuality and Class: A Theoretical Perspective

3.1. Introduction

When exploring various health problems and behaviours, a robust theoretical foundation serves as a reliable guide for an efficient and effective analysis of the elements necessary for health promotion. Timothy Edgar and Julie Volkman (2012) argue that without a solid theoretical base, any empirical investigation of health diseases, and their intervention and effects would solely rely on intuition and guessing. It is from this point of departure that this study seeks to theoretically frame its exploration of the communicative practices, attitudes and perceptions of BMSM towards PrEP. This study adopts the Health Belief Model (HBM) proposed by Hochbaum (1958) and Rosenstock (1966) and the Intersectionality Theory proposed by Kimberlé Crenshaw (1989). When combined, these two varying theoretical foundations provide a reciprocal lens through which the lived experiences of BMSM and their marginalisation can be understood. This kind of theory triangulation is used to explain the health behaviours of BMSM as well as their choices regarding HIV prevention. The HBM is one of the oldest of the individual behavioural theories and is a widely used theory in public health, while the Intersectionality Theory, though still emerging is fast becoming a cornerstone of sociological thought and is increasingly being used by health researchers.

Both the HBM and Intersectionality Theory offer different vantage points from which to explore and understand health issues and their prevention. It is worth noting that although both the HBM and the Intersectionality Theory were developed 60 and 3 years ago respectively, these two theories remain relevant and have currency in current day studies. This is exhibited by these theories being used respectively in several local and global studies (Kirscht and Joseph, 1989; Bakker, Buunk, Siero and Van Den Eijden, 1997; Parent, DeBlaere and Moradi, 2013; Buldeo and Gilbert, 2015; Quinn and Dickson-Gomez, 2015; Green, Evans and Subramanian, 2017). This is because they offer a lens that enhances the understanding of marginalised groups in the context of health promotion.

The HBM has been specifically chosen for this study because it can be used to predict health behaviour. It is anticipated that the model is relevant to predicting the circumstances under which BMSM decide to uptake or not uptake PrEP.

In this study does not exclusively rely on HBM due to its benefits and shortcomings but instead also uses the Intersectionality Theory as a conjunctive (supplementary) theory. In their 1989 study which explored the recommended behavioural changes needed to prevent HIV transmission among a cohort of gay men in Chicago, Kirscht and Joseph (1989) argued that, although the HBM had feasible and useful features, it required synthesis with other frameworks for a comprehensive analysis of behavioural change. This recommendation, thus, informed the pursuit for a complementary theory, such as Intersectionality to allow for a thorough analysis of the attitudes and perceptions of BMSM towards PrEP. This includes an analysis of the functioning of peer health communication in the development of these views. Intersectionality explores how the interactive nature of various social identity categories such as race, class, gender and sexuality cultivate life experiences, and in particular the interlocking experiences of privilege and oppression (Gopaldas, 2013). This is crucial for exploring the intermingled elements of marginalisation which characterise the lived experiences BMSM in a non-metropole city such as Pietermaritzburg and how these ultimately influence their choices of good health practices. The choice for a synergetic relationship between Intersectionality and the HBM is further supported by Green, Evans, and Subramanian (2017:215) who argue that from an intersectional perspective, "intersectionality will be most effective where combined with a social theory on the production of health inequalities".

This chapter contextualises the HBM by providing a comprehensive overview of its background and provides a review of its function in developing new knowledge about health problems. It also offers insights into the practical application of the model in HIV prevention research and finally reflects on pertinent critiques of the model with the intention to provide a reflexive perspective to establish the HBM as a crucial theoretical foundation for this study. In addition, Intersectionality Theory is explored by means of a genealogical review and a transformative exploration of its theoretical capability which is beneficial to this study. This is supported by a discussion on the various intersectional elements relevant to this study to highlight how analysing South African MSM can be intersectional. In closing, this chapter reflects on the intermingling relationship between

the HBM and Intersectionality Theory, which makes these two diverse theoretical school of thoughts reciprocal in this study.

3.2. The Health Belief Model

The Health Belief Model was first developed by Godfrey Hochbaum, Irwin Rosenstock and Stephen Kegels, a group of social psychologists working within the Public Health Services in the United States of America (USA). Its development was the culmination of independent investigations into various health research problems pertinent between 1950 and 1960 (Rosenstock, 1974b; Kirscht and Joseph, 1989; Abraham and Sheeran, 2005). Consequently, the HBM is one of the few medical theories whose development was the direct solution to the research problems characteristic of the period. It was initially used to explain preventative health behaviours particularly those which influenced individuals to participate in free tuberculosis screening programs available at the time. Since that development, the HBM has been used to predict a range of health promotion behaviours including vaccination and contraceptive practices, clearly demonstrating its original objectives which were to evaluate and influence individual behavioural change and to enhance the effectiveness of health education programmes (Abraham and Sheeran, 2005).

3.2.1. Understanding the Health Belief Model

The HBM's strength lies in its predictive and explanatory potential. Central to its functionality is the premise that an individual's beliefs about their susceptibility to and the severity of a possible health concern, mitigated by their belief about the efficacy of the available possible preventative action predicts the likelihood of that individual to act (Simons-Morton, McLeroy, and Wendel, 2012; Buldeo and Gilbert, 2015). For an individual to act to avoid a negative health outcome, they would need to believe that: firstly they are personally susceptible to a negative health outcome (disease). Secondly, contracting the disease would have an adverse effect on their lives and thirdly, taking a particular action would be beneficial and reduce their susceptibility to the disease or reduce its severity. To competently achieve this, the individual would have to overcome barriers such as cost, inconvenience and stigma (Rosenstock, 1974b). The main assertion of the HBM has salient implications for this study as it allows for robust exploratory analysis of the perceptions and

attitudes of BMSM towards PrEP and the communicative ecology within which these attitudes and perceptions are formed and sustained.

According to Manoj Sharma and John Romas (2012), theories from behavioural and social sciences have easily identified building blocks referred to as "constructs". In the HBM, these constructs which are depicted in Figure 3 (below), are what an individual considers as part of their reasoning process to change health behaviour. Currently, the HBM consists of six constructs namely: Perceived Susceptibility, Perceived Severity, Perceived Benefits, Perceived Barriers and, Cues to Action and Self Efficacy (Abraham and Sheeran, 2005; Corcoran, 2007a). Firstly, under the section Perceived Susceptibility, the HBM draws attention to personal vulnerability, which is the belief a person has about the prospects of acquiring a disease or reaching a harmful state. It is guided by the overarching argument presented by Corcoran (2007a) that a person's behaviour can be predicted based on how vulnerable they consider themself to be. Hence, the more susceptible an individual feels the greater likelihood there is that they will take preventative measures (Sharma and Romas, 2012). An individual's beliefs concerning their exposure to a given disease vary according to everyone's perceived level of vulnerability. At the one end, there are those people who invariably deny that they could ever be at risk of contracting the set disease, in a modest level are those who believe that there is a hypothetical possibility that they may be at risk while still believing that there is a possibility they are not at risk. Finally, there are those individuals that firmly believe that they are at risk of contracting the disease (Rosenstock, 1974b; Sharma and Romas, 2012). These variations are especially striking and offer this study an opportunity to explore BMSM's perceived susceptibility to HIV as an influencing factor for their sexual behaviours and their attitudes to either take up or not take up PrEP. These aspects are elucidated in detail later in this dissertation when analysing the respondent's various responses in this study.

Perceived severity is the second construct within the HBM format. This construct is concerned with an individual's belief about the level or nature of the harm that contracting a disease will have on their lives. This construct is closely linked to perceived susceptibility and varies from one individual to the other. Perceived severity can be understood from a variety of perspectives and not only medically. An individual could consider the effects that contracting the disease would have on their social life, finances, their physical mobility as well as the emotional, psychological and financial well-being (Rosenstock, 1974b).

An example is HIV infection; although an individual may not perceive HIV infection as a death sentence as it once was, they may look at the effects that living with HIV will have on their social life e.g. – having to disclose their status to a new partner, their financial risk - loss of wages as a result of being sick and staying at home, the financial burden of purchasing life-extending medication (ARV's) and multivitamins regularly. There is also the long-term effects ARV's could have on their internal organs and the social stigma they may experience from family, friends and the workplace because of their HIV positive status. A combination of all these considerations could result in an individual acknowledging the severity of contracting a disease would entail and thus intend to change certain risky sexual behaviours they are involved in (Rosenstock, 1974a, Hayden, 2009; Sharma and Romas, 2012).

It is contended that the higher the level of perceived severity, the greater the belief that the health problem is severe, the more likely it is for a person to take preventative action. This construct resonates with this study and is illuminated through the analysis of perceived susceptibility and perceived severity of BMSM in terms of HIV infection and how this combination influences their decision to take up PrEP. It is worth noting that perceived severity cannot be established independently without consideration and acknowledgement of perceived susceptibility. Severity may, however, not be an important influence for an individual that does not perceive personal susceptibility because there is no initial acknowledgement of risk and the level of risk cannot exist autonomously without the act of personal/individual risk. Rosenstock (1974b) emphasised that these two constructs when combined are called *perceived threat* and are dependent on knowledge.

The third construct is perceived benefits which refers to the beliefs about the effectiveness and the value of a new behaviour towards decreasing the threat of developing a disease. Furthermore, closely related to the above-mentioned constructs an action would be considered beneficial if it reduces the perceived susceptibility and perceived severity of the disease. An individual's selected behaviour is dependent on how beneficial they believe the various activities would be in reducing the set threat in their case. Hence, in this study, the uptake of and adherence to PrEP in combination with the effective use of condoms and waterbased lubricant will significantly decrease an MSM's risk of HIV infection, despite the number of different sexual partners they have.

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The fourth construct of the HBM, perceived barriers to action goes hand in hand with perceived benefits. This is an individual's own valuation of the obstacles to taking action to reduce a health risk. As highlighted earlier in this chapter, an individual may believe that a given action will be effective in reducing the threat of disease but may find that acting may be inconvenient, costly, painful or upsetting, these are the barriers to uptake of action (Rosenstock, 1974b). Exemplifying this with HIV prevention amongst BMSM in Msunduzi Local Municipality, it is worth noting that although the perceived benefit of taking PrEP decreases the individual's perceived susceptibility to contracting HIV and their perceived severity of contracting and living with HIV, the individual may acknowledge that access to PrEP might be limited and requires the individual to travel long distances to access it at a high cost because it is not funded by government and not available at government facilities. Furthermore, they may find the associated medical side-effects to be unbearable and that they are experiencing stigma from potential sexual partners, family and friends for using ARVs. Above is a clear example of the functioning of the perceived barrier which results in an individual not taking an action to change a behaviour or to adopt a preventative method. Considering the above, case for a new behaviour to be adopted, the individual needs to believe that the benefits of the new behaviour outweigh the consequences of continuing with the old while cognisant of the potential barriers that may prevent them from taking the action. Moreover, taking a certain action is determined by the relationship between the level of readiness to act against the extent of the perceived barriers. If the level of readiness is high and the perceived barriers weaker, the propensity to act is more likely than when the readiness is lower, and the perceived barriers are higher. This highlights the relationship between the four constructs discussed above and how each construct functions to predict the health behaviour of BMSM in the Msunduzi Local Municipality particularly, the formation of their attitudes and perceptions toward the uptake of PrEP.

As indicated in Figure 3 (see page 53), there are supplementary constructs that form part of the HBM which influence the main four main constructs. Most relevant and closely related to Intersectionality Theory, which is discussed later in this chapter are modifying factors. Modifying factors are the factors that modify the four major constructs discussed above; they are individual characteristics that influence personal perceptions. These factors were originally categorised according to demographic variables, socio-psychological variables and structural variables all of which are relevant to this study and deserve further exploration (Rosenstock, 1974b). Demographic variables are all the intrinsic biological variables (such as race, gender and ethnicity) that may influence an individual's perceptions about HIV prevention.

A variable such as age has a considerable effect on an individual's perceived susceptibility and severity when reflecting on HIV and AIDS amongst MSM. A 70-year-old South African MSM will have different perceptions about their susceptibility to HIV and AIDS compared to their 32-year-old counterpart who grew up during the height of the HIV epidemic. Other variables, for instance, socio-psychological variables include social class, educational level, skills and sexual orientation whereas structural variables include personal experiences with HIV and AIDS, in the form of a previous scare with HIV or the terminal illness or death of a close family member. These will all have a motivating influence on the individual's perceptions of their susceptibility, severity and will influence their readiness to take preventative action. Solidifying this stance, Rosenstock (1974b:333) further maintains that, as developers of the model, in their view "the role of demographic variables, socio-psychological and structural variables is that they serve to condition both individual perceptions and the perceived benefits of preventative action". Hence, modifying factors perform a critical role of being a lens through which this study explores the construction of BMSM, their perceptions and attitudes to exist.

Furthermore, although this is still to be explicated in detail later in this chapter, these modifying factors are closely linked to the explorative elements that Intersectionality uses. Particularly, how various social identity categories intersect in the identity construction of individual BMSM and enable the marginalisation that these BMSM face. What is more relevant is how these intersections of marginalisation influence each individual BMSM's sexual health choices and preventative health methods that they are willing to take especially their acceptance or rejection of PrEP.

In Figure 3 (on the next page), it is evident that modifying factors influence the perceived threat constructs which inform what actions will take place after this.

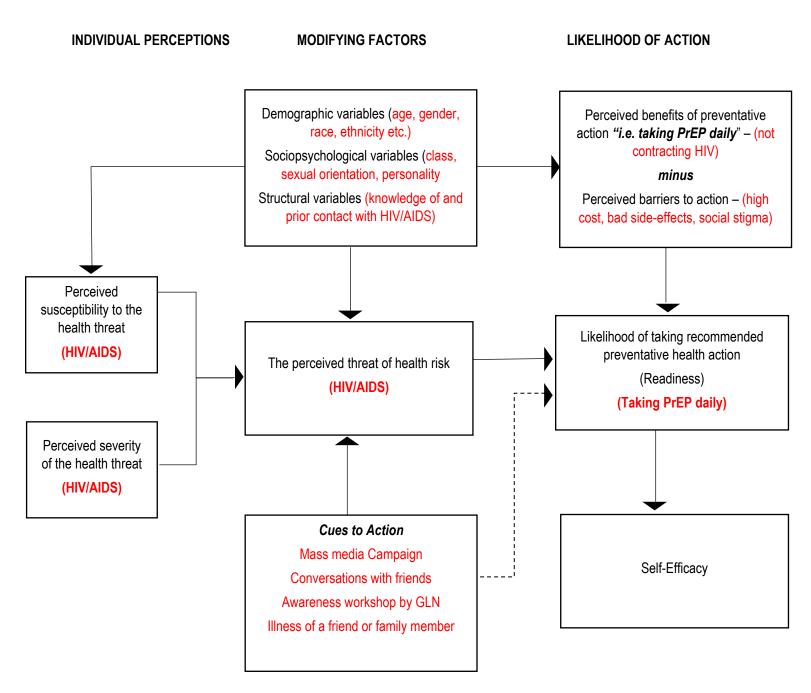


Figure 1.3 Adapted Health Belief Model simulating the Voicing the Voiceless Study

Source: Becker M. H *ed* (1974). "The Health Belief Model and Personal Health Behaviour." *Health Education Monographs 2,* 324-47.

The fifth construct of the HBM are cues to action. These are the triggering forces that motivate a person to take the necessary health action. Although this construct is not well developed and researched within HBM theory, it forms an integral influencer that reminds an individual to take an action (Bakker et al, 1997). These triggers can come in the form of new health promotion information, events, or people that drive individuals to change their behaviours. In their various studies respectively, Irwin Rosenstock (1974a) and Sharma and Romas (2012) maintain that such cues are either internal (e.g., perceptions of a bodily state) or external (e.g., interpersonal communication or a mass media campaign). Rosenstock (1974b) further maintains that there is a relationship between levels of perceived susceptibility and severity and the extent to which it is necessary to have an intense cue in order to effectively trigger action. Hence, where there is low perceived susceptibility and severity the greater the for a higher degree of intensity of the cue in order to influence action. Whereas if the perceived susceptibility and severity is higher even the slightest stimuli would be adequate to motivate an individual to take the necessary preventative action. An objective of this study is to establish the role that a cue to action such as communication about sexual health amongst black MSM whose peers influence their individual perceptions of PrEP and their motivation for taking up PrEP or not. Therefore, this construct allows for a clear analysis and testing of the communicative practices among black MSM and the influences of these on individual decisions with regards to PrEP.

The final construct which was added to the model in the 1980s is self-efficacy and is defined as an individual's confidence in their ability to act in a particular way and adopt a particular behaviour (Rosenstock, Strecher and Becker, 1988). This is one of the constructs that least explored in this study but one that may saliently emerge from discussions that black MSM have about their willingness to adopt PrEP as a preventative method. Cues to action can include an estimate of one's ability to overcome barriers and especially relevant here is that if an individual has high susceptibility and severity but does not have faith in their ability to maintain the health action this, will significantly decrease their likelihood to act. This construct is not prominent for analysis in this study due to the study's objective which does not place MSM in a fully reflexive position but requires them to explore their perceptions and attitudes about PrEP.

Additionally, and especially relevant to this study and the choice of the HBM is the assertion by Gottwald and Goodman-Brown (2012) that the main premises of the HBM are that individual's beliefs and ideas about their health are based on perceptions and not reactions to health events. This is particularly true of this study that explores the perceptions and attitudes and not the reactive action that emanates from black MSM using PrEP. Presenting the analysis with ample opportunity to vigorously explore the barriers and motivators to the use of PrEP from a perspective that contextualises the formation of these attitudes and perceptions ensures that there are great insights that can be garnered from this study using this model of predicting and exploring health behaviour.

3.3. The Health Belief Model and understanding health behaviours

Taking a theoretical look at the HBM and the underpinning concepts that are the base for the formation of the theory and in assisting understanding health behaviour, it is worth noting that the HBM falls within the category of value expectancy theories. These are a group of theories that were developed to explain how individuals' behaviours are influenced by beliefs, perceptions, and attitudes towards objects and actions. At their core, these theories assume that people behave according to the benefits that an action is anticipated or expected to provide after considering the costs or relative advantages of the alternatives (Simons-Morton *et al.*, 2012). They provide a theoretical framework for determining logical and effective calculations that go into decisions about action and provide the explanations with the beliefs and attitudes that are the cognitive underpinnings of behaviour (Sharma and Romas, 2012; Simons-Morton *et al.*, 2012).

These value expectancy theories, further premise that events believed to be more or less likely are seen to be positively or negatively evaluated by the individual against the likelihood of experiencing a health problem, the severity of the consequences of that problem, the perceived benefits of a health behaviour, in combination with its potential costs, were seen as key beliefs that shaped health behaviour (Abraham and Sheeran, 2005). This description and the preceding discussion on the HBM illuminate how the HBM competently forms a part of this group of theories while providing a bases upon which each of the aspects relevant to this study and the units of analysis of the HBM are linked to the objectives of this study, hence illuminating the HBM's utility as a theoretical lens through which this study is unpacked.

The premise of the HBM is dependent on several pertinent elements or (unit of analysis), namely; beliefs, perceptions, attitudes and values and provided a link between socialisation and behaviour (Abraham and Sheeran, 2005). In their text, Sharma and Romas (2012) support this in their definition of health behaviour by asserting that, "the personal attributes such as beliefs, expectations, motives, values, perceptions and other cognitive elements...relate to health maintenance, restoration of health and the improvement of health" (2012:5). Clearly highlighting the role of the various elements in health behaviour, a brief understanding of the various elements is important. Firstly, beliefs are enduring individual characteristics which shape behaviour and can be acquired through primary socialisation or because of the interaction between of different social categorisations such as, gender, race, socioeconomic status (class) and age. These beliefs are modifiable and can differ between individuals of the same background. Individual health beliefs are ever evolving and can change during a person's life influenced by their life experience and the above-mentioned social categorisation aspects (Abraham and Sheeran, 2005; Gottwald and Goodman-Brown, 2012).

Furthermore, personal control beliefs are critically linked to perceiving barriers to undertaking preventative behaviours and to the motivation for initiating and maintaining risk-reduction activities (Brunswick and Banaszak-Holl, 1996). Other important elements include attitudes which Joanna Hayden (2009) describes as the ideas that are developed from a series of belief and relates to a standpoint on a particular matter, in this case, would be those formed about PrEP. These form an integral part of predicting health behaviour and are particularly relevant to this study exploring the uptake of preventative health behaviours. Sharma and Romas (2012) present health behaviours as any activity undertaken by an individual regardless of actual or perceived health status for promoting, protecting or maintaining health. Therefore, this is concerned with identifying relevant knowledge, beliefs, attitudes, and behaviours of the population groups of interest with respect to the health behaviours and outcomes of interest.

This study is particularly interested in what Stanislav Kasl and Sidney Cobb (1966) refer to as preventative (or health) behaviour which is an activity that is undertaken by a person who considers themselves to be healthy in order to prevent disease or to detect it early while it is still in its asymptotic stage. When considering the nature of PrEP as a preventative measure for the transmission of HIV, the Health Belief Model is a sound theoretical base for this study as a model that was mainly developed to address these preventative

behaviours and whose main premises are a based on the predicting the health behaviours which are closely related to the preventative health behaviours and the actions taken by individuals as they would when making decisions on whether to take up PrEP. The various elements of the predicting health behaviour that have been described above have highlighted the close link between the formulation of health behaviours, and the elements used to establish how health behaviours are constructed are closely linked to the study and its selected theory, the HBM.

It is evident from the above discussions that the HBM has in relative terms been most frequently used in the context of health services uptake such as immunisation acceptance, and compliance with medical treatment (Rosenstock, 1974b; Janz and Becker, 1984). This synergy between the various theoretical underpinnings enhance the identification of issues relevant to health behaviour and further explore the motivators and barriers to black MSM taking up PrEP. This is especially relevant for the HBM's applicability to this study, a study which saliently seeks to explore the role that individual beliefs, attitudes, and values play in the decision-making process of black MSM in the Msunduzi Local Municipality and their willingness to uptake or not uptake PrEP.

3.4. The Health Belief Model in practice – HIV and AIDS in action

With the incessant increase in new HIV infections especially among key populations such as black MSM across the globe, there is a great focus on predicting and better understanding the behaviour that leads to these infections. Franklyn Manu and Ven Sriram (1999) argue that a deeper understanding of the AIDS-related beliefs, attitudes and behaviour among key populations is needed. The HBM offers a clear model for predicting the beliefs and actions and that will support this kind of research that may lead to decreasing infection rates. With respect to HIV/AIDS, the HBM has been widely used to better understand human behaviour and factors that put people at risk as well as those which encourage behavioural change (Orisakwe, Ross and Ocholla, 2012). Due to this, the HBM's relevance within HIV and AIDS research has been well anthologised dating back to the discovery of HIV and AIDS in the 1980s. Since then, there have been numerous local and international studies that have applied the HBM to HIV prevention behaviour research (Brunswick and Banaszak-Holl, 1996, Bakker *et al*, 1997, Orisakwe *et al*., 2012, Buldeo and Gilbert, 2015) although this has often involved modification and expansion of the model to best apply to varied

settings. Illustrative of this is Bakker *et al.* (1997) critiqued the construct perceived severity as a low predictor of HIV risk reduction among a population of MSM in the Netherlands. As a result, they, elected to modify this construct and as such found that the model could explain with a reasonable variance the intention to practice safe sex among MSM.

Other studies that employed the HBM to predict people's preventative methods include an analysis of the preventative methods used by various people of colour in the USA, the commitment to condom use and the willingness of students and adolescents in Ghana, South Africa and the USA to test for HIV, and finally the uptake of HIV counselling and testing in the South African hospital system (Manu and Sriram, 1999; Orisakwe *et al.*, 2012; Buldeo and Gilbert, 2015). Although these studies presented different findings as applicable to each community, the overall observation was that the HBM is appropriate for predicting complex preventative health behaviours such as the uptake of PrEP (Schnall Rojas and Travers, 2015).

A genealogical presentation of the studies highlighted above illuminate the appropriateness of the HBM and solidifies its relevance as a theoretical lens for understanding the motives and barriers of BMSM's uptake of PrEP. Amongst the earliest studies which used the HBM in HIV research is one conducted by Rosenstock, Strecher and Becker (1994), where they reviewed studies from the previous decade (1984-1994). In their findings, they propose that at the time, perceived benefit was the most researched HBM construct. This could be linked to the model's value-expectancy orientation where the perceived benefit of taking a health action is weighted against the perceived susceptibility and severity to determine the likelihood to act. This is in line with the main hypothesis of the HBM that individuals interested in acting would weigh up the benefits of performing a recommended health action against the barriers. If these individuals found that the benefits outweigh the barriers, the likelihood of acting would be substantially higher. In their finding which also supports the above assertion about perceived benefits, Manu and Sriram (1999) maintain that an individual's commitment to safer sex is likely to be higher when these actions are perceived to be effective in risk reduction. Essentially, Rosenstock *et al.* (1994) presented evidence that the HBM variables are associated with health-related behaviour and that the manipulation of health belief variables can lead to increased compliance with health recommendations.

With the HBM's popularity as an organising framework for explaining and predicting the individual's acceptance of recommended preventative health actions being reported on in earlier parts of this chapter, it is evident how the HBM became a chief archetype that guided research on the modification of HIV prevention behaviours (Rosenstock *et al.*, 1994). This was achieved by means of clarifying the relationship between HIV-related attitudes and HIV risk behaviours. Similarly, the premise of HBM even within HIV and AIDS research articulates that individuals need to first develop a sense of perceived susceptibility to HIV infection. They need to reflect on the severity of HIV illness and must possess the self-efficacy to regulate the sexual health behaviours which put them at risk. This is if they intend to stop engaging in health-threatening behaviours or adopt and maintain practices that prevent HIV exposure.

In this case, it is the uptake of additional HIV prevention methods such as PrEP. Evidence from the Ann Brunswick and Jane Banaszak-Holl (1996) study proved this above-mentioned premise and found that high perceived susceptibility was significantly related to risk avoidance practices, and proved that as assumed, the higher the perceived susceptibility and views of risk of HIV infection would translate to an increased willingness and likelihood of risk avoidance and reduction practices. Thus, indicating the HBM's competence in predicting HIV preventative health behaviours, which is the focus of this study.

3.5. Critique of the Health Belief Model

There are various critiques to the HBM that have been offered by a range of scholars and medical practitioners. This study acknowledges with caution, a wide range of critiques that have been meted against the HBM for various reasons. This study uses the HBM with the intention to counter certain criticisms and positively counter these critiques through the research undertaken. Initially, scholars, Mary Gottwald and Jane Goodman-Brown (2012) criticise the model for its assumption that there is a rational nature through which all health decisions are made. This is supported by Taylor, Bury, Campling, Carter, Newbould, and Rennie (2006:37) who argue that "notwithstanding components like perceived barriers and demographic and socio-economic descriptors, as normally applied this model may be taken implicitly to assume that people are rational actors". Mark Edberg (2015) also contends that the HBM assumes that there is an internal, rational process where individuals assess their degree of risk and make a cost-benefit calculation about whether to engage in the preventative or health-orientated behaviour. This assumptive conception of

rationality is not a correct assessment because in a cognitive decision-making process there cannot be complete rationality, but that the decisions made are powered by an assortment of cognitive elements that are propelled by the individual's conscious perceptions of the world.

With regards to the HBM's utility and its predictive prowess that has been asserted in earlier sections of this chapter, Taylor et al. (2006) in their comparative study argue that available evidence indicates that the HBM has a relatively weak predictive power. They account this is in part because of how the constructs have been defined badly, a lack of combinatorial rules and weaknesses in the predictive validity of the HBM's core psychological components. They support their assertion by presenting results from a comparative exploration which indicates that the Theory of Reasoned Action (TRA) is a substantially better predictor of health behaviours than the HBM. They argue that in controlled assessments completed with the TRA, they were able to explain over 34 per cent of health behavioural variance, whereas they were able to only to establish just 24 per cent with the HBM. Consequently, they concluded that the HBM is essentially a list of variables rather than a theory based on adequately specified relationships between its core components. This is a wellknown critique dating back to the 1994 study by Rosenstock, Strecher and Becker which critiqued the utility of the HBM in early HIV research. In this study, they also argued that it was evident from a pool of studies that the HBM could not be used in its entirety and prompted researchers within the field to test the individual constructs of the HBM. Research and the applicability of the HBM have thus been skewed to the measurement and analyses of the independent constructs and not taking an applied systematic view of the full set of model components described above.

Another critique of the HBM expands on the influence of social, economic and environmental factors on health behaviours; these are beyond the cognitive factors contained in the psycho-social dimension that is at the core of the HBM. Various studies consulted did not provide evidence that the constructs of the HBM enabled the influence of social, economic or other environmental factors (these include variables such as low income, exposure to racism, cultural segregation, or inconvenient health service provision) to be better understood by researchers, or health practitioners. Gottwald and Goodman-Brown (2012) argue that in view of this, the model takes a bio-medical view of health and does not recognise the role that family, social life,

cultural environment and political factors play in everyone's decision-making process but is mainly based on an individual cognitive process.

The above sentiments are also shared by Edberg (2015) who maintained that the HBM doesn't place a lot of emphasis on external context. This critique delimits the utility of the HBM not to account for predictors that are viewed as crucial to the health behaviour. Aware of this skewed perception of the HBM, this study uses the HBM for its predictive ability to assess the various constructs and supplements this with the Intersectionality Theory, which is the exploratory lens through which the various identification categorisations that are influenced by the social, economic or other factors are reflected on, especially the intersections at which these are existent in BMSM in the Msunduzi Local Municipality.

Another critique is that albeit the significance of cues to action being recognised in the HBM, the model remains ineffective in establishing the importance of communication settings within which various cues to action are related. Furthermore, a critique and opportunity for the utility of the HBM is the model's lack of acknowledgement of the role that communication plays as an enabler of health beliefs and changing health behaviours. It fails to address how variations in cognitive factors can determine the effectiveness of alternative communicators such as, say, doctors as against nurses or pharmacists, or older females as opposed to younger males, friends as opposed to siblings or colleagues and how these influence the cues that individuals consider when they make decisions whether to act or not.

Through this study, the element of communication, focusing on the role that it plays as a cognitive influencer for changing behaviour is explored from an interpersonal level to provide at a basic level, an "independent" construct of interpersonal communication that acts as a strong cognitive influencer that triggers individuals to act and adopt preventative health measures. This pursuit is in response to an argument presented Taylor *et al.* (2006) who postulate that in their current format, models such as the HBM imply that behavioural cues such as media advertisements and written or personal reminders may have a fundamentally different function from communications aimed at changing beliefs and attitudes. Hence, this study seeks to use the various elements of the HBM to predict behaviour and establish the propensity for interpersonal communication to act in the cognitive realm to influence a choice to change behaviour.

Finally, Edberg (2015) postulates that when exploring the utility of HBM, it is not always clear how all six HBM constructs influence changes in behaviour. Most health research use HBM certain of the constructs but not all of them at once, casting a light of apprehension on the utility of the entire model in predicting behaviour change. This apprehension is supported by Simons-Morton, McLeroy, and Wendel (2012) who argue that the HBM in its entirety with all its constructs has been poorly, inadequately and inappropriately applied to health research settings. This has only perceived susceptibility and severity being accessed in some instances, leaving out the rest of the constructs of the HBM. This form of methodological inconsistency casts doubt on the applicability of the HBM as a comprehensive model for predicting health behaviour.

In response to the above, this study responds to the above criticism by firstly testing the utility of the various constructs of the model while suggesting new ways of addressing "developmental" cues such as communication discussed above. Furthermore, it addresses the prediction of the health behaviour amongst MSM a key population that is disproportionately affected by HIV with a paucity of recent research that uses the HBM as a lens to reflect on the behaviour of MSM and the decisions on whether to take up PrEP.

3.6. Intersectionality Theory

3.6.1. A genealogical review of Intersectionality Theory

The concept of intersectionality emerged in feminist theory in 1989, where it sought to develop a more robust understanding of race-sex or gender-based scholarship by arguing that the multiple marginalisations experienced by African-American women, were mutually constituted and could not be understood by approaches that treated race and sex or gender as distinct concepts of inquiry. It was borne from the problematic tendency to treat, race and gender as mutually exhaustive or exclusive categories (Crenshaw, 1989). It sought to give prominence to various elements that influence identification by highlighting the fluidity of human experience and better understanding of how the varied elements such as gender and race intersect to define this. Further to this definition, Dhamoon (2011) argues that intersectionality offers a richer ontology beyond the view that people only belong to one category. It treats social positions as relational and it makes

visible the multiple positions of an individual that constitute their everyday life, accentuating the power relations that are central to this lived experience. Nash (2008) argues that the Intersectionality Theory emerged as a theoretical tool designed to combat feminist hierarchy, hegemony and exclusivity. A comprehensive and accessible definition for the tenets of intersectionality is presented by Garry (2011: 827) who argues that;

Oppression and privilege by race, ethnicity and gender, sexual orientation, class, nationality and so on do not act independently of each other. In our individual lives or in our social structures; instead, each kind of oppression or privilege is shaped by and work through the others. These compounded, intermeshed systems of oppression and privilege in our social structure helps to produce (a) our social relations, (b) our experiences of our own identity and (c) the limitations of shared interests even among the member of the "same" oppressed or privileged group.

Therefore, it is evident why intersectionality is sometimes simultaneously regarded as "crossroads" or a dynamic process that is context specific and considers time and location when understanding the proliferation of intersectional issues that individuals experience.

Over the past two decades, intersectionality has become a foundational concept for understanding society and sociological constructs. Its increased popularity is based on the fact that it offers new frames for exploring the social injustices that characterise the everyday lives of individuals. As a theory reliant on the use of new frames of understanding issues. Crenshaw (2018) asserts that Intersectionality Theory challenges against conventional ways of thinking. It requires us to unearth and reconfigure the singular lens or frame or form of thinking used to explore the varied issues of race, sexuality and gender. At its core, it necessitates that new ways of thinking are uncovered to reflect on the multiple characteristics that define the lived experiences of individuals. From the above, what is evident is that Kimberlé Crenshaw problematises a single axis of viewing the world, but rather encourages a multi-dimensional axis of exploration (Crenshaw, 2018). In her 1989 seminal article, she contends that single-axis analysis distorts the multi-dimensional nature of the marginalised group or individuals' experiences (Crenshaw, 1989). With developments in the theory supporting this and arguing that theoretically, Intersectionality disputes the essentialist view, that it is a single characteristic

(race, class, or gender) that defines the inclusion of one in the group but rather propagates that there is diversity within groups (Hancock, 2007). An example could be college students, although there is an urge is to delineate them as only being students. Whereas, the group is extremely diverse, with different genders, races, ages, sexual orientations, social economic status (SES), and able and disabled individuals. Therefore, above remark about diversity by Hancock (2007) emphasises the impracticality of using a single frame of analysis to understand a category and subtly encourages for a multi-dimensional frame that will assist in accounting for the differences and how all these intersect to create the diverse group.

In a recent interview, Kimberlé Crenshaw asserts that "you cannot understand progressive outcomes without understanding how they come about" (Crenshaw, 2018). Considering this study, this statement by Crenshaw propagates how an intersectional prism can lead to a better understanding of how certain factors intersect to illuminate what informs certain health-seeking behaviours and preferences for preventative methods. As demonstrated in the literature review, this study's exploration of perceptions and attitudes of BMSM toward PrEP cannot be competently executed without acknowledging the marginalisation that BMSM experience. Marginalisation disproportionately places BMSM at higher-risk of HIV infection. Therefore, Intersectionality Theory proposes to interrogate the various constructs of this marginalisation from a multi-dimensional perspective. This involves explorations not based on race, class, or gender but a more fluid exploration that examines how these various constructs intersect.

Underscoring the focus on a multi-dimensional view, Nash (2008) asserts that Intersectionality subverts binaries in the service of theorising identity in a more complex manner. Therefore, a single axis view of the marginalisation of BMSM would presuppose that they are marginalised because of their same-sex desire while the Intersectionality theory uses a more exhaustive and multi-dimensional approach that interrogates, racial, gendered, social, economic and political constructs that intersect to maintain this marginalisation.

There is evidence that Intersectionality offers a strong viewpoint through which to better understand social structures and how they influence lived experiences. As a framework of analysis, the Intersectionality Theory can be integrated into various types of research as a method for knowledge production (Dhamoon, 2011).

Fundamentally, Kimberlé Crenshaw (1989) asserts the necessity of an intersectional lens by arguing that any analysis that does not take Intersectionality into account cannot sufficiently address the way marginalised groups are subordinated. For its utility as a theoretical foundation in this study and the role that it plays in acknowledging how the intersection of identity, sexuality, race and privilege have the potential to define the way BMSM in Msunduzi Local Municipality perceive their sexual risks and define their response to HIV prevention methods such as PrEP. Intersectionality focuses its attention on the determinants of health, whilst also accounting for both between and within-group differences. These kinds of approaches help explore the extent to which interlocking systems of oppression and privilege become embodied in health disparities (Green *et al.*, 2017). Hence in this study, enables an analysis of how racial, gender and sexual orientation stereotypes play themselves out in health care and how this influences the decision making of BMSM regarding preventative methods.

3.7. Intersectionality Theory – A transformative perspective

As emphasised by Nash (2008), the Intersectionality project centre's the experiences of individuals whose voices have been disregarded. This is closely linked to the decolonial project which seeks to focus on agendas meant to honour the local knowledge of subjugated, marginalised, and indigenous people. Decolonizing ideologies and practices offer an opportunity for researchers to decentre the prevailing discourse of knowledge production and loosen the grip of neo-colonial paradigms (Denzin and Lincoln, 2008). As with culturally responsive research, decolonising research methods highlights and privileges the voices that have been ignored, disregarded, and/or marginalised. This is particularly crucial for a theory that is described as a critical race theory and that emphasises the narrative of those previously on the periphery. It is, therefore, established from this point that Intersectionality can be viewed as a decolonial and transformative perspective of analysis. Historically, Intersectionality was developed in response to and in the

critique of the inefficacy of anti-discriminatory laws and how they addressed the inequality experienced by American black women in the employment sector (Crenshaw, 1989). Therefore, it can be argued that a focus towards transformative ideals is inherent in the purpose of Intersectional Theory.

Thought leader in transformative research work Donna Mertens argues that the fundamental principle of transformative paradigmatic assumptions is the enhancement of social justice, the furtherance of human rights and the respect of culture (Mertens, 2010). These underlying assumptions are considered when arguing towards the transformative nature of a construct or theory. It is assumed that Intersectionality Theory is based on a transformative outlook since historically it was developed out of the need for generating better tools of analysis to interrogate the social marginalisation that black women were experiencing in the employment market. The lack of equal employment opportunities is a social issue and efforts to address this and to better understand the impediments present in these is intrinsically in tune with addressing the social justice issues of black women.

Based on the above associations, this study argues that Intersectionality can be understood as a transformative tool. This suggestion is supported by Gopaldas (2013), who asserts that Intersectionality research is positioned as critical and transformative because it is critical of power relations that influence social (dis)advantage or advantage of certain groups based on the conceptions of social identity constructs. This statement mergers characteristics of Intersectionality, namely that it is part of critical race theories and that it also possesses a transformative capacity.

Furthermore, Intersectionality Theory is considered a theory that can be used to better understand and explain certain social justice issues hence fundamentally making its premise transformative. Mertens (2007) contends that transformative outlooks are imbued in the recognition that realities are constructed and shaped by social, political, cultural, economic, and racial or ethnic values which indicate that power and privilege are important determinants of social reality. Crenshaw (1991) theorises that Intersectional subordination is not intentionally produced but in fact, is frequently the consequence of the imposition of one burden that interacts with pre-existing vulnerabilities to create yet another dimension of disempowerment. Therefore, collectively, an outline can be drawn between how a transformative perspective views social reality and the establishment

of a socially unjust reality as well as how Intersectionality unpacks this reality with the intention to explain how the elements inherent in the environment intersect to define ways of being and living.

The transformative nature of Intersectionality can be applied to this study, on the basis that at its core, the study is set in the backdrop of an unequal social system and grapples with the social issue of health care for marginalised groups. This is illustrated by the inaccessibility of life-saving preventative medication for the majority of BMSM who are disproportionately affected by the HIV epidemic. This study, therefore, attempts to mitigate this by establishing the acceptability of PrEP and advise on the efficacy of an implementation programme in Msunduzi Local Municipality. Therefore, an Intersectional prism allows for the interrogation of the social constructs that influence the lived experiences of these BMSM, which would ultimately affect their decision-making process. It allows for a close analysis of BMSM who experience multi-dimensional marginalisation as part of the various identity categories which they fall into. With the intention to provide knowledge on this group and in a minor manner address the social issue at hand. Therefore, the transformative role Intersectionality can play in this study is evident.

Another transformative consideration of Intersectionality is linked to the widely held argument for the use of a Socio-Ecological Model (SEM) in collaboration with a Health Belief Model for predicting health behaviour. There are many ways in which health behaviour can be explained either internally, such as belief, attitudes and externally which is based on the social environment. The preceding prominence of ecological models is based on the view that ecological models predict health behaviour by using both the internal and external factors and not one or the other. Explicating the socio-ecology Simons-Morton *et al.* (2012:42) state that it is the "study of the effect of the interrelationships of social levels behaviour and health". They argue that personal health is influenced by an array of factors, including their cognitions, relationships with others, affiliations with organisations, politics and the economy, as well as their position within the community." From the above definition, it is evident that the SEM seeks to understand the multiple and interrelated factors that influence individuals to do what they do, not to critique, or transform the current social systems, but merely to explicate and position the various elements according to categories. This makes the outlook of SEM quite linear and not critical.

Conversely, the Intersectionality Theory portrays, interrogates and critiques the current social identification structures that influence the marginalisation or privileges experienced by a particular group. This critique position innately adds projects of seeking to transform these structures with the idea of addressing the social injustices they perpetuate. Therefore, this study employs an Intersectional lens rather than a Socio-Ecological perspective, because it is innately based on seeking to produce knowledge that grapples with the social injustices that BMSM experience and the saliency of these issues in relation to preventative health. Furthermore, Simons-Morton *et al.* (2012) argue that a socio-ecological perspective is a sound basis for predicting and changing behaviour. This study aims not to influence behavioural change but to rather access the attitudes and perceptions of BMSM towards PrEP. Therefore, an Intersectional frame allows for a comprehensive analysis, of the social identity structures rather than argue for habitual change. Finally, although the elements highlighted in the Socio-Ecology Model are closely linked to the social constructs of Intersectionality, the social constructs have on identification, illuminating on a multi-dimensional view of these constructs and how they intersect with each individual.

3.8. The intersection of gender, sexuality, race and class

The exploration of Intersectionality and notions of homogeneity when applied to homosexual identity and sexual behaviours is evident across demographic variables such as socioeconomic status, gender, age, and ethnicity. Furthermore, these demographic variables are known to be associated with preventative health behaviours, although it is recognised that these antecedents cannot be changed through health education and peer-related interventions (Riggs and Das Nair, 2012). Wyatt, Gómez, Hamilton, Valencia-Garcia, Gant, and Graham (2013) emphasize that to make inroads towards ending the HIV epidemic, intervention and prevention research needs to address how gender and ethnicity intersect, and how these intersect with other social constructs. They bring to the fore the need for this research to be cognisant of the myriad of contradictions that may be emergent when addressing HIV prevention amongst underserved communities such as BMSM. This argument highlights the need for an intersectional approach to analysing the perceptions

and attitudes of BMSM towards PrEP and posits the relevance of the constructs of gender, race, sexuality and class when employing such an analytical tool.

The above is supported by Greta Bauer (2014) who asserts that Intersectionality has the potential to study health and disease at different intersections of identity, social position, processes of oppression or privilege and policies or institutional practices. Although this may be the case, Crenshaw (1991), warns against viewing Intersectionality as a new totalising theory of identity. Instead, Crenshaw (1991) encourages that Intersectionality be viewed as a means for addressing the need to account for the multiple grounds of identity when considering how social life is constructed, particularly in health issues. In HIV research, Celeste Watkins-Hayes (2014:433) best encapsulates how Intersectionality is embedded within the epidemic that, "HIV/AIDS is an epidemic of intersectional inequality fuelled by racial, gender, class, and sexual inequities at the macro-structural, meso-institutional, and micro-interpersonal levels. These inequalities shape the likelihood of exposure to the virus; the realities of living with HIV; and our medical, programmatic, political, and social-scientific responses". Hence, this explicates why there is a need for an intersectional lens that propagates the various constructs of social identity within HIV and AIDS research and how constructively the epidemic is premised and manifests itself along various intersects.

The inter-relationality of the various constructs and how they are analysed and influence research objectives in HIV and AIDS research is well documented. The prevalent argument in favour of an intersectional lens is that gender intersects with other social identities and categories, including but not limited to ability, status, age, ethnicity, race, sexual orientation and social class (Parent *et al.*, 2013). This ideal is supported by Ann-Dorte Christensen and Sune-Qvotrup Jensen (2012) who argue that an intersectional analysis aims to explore intersecting patterns between different structures of power and how people are simultaneously positioned and how they position themselves in the various categories of gender, class and race.

Reflecting on this from an HIV and AIDs perspective Wyatt et al. (2013:248) assert that;

Gender and ethnicity are unlike behavioural risk factors that can potentially be addressed in interventions; they are not deleterious behaviours but are instead complex, socially constructed, interconnected aspects of human experience. Given their centrality to HIV risk and transmission...the task in intervention and prevention research is to better understand the intersection of gender and ethnicity, specifically the sociocultural factors that support traditional definitions and roles of gender identity in ethnic and sexual minority communities.

Hence, delineating how race and ethnicity can be understood as nuanced aspects of illness and its transmission is important. Furthermore, within intervention and preventative health research, intersectionality allows us to look at how the convergence of race stereotypes and gender stereotypes, sexual minority stereotypes play out within the health sector and particularly how they further marginalise at higher-risk groups such as MSM (Crenshaw, 2018).

The availability of Intersectionality subverts race or gender binaries in the service of theorising identity in a more complex style, ultimately it seeks to demonstrate the racial variations within gender and the gendered variations within race through its attention to subjects whose identities contest race-or gender (Nash, 2008). The utility of Intersectionality theory in the analysis of peer sexual health communication amongst BMSM is best articulated by Damien Riggs and Roshan das Nair (2012) who argue that intersectional approaches do not only encompass an account that locates individuals at the intersections of a range of social categories but also in a relationship with other people who occupy different social categories. This has applicability for exploring communicative interactions amongst BMSM and their influences on perceptions and attitudes. It has been suggested that the use of Intersectionality in physical health issues amongst LGBT individuals, reiterated the utility of Intersectionality in the study of health and health promotion when Intersectionality can explore how health issues affect LGBT lives and how marginalisation based on sexual identity intersects with experiences of ill health and health promotion (Riggs and Das Nair, 2012). This statement clearly elucidates how Intersectionality theory can further be applied to the study of marginalised groups and how the intersection of sexual identity has much to offer towards understanding health disparities by providing more precise information on inequalities.

3.9. Exploring South African BMSM through the lens of Intersectionality Theory

In her seminal piece, Kimberlé Crenshaw (1989) provides various groups and individuals that can use an intersectional frame. Crenshaw (1989) argues that intersectionality is not a grand theory but is rather a prism

for understanding certain kinds of problems. Theoretically in this study it, Intersectionality Theory is used to illuminate the problem of accessibility to necessary preventative health methods. This is against a backdrop of social and structural vulnerability that BMSM experience and how these BMSM as a means of self-preserving or correcting attempt to address these problems with prevention implements such as PrEP and through dialogue. The main issue which is relevant to this study is marginalisation and how these causes of marginalisation function at various levels. To best understand how BMSM can be intersectionally analysed, this study draws on the famous quote of Gay, Anti-Apartheid and HIV activist Simon Nkoli. In the popular documentary, *Simon and I* by Bev Ditse and Nicky Newman Ditse and Newman (2002), Nkoli at the first-ever Gay Pride in 1990 delivers what went on to become known as a poster quotation on Intersectionality. Nkoli comments:

This is what I say to my comrades in the struggle when they ask why I waste time fighting for moffies. This is what I say to White gay men and women who ask me why I spend so much time talking about Apartheid when I should be fighting for gay rights. I am Black, and I am Gay. I cannot separate the two parts of me into secondary and primary struggles. It will all be one struggle. In South Africa, I am oppressed because I am a Gay man. So, when I fight for freedom, I must fight against both oppressions... All those who believe in a democratic South Africa must fight against all oppression, all intolerance, all injustice.

Even in as early as 1990, Nkoli exhibits an understanding of the interrelated, interdependent struggles that converge to define his lived experience as a Black gay man in South Africa. From this statement, the intersectional struggles based on ethnicity and sexuality are apparent. Drawing associations between this statement and this study the attitudes and perceptions of BMSM cannot be understood individually, these need to be explored in a nuanced manner that takes into cognisance, the effects of race, gender, sexuality and class and how these define, sexual risk behaviours and preference of preventative methods.

As highlighted in earlier sections of this chapter, Intersectionality can be understood as a frame; What is the frame that black gay men are explored through? Black gay men can be explored through the intersections of race, gender and particularly sexual orientation. Although focused on the struggle of black women, Kimberlé Crenshaw (1989) is aware of the struggles of other sexual minorities, particularly the struggles experienced

by black sexual minorities. A prominent statement in her seminal work, argues against the proliferation of a focus on the privileged group against the marginalised group. An example that she makes is that of gayness and how within a critical paradigm, it has been associated with whiteness, maleness and privilege. This then mirages the marginalisation of black gay, men if we are to explore it from the vantage point of sexuality. This does not consider race as a determining factor of the lived experience of black gay men. Crenshaw (1989) further explicates this by arguing that BMSM sometimes experiences discrimination in ways that are like other MSM and their experiences are sometimes like with those of black heterosexual men. Yet overall, BMSM experience double discrimination which is the combined effect of the practices that discriminate them based on their gender, race and sexual orientation. Concluding that they sometimes experience discrimination just as BMSM, not the sum of race, gender or sexual orientation but as BMSM. Intersectionality offers a frame through which to explore this. So, this marginalisation all intersects at some certain points in the lived experiences of these BMSM.

Exemplifying the intersecting struggles within a South African context, the marginalisation that is inherent in BMSM cannot be understood outside the context of the current environment. If we are to explore these struggles from a health perspective, although South Africa has one of the world's most comprehensive constitutions with an exhaustive bill of rights that protects the rights of all citizens against discrimination based on sexual orientation (Constitution of the Republic of South Africa, 1996), the lived experience of BMSM is not congruent with the laws enshrined in this constitution. Therefore, many BMSM who are out-identified experience harassment in communities, the workplace and health care facilities, resulting in a large number of BMSM opting not to disclose their same-sex desire for fear of this discrimination (Lane *et al.*, 2008a; Mantell *et al.*, 2016).

An intersectional prism of analysis of the lived experience of these BMSM would firstly consider the construct of race, e.g. blackness in a post-apartheid South Africa is characterised by neo-marginalisation and subjugation, which hence marginalises these individuals based on their race. Their ethnic (race) and social (class) backgrounds dictate the level of education they can attain, the opportunities available to them as well as employment or more predominantly in South Africa, unemployment. This affects their financial capacity (class) and increases their dependency which then leaves them forced to use government facilities and being dependent on government opportunities where they find themselves discriminated against not for their race but for self-disclosed sexual orientation. This experience is completely different for most white MSM in the same country, based on the structural privilege they have experienced (Biko, 1977; Ndlovu and Makoni, 2014). This illustrates the assertion of Crenshaw (2018) that identity is not a self-contained unit but rather a relationship, which could be between people and history, people and communities, as well as people institutions. The above illustrates the varied difference of experiences experienced by white MSM and black MSM in South Africa. From the above, the constructs of race and ethnicity, gender, class, sexual orientation all intersect to define how BMSM experience or do not experience medical care and preventative methods. Therefore, an intersectional prism holds great potential for better understanding of those groups most at risk in South Africa.

3.10. The relationship between Intersectionality and the Health Belief Model

The current study draws on the connectivity of the two theories that have been discussed above as the lens through which the findings of this study will be analysed. Nova Corcoran (2007) acknowledges that the Health Belief Model considers 'modifying factors' important to behaviour change, these include demographic variables, socio-psychological variables and structural variables, and further asserts that factors such as age and gender will impact on an individuals' decision-making process.

This assertion is relevant for the analysis of the BMSM's attitudes and perceptions towards PrEP from a health behaviour model perspective. The analysis firstly explores the factors that influence health behavioural decisions. Secondly, the focus is on the formation of attitudes and perceptions of PrEP. This is done while incorporating how the intersection of gender- sexuality, economic status defines this group's (BMSM) conception of health promotion. The communicative process is further explored, especially the process between BMSM who have peers and how this influences attitudes and perceptions towards PrEP.

3.11. Conclusion

According to the HBM, modifying factors, cues to actions and self-efficacy affect an individual's perceptions of susceptibility, seriousness, benefits and, therefore, individual behaviours. The HBM has been used by

various scholars and health practitioners to predict the various health behaviours. What was particularly relevant for this study is its 'applicability' in HIV and AIDS research. Although the HBM has exhibited popularity for health preventative methods, this has not translated into an uncritiqued theory. There have been various critiques of the theory that have ranged from its assumption of rationality in the cognitive process to the use of individual constructs and not a systematic approach to understanding health behaviour. Most relevant and what closely links to intersectionality is that the HBM ignores important social and environmental aspects. This is the defining force that influenced the selection of a complementary theory in the form of the Intersectionality Theory.

The Intersectionality Theory allows for a deeper understanding into the fundamental point that there are many facets to the construction of identities and that each of these identities is differently impacted by multiple interacting systems of oppression and privilege. This defines how black MSM can be understood in the form of the various elements that create their marginalisation, namely; their ethnicity, gender, sexual orientation and class. All these either lead to the erasure of their lived experience or their double marginalisation. It is this marginalisation which influences each individual's beliefs about health behaviour and defines whether an individual would be willing to take up PrEP as a preventative method against HIV incidence.

Chapter Four

Exploring Transformative Methods for voicing Black MSM in the Msunduzi Local Municipality

4.1. Introduction

Dealing with a sensitive subject matter presents a challenge to the researcher. This is because the issue of same-sex desire remains a taboo in South Africa. This consequently leads to many BMSM experiencing stigmatisation emanating from homophobia. The broader implication of both stigmatisation and homophobic tendencies towards BMSM is non-disclosure about sexual preferences and the inclination for remaining invisible. Non-disclosure makes these individuals non-accessible to studies which attempt to grow knowledge about 'non-normative sexual- desire' and the associated lived experiences of individuals in this population. This presents the challenge of finding participants who are willing to participate in the study (amfAR *et al.*, 2011).

Considering the above challenge, research methodology in this context should comprehend with being:

Concerned not so much with the actual technique of selecting a method but much more with the context in which research problems are contextualised and designed with implications of research for its participants and their communities (Smith, 2012: vi).

This chapter, therefore, describes how the researcher 'planned' the research. It systematically provides detail regarding the research methodology that was used during the data collection process. It expands on the paradigmatic foundations of these methods and clarifies the research approach, which thus influenced the plan for data collection and data analysis. The sampling technique and recruitment strategy used to select participants within hidden populations such as BMSM are explained. The chapter also reflects on an assessment of the issues of research and data validity, reliability and the ethical considerations for this study.

4.2. Research paradigm and design

When embarking on social research, it is important to consider and recognise the role that underlying philosophical foundations play in defining the trajectory of the study as well as the overall decision-making process. When reflecting on the phenomenon of social research and its precepts, Martyn (2010) argues that it is vital to grasp the philosophical foundations that underpin each research investigation and how these manifest themselves in developing social research. Considering the above assertions, this exploratory study was executed using the transformative paradigm. The transformative paradigm is a framework of belief systems that unswervingly engage members from groups that are culturally diverse with an intent focus on enhancing social justice (Mertens, 2009).

This study explores the communicative practices, attitudes and perceptions of BMSM, a population that is disproportionately affected by the HIV epidemic and is underserved by the national and local response to HIV. What is particularly relevant to this study is the inaccessibility of PrEP by BMSM in Msunduzi, KwaZulu-Natal. Therefore, the transformative paradigm selected for this study aims to address and respond to the social inequalities that affect BMSM in non-metropole areas, considering preventative methods in the age of the biggest health epidemic in the history of humankind.

As Luke and Kurz (2002: 1) suggest that:

Addressing inequalities is not a choice—it's a moral and practical necessity. A moral necessity that speaks directly to our conscience... our sense of fairness and justice... our conviction that all people must have a fair opportunity to live full, healthy lives, no matter where they live, no matter what barriers they face. That is their right. And a practical necessity, because a focus on equity in our work saves more lives.

The transformative paradigm asserts that the role of the researcher is reframed as one who possesses a shared sense of responsibility and recognises the inequalities and injustices in society and strives to challenge the status quo (Mertens, 2007). Therefore, for this research, the subject matter of inquiry is explored through the transformative paradigm lens. The study aims to give a voice to previously relegated BMSM, regarding the adoption of PrEP as a strategy to mitigate HIV incidence. This is especially important for this key population that has not been included in very few implementation programmes.

By giving voice to BMSM, this study explores the feasibility of PrEP and makes suggestions on effective communication strategies that can help increase and enhance access to this new biomedical preventative method by BMSM.

A characteristic of the transformative paradigm is to place central importance on the lives and experiences of individuals that have been relegated to the margins of society. As well as to interrogate unequal power relations and to connect the results of the research into social action (Mertens, 2009). These are the philosophical considerations of the study at hand; I am interested in studying BMSM, a social grouping that has been relegated to the margins of society due to the intersection of their race and same-sex desire. This relegation has resulted in these BMSM being underserved and not accessing the necessary preventative tools against HIV incidence. Furthermore, this population has been further relegated due to their geographic location which has translated in a dearth in research on BMSM in non-metropole areas.

This research on the attitudes and perceptions of BMSM and their acceptance levels of PrEP as an HIV prevention method addresses issues of relegation and erasure in preventative health care. Therefore, this dissertation is concerned with the preferences of BMSM and what informs them. The study explores how BMSM can inform the implementation of PrEP. By exploring the saliency of sexual health communication among this key population, this dissertation further addresses the subject in question and makes suggestions of how best to communicate accessibility and knowledge of PrEP to this population.

For Mertens (2008) the ontological assumptions of the transformative paradigm necessitate the examination of undeserved privileges based on social dimensions of socio-economic status, age, religion, gender, race and ethnicity, (dis)ability, as well as sexual orientation. These are not the only dimensions of diversity that are used as a basis for discrimination and oppression, as the bases of social inequities and injustices are dependent on the context that individuals find themselves in. This discussion ties with one of the theoretical foundations [Intersectionality] of this dissertation. This foundation seeks to not only determine the awareness, attitudes and perceptions of BMSM towards PrEP but also to appreciate how contextual factors influence these perceptions. This is done by interrogating the multiple constructs that reinforce inequality or

marginalisation and how these compound on the lived experiences of BMSM vis-à-vis the power relations that exist in society.

To best achieve the study objectives, this study used a mixed-methods approach. Uwe Flick (2014) defines this approach as, a type of research which combines elements of qualitative and quantitative research approaches with the intention of understanding a specific phenomena. A mixed methods approach has the potential to increase the reliability and validity of a study by merging more than one method to provide a comprehensive view of the phenomenon under scrutiny. The transformative paradigm provides a mixed methods framework for examining assumptions that overtly address power complications, social justice, and cultural complications throughout the research process. Mertens (2007) argues that transformative mixed methods research is needed because previous research had not served the needs of those who had traditionally been excluded from power in the research landscape. Mixed methods research has the potential to mitigate the above power dynamics and provide a basis for social change (Mertens, 2007).

As she argues:

Hence, the reason we need good mixed methods research is that there are real lives at stake that are being determined by those in power. The voices of those who are disenfranchised on the basis of gender, race/ethnicity, disability, or other characteristics remind us of the issues of power that surround so much in the public sphere, even that supposedly neutral and objective world of research (Mertens, 2007:214).

The above description best encapsulates the positive elements of using a mixed-methods approach within the transformative paradigm. For this study, a mixed methods approach was crucial to give voice to those disenfranchised by racial, gender, economic and sexual orientation inequalities especially in the context of health care and preventative health. This study used a sequential mixed methods approach which involved using quantitative and qualitative data collection and analysis techniques. There was no weighting of strength between the two methods and both were used to fulfil separate methodological intentions. On the one hand, a quantitative method (questionnaires) was selected for its ability to collect data that when analysed, would be more generalisable to the broader population of BMSM in Msunduzi Local Municipality. Whereas, qualitative methods were used to obtain greater depth on the results emergent from the quantitative

component of the study. Ideally, the two methods were combined to leverage the strength and weaknesses of each method, namely (depth and nuance) – in qualitative research against (objectivity and generalisability) of the quantitative.

Furthermore, there is an array of literature dedicated to the mixed methodological approach (Creswell, 2007; Flick, 2014). One of the significant benefits of using this approach as emphasised by these studies is that it provides an optimal opportunity for triangulation which allows for more robust analysis of the phenomena. Consequently, using a mixed-method approach was based on the intention to obtain optimal results and to translate in writing what the topic entails, which is to give voice to the disenfranchised and under-researched population on BMSM in the broader Msunduzi Local Municipality.

Another valuable consideration that informed the decision to adopt a mixed-method approach for this study was a reflection on similar studies that have been conducted across the world. This includes studies by Brooks *et al.* (2011), Eisingerich *et al.* (2012), Hugo *et al.* (2016) and Karuga *et al.* (2016), which explore the perceptions, attitudes and acceptability of PrEP amongst men having sex with men (MSM). Most of these studies used a mixed-methods approach to elicit comprehensive responses to their research questions, which resulted in credible research that added to knowledge production around MSM and PrEP. Therefore, an assessment of these studies influenced this study's methodological approach.

4.3. Location and setting

This study focused on BMSM in the Msunduzi Local Municipality, therefore, the study was conducted within the boundaries of the municipality which includes Pietermaritzburg's central business district (CBD) and the city's outlying residential areas. Primary data were collected using self-administered questionnaires and semi-structured in-depth interviews with BMSM in the Msunduzi Local Municipality between May and October 2018. Based on the populational breakdown of the municipality presented in Chapter One, and considering the advice of GLN regarding the areas with a high population of BMSM, a small number of areas were identified. Engagements with GLN representatives assisted in establishing areas where the highest density

of BMSM that would be responsive to the study could be found. Another consideration was where the necessary seeds who would initiate the recruitment process could be identified.

The current study was, therefore, conducted in various areas of the Municipality including Pietermaritzburg CBD, surrounding suburbs, townships and semi-rural areas. Specific areas of focus were the townships of Imbali, Sobantu, Machibisa, Caluza and Edendale, Vulindlela (semi-rural area), Pietermaritzburg CBD as well as the suburbs of Prestbury and Scottsville. To protect the anonymity of both participants and respondents and to create safe and neutral spaces for engagement and discussions, data collection was conducted at various locations within these areas. The locations included churches, community centres, and with the advice of GLN member's specific safe spaces for MSM engagement such as local homes of BMSM. The above are venues where BMSM could gather in peace, away from the public and without fear of discrimination. These safe spaces acted as a good guise for bisexual, straight-identified and curious men to gather without the risk of suspicion.

4.4. Sampling strategy

As a result of the discrimination, homophobic stigma and violence that is pitted against MSM, many tend to hide their identity and sexual orientation because of the unacceptability of same-sex desires amongst most of the South African population. Based on the above-mentioned socio-structural issues facing the study's participants and respondents a number of assumptions were made. Firstly, it will be difficult to access and enrol the study's participants and respondents and secondly that constructing a sampling frame would be challenging. The Best Practices Guidance Report for conducting HIV research with same-sex desiring groups asserts that working with MSM presents unique challenges due to stigma, discrimination and dangers that are experienced by same-sex individuals. These issues are further compounded by a lack of community structures which protect same-sex individuals (amfAR *et al.*, 2011). Since the study used a mixed methods approach, when constructing the sampling frame it considered the various objectives that each methodological approach set to achieve. These contemplations had to be cognisant of the population type and the challenges that research focusing on a marginalised group such as BMSM presents for this study. In quantitative sampling, it is important that a sample that best estimates the characteristics of the population

is selected. This is important because the methods of sampling influence the data collected from which analysis is done and inferences are drawn.

In line with the objectives in this study, the quantitative objective ultimately aimed to explain frequencies and to establish the degree of associations between variables that were representative of the population. Therefore, a sampling frame that would best approximate the population of BMSM in Msunduzi Local Municipality was selected. This is in contrast to qualitative sampling (selection of participants), whose goal is not necessarily to generate a representative sample of the population but is rather concerned with developing a meaningful understanding about people's behaviours, beliefs and perceptions or trends (Du Plooy, 2009). Thus, a qualitative sampling frame does not focus on the resprestitivity of the participants selected but rather, how relevant they are to the research subject. Therefore, this study used a combination of the non-probability sampling techniques, respondent-driven sampling and convenience sampling to address the varying objectives of each methodological approach and to reach the hard to reach a population of BMSM.

The eligibility criteria required individuals to identify as gay, bisexual, straight, curious and to fall into the category of MSM. They had to have reported sexual activity with another man in the past 12 months and be a permanent resident of the Msunduzi Local Municipality with no plans to relocate during the period of the study. Participants' age range was 18 to 54 years. Crucially, one needed to be willing to volunteer as a participant and be able to communicate in either English or IsiZulu. Non-probability sampling is a non-random process that is subjectively executed based on the participant's availability and willingness to be involved in the study (Laher and Botha, 2012). The above-highlighted strategies were used at different stages of the recruitment process during either the quantitative (questionnaire), the qualitative (interviews) or in collaboration to reach hard to reach BMSM. This was done to create a more inclusive sample that was representative of the BMSM population in the Msunduzi Local Municipality. Johnston *et al.* (2008) assert that Respondent Driven Sampling (RDS) is a useful method for studying hidden populations that often do not have sampling frames. This includes HIV risk populations who practice behaviours for which they are stigmatised (e.g., same-sex intercourse). For this reason, it is understandable why these populations are hidden because the public acknowledgement of being a member of the population might place them at risk of discrimination and stigmatisation.

Considering the above, RDS was used to create the quantitative sampling frame by using members of the actual population and their social networks to recruit respondents. This type of decision is closely tied to the epistemological assumptions of the transformative paradigm which encourages the use of a more cyclic model of research (Mertens, 2007). The cyclic model encourages community participation throughout the inquiry process. The goal of a transformative position is to have research that contributes to a sustainable change in the community, hence the need for a cyclic approach. Therefore, an RDS frame allows for the community of interest to play an integral part in the research process. This sampling method was used more prominently to establish the sample for quantitative data generation as the RDS frame posited creating a representative sample, from which data could be statistically tested and for extrapolations to be made about BMSM in the Msunduzi Local Municipality.

A respondent-driven sampling (RDS) strategy uses the chain referral approach but incorporates social network systems to gather a sample that is representative of the target population by mitigating the biases commonly found in chain referrals. In this study RDS was employed in this sequence:

- 1. Participants were recruited in collaboration with the GLN who helped the researcher to identify a group of key members (seeds) who would be willing to be part of the study and to act as recruiters in the first wave of recruitment. From this assessment, five key members (seeds) of different sexual identifications in different areas were identified and recruited. This was based on the perceived influence that they hold in their communities and the size of their social network which placed them in a favourable position to reach a larger group of potential respondents. The seeds were the first group to complete the questionnaire.
- 2. Upon their completion of the questionnaire, the seeds were encouraged to recruit five members of the target population from their social network. They were issued with five coded recruitment coupons each to issue to potential respondents. The seeds were advised to provide the potential respondents with the necessary study information and refer them to the study Facebook page for further information. Their recruits presented these coupons upon enrolling for the research and completed the questionnaire making them the first wave of respondents.
- The first wave of respondents were issued with four coded recruitment coupons to recruit 3-4
 respondents from their social networks using the coupons. This became the second wave of
 respondents.

- The second wave of respondents were issued with four coded recruitment coupons to recruit 3-4
 respondents from their social networks using the coupons. These became the third wave of
 respondents.
- The third wave of respondents were issued with four coded recruitment coupons to recruit 3-4 respondents from their social networks using the coupons. This became the fourth wave of respondents.

It was realised that during the fourth wave of recruitment that there was a saturation of social networks amongst the respondents, as the third wave of respondents did not manage to recruit more than one respondent each with some not even recruiting any respondent. Considering cost and time constraints since the researcher was residing out of the municipality at that time, it was necessary to develop a secondary process of recruitment in order to achieve the 100+ respondent rate required for significant quantitative analysis.

A convenience sampling frame was used with the intention to recruit members of the population that had not been reached in the RDS phase. Convenience sampling, which is also referred to as reliance on available subjects, entails selecting participants based on their availability, convenience and accessibility (Babbie and Mouton, 2001). Although this sampling technique does not aim to present statistical results, it was the available strategy taking into consideration the field and the researcher's constraints. Although this was the case, measures were put in place to manage resprestitivity of the population. In this second recruitment, drive participants were recruited through a social media marketing initiative. A Facebook page was then created to provide information to potential respondents and used to invite participants to be part of the study.

An online version of the questionnaire was created using Google Docs (Google, 2018). To protect the anonymity of respondents, there were no email addresses requested, making the documents accessible to anyone using any kind of browser without having to identify themselves. Previous participation assessment was created as the first entrance question to be answered before proceeding to complete the consent form. On the form, it was ascertained by making the response to this question compulsory, therefore prohibiting the respondent from moving on to the next section if this question was not answered. This was measured through self-reporting to ensure that the researcher was aware if this was a duplication questionnaire.

The similar process to the one described above was used to ensure that informed consent was given. The informed consent form was created after duplication assessment at the beginning of the questionnaire and respondents provided consent for involvement before moving on. A link to the online questionnaire was posted on the study Facebook page and these posts were boasted to garner maximum reach after the necessary parameters (race, gender, location, age) were applied. Several posts with the link were shared on the study's Facebook Page over a course of two weeks and growth in respondents was managed on the Google Form. Numerous MSM focused Facebook groups were identified for maximum reach and the post with the link was shared on these groups several times over the two-week period. Groups that were identified include UKZN-LGBTI-Forum Chasu PMB, PMB Top Bottom Verse, Ashdown Church and PMB Gay Guys.

A convenience sampling frame was used again for recruiting participants to take part in the semi-structured in-depth interviews after the questionnaires were collected and analysed. Respondents were requested at the end of the questionnaire to stipulate on both the printed and online format if they would like to take part in further research (see appendix 5). To protect anonymity, no names or specific details were required an email address was requested where interested participants could be reached for arrangements. It emerged that there were several participants who because of their SES did not have an active email address, these respondents were asked to supply their contact number(s). Of the 120 questionnaire respondents, 36 indicated interest in taking part in further research and supplied either their email addresses or contact number(s). Before the qualitative data collection commenced, a generic email was sent using the study's official email address to the respondents. Furthermore, a generic short-message-system (SMS) was sent, where participants had to confirm interest in participation. Of the 36 who had initially indicated interest, only 13 confirmed participation and interviews were arranged. Thirteen interviews were scheduled, and three participants did not turn up for interviews and they could not be reached to facilitate a reschedule, so a sample of 10 interview participants was finalised.

4.5. Methods of data collection

Given this study' aims and objectives, the two data collection methods used involved various forms of questioning and levels of data collection. The first data collection instrument used were self-administered questionnaires which allowed for structured questioning and extensive data collection.

Gertruida Du Plooy (2009), describes self-administered questionnaires as being part of a group of data collection instruments which can collect a large amount data on different variables which also allows for a certain level of control to be applied to their execution. It is for this reason that self-administered questionnaires were used because they allowed for data on the demographics, HIV characteristics, knowledge of HIV, self-perceptions of HIV, knowledge of and willingness to adopt PrEP were collected.

Further considerations that informed the choice of self-administered questionnaires was its ability to allow for standardised responses, minimal interviewer interference and bias, and for the greater likelihood the ability to protect respondent's anonymity (Mentz, 2012). All of which were crucial considerations for a study that involved at risk respondents and delved into a topic of personal nature such as HIV and AIDS and preventative methods used by BMSM. Another crucial consideration for the choice of this instrument was that it was favourable as an instrument that allowed for a broad set of generic results to be drawn about the population of BMSM in the Msunduzi Local Municipality. The results generated through the questionnaire allowed for inferences to be drawn about BMSM in the Municipality which were further tested and corroborated through the second instrument, in-depth semi-structured interviews.

The second data collection instrument used included a more fluid form of questioning, which developed an in-depth understanding of the communicative practices, attitudes and perceptions of BMSM in the Msunduzi Local Municipality towards PrEP. This method is frequently referred to as "open-ended ethnographic (in-depth) interviews" (Fontana and James, 1994:365). Du Plooy (2009) provides a concentrated conception of the purpose of a semi-structured interview where she asserts that it is to understand how the participant's frame of meaning is constructed. This objective denotes a need to understand what is going on with the thought process of a participant, especially the hidden, unconscious motives which inform decisions and behaviours. This statement summarises the considerations which informed the selection of in-depth, semi-structured interviews as a research method, especially for this study which grasped the intangible attitudes and perceptions of BMSM towards PrEP. Further to this was the ability of interviews to generate in-depth data that could provide a more nuanced understanding of the view that were emergent in the self-administered questionnaire results.

4.6. Procedures for data collection

Given this study's questions and objectives, and as highlighted above the two methods selected as part of the mixed-methods protocol were 120 self-administered questionnaires and 10 in-depth, semi-structured interviews. Babbie and Mouton (2001) assert that questionnaires are multifaceted and can be utilised for several types of research such as descriptive, explanatory and exploratory studies. Therefore, this exploratory study employed 120 (109 BMSM) self-administered questionnaires with the purpose of gaining data to establish the generalisable awareness, attitudes and perceptions of BMSM towards PrEP, which would inform the investigation that results in the in-depth, semi-structured interviews. It was decided that the questionnaires method was the best to adopt for this investigation when considering the ethical advantage, they present. Melody Mentz (2012) contends that questionnaires provide the greatest possibility for anonymity because respondents do not need to complete any personal details on the survey. This sensitivity that questionnaires have towards anonymity was a foremost consideration for a study that deals with a hidden population that values anonymity.

The self-administered questionnaire consisted of 29 closed-ended questions that covered a range of topics. Before completion, respondents were asked to confirm willingness to voluntarily fill in the questionnaire, hence the consent form attached in front of the questionnaire (see appendix 2). Taking cognisance of the ontological perspective of the transformative paradigm relating to the role that language plays in privileging whose reality is understood as well as the power relations that are inherent in the endorsement of certain languages over others. This was particularly crucial in developing a transformative understanding of social reality, hence the questionnaire was made available in IsiZulu, which is the main indigenous language of KwaZulu-Natal. The data collection instrument (questionnaire) also had an English version.

However, all the respondents recruited using the RDS strategy preferred completing the English version of the questionnaire. Understanding was facilitated by reading out each question for each respondent and offering them a chance to answer questions before they attempted answering the questionnaire. The measures used in the questionnaires to collect information included, demographics; here respondents were asked to report their age, ethnicity, level of education attained, employment status, income, and finally how they identified their sexual orientation, whether they identified as gay, bisexual, straight, or curious. This data

enabled for the creation of a profile of not only an MSM in Msunduzi Local Municipality but more specifically, what was characteristic of BMSM in the study setting. Sexual risk behaviour and HIV perceptions required respondents to report on their relationship status, sexual role, awareness of HIV status and HIV testing behaviours i.e. last HIV test. The focus of this section was to establish risky sexual behaviours. Therefore, the respondents reported on sexual activity with a male sexual partner, the number of male sexual partners in a 12-month period, condom use with male sexual partners and finally their perceived risk of HIV transmission. This generated data that would be statistically tested for relationships between behaviours, and risk perceptions as well as PrEP Adoption Intention (see results in Chapter Five). The most crucial measures in the guestionnaire were those of PrEP Awareness and PrEP Adoption Intention. In this section, respondents were required to answer questions such as; "Do you know about Pre- Exposure Prophylaxis?", "If yes, where did you find out about it?" "Which statement best describes your awareness of PrEP?", "Have you ever used PrEP?", "Would you be willing to take PrEP daily to protect against HIV transmission?", "What would motivate you to take PrEP?", "What would prevent you from taking PrEP?" using a Likert scale. These questions collected the fundamental data to answer the study's central research guestions and to meet the research objectives of establishing awareness, and attitudes towards PrEP. This section is the most crucial in the questionnaire.

Data on health communication amongst peers and the saliency of these conversations were collected through respondents' reports on the existence of these conversations, who was involved in these conversations, the motivators for having these conversations with the chosen person/people. Furthermore, the frequency of these conversations, the topics discussed in these conversations and finally, the saliency of these conversations for influencing sexual health behaviours was collected. Due to the intention to conduct statistical testing, checking for frequencies and analysis, the questionnaire used only closed-ended questions. This form of questioning is understood to be most structured because it requires minimal human involvement in documenting, quantifying and presenting the responses. In support of this notion, Babbie and Mouton (2001) state that closed-ended questions, encourage uniformity and make it easy for data processing. Although they are disadvantaged by not allowing depth, for this study, the depth was generated from interview data. Hence, the data generated from questionnaires informed the construction of the in-depth, semi-structured interview with the intention to confirm notions presented and to establish that which inform the sexual risk behaviours, attitudes and perceptions towards PrEP.

It was on the basis of the above that questionnaires were administered for initial data generation, I intended planning the in-depth, semi-structured interviews according to data that emerged as crucial in the questionnaires. Following the analysis of the questionnaire data, the in-depth, semi-structured interview guide was refined from preliminary planned versions considering the salient data categories that were emergent from the quantitative analysis. This was intended to elaborate, clarify and further develop on emergent responses from the questionnaire. This kind of an integrated mixed method approach is described by Greene, Caracelli, and Graham (1989:259) as, "complementarity, which seeks to elaborate, enhance, illustrate, clarify the results of the one method with the results from the other".

The integrated mixed method approach helps to explain emergent categories in the other data. This approach is specifically salient for a qualitative method such as in-depth, semi-structured interviews because as commented by Du Plooy (2009), qualitative methods explore areas that have limited or no prior information. It can describe behaviours, themes, trends attitudes or relations that are relevant to the item being analysed. Therefore, the interviews had the potential to better illuminate the data that was generated through the questionnaire. Each interview lasted for approximately an hour, which included the signing of the informed consent form (see Appendix 4) since participation was voluntary.

The data collection instrument was an interview guide and included an array of guiding questions. The design of the interview guide took cognisance of language and the role that it plays in understanding the social reality of individuals. Therefore, the interview guide was made available in IsiZulu as well as English. With the interviews, one interview was completed fully in IsiZulu and was transcribed and interpreted into English for analysis, whilst most interviewees opted to code switch between IsiZulu and English, which was possible as the researcher was competent in both languages.

During the interview, as an introduction, participants were requested to discuss and expand on their positionality with regards to being a black MSM. This discussion expounded on individual's resonance with the category and their preferred ways of identification. Mertens (2007), comments that when using a transformative perspective from a methodological standpoint, the dangers of the fallacy that groups are homogenous must be exposed, further arguing that transformative research endeavours to better understand

the important dimensions of diversity. This act of reflection avoids causing additional harm to marginalised and subjugated populations by ascribing them labels that are humiliating and self-defeating. Correspondingly, as stated in Chapter 3, the decolonial project and transformative work cannot be divorced from each other completely. A decolonial research argument for self-determination presented by Smith (2012) can be applied to this train of thought. Ultimately, if research is to contribute to the sustainable change in any community, particularly marginalised communities such as black men who have sex with men (BMSM), the agency of that community to name itself and own its name is important.

In light of the above, the interview allowed participants to explore the contestations of naming. This is also relevant for communicating preventative methods to at-risk populations. Education and communication campaigns need to interpolate these individuals which is extremely difficult if they are not using non-contextual terms of reference. Subsequent to this, HIV risk and the factors were explored to better understand the risk factors that influence the development of attitudes and perceptions that BMSM hold about PrEP. Participants were required to engage on their PrEP awareness, intentions to adopt PrEP or their lack of intention as well as the motivators, and barriers that influence their overall outlook on PrEP. This data would enable the researcher to identify if there were any synergies with the responses provided in the questionnaire and to establish the influencers of attitudes and perceptions of BMSM towards PrEP. Finally, were a set of questions engaging respondents about the health communication and its role the formation of their sexual health behaviour.

4.7. Data analysis

Data collected through the 120 (109 BMSM) questionnaires were captured and statistically analysed. The researcher read through each questionnaire and captured it on a Microsoft Excel sheet categorising all data collected into decipherable aspects. Once the data was captured and ordered, it was captured onto the statistical package to be used for analysis. Statistical analyses were conducted using IBM Statistical Package for Social Sciences (SPSS), Version 24.0. for Windows (IBM Corp, Armonk, IL). Two levels of statistical analysis were used on the data, namely univariate and bivariate analysis. Univariate is a basic level of statistical analysis and as the name suggests, it is the examination of the distribution of cases on only one

variable at a time. This includes quantifying the frequency distribution of the individual cases (Babbie and Mouton, 2001). This analysis focused on the age as an individual case and quantified the distribution of the various elements (categories) such as ages 18-23, 24-29, 30-35, 36-40 and >41 ectara, presenting these distributions according to the entire individual case an example of this kind of distribution is in Table 1 below.

Age			
		Frequency	Percent
Valid	18-23	40	33.1
	24-29	49	40.5
	30-35	27	22.3
	36-40	3	2.5
	>41	1	.8
	Total	120	99.2
Missing	System	1	.8
Total		121	100.0

Table 1: Example of Data Frequency Table

This kind of analysis was done for each one of the cases in the questionnaire and presented in tabulated format.

The next form of analysis in contrast to univariate analysis was bivariate analysis, which involved analysis of two variables. Most bivariate analysis in social research include an additional element which is to explore the relationships between the variables (Babbie and Mouton, 2001). To test for associations between the categorical (nominal and ordinal) variables present in the research, a Chi-Square Test of Bivariate Associations was used. According to Wegner (2016) a Chi-Square Test Statistic measures by how much the observed frequencies and expected frequencies differ. Wegner (2016) further states that if this difference is small, the null hypothesis is likely to be accepted. Conversely, a large difference is likely to result in the null hypothesis being rejected. Since the Chi-Square Test Statistic transforms sample frequencies into a test statistic, it was used in the analysis in Chapter Five to make conclusions regarding associations.

It is also important to keep in mind that like most statistical tests, the Chi-Square Test has assumptions governing it. If these assumptions are violated, then necessary remedies must be initiated. In the context of these results, it was ensuring that no more than 20% of the cells had expected counts less than 5. Where such was the case, the Likelihood Ratio Statistic was used instead of the Chi-Square Statistic to make conclusions about associations. An alpha or significance level of 0.05 was used as a reference point. Finally, where associations were found, a Cramer's V test statistic was used to make conclusions regarding the strength of associations. The Chi-Square tests were used to assess bivariate associations between sexual and HIV testing behaviours and perceived HIV susceptibility, PrEP adoption intention and demographic characteristics, PrEP-related attitudes and beliefs. All these were considered theoretically important for predicting PrEP adoption intentions among BMSM. For all analyses, the standard alpha level of 0.05 was statistically significant.

Data from the qualitative interviews were analysed using the process of Thematic Analysis which is described by Braun and Clarke (2006: 79) as "a method for identifying, analysing and reporting patterns themes within data." Braun and Clarke (2006) further assert that at a fundamental level thematic analysis "organizes and describes your data set in rich detail and interprets various aspects of the research topic" This analysis method is very popular in psychology scholarship and research. It was selected for executing this study because it offers a manageable and academically flexible approach to analysing qualitative data. The choice to use this analysis method is informed by the overarching objectives of the study which include developing an understanding of general acceptability, the motivators and barriers to the uptake of PrEP. Using this analysis method offered the researcher the possibility to acquire a richer view of the perceptions and attitudes of BMSM towards PrEP.

Braun and Clarke (2006) propose several steps that need to be followed in executing an effective thematic analysis. This study contextualised these guiding steps according to the data set available and research objectives.

Therefore, the phases proposed by Braun and Clarke (2006) were applied in this study in the following manner:

- 1. Firstly, the recordings from the interviews were transcribed. The researcher then read through the transcripts several times in conjunction with listening to the interview audio-recordings to familiarise himself with the data.
- Having familiarised himself with the data, the researcher then coded the transcribed data by writing codes on the axis of the transcripts, taking note of key points that were emerging from the data. The researcher used an Excel sheet to group and manage these axial codes.
- 3. Step three resulted in volumes of codes which were then collated, and the next step was to develop themes according to their saliency and relevance to the research objectives.
- 4. The themes that were developed were then reviewed to ascertain their relevancy and to manage overlapping of themes.
- 5. Following this, the researcher scrutinised and refined each theme with the purpose of developing clear descriptions and apt names for each theme that was relevant to the research objectives.
- 6. The final step included extracting key examples from the data that would be used in the final dissertation. This data was then presented, explicated and analysed in relation to the study's research questions and relevant literature.

From following the steps of this thematic analysis, eight themes emerged from the data and these are discussed in detail in Chapter Six. The themes include (1) Being MSM an Act of Love or Sexual Desire (2); HIV Awareness and Resonance of Risk; (3) HIV Risks – Battling "Promiscuity" and Alcohol Use; (4) PrEP Awareness and Enthusiasm in Times of Disparate Information Availability; (5) PrEP, Efficacious of ??in certain Situations More Than Others; (6) PrEP and Personal Interference – Concerns of Self-Efficacy; (7) Dyadic Communication between Friends Essential for Affirming and Experiencing Sexuality; (8) Dyadic Communication for Change Potential for Influencing Behaviours and Health.

4.8. Validity and reliability

The overarching consideration that led to the researcher devising a study-specific strategy to maintain validity and reliability is suggested by Winter (2000:3), where she asserts that;

"Validity is not a single, fixed or universal concept, but rather a contingent construct, inescapably grounded in the processes and intentions of particular research methodologies and projects."

Devising this study informed by a transformative paradigmatic outlook and a mixed methods approach, the researcher had to be cognisant of the goal towards social justice. This notion of social justice played a crucial role in terms of the validity measures used. This was done to ensure that the focus of the study, which is the community of BMSM are not treated with disrespect but are considered within the social justice objectives this study set out to achieve.

Therefore, varying strategies were employed for each data collection phase. Within qualitative research, the researcher is more interested in the authenticity and 'truth' in the collected data, rather than realising a 'single truth'. In quantitative research where questionnaires are the main strategy to maintain truthfulness, it was important to reduce social desirability bias. Therefore, the questionnaire design considered some of the methods presented by Podsakoff, MacKenzie, Lee, and Podsakoff (2003) to guard against social desirability status and to reduce the possibility of its effects; namely - evaluation apprehension and social distance. Evaluation apprehension endeavours to minimise the burden that BMSM may feel to have presented a positive self-image. The researcher requested BMSM to truthfully answer the questions as truthfully by assuring them that their responses could not be traced back to them. Social distance was accounted for by ensuring a cordial but professional relationship between the respondents and researcher that was not overly social. The researcher also ensured that respondents did not write any identifying particulars on the questionnaire. Although the researcher was present whilst the respondents completed the questionnaires, it did not influence his professional judgement as he maintained a level of distance from the respondents. This was supported by the fact that he was not familiar with the respondents, a benefit of using an RDS strategy.

However, validity has been a problematic concept to articulate within qualitative research practices, and research validity has been difficult to establish. To ensure credibility of the qualitative findings, the researcher

consulted with the strategies offered by Andrew Shenton (2004). Shenton (2004) offers a list of key strategies to assist the researcher accurately ensure trustworthiness in qualitative research. To record an accurate picture of the area of research and to align with Shenton's (2004) strategies, the researcher took a few steps namely; triangulation, and tactics to help ensure honesty from informants.

Triangulation can be used at various stages of the research process and can offer benefits to the researcher. For example, "at the data collection stage it, provided the researchers with ways of verifying or substantiating the accuracy and stability of the data, furthermore, during the analysis stage, it can be used to increase the rigour of the analysis" (Potter, 2012: 168). Triangulation involved the use of different research instruments (questionnaires and interviews) for data collection to enhance the quality of data from different sources. The data from the two methods was compared against each other to determine congruency between responses in the questionnaire and interviews and to establish trustworthiness. The tactics to ensure honesty from respondents are closely aligned to the study's ethical considerations and include maintaining anonymity, confidentiality and offering respondents the option to refuse participation and withdraw from the study at any point.

4.9. Ethical considerations

This study was conducted in accordance with the University of Kwa Zulu-Natal's Research Framework and Guidelines focusing especially on the guidelines for conducting research with participants. Ethical Clearance (Ethical Approval Number: HSS-2055-017M) was obtained from the University of Kwa Zulu-Natal' Humanities and Social Sciences Research Ethics Committee. Relevant gatekeeper letters were sourced prior to data collection. This study was also conducted in accordance with the best practices in conducting research with MSM communities as stipulated in the Best Practices Guidance in conducting HIV research with gay, bisexual and men who have sex with men (MSM) in rights–constrained environments (amfAR *et al.*, 2011). The Best Practices Guide asserts that engaging MSM in research must be done in a manner that is safe and beneficial for both individuals and communities involved, across all stages of the research process (amfAR *et al.*, 2011). The above ethos was the foundation upon which this study was conducted especially with a focus on maintaining the autonomy and protecting the dignity of the participants.

As part of the ethical deliberations, all participants were given a written informed consent form (see Appendix 1). This was written in a simple and clear language and it clearly articulated the purpose and objectives of the study. In addition to this, the consent form made provisions for full participation or opting out from the study, as well as explaining issues of participant confidentiality. For example, individuals were handed an informed consent form and the researcher explained that individuals did not have to participate in this study if they were uncomfortable with the subject. It was also explained that if individuals opted to participate, they also had an option to discontinue participating at any given time during the discussions. The informed consent forms were well thought through and designed to reiterate the voluntary nature of this study. If the participant opted to complete the questionnaire a specific consent form (See Appendix 2) was issued and this required minimal personal information with only a signature required. To control and maintain the integrity of this RDS process, individually coded coupons were created and issued to each seed to distribute to their potentials. Recruited participants presented these coupons with their individual codes when enrolling for the study. This coding system minimised the need for personal details other than contact details i.e. email/contact numbers needed from those interested in being involved in the second part of the research.

The interview process commenced after individuals formally consented, in writing (see Appendix 4), to participate. During this time, the interviewer was conscious of the participants' emotional well-being, allowing participants to guide the discussion and discussing whatever information each person felt comfortable to disclose within boundaries. To remedy any unfortunate situations, arrangements were made with a Counselling Psychologist to attend to any BMSM who would have experienced any stress during the interview process. During interviews, the researcher relayed back the participants' answers after each question. This was done to ensure that each position was accurately understood by the researcher and the subsequent guiding questions. This technique provided for more ethical and trustworthy findings. Participants were also made aware that they did not have to disclose any confidential information or answer any question that they felt uncomfortable to explore. Similarly, the individuals' perceptions would not be used against them if they chose to participate or not. For example, if a BMSM wished to participate in the interviews, their identity would remain hidden by means of a pseudonym or a number identification followed by the sexual identification of the respondent and their sexual role; for example Respondent Six, Gay, Receptive Anal Intercourse Partner. In the event of the findings being published, this measure will ensure the protection of participants' identities.

Chapter Five

A quantitative exploration of the perceptions, attitudes and Communicative practices of BMSM in the Msunduzi Local Municipality

5.1. Introduction

This chapter presents and encapsulates the findings on the communicative practices, perceptions and attitudes of BMSM towards PrEP. As highlighted in the Methodology chapter, this study used a mixed methods approach to collect data. This approach comprised a questionnaire that was self-administered at various venues across the municipality and a series of in-depth, semi-structured interviews conducted with BMSM of various social and sexual identifications, also across different venues in Msunduzi Local Municipality. The questionnaires in this study were administered to establish knowledge and determine the attitudes and perceptions as well as the communicative practices of BMSM. This information was then analysed, and important conclusions formed the foundational data that informed what the in-depth interviews explored.

This sequential process was devised to allow for data triangulation and increase the validity of the study results. Flick (2014) maintains that the most significant benefits of using this approach are that the combination of qualitative and quantitative methods allows for more robust analysis of phenomena, in this study's case, the attitudes, perceptions and practices of BMSM. A mixed methods approach provides an optimal opportunity for triangulation (Flick, 2014). It is for this purpose that this dissertation uses both quantitative and qualitative techniques of approaching research through a traditional, sequential mixed method approach to collecting and analysing data. This chapter addresses the quantitative analysis conducted on the data set collected through questionnaires. This analysis is based on statistical analyses which were performed using IBM Statistical Package for Social Sciences (SPSS), Version 24.0. for Windows (IBM Corp, Armonk, IL).

A total of 124 questionnaires were completed by MSM in the Msunduzi Local Municipality; however, four of the respondents did not answer all the questions in the questionnaire. Since this study used a structured quantitative analysis process that used various statistical tests to describe data and measure associations between variables, the missing value range could have potentially affected the overall results from the questionnaire and risked the reliability of the quantitative data analysis and the validity of the data. Therefore, the incomplete questionnaires were not included in the analysis sample leaving only (n=120) questionnaires in the overall sample which were analysed. The overall sample of (n=120) questionnaires included (n=11) non-BMSM respondents that were recruited through the online recruitment drive. Due to the variable insignificance of (n=11), overall univariate analyses, such as socio-demographic and specific bivariate analysis conducted included these responses. Granting the above, although there was specific frequency distribution, analyses that focused only on BMSM responses.

5.2. Structure of analysis

The first section of this chapter deals with the descriptive statistical analyses done on the data. Descriptive analyses were used to describe the data. For the socio-demographic characteristics of the sample (inclusive of n=120), a univariate analysis was conducted, which focused on the frequency distribution of variables such as age, race, income, education and sexual orientation. Furthermore, detailed distributions focusing on HIV and sexual risk behaviours (focused on only n=109 BMSM) included frequencies on HIV testing behaviours, number of sexual partners, frequency of condom use, and the frequency of condomless sex. For the analysis, some frequencies used subgroup comparisons whose purpose is described by Babbie and Mouton (2001) as being largely descriptive, with the intention to independently describe subgroups, with an element of comparison. It is worth noting though that these are not a detailed form of bivariate analysis.

Distributions focusing on HIV and sexual risk behaviours used subgroup comparisons, comparing the above detailed sexual and risk behaviours along the axis of self -reported HIV status awareness. These subgroup analyses compared the behaviours along the lines of those who knew their HIV status against those who did

not know their HIV status. This was to compare if there was a propensity to partake in risky sexual behaviour because of HIV status knowledge. Finally, constructs such as PrEP awareness and knowledge and PrEP adoption intention, including motivators and barriers were also analysed univariately using frequency distribution tables. These analyses also adopted a subgroup comparison approach along the axis of high PrEP adoption intention (willingness) and low PrEP adoption intention (unwillingness). This was to establish if there were any differences in the chosen motivators and barriers that informed the low or high PrEP adoption intention.

The second section addresses a depiction of the bivariate analysis done on the data. This explored the relationships that existed between two variables by calculating the correlation coefficient (Mentz and Botha, 2012). To test for associations between the categorical (nominal and ordinal) variables present in the research, a Chi-Square Test of Associations was used. According to Wegner (2016) a Chi-Square Test Statistic measures by how much the observed frequencies and expected frequencies differ. This study tested the following variables to establish relationships; the first was sexual and HIV testing behaviours, this was tested against an individual's perceived susceptibility.

The specific variables tested here were the time elapsed since the last HIV test, number of sexual partners and frequency of condomless sex. This was done to establish if any of the variables influenced the perceived susceptibility. The socio-demographic characteristics of age, race, sexual orientation, education, personal income and sexual role were tested for correlation coefficient to PrEP adoption intention. This was to establish the demographic influences on PrEP adoption intention. Sexual and HIV risk perceptions such as perceived susceptibility, number of male sexual partners and frequency of condomless sex were tested for association with PrEP adoption intention. Finally, the socio-demographics of age and personal income were tested for a correlation coefficient with barriers to PrEP adoption, to establish the relationship between demographics and the prominence of barriers. All data analyses in this chapter are tabulated for accessibility.

5.3. Descriptive Analysis

5.3.1. Demographics of MSM in the Msunduzi Local Municipality

To determine the socio-demographic characteristics of the MSM who completed the questionnaire, respondents were asked to report their ethnicity, age, level of education, employment status and monthly income. It is evident in Table 2 below that most MSM within the Msunduzi Local Municipality belong to the black population with 90.1% reporting a black ethnicity, 5.8% being coloured, 2.5% Indian and 0.8% being white. This is in line with population figures from (Stats SA, 2018b) presented in earlier chapters which highlighted that Black Africans constitute 81% and constitute most inhabitants of the municipality followed by Indians at 10%, White people at 6% and Coloureds at 3%. The remainder of the analysis in this chapter emphasises BMSM, as the focus of this study. Therefore, minimal consideration is granted to the skewed representation of the other races which according to the population statistics should be more highly represented.

Socio-demographic Characteristics	Frequency	Percent (%)
Ethnicity		
Black	109	(90.1)
Indian	3	(2.5)
White	1	(0.8)
Coloured	7	(5.8)
Age		
18–23	40	(33.1)
24–29	49	(40.5)
30–35	27	(22.3)
36–40	3	(2.5)
>41	1	(0.8)
Sexual Orientation		
Gay	64	(52.9)
Bisexual	17	(14.0)
Straight	30	(24.8)
Curious	9	(7.4)
Education Completed		
Primary Education (Grade 7)	3	(2.5)
Secondary Education (Matric)	61	(50.4)
Diploma	21	(17.4)
Bachelor's degree	17	(14.0)

Postgraduate Diploma or Honours	12	(9.9)
Masters or Doctorate	2	(1.7)
None	4	(3.3)
Table 2 continued		
Employment Status		
Unemployed	71	(58.7)
Student	19	(15.7)
Employed	29	(24.0)
Retired	1	(0.8)
Monthly Income		
<r1000< td=""><td>82</td><td>(67.8)</td></r1000<>	82	(67.8)
R1001-R5000	9	(7.4)
R5001-R10000	7	(5.8)
R10001-R15000	7	(5.8)
>R15001	15	(12.4)

Table 2: Socio-demographic characteristics of MSM in Msunduzi Local Municipality (n=120)

The emergent prominence of black-identified MSM compliments with research such as that by Brooks *et al.* (2015), which posits that BMSM in the USA are disproportionately affected by the HIV epidemic in comparison to their counterparts of other races. Arguing that this HIV risk is exacerbated by the fact that there is only a limited number of interventions adapted for this population. The above-presented research concurs with the fact that there is limited epidemiological data on BMSM in South Africa and stresses the importance to understand the perceptions and attitudes of this population towards PrEP.

Furthermore, the socio-demographic data also revealed that most respondents were between the ages of 24-29 (40.5%), followed by those between the ages 18-23 (33.1%), 30-35 (22.3%) and very few amongst the ages, 36-40 and over 41 years old. The bulk of respondents identified as gay, followed by a small group who identified as straight, bisexual and finally a small group of curious identified MSM. This suggests that there is a diverse population of MSM in the Municipality, with a considerable amount using socially accepted identifications such as bisexual and straight. This pattern is similar to those of other provinces such as Mpumalanga revealed by Mantell, Tocco, Osmand, Sandfort, and Lane (2016). Many respondents had a secondary education (50.4%), followed by those with undergraduate qualifications, Diploma (17.4%),

Bachelor's degree (14.0%), a small portion of post-graduate qualification holders and finally a tiny portion who reported either having Primary education (2.5%) or no formal education at all (3.3%).

From this socio-demographic data, it can be suggested that Msunduzi Local Municipality is experiencing an unemployment crisis and MSM are bearing the brunt of this. There was a high unemployment rate (58.7%) amongst respondents, which is higher than the national unemployment rate of (27.2%) reported in the third quarter of 2018 (Stats SA, 2018c). Those who were employed contributed (24.0%), students (15.7%) while retired were at (0.8%). These figures are closely related to and indicative of the current employment patterns in the Municipality, with unemployment estimated at (33%) and unemployment rates amongst the youth who formed the bulk of this study's sample was at (43.1%). Although not within the scope of this study, the high unemployment rates amongst MSM in this study in comparison to the overall [municipal] population raises questions about the possible marginalisation that MSM and particularly gay-identified MSM could experience in the work market in the Municipality due to their sexual identity. Closely linked to employment status is disposable income. Respondents to the questionnaire reported low monthly disposable incomes. Most respondents (67.8%) indicated an income of below R1000 monthly, conversely compared to 15.2% who had an income of above R15 000 monthly and an average of 5.8% amongst those with an income between R5001 – R10 000 and R10 001 – R15 000 per month.

When developing a profile of the sample MSM as per the aggregate of the socio-demographic data presented above, this individual would be black, between the ages of 24-29, identified as gay, secondary educated, unemployed and with a monthly income of below R1000. From an Intersectionality theory perspective, the above data and this profile present a new prism through which to better understand what informs the sexual risk behaviours of MSM and particularly their attitudes and perceptions towards PrEP. Intersectionality theory was borne of the need to deviate from focusing on the uniform axis of demographics but to focus more on the interlocking constructs in self-identification that highlight either oppression or privilege (Gopaldas, 2013). At a basic level Intersectionality Theory argues that, such as with this population of MSM, not all members are the same. Furthermore, the population is made of diverse individuals with varying constructs which intersect to create individual identification.

How an intersectional analysis would be applied to the above profile is, the socio-demographic data signposted that the constructs that intersect to influence the identity of the assumed population member is race (being black), age (24-29, youthfulness), sexual orientation (gay identification), education (secondary education), employment status (unemployed) and finally, income (little disposable income <R1000). These last three constructs can be aggregated into the construct of class. Therefore, it is evident that several constructs intersect to define lived experience. These BMSM were affected by their black ethnicity, gay identification, education and employment status, which overall influences their economic status. Therefore, being MSM is not limited to just sexual engagement with another man, but for those men revealed in the profile, their experience of being MSM is informed by their race, sexual orientation and their economic power. Hence, whatever marginalisation they may experience as MSM is not limited to their sexual choices alone but is also linked to the other constructs that influence their lived experiences. Hence, the risky sexual behaviour of BMSM could be elevated by unemployment and lack of income which could necessitate individuals to be involved in transactional sex. This consequently influences their ability to negotiate safe sex due to the power relations embedded in transactional sex. Furthermore, their sexual identity as either bisexual or straight could influence the lack of access to the proper preventative methods i.e. personal lubricant. This could also be linked to not seeking sexual health care if faced with a medical emergency and even not disclosing their MSM sexual activity to medical practitioners for fear of discrimination.

Therefore, sexual health concerns cannot be interrogated using a single axis of identification which is used regularly and that equates MSM activity with risky sexual behaviours (Baral *et al.*, 2011). There needs to be a multi-dimensional prism through which to better understand these behaviours. Ultimately, this is crucially important for understanding the influences on the perceptions and attitudes of MSM towards PrEP which will be robustly interrogated later in this chapter. Idiosyncratically, an intersectional lens necessitates that a barrier to the uptake of PrEP such as high-cost not only be reduced to monetary value but be explored from a perspective that considers how unemployment, lack of disposable income and dependency may affect the individual in question. Similarly, a barrier such as social stigma, needs to consider how the constructs of race, sexual identity, and class (disposable income) all intersect to define the decision of an individual to collect PrEP at a public health facility as well as the stigma that they may experience in the community due to perceptions of having an HIV seropositive status. These socio-demographic variables, therefore, are a

catalyst for better understanding the sexual risk behaviours of MSM in the Msunduzi Local Municipality and how this informs their perceptions and attitudes towards PrEP.

5.3.2. Sexual behaviours and sexual risk taking of BMSM in the Msunduzi Local Municipality

The self-reported sexual behaviour and sexual risks taken by respondents of the questionnaire have been presented in Table 3, along the axis of awareness of HIV status and non-awareness of HIV status. This was done in accordance with the suggestions by Burrell *et al.* (2010) that perceived awareness of HIV status would influence the sexual behaviours of an individual. This study adopts this lens to better understand if awareness of HIV status influences the sexual behaviour of respondents and if this awareness works to mitigate risky sexual behaviour. While this may be argued in previous studies, it is worth noting that in this study, awareness of HIV status is self-reported and largely subjective according to the individual's own perceptions. Inhibited by the research protocol, no HIV testing was conducted to either confirm or refute this self-reported awareness of their HIV status and not their actual status and to answer the questions as honestly as possible.

Further to this, in their study into the awareness and uptake of PrEP amongst BMSM and transgender women who have sex with men in the USA, Eaton, Matthews, Driffin, Bukowski, Wilson, Stall and Power Study Team (2017) suggest that HIV testing and a recent awareness of their HIV status is a strong predictor of PrEP awareness. This is an element that will be interrogated in detail in later sections of this dissertation.

According to the data collected, insertive anal intercourse partners (top), were the most respondents across both spectrums of HIV status awareness see (Table 3 on page 105), followed by receptive anal intercourse partners (bottom), then versatile anal intercourse partners and small group who indicated their sexual preference as not involving anal intercourse but only oral intercourse. There were no variant differences in HIV awareness among these groups of respondents. These findings of sexual role preference are not surprising and confirm previous research which suggests that sexual identification plays a crucial role in the assumption of sexual roles during intercourse i.e. more straight or bisexual identified individuals would prefer

an insertive sexual role to maintain social standing and masculine expressions that may be linked to their heterosexual relationships with females (Moskowitz, Rieger and Roloff, 2008). Whereas, gay-identified individuals and particularly those who are out are assigned to a more receptive role which is linked to a more feminine identification or even a versatile sexual role preference (Moskowitz *et al.*, 2008). This notion is evident when analysing sexual orientation, figures presented in Table 2 (see page 98) in relation to sexual role preference in Table 3 below. When quantified, straight, bisexual and curious identified MSM in this sample closely link to the suggestion made above about sexual role preference based on sexual identity. Therefore, the results of this study support the notions presented on sexual identification and sexual role preference.

The section of the questionnaire whose results are presented in Table 3 required respondents to provide information on their sexual behaviours to establish if there was a correlation between actual risk activity and perceived risk of HIV transmission. This was done to assess if the BMSM in the sample consider themselves to be susceptible to HIV incidence, which is referred to as *perceived susceptibility* in the HBM (Sharma and Romas, 2012). Essentially to establish, if the *perceived susceptibility* to HIV that BMSM may experience is an influencing factor for their sexual behaviours and their attitudes towards the adoption of PrEP. It is apparent from the data in Table 3 that firstly, very few respondents reported not being aware of their HIV status.

There is no significant lateral difference between the two groups across the various categories. Most respondents who reported an awareness of the HIV status had recently had an HIV test with (55.0%) reporting being tested less than 3 months ago, followed by those having test 3-6 months ago, and 6-12 months and a small group of (10.0%) reporting having an HIV test over a year ago. It can be suggested that the confidence to report awareness of HIV status is linked to recently testing for HIV. This is further exhibited by the respondents who reported being unaware of their HIV status, (55.5%) of which reported having a test 6-12 months ago, which indicates that the more time has elapsed since an HIV test the higher the uncertainty with regards to one's HIV status. It can, therefore, be suggested that there is a close relationship between the recent occurrence of the test and the perceived awareness of HIV status. What these findings revealed

is a reported prevalence of testing amongst BMSM. This is in support of earlier research by Sandfort *et al.* (2008) who asserted that HIV testing amongst MSM was more prevalent than in the general population.

Granting that there is a high perceived HIV status awareness, the data revealed that there was a pattern of multiple male sexual partners amongst respondents with the average of 1-5 sexual partners per BMSM over a 12-month period across both the HIV status aware (83.0%) and HIV status unaware (55.5%) individuals. There was an average number reporting a higher rate of male sexual partners and there were a few HIV aware respondents (5.0%) reporting 11-15 male sexual partners in the past 12 months. Although the categorised number of sexual partners is not excessively high, but multi-partner risks can be assumed to exist amongst this population. It can also be argued that HIV risk behaviour in the form of multiple sexual partners is positively affected by an awareness of the HIV status. This number could have been larger as revealed in other local and continental studies (Baral *et al.*, 2009; Merrigan *et al.*, 2011).

Sayual Pahaviaur and Sayual Biak Taking	HIV Status Awar	eness	Not Aware of HIV statu			
Sexual Behaviour and Sexual Risk Taking	(n=100)		(n=9)			
	Frequency	Percent (%)	Frequency	Percent		
				(%)		
Sexual Role						
Insertive	43	(43.0)	7	(77.7)		
Receptive (Bottom)	27	(27.0)	2	(22.2)		
Both (Versatile)	28	(28.0)	0	(0.0)		
Oral	2	(2.0)	0	0.0		
Last HIV Test						
<3 months ago,	55	(55.0)	3	(33.3)		
3–6 months ago,	21	(21.0)	1	(11.1)		
6–12 months ago,	14	(14.0)	5	(55.5)		
>1 year ago,	10	(10.0)	0	(0.0)		
Male Sexual Partner in the past 12 months						
Yes	94	(94.0)	8	(88.8)		
No	6	(6.0)	1	(11.1)		
Number of Male Sexual Partners in the pa	st 12					
nonths						
None	5	(5.0)	1	(11.1)		
1–5	83	(83.0)	5	(55.5)		
6–10	5	(5.0)	2	(22.2)		
11–15	5	(5.0)	1	(11.1)		
>15	2	(2.0)	0	(0.0)		
Condom Use with Male Sexual Partner						
Always	51	(51.0)	7	(77.7)		
/ery Often	19	(19.0)	1	(11.1)		
Dccasionally	14	(14.0)	1	(11.1)		
Rarely	10	(10.0)	.0	(0.0)		

Table 3: Sexual behaviours and sexual risk taking BMSM in Msunduzi Local Municipality

Table 3: Continued

Sexual Behaviour and Sexual Risk	HIV Awareness	StatusNot Aware of status	HIV		
	(n=110) Frequency	(n=10) Percent (%)	Frequency	Percent (%)	
Condom Use with Male Sexual Partner					
Always	51	(51.0)	7	(77.7)	
Very Often	19	(19.0)	1	(11.1)	
Occasionally	14	(14.0)	1	(11.1)	
Rarely	10	(10.0)	.0	(0.0)	
Condomless Anal Intercourse in past 12 months					
1–5 times	46	(46.0)	4	(44.0)	
6–10 times	11	(11.0)	.0	(0)	
11–15 times	4	(4.0)	.0	(0)	
>15 times	10	(10.0)	.0	(0)	
Never	29	(29.0)	5	(55.0)	
Perceived Risk of Contracting HIV					
High	39	(39.0)	2	(22.2)	
Moderate	36	(36.0)	5	(55.5)	
Low	20	(20.0)	2	(22.2)	
Non-existent	5	(5.0)	.0	(0)	

What is interesting in these results is that although many HIV status aware respondents were reporting consistent condom use (51.0%), they were concurrently reporting frequent condomless sex with their male sexual partners (46.0%). This evidence is an inconsistency of effort and elevated risky sexual behaviour. A close assessment of Table 3 reveals that most HIV status aware respondents indicated multiple partners in the past 12 months, confirming an average of 1-5 sexual partners over this period. An area requiring further interrogation is the close relation in the high number of respondents reporting condomless sex 1-5 times over the same 12 months' period. This brings to the fore questions of whether these MSM are practising safe sex even though they report being aware of their HIV status or are they taking part in risky sexual behaviour.

This table is quite revealing in several ways. Firstly, it exposes that respondents who are unaware of their HIV status do not exhibit a difference in behaviour than their HIV status aware counterparts. This is because a similar behaviour trajectory can be identified amongst this group of BMSM. Secondly, there is a disconnect between the self-reported safe behaviours such as regular condom use and the number of times that these respondents have condomless sex. Thirdly, although many of these respondents (63.6%) report having confidence in the adequacy and efficacy of the HIV prevention methods available to them, their reported behaviour indicates that they are not using these methods, with a high percentage reporting not using a condom on average 1-5 times during the previous 12 months. Finally, most HIV status aware respondents reported high perceived risk (39.0%) and those with perceived moderate risk (36.0%). The same trajectory could be identified amongst HIV unaware respondents. The present findings seem to be consistent with other previous research which found that Tanzanian MSM perceived their risk of HIV infection to be higher due to risky sexual behaviours (Dahoma *et al.*, 2011).

Furthermore, what these findings reveal is that awareness of HIV status does not influence the risk behaviour of respondents with a majority still reporting multiple sexual partners and multiple incidences of condomless sex, all underscoring their perceived risk to HIV transmission. What HIV unaware respondents revealed is that they were prone to the less frequent HIV testing, a higher number of multiple sexual partners, frequent condomless sex and a moderate perceived risk to HIV infection. What can be deduced from these above results is that there is no significant correlation between the behaviours of HIV aware and unaware individuals. The respondents partook in risk behaviour considering their perceived risk to HIV transmission, therefore, their self-reported perceived susceptibility to HIV transmission does not influence their behaviours. Conversely, these risky sexual behaviours may be the driving force for their perceived susceptibility. It is still to be revealed if the promise of PrEP as an additional HIV preventative method, and particularly its uptake will be influenced by this sexual risk taking by BMSM in the Msunduzi Local Municipality.

5.3.3. PrEP awareness and knowledge amongst BMSM in the Msunduzi Local Municipality

Data pertaining to PrEP awareness revealed that many of the respondents (80.7%) knew what PrEP was with a small portion (19.2%) indicating a lack of awareness of PrEP. Respondents were not given any details on PrEP before being requested to complete the questionnaire to generate, raw data on the actual level of awareness among BMSM in the Msunduzi Local Municipality have on PrEP. In accordance with the present results, a previous local study into the adherence levels of Post-Exposure Prophylaxis and awareness of Pre-Exposure Prophylaxis in Cape Town conducted by Hugo *et al.* (2016) found that (90%) of the respondents had heard about PrEP, indicating a high perceived awareness of PrEP. Although, these results on one level are supported by previous local research, they are contradictory to international studies on BMSM awareness of PrEP by Brooks *et al.* (2015), Eaton *et al.* (2015) and Eaton *et al.* (2017), in that PrEP awareness in this study higher compared to the above-mentioned studies. Granting that, closer analysis reveals that these results are on another level consistent with certain deductions made by the above-mentioned studies, that information about PrEP is not widespread enough and is not reaching those most in need of this information such as MSM and BMSM. This is highlighted by the considerable quantity of respondents who had no awareness of PrEP at all as well as inconsistent knowledge about PrEP.

The results below (see Table 4, page 109) emphasise the notion that although individuals were aware of PrEP, they were simultaneously unaware of it. A close review of Table 4 illustrates that although there is a large portion of respondents who assert knowing what PrEP is when asked to describe what its purpose is there were inconsistencies in the knowledge that these respondents had. For example; although (80.7%) of the respondents affirmed that they were aware of PrEP only (60.5%) knew what its intended use is i.e. an antiretroviral drug used to protect against HIV transmission. This reveals that there was a lack of information on PrEP that is targeted at BMSM and if there was, this information was not reaching them. This suggestion is further illustrated by the sources of information that MSM were using to gain knowledge about PrEP.

PrEP Awareness and Knowledge	Frequency	Percent (%)
PrEP Awareness		
Yes	88	(80.7)
No Previous PrEP Use	21	(19.2)
Yes	18	(16.5)
No Knowledge of PrEP	91	(83.4)
Antiretroviral drug to protect against HIV Transmission	66	(60.5)
Antiretroviral drug to protect against STIs	4	(3.6)
Antiretroviral drug to protect against HIV and STIs	28	(25.6)
Antiretroviral drug you take so you can stop using condoms	11	(10.0)
Sources of Information		
Other	40	(36.6)
TV	7	(6.4)
Friends/Family	15	(13.7)
Health Facility (Clinic/Doctor/Hospital)	25	(22.9)
Social Media	8	(7.3)
Articles in Magazines or newspapers	5	(4.5)
Leaflets and Information booklets	1	(0.9)
Billboard	1	(0.9)
TV + Other	1	(0.9)
Family/Friends + Leaflets and information booklets + Soci Media + Billboard	al 1	(0.9)
TV + Friends/family + Social Media + Other	1	(0.9)
Health Facility (Clinic/Doctor/Hospital) + Leaflets ar Information Booklets; Social Media	nd 1	(0.9)
Health Facility (Clinic/Doctor/ Hospital) + Other	1	(0.9)
Health Facility (Clinic/Doctor/ Hospital) + Social Media + Article	es 1	
in Magazines or Newspapers		(0.9)
Health Facility (Clinic/Doctor/ Hospital) + Social Media Billboard	+ 1	(0.9)

Table 4: PrEP Awareness and Knowledge amongst BMSM (n=109)

The collected data indicates that there are a few prominent sources of information available to MSM namely, "Other" sources of information which accounted (36.6%) of information sources. 112

Examples of these kinds of sources were mainly the Gay and Lesbian Network (GLN) which most respondents indicated was their primary source of information on PrEP. This was followed by Health care facilities (22.9%), friends and family members (13.7%), social media (7.3%) and finally television (6.4%). What is surprising is that common formats of health communication material such as information booklets and leaflets as well as newspaper and magazine advertising and features featured minimally as sources of information.

These results corroborate the findings of a great deal of previous work in the areas of health, prevention and care for BMSM, which revealed that BMSM are underserved by the current health promotion campaigns (Brooks *et al.*, 2015). The choice by respondents in this study to emphasise GLN as their main source of information on PrEP is telling of the current structural exclusions BMSM experience in national health education programmes. Furthermore, it reveals their reliance on health education and prevention implements in LGBTI focused Non-governmental Organisations (NGO) such as GLN. Moreover, the choice of BMSM to select GLN on its own signals that BMSM do not only consider GLN as a health facility but rather they view it as a holistic organisation that offers support to members of their population. It can be assumed that health facilities in this instance refer to Primary Health Centres (PHC)-clinics or hospitals.

The above findings have important implications for developing an effective implementation plan for BMSM in the Msunduzi Local Municipality. There need to be various considerations if the implementation is to be successful. Firstly, there is a need for a comprehensive nationwide education campaign that will optimally reach this Municipality. This campaign needs to contain the correct type and amount of information that is targeted BMSM taking into consideration their unique risk profile. The inclusion of organisations such as GLN cannot be dismissed in this plan as it is evident from current findings that BMSM in the municipality have a close relationship with the organisation as a source of information and MSM targeted health care. Therefore, their inclusion is crucially important to successfully reach BMSM, who have been previously erased from HIV and AIDS prevention campaigns. This accords with recent research which asserts that if an implementation programme targeted at MSM is to be a success a one size fits all approach will not be effective (Witzel *et al.*, 2018).

5.3.4. PrEP adoption intention and PrEP related attitudes and beliefs

An initial objective of this study was to understand the attitudes and perceptions of BMSM towards PrEP with the intention to establish if BMSM in Msunduzi Local Municipality would be willing to adopt and use PrEP as a preventative method. The questionnaire dedicated a considerable focus on establishing this and understanding the factors that would motivate or inhibit MSM from adopting PrEP. In this section of the questionnaire, respondents were required to give information on their willingness to take PrEP daily to prevent HIV and to identify motivators and the barriers that would impede adoption. Although the level of PrEP awareness was established in the previous section (see Table 4, page 109), the primary focus of this study was to establish intent to adopt PrEP. Therefore, firstly, respondents were asked to indicate whether they would be willing to take PrEP daily and the results of which are presented in the below Table 5.

The results indicate that the majority of those who responded (88.9%) felt that they would be willing to take PrEP daily to prevent HIV transmission. Considering this eager intention to adopt PrEP, it is apparent that very few (11.0%) respondents were unwilling to take PrEP. Seeing that the intention of the guestionnaire was to lay the ground for the in-depth interviews, which are analysed in Chapter Six, respondents were not requested to expound on their decisions or contextualise these yet. These results match those observed in earlier studies from various parts of the globe which indicated high intention to adopt PrEP amongst MSM. In a study exploring sexual risk as an indicator for willingness to take PrEP amongst MSM in Canada, Kesler et al. (2016) found that 55% of HIV-negative MSM were willing to use PrEP if available. Kesler et al. (2016) could identify similarities and link their findings to previous studies conducted in Toronto which also indicated a consistent willingness to take up PrEP. Results from a study on MSM in England indicated that participants were generally eager to accept PrEP and adopt it as soon as it was available (Eisingerich et al., 2012). The sentiments expressed in the above studies, which are like those found in this study are not only limited to countries in the north. Studies in Africa (Karuga et al., 2016) and locally (Hugo et al., 2016) both revealed a high willingness of MSM in Kenya (83%) and Cape Town (75%) to adopt PrEP, respectively. These figures are closely related to this study's acceptability figure of (88.9%) inferring that there is a greater willingness amongst African MSM to adopt PrEP. A possible explanation for this might be the large-scale HIV epidemic in sub-Saharan Africa when compared to the rest of the globe.

These findings are scrutinised, taking into consideration those that emerge from the in-depth interviews. However, there are some immediately dependable conclusions when considering the feasibility of an implementation programme for Msunduzi Local Municipality. It can be deduced that there is considerable interest in PrEP adoption by BMSM in the Municipality.

PrEP Adoption Intention and Related Variables	Frequency	Percent (%)
Willingness to take PrEP		
Yes	97	(88.9)
No Motivation for PrEP Use	12	(11.0)
Protection against HIV	81	(74.3)
Protection against STI's Being able to have condom-less sex	10 8	(9.1) (7.3)
Other	6	(5.5)
Protection against HIV + Being able to have condom-less sex	2	(1.8)
Protection Against STI's + Other	1	(0.9)
Protection Against HIV + Protection Against STIs	1	(0.9)
Barriers to PrEP Use		
High Cost	32	(29.3)
Bad Side Effects	24	(22.0)
Taking a pill daily	19	(17.4)
None	16	(14.6)
Pressure from sexual partner	6	(5.5)
Social Stigma-discrimination from friends and sexual partners	5	(4.5)
Other	2	(1.8)
Risk of STI transmission	2	(1.8)
Bad side-Effects + Taking a pill Daily +Risk of STI transmission	1	(0.9)
High cost + Bad Side-Effect + Social stigma and discrimination	1	(0.9)
High Cost + Taking a pill daily + Social Pressure	1	(0.9)

Table 5: PrEP Adoption Intention of BMSM (n=109)

The above results paint a promising picture for the feasibility of an implementation programme of PrEP targeted at BMSM in the Msunduzi Local Municipality. To enable an efficacious implementation programme, intention to adopt cannot be considered as totalising.

Therefore, the questionnaire set out to understand the barriers and facilitators should be considered when PrEP is made available to understand which were salient amongst BMSM in the Municipality.

In response to the question: 'What would be your motivation for taking PrEP?', a range of responses was elicited with two-thirds of the respondents (74.3%) indicating that protection against HIV transmission was the primary motivation for the uptake of PrEP. This was followed by a faction of the respondents (9.1%) indicating the protection against STIs was important to them and their motivator. About (7.3%) felt that having condomless sex was a prime motivator. Though not significantly apparent, the notion of having condomless sex was subtly recurring among other respondents (see Table 5, page 112) indicating that this formed part of their considerations when considering adopting PrEP.

In summary, these results show that protection against HIV was a concern for BMSM in Msunduzi Local Municipality and they would consider the adoption of PrEP to mitigate risks. These results are consistent with those of Karuga *et al.* (2016) who revealed that the main motivator among Kenyan MSM for taking PrEP was the need to stay HIV negative. Further to this, the main theoretical premise behind the intent to adopt PrEP to maintain a seronegative status is linked to the HBM construct of perceived benefit. The HBM asserts that the intention to adopt a health-promoting method is influenced the view that taking a particular action would be beneficial to reduce susceptibility to the disease or reduce its severity (Rosenstock *et al.*, 1994b). It has emerged in earlier sections of this analysis that MSM, partake in risky sexual behaviour and thus perceive themselves to be highly susceptible to contracting HIV. Amid this perceived susceptibility they expressed concern with the adequacy of current preventative methods, hence they considered perceived benefit of using PrEP to maintain an HIV seronegative status.

As mentioned in the literature review, supplementary to the motivators, the concerns and barriers to acceptance and adoption of PrEP, included the burden of taking a pill daily, uncertainty regarding the sideeffects, adverse effects of not using PrEP correctly, and the perceived high cost of PrEP. Including the issues of low-income and underinsured populations when considering the marginalisation that MSM experience in the current health system that is not sensitised to issues of homosexuality is important (Brooks *et al.*, 2011; Eisingerich *et al.*, 2012; Gredig *et al.*, 2016; Mitchell *et al.*, 2016). The current study within the low socio-economic context of Msunduzi Local Municipality found that a sizeable group of respondents (29.3%) felt that a high price point would be their main barrier to adopting PrEP. This was followed by the fear of side effects (22.0%), concerns of medication adherence that were exacerbated by the need to take the pill every day (17.4%).

One unanticipated finding was that some respondents (15.7%) conversely reported that there were no barriers that would prevent them from taking PrEP. Suggesting that there is great anticipation for a biomedical preventative method like PrEP among BMSM is peri-urban cities in South Africa. The above findings are suggestive of the effects that the current socio-economic climate has on decision making of BMSM with regards to preventative health. This is exhibited by the high cost of PrEP being a prominent barrier to adoption. Theoretically, this barrier is best interrogated by using an Intersectional lens. To effectively do this, attention must be paid to the data presented above (see Table 2: page 98) the constructs that inform this population of BMSM are namely; race (black), sexual orientation (straight-identified - MSM), class (secondary educated, unemployed, with monthly disposable income of <R1 000). Therefore, from this vantage point, these various constructs intersect to define the lived experiences of most BMSM in Msunduzi Local Municipality who reported an awareness of PrEP, and a willingness to adopt it. An Intersectional lens contests conventional methods of reasoning which urge that all MSM be submerged in the same totalising category.

Many respondents in this study as illustrated in Table 2, were unemployed, this unemployment cannot be separated from issues of low educational levels which make them desirable candidates in the job market. The above cannot be separated from issues of race, and the subjugation that is pitted against black semi or low skilled individuals in the job market. Finally, this unemployment cannot be separated from issues of not having the disposable income to partake in social life and the exclusion that happens due to a lack of disposable income. How all these constructs intersect is with regards to the accessibility to PrEP, due to the various constructs that intersect to marginalise a black, secondary educated, unemployed, straight-identified MSM living in a peri-urban community. The decision to view the high cost of PrEP as a barrier is illuminated by the various aspects of their identity that intersect to exclude them from being able to access life-saving preventative methods. Therefore, the theoretical assumption behind a choice of high-cost as a barrier should

reflect on the varied social ills that need to be addressed not only regarding PrEP but also socially if PrEP is going to be efficacious amongst this population.

Hence, it is evident that an Intersectional lens offers a better understanding of what informs the perceptions held by the majority of BMSM about PrEP in this study. Furthermore, it allows for an improved perspective on the aspects that need to be interrogated socially in order to improve on the social justice imperatives needed for PrEP's successful implementation.

Even though this section does not propagate to conduct bivariate analysis on nominal and ordinal variables such as socio-demographic characteristics and PrEP adoption intention, a comparison of the two results as depicted in Table 5 below reveal a suggestive profile of the BMSM who would be willing to take PrEP. This is one of the subgroup comparisons this study undertook. The purpose of these subgroup comparison is described as mainly descriptive with the intention to define subgroups, including an additional element of comparison Babbie and Mouton (2001). Using subgroup comparisons, which, like univariate analysis is largely descriptive, this form of descriptive analysis describes the independent subgroups and then adds an element of comparison to this effect. In the below table, a comparison is made between the groups that indicate a high and low PrEP adoption intention, with the aim to establish the variables present in each subgroup and to ultimately create a profile of the individuals with diverging PrEP adoption outlooks. This kind of suggestive statistics could be proficient foreground data to better understand with the assistance of bivariate analysis, [discussed in later sections of this chapter] the target of future PrEP implementation plans. This table is quite revealing in several ways.

At initial glance, there are some characteristic differences between the profiles of BMSM who have reported a high PrEP adoption intention and those who have presented a low PrEP adoption. The profile reflecting a high PrEP adoption intention amongst respondents reveals that most of these respondents were relatively young (24–29 years), had a secondary education and were unemployed with a low monthly income (<R1 000). These respondents identified as gay and had an insertive sexual role preference and were single or dating at the time of data collection. While respondents with low intention were much younger (18–23 years), they had some tertiary education (diploma), were unemployed with a considerable amount employed (41.6%) and a low monthly income (<R1 000). These BMSM were gay-identified, straight, and had an insertive sexual role preferences. What is evident from the above is that there were lower levels of intention amongst younger more educated respondents, this could be suggestive of BMSM making an informed decision based on more information accessibility. What is noteworthy between these profiles is that more employed, older and financially stable (>15001) and educated (tertiary + postgraduate) respondents were not willing to adopt PrEP.

		PrEP Adoptio	n	PrEP Adoptic	on Intention	Total			
Socio-demographic Characteristics		Intention		Low		Population			
		High							
		(n=97)		(n=12)		(n=109)			
		Frequency	Percent (%)	Frequency	Percent (%)	Frequency	Percent (%)		
Ethnicity									
Black Age		97	(88.9)	12	(11.0)	109	(100.)		
18–23		33	(34.0)	6	(50.0)	39	(35.7)		
24–29		40	(41.2)	3	(25.0)	43	(39.4)		
30–35		22	(22.6)	2	(16.6)	24	(22.0)		
36–40		2	(2.0)	1	(8.3)	3	(2.7)		
>41		0	(0.0)	0	(0.0)	0	(0.0)		
Education Completed	ł								
Primary Education (Grade 7)		2	(2.0)	0	(0.0)	2	(1.8)		
Secondary Education (I	Matric)	54	(55.6)	3	(25.0)	57	(52.2)		
Diploma		24	(24.7)	4	(33.3)	28	(25.6)		
Bachelor's Degree		12	(12.3)	3	(25.0)	15	(13.7)		
Postgraduate D Honours)iploma/	8	(8.2)	2	(16.6)	10	(9.1)		
Masters or Doctorate		1	(1.0)	0	(0.0)	1	(0.9)		
None		4	(4.1)	0	(0.0)	4	(3.6)		
Employment Status									
Unemployed		61	(62.8)	6	(50.0)	67	(61.4)		
Student		16	(16.4)	1	(8.3)	17	(15.5)		
Employed		19	(19.5)	5	(41.6)	24	(22.0)		
Retired		1	(1.0)	0	(0.0)	1	(0.9)		

Table 6: Socio-Demographics by PrEP Adoption Intention – Subgroup Comparison

	PrEP Adoptic	on	PrEP Adoptic	on Intention	Total			
Socio-demographic	Intention		Low		Population			
Characteristics	<u>High</u>							
	(n=97)		(n=12)		(n=109)			
	Frequency	Percent (%)	Frequency	Percent (%)	Frequency	Percent (%)		
Monthly Income								
<r1000< td=""><td>73</td><td>(75.2)</td><td>6</td><td>(50.0)</td><td>79</td><td>(72.4)</td></r1000<>	73	(75.2)	6	(50.0)	79	(72.4)		
R1 001–R5 000	5	(5.1)	1	(8.3)	6	(5.5)		
R5 001–R10 000	7	(6.4)	0	(0.0)	7	(5.8)		
R10 001–R15 000	3	(3.0)	2	(16.6)	5	(4.5)		
>R15 001	9	(9.2)	3	(25.0)	12	(11.0)		
Sexual Orientation								
Gay	53	(54.6)	5	(41.6)	58	(53.2)		
Bisexual	16	(16.4)	1	(8.3)	17	(15.5)		
Straight	24	(24.7)	4	(33.3)	28	(25.6)		
Curious	4	(6.5)	2	(16.6)	6	(5.5)		
Sexual Role								
Insertive (Top)	43	(44.3)	7	(58.3)	50	(45.8)		
Receptive (Bottom)	27	(27.8)	2	(16.6)	29	(26.6)		
Both (Versatile)	25	(25.7)	3	(25.0)	28	(25.6)		
Oral	2	(2.0)	0	(0.0)	2	(1.8)		
Relationship Status								
Single	54	(55.6)	8	(66.6)	62	(56.2)		
Dating	41	(42.2)	3	(25.0)	44	(40.3)		
Married	1	(1.0)	0	(0.0)	1	(0.9)		
Divorced	1	(1.0)	1	(8.3)	2	(1.8)		

Table 6 Continued

5.3.5. Communicating sexual health and preventative methods

The present study was designed to determine the attitudes and perceptions of MSM in Msunduzi Local Municipality towards PrEP, with the galvanising objective to establish the feasibility of a PrEP implementation programme targeted at BMSM. Prior studies (Philbin, Parker, Parker, Wilson, Garcia and Hirsch, 2016; Young Schumm, Alon, Bouris, Ferreira, Hill, Khanna, Valente and Schneider, 2018) have noted the important role

that informal networks and the interactions with friends, family members and sexual partners not only have for influencing desire for PrEP but also how beneficial they could be for encouraging PrEP engagement. Therefore, a focus on interpersonal communication emerged with the intention to better understand the communicative practices of BMSM, with reference to sexual health and preventative methods. Consequently, the communication section of the questionnaire required respondents to furnish information on their communicative practices with a focus on the members of their social networks they discussed sexual health matters with. The frequency of these discussions, the topics they discussed and finally establishing the effects of these discussions on future sexual health decisions. This was intended to establish the saliency of such conversations amongst BMSM in the sample. The results are presented in Table 7 (see page 119).

From table 7, by far the greatest amount of discussions about sexual health that happen amongst BMSM happen amongst friends. Of the 109 respondents who completed the questionnaire, just over half (64.2%) indicated that they discussed previous sexual encounters and matters of sexual health with friends. Some respondents indicated that they discussed these sensitive matters with health practitioners (21.1%) and a minority of respondents (11.0%) indicated that they had these discussions with family members. Taken together, these results suggest that there is legitimacy in the assertion made by Philbin *et al.* (2016) about the importance of interactions that MSM have with friends, family member and sexual partners. These results are also consistent with those of other studies and suggest that conversations with friends are a crucial source of information about sexuality for young gay men and are an important way that sexual health behaviour patterns are shared (Mutchler and McDavitt, 2011, McDavitt and Mutchler, 2014). Prominent topics for discussions during these conversations included previous sexual encounters (45.8%), ways to prevent illnesses and diseases (24.7%) and HIV prevention methods (22.8%). These discussions were reported by most respondents (41.2%) to take place very frequently and many respondents (86.2%) reported that these discussions positively affected their sexual health behaviours.

Interpersonal Health Communication Dyads	Frequency	Percent (%)	
Health Communication Partner			
Friends	70	(64.2)	
Family	12	(11.0)	
Health Practitioner	23	(21.1)	
Friends + Health Practitioner + Family	1	(0.9)	
Friends + Family	2	(1.8)	
Other	1	(0.9)	
Frequency of Discussions			
Very Frequently	45	(41.2)	
Frequently	27	(24.7)	
Occasionally	25	(22.9)	
Rarely	11	(10.0)	
Very Rarely	1	(0.9)	
Reasons for Choice			
They offer valuable advice	20	(18.3)	
They have experience and I trust them	20	(18.3)	
I trust them to be confidential	53	(48.6)	
They are the only person I can talk to	10	(9.1)	
I trust them to be confidential +They offer valuable ad	vice + 1	(0.9)	
They have experience and I trust them + They are the	e only		
person I can talk to			
I trust them to be confidential + They offer valuable ad	vice + 1	(0.9)	
They have experience and I trust them			
I trust them to be confidential + They have experience	and I 1	(0.9)	
trust them			
I trust them to be confidential + They offer valuable ad	lvice 1	(0.9)	
I trust them to be confidential + They offer valuable ad	vice + 1	(0.9)	
They are the only person I can talk to			
They offer valuable advice + They have experience	and I 1	(0.9)	
trust them			
Have the Discussions Helped Change S	exual		
Behaviours			
Yes	94	(86.2)	
No	15	(13.7)	

Table 7: Interpersonal Health Communication Dyads of BMSM in Msunduzi (n=109)

Table 7 Continued

Interpersonal Health Communication Dyads	Frequency	Percent (%)	
Discussion Topics			
Previous sexual encounters	50	(45.8)	
Ways to prevent illness and disease	27	(24.7)	
HIV prevention methods	25	(22.9)	
Other	3	(2.7)	
Previous Sexual encounters + Other	1	(0.9)	
Ways to prevent illness and disease + HIV Prevention	2	(1.8)	
Methods			
Previous Sexual Encounters + Ways to prevent illness and	1	(0.9)	
disease + HIVPrevention Methods			

5.4. Results of bivariate associations

This section of the chapter focuses on the statistical tests that were conducted to establish associations between the nominal and ordinal variables present in the questionnaire. To test for associations between the categorical (nominal and ordinal) variables present in the research, a Chi-Square Test of Associations was used. According to Wegner (2016), a Chi-Square Test Statistic measures by how much the observed frequencies and expected frequencies differ. Wegner (2016) further states that if this difference is small the null hypothesis is likely to be accepted. Conversely, a large difference is likely to result in the null hypothesis being rejected. Since the Chi-Square Test Statistic transforms sample frequencies into a test statistic, it was used in the below tables to make conclusions regarding associations. It is also important to keep in mind like most statistical tests, the Chi-Square Test has assumptions governing it. If these assumptions are violated, then necessary remedies must be initiated. In the context of these results, it was ensuring that no more than 20% of the cells had expected counts less than 5. Where such was the case, the Likelihood Ratio Statistic was used instead of the Chi-Square Statistic to make conclusions about associations. An alpha or significance level of <0.05 was used as a reference point. Finally, where associations were found, a Cramer's V test statistic was used to signify a strong association between variables.

5.4.1. Sexual and HIV testing behaviours by perceived HIV susceptibility

Although individual Chi-Square Tests were conducted for the different variables the results of the correlational analysis are presented in Table 8. This table was collated to synthesize the results of the tests done on common overarching categories. The table on the next page needs to be analysed systematically to understand how these elements intersect to create the result to the test of sexual and HIV testing behaviour variables and perceived HIV susceptibility. In the results below, the researcher attempted to test whether an association between the time elapsed since the last HIV test and perceived HIV susceptibility. Table seven includes two main aspects for concentration, the left hand depicts the counts and the percentages for each construct of the variable namely under the last HIV test. This is comparatively done, the various counts are separated according to the various periods lapsed (<3 months ago; 3-6 months ago; 6-12 months ago; >1 year ago) these are tested according to the levels of perceived HIV susceptibility (high; moderate; low; non-existent), the percentage values of these are found below each count. At the bottom of these variable tests is the Total section which on the right-hand side is the quantification of the various variables which will always account to (n=120), which is the size of the sample.

The right-hand side of that total then depicts the results of the Chi-Square Test results and needs to be paid attention to. Firstly, of attention is the establishment of a violation of the Chi-Square Test of Associations (results depicted under = (α) column), as indicated in the above section, there are assumptions governing the Chi-Square Test, if these assumptions are violated, then necessary remedies must be initiated. In the context of these results, it was ensuring that no more than 20% of the cells had expected a count less than 5 the results of which results depicted under = (α) column in this table. Where such was the case, the Likelihood Ratio Statistic was, used instead of the Chi-Square Test of Associations was violated i.e. cells (50.0%) have expected count less than 5. Therefore, the Likelihood Ratio, asymptotic significance (2-sided) result of (0.454) was used as a reference point for making conclusions regarding associations. Since this value (0.454) is larger than our significance level, we conclude that there is no association between the time elapsed since an HIV test and perceived HIV susceptibility.

Table 8: Crosstabulation of HIV Testing and Sexual Risk Behaviours by Perceived HIV Susceptibility

Variables for Analysis (Variables, Actual Calculations)									Chi-Square Test Results (Overall Considerations)					
I believe my risk of contracting HIV is?								Likeliho	od R	atio				
HIV Testing and Sex	ual Risk Behaviours	High	Moderate	Low	Non- existent	Total	α	Value	df	Asymptotic Significance (2-sided)				
Last HIV Test	<3 months ago,	23 (37.7%)	22 (36.1%)	13 (21.3%)	3 (4.9%)	61 (100.0%)								
	3-6 months ago,	10 (38.5%)	9 (34.6%)	7 (26.9%)	0 (0.0%)	26 (100.0%)								
	6-12 months ago,	5 (25.0%)	10 (50.0%)	4 (20.0%)	1 (5.0%)	20 (100.0%)								
	>1 year ago,	6 (46.2%)	2 (15.4%)	3 (23.1%)	2 (15.4%)	13 (100.0%)								
Total		44 (36.7%)	43 (35.8%)	27 (22.5%)	6 (5.0%)	120 (100.0%)	8 (50%)	8.822	9	0.454				
Number of male	None	3	2	1	0	6								
sexual partners in		(50.0%)	(33.3%)	(16.7%)	(0.0%)	(100.0%)								
the past 12 months	1-5	35 (36.1%)	31 (32.0%)	25 (25.8%)	6 (6.2%)	97 (100.0%)								
	6-10	2 (28.6%)	5 (71.4%)	0 (0.0%)	0 (0.0%)	7 (100.0%)								
	11-15	2 (28.6%)	4 (57.1%)	1 (14.3%)	0 (0.0%)	7 (100.0%)								
	>15	2 (66.7%)	1 (33.3%)	0 (0.0%)	0 (0.0%)	3 (100.0%)								
Total		44	43	27	6	120	17	12.071	12	0.440				
• • •		(36.7%)	(35.8%)	(22.5%)	(5.0%)	(100.0%)	(85%)							
Condom use with a male sexual partner	•	20 (32.3%)	28 (45.2%)	10 (16.1%)	4 (6.5%)	62 (100.0%)								
	Very Often	8 (32.0%)	6 (24.0%)	11 (44.0%)	0 (0.0%)	25 (100.0%)								
	Occasionally	8 (50.0%)	6 (37.5%)	2 (12.5%)	0 (0.0%)	16 (100.0%)								
	Rarely	5 (50.0%)	2 (20.0%)	3 (30.0%)	0 (0.0%)	10 (100.0%)								

	Never	3	1	1	2	7				
		(42.9%)	(14.3%)	(14.3%)	(28.6%)	(100.0%)				
Total	44	43	27	6	120	12				
		(36.7%)	(35.8%)	(22.5%)	(5.0%)	(100.0%)	(60%)	21.792	12	<0.040*

The second variable tested was the number of male sexual partners. Here the research attempted to test whether an association between the reported number of male sexual partners and an individual's perceived susceptibility to contracting HIV. The results above illustrate that the Chi-Square Test of Associations was violated i.e. cells (85.0%) have expected a count less than 5. Therefore, the Likelihood Ratio (0.440) was used as a reference point for making conclusions regarding associations. Since this value (0.440) is larger than our significance level =0.050 we conclude that there is an association between the reported number of male sexual partners and an individual's perceived susceptibility to contracting HIV.

Last is a correlation test between the number of times an individual engaged in condomless sex with a male sexual partner and their perceived susceptibility to HIV infection. The results above illustrate that the Chi-Square Test of Associations was violated i.e. cells (70.0%) have expected a count less than 5. Therefore, the Likelihood Ratio (0.040) was used as a reference point for making conclusions regarding associations. Since this value (0.040) is smaller than our significance level of p = 0.050, one may conclude that there was a significant positive correlation between the number of times an individual engaged in condomless sex with a male sexual partner and their perceived susceptibility to HIV infection. Although there is not a vast expanse of studies that explore the relationship between sexual acts such as condomless sex and perceived susceptibility. This study produced results which corroborate the findings of previous work from sub-Saharan Africa by Dahoma, Johnston, Holman, Miller, Mussa, Othman, Khatib, Issa, Kendall, Kim (2011) which suggested that MSM in Zanzibar believed they were at risk for HIV infection due to their risky sexual behaviours.

Furthermore, the notion of engaging in condomless sex multiple times being a predictor for HIV infection is underscored by studies such as Merrigan *et al.* (2011) and Ross *et al.* (2014). This is especially relevant when you view the breakdown of the number of occurrences against the levels of risk, individuals who report never, rarely and occasionally are the largest number of people who perceive their risk to HIV infection to be

high. These factors may explain the relatively good correlation between actual risky sexual behaviours and perceived risk of HIV transmission.

Symmetric Measures			
			Approximate
		Value	Significance
Nominal by Nominal	Phi	.447	.021
	Cramer's V	.258	.021
N of Valid Cases		120	

Table 9: Cramer's V Symmetric Measure Results

Table 9 above presents the results of the Cramer's V test statistic used to make conclusions regarding the strength of associations. It is evident from the table above that 0.021 reference point is below the 0.60> reference point that signifies a strong association between variables, therefore it can be suggested that there is a moderate association between these variables. Some of the issues emerging from this finding relate specifically to the perceived susceptibility to illness, already this association confirms that BMSM in Msunduzi Local Municipality consider themselves at risk of HIV infection based on their condomless sexual activity. This offers a better understanding of perceived susceptibility as a predicting factor for their PrEP adoption intention highlighted in earlier sections of this chapter. Furthermore, there is abundant room for further research using multivariate analysis to determine the association between multiple variables such as condomless sexual activity, perceived HIV susceptibility and PrEP adoption intention.

In the above section, Chi-Square Tests were conducted to establish associated between sexual and HIV testing behaviour and *perceived susceptibility*. The HBM explains *perceived susceptibility* as a predictive factor to establish if an individual will take a health action. It argues that an individual's beliefs concerning their vulnerability to a given disease vary according to their perceived level of vulnerability. At the one end, there are those people who invariably deny that they could ever be at risk of contracting the set disease, in a modest level are those who believe that there is a hypothetical possibility that they may be at risk while still believing that there is a possibility they are not at risk. Finally, there are those individuals that believe that they are at risk of contracting the disease (Rosenstock, 1974b; Sharma and Romas, 2012).

Therefore, understanding the relationships between risk behaviour and perceived HIV infection could offer insights into understanding PrEP adoption intention. The results of the correlational analysis are presented in Table 8 above. The table was collated to synthesize the results of the tests done on common overarching categories. In the results below, the researcher attempted to test whether an association between sexual and HIV testing behaviours such as frequency of HIV testing, the multiplicity of male sexual partners as well as the frequency of condom use with male sexual partners and perceived risk of contracting HIV.

5.4.2. Socio-demographic characteristics by PrEP adoption intention

Although individual Chi-Square Tests were conducted for the different variables and the results of the correlational analysis are presented in Table 10, see page. This table was collated to synthesise the results of the tests done on common overarching categories. The table below needs to be analysed systematically to understand how these elements intersect to create the result to the test of socio-demographic variables and PrEP adoption intention. In the results presented below, the researcher attempted to test whether an association between the level of education attained and willingness to take PrEP daily to prevent HIV transmissions. Table 7 includes two main aspects for concentration, the left hand depicts the counts and the percentages for each construct of the variable namely, underage. This is comparatively done, and the various counts are separated according to the various education levels (primary; secondary; diploma; bachelor's degree; postgraduate diploma or honours; masters or doctorate; none). The various education levels are tested according to high adoption intention (Yes) or low adoption intention (No), the percentage values of these are found below each count. At the bottom of these variable tests is the Total section which on the right-hand side is the quantification of the various variables which will always account to (n=120), which is the size of the sample.

The right-hand side of that total then depicts the results of the Chi-Square Test results and needs to be paid attention to. Firstly, of attention is the establishment of a violation of the Chi-Square Test of Associations (results depicted under = (α) column), as indicated in the above section, there are assumptions governing the Chi-Square Test, if these assumptions are violated, then necessary remedies must be initiated. In the context of these results, it was ensuring that no more than 20% of the cells had expected counts less than 5 the results of which results depicted under = (α) column in this table. Where such was the case, the Likelihood

Ratio Statistic was, used instead of the Chi-Square Statistic to make conclusions about Associations. From these results, it is evident that the Chi-Square Test of Associations was violated i.e. cells (64.3%) have expected a count less than 5. Therefore, the Likelihood Ratio, asymptotic significance (2-sided) result of (0.272) was used as a reference point for making conclusions regarding associations.

Since this value (0.272) is larger than the significance level, one may conclude that there is no association between the level of education attained and intention to adopt PrEP daily to prevent HIV.

The second variable of socio-demographic characteristics is Age, in the below results, the researcher attempted to test whether there was an association between age and intention to adopt PrEP daily to prevent HIV. It is apparent from Table 10 that the chi-square test of associations was violated i.e. cells (60.0%) have expected a count less than 5, therefore, the Likelihood Ratio (0.429) was used as a reference point for making conclusions regarding associations. Since this value (0.429) is larger than our significance level of <0.05, we conclude that the chi-square test did not show any association between age and intention to adopt PrEP daily to prevent HIV. Therefore, it cannot be inferred that the age of BMSM in Msunduzi can be used to assume a prone to adopting PrEP for HIV transmission. The present results seem to be consistent with other research by Brooks *et al.*, (2015), which had a similar stratified sample that contained a majority of young BMSM (between 18-29 years) and found that there was no bivariate statistical association been socio-demographic characteristics and PrEP adoption intention.

The third socio-demographic characteristic variable of interest that is depicted in the Table 10 is personal income. The data which is in line with the subgroup comparison in the previous section of this chapter reveals that respondents were primarily of lower social economic status (SES) with (72.6%) having a very low income of <R1000 per month. The test to establish an association between personal income and intention to adopt PrEP to mitigate HIV infection revealed that the Chi-Square Test of Associations was violated i.e. cells (40.0%) have expected a count less than 5. Therefore, the Likelihood Ratio (0.036) was used as a reference point for making conclusions regarding associations. Since this result is significant at the p= <0.05 level, one may conclude that there was a significant positive correlation between personal income and intention to adopt PrEP daily to prevent HIV. This denotes that there is an association between these two variables. The

Cramer's V test statistic result below (see page 130) indicates that although the association is prevalent, it is not as strong association with the statistic value (0.015) = < 0.060 level for strong associations.

Table 10: Crosstabulation of Socio-Demographic Characteristics by PrEP Adoption Intention

Variables f	or Analysis	ivariate Ana	IYSIS				Chi - Square Test Results (Overall Considerations)				
-	Actual Calconographic Ch	aracteristics		Would you daily	Overan	Likelihood Ratio					
				Yes	transmissions? Yes No Total		α	Value	df	Asymptotic Significance (2-sided)	
Level	Education	Primary	Education	3	0	3					
Attained		(Grade 7)		(100.0%)	(0.0%)	(100.0%)					
		Secondary	Education	57	4	61					
		(Matric)		(93.4%)	(6.6%)	(100.0%)					
		Diploma		18	3	21					
				(85.7%)	(14.3%)	(100.0%)					
		Bachelor's De	egree	13	4	17					
				(76.5%)	(23.5%)	(100.0%)					
		Postgraduate	e Diploma	10	2	1					
		or Honours		(83.3%)	(16.7%)	(100.0%)					
		Masters or D	octorate	1	1	2					
				(50.0%)	(50.0%)	(50.0%)					
		None		4	0	4					
				(100.0%)	(0.0%)	(100.0%)					
Total				106	14	120	4	7.566	6	0.272	
				(88.3%)	(11.7%)	(100.0%)	(40%)	7.500	0	0.272	
Age		18-23		34	6	40					
				(85.0%)	(15.0%)	(100.0%)					
		24-29		43	6	49					
				(87.8%)	(12.2%)	(100.0%)					
		30-35		26	1	27					
				(96.3%)	(3.7%)	(100.0%)					
		36-40		2	1	3					
				(66.7%)	(33.3%)	100.0%					

	>41	1	0	1				
		(100.0%)	(0.0%)	(100.0%)				
Total		106	14	120	6	3.831	4	0.429
		(88.3%)	(11.7%)	(100.0%)	(60%)	3.031	4	0.429
Personal	<r1000< td=""><td>76</td><td>6</td><td>82</td><td></td><td></td><td></td><td></td></r1000<>	76	6	82				
ncome		(92.7%)	(7.3%)	(100.0%)				
	R1001-R5000	8	1	9				
		(88.9%)	(11.1%)	(100.0%)				
	R5001-R10000	7	0	7				
		(100.0%)	(0.0%)	(100.0%)				
	R10001-R15000	4	3	7				
		(57.1%)	(42.9%)	(100.0%)				
	>R1500	11	4	15				
		(73.3%)	(26.7%)	(100.0%)				
Total		106	14	120	4	40.000		<0.020*
		(88.3%)	(11.7%)	(100.0%)	(40%)	10.289	4	<0.036*
Sexual Orientation	Gay	57	7	64				
	Count	(89.1%)	(10.9%)	(100.0%)				
	Bisexual	15	2	17				
	Count	(88.2%)	(11.8%)	(100.0%)				
	Straight	(00.2 %)	3	(100.078)				
	Count							
		(90.0%)	(10.0%)	(100.0%)				
	Curious	7	2	9				
		(77.8%)	(22.2%)	(100.0%)				
Total		106	14	120	3	0.044	•	0.000
		(88.3%)	(11.7%)	(100.0%)	(37.5%)	0.914	3	0.822
Sexual Role	Insertive (Top)	48	8	56				
		(85.7%)	(14.3%)	(100.0%)				
	Receptive (Bottom)	29	3	32				
	- , /							
	Poth () (oractila)	(90.6%) 27	(9.4%) 2	(100.0%) 20				
	Both (Versatile)	27	3	30				
		(90.0%)	(10.0%)	(100.0%)				
	Oral	2	0	2				
		(100.0%)	(0.0%)	(100.0%)				
		. /	· · /	. /				

Total	106	14	120	4	1.105	3	0.776
	(88.3%)	(11.7%)	(100.0%)	(50.0%)			

Table 11: Cramer's V Symmetric Measures Results

Symmetric Measures			
			Approximate
		Value	Significance
Nominal by Nominal	Phi	.320	.015
	Cramer's V	.320	.015
N of Valid Cases		120	

A close analysis reveals that PrEP adoption intention is significant amongst MSM with a low income with (92.7%) reporting an income of <R1000 monthly, followed by those with R1001- R5000 accounting (88.9%) and those on the higher end of the income bracket <R15001 also reflecting an (88.3%) adoption intention. This correlation does not reflect what previous studies have reported on. In their study of BMSM in Los Angeles, which had a sample of lower socio-economic status (SES), Brooks *et al.* (2015) revealed no association between any socio-demographic characteristics and PrEP adoption intention. In their study exploring access among Black and Latino MSM, Lelutiu-Weinberger and Golub (2016) learnt that a lower SES resulted in a not being medically ensured, which many BLMSM viewed as a barrier to adoption. This is supported by an assortment of studies which highlighted high cost as a barrier to adoption.

Therefore, it is surprising to see an association between MSM with lower SES in this sample and the intention to adopt PrEP. Although this association is established here, these data must be interpreted with caution because the sample is skewed towards individuals in the lower income bracket <R1000, because of high unemployment rates amongst this sample. Therefore, these results may not be representative of the general population of BMSM in Msunduzi Local Municipality without necessary unemployment figures to corroborate these levels of unemployment affecting the income levels. It is difficult to explain this result, however, a possible explanation for this can be linked to the role that the Gay and Lesbian Network (GLN) plays as a preventative health provision source for most BMSM in the area. As highlighted in the above section, the GLN is viewed as a valuable source of information and preventative methods, therefore, it could be suggested that BMSM with lower an SES would rely on the accessing PrEP from the GLN, in the same way, that current

preventative methods are provided (for free). Although this has not been tested and will be explored more in the interviews. This could explain the conviction to adopt PrEP among low-income level individuals.

The next test for association depicted in Table 10 is sexual orientation. The researcher attempted to test whether there was an association between sexual orientation and intention to adopt PrEP daily to prevent HIV transmissions. The above results illustrate that the Chi-Square Test of associations was violated i.e. cells (37.5%) have expected a count less than 5. Therefore, the Likelihood Ratio (0.822) was used as a reference point for making conclusions regarding associations. Since this value (0.822) is larger than our significance level, one can conclude that there is no association between sexual orientation and intention to adopt PrEP daily to prevent HIV transmission. Following, this the researcher attempted to test whether an association between an individual's sexual role and intention to adopt PrEP daily to prevent HIV transmissions.

The above results illustrate that the Chi-Square Test of associations was violated i.e. cells (50.0%) have expected a count less than 5. Therefore, the Likelihood Ratio (0.766) was used as a reference point for making conclusions regarding associations. Since this value (0.766) is larger than our significance level, one can conclude that there is no association between an individual's sexual role and intention to adopt PrEP daily to prevent HIV transmission. Together, the results observed in this study mirror those, of the study by Brooks *et al.* (2015) mentioned earlier which examined socio-demographic characteristics such a sexual orientation and established no statistical association between these and PrEP adoption intention.

In conclusion, it is evident that most socio-demographic characteristics amongst BMSM in Msunduzi Local Municipality do not predict the intention to adopt PrEP, with the exclusion of personal income. Therefore, it is important to identify what informs this association even though most BMSM have indicated that high-cost would be a barrier to adoption. Therefore, the association identified here give cues for consideration of cost and the attainability of PrEP for low-income BMSM in the Municipality. Interview data are presented in Chapter 6 have the potential to better illuminate the intended hopes for accessibility of PrEP especially, for BMSM with a lower SES in the Municipality.

Following the above analysis on the relationship between socio-demographic characteristics and PrEP adoption intention, a second level and more specific statistical analysis of bivariate relationships is needed. This is to establish if HIV risk perceptions and sexual risk-taking behaviours are related to PrEP adoption by BMSM in the Msunduzi Local Municipality. Although individual Chi-Square Tests were conducted for different variables, the results of the correlational analysis are presented in Table 12. This table was collated to synthesize the results of the tests done on the common overarching categories. The table below needs to be analysed systematically to understand how these elements intersect to create the result of HIV, sexual and risk-takingbehaviour and the intention to adopt PrEP. In the results below, the researcher initially attempted to test whether there was an association between an individual's perceived susceptibility to HIV and their willingness to take PrEP daily to prevent HIV transmissions. Secondly, if there was an association between the number of male sexual partners an individual had had in the past 12 months and their intention to adopt PrEP. Thirdly and finally test, an analysis of the association between the number of times an individual had had condomless sex with a male sexual partner and their intention to adopt PrEP.

The first variable of HIV risk perceptions and sexual risk-taking behaviour is perceived susceptibility to HIV. In the below results, the researcher attempted to test whether there was an association between perceived susceptibility to HIV and intention to adopt PrEP daily to prevent HIV. It is apparent from Table 12 (see page 134) that the Chi-Square Test of associations was violated i.e. cells (25.0%) have expected a count less than 5, therefore, the Likelihood Ratio (0.104) was used as reference point for making conclusions regarding associations. Since this value (0.104) is larger than our significance level of < 0.05, one may conclude that the Chi-Square Test did not show any association between perceived susceptibility to HIV and intention to adopt PrEP daily to prevent HIV. Therefore, it cannot be inferred that the perceived susceptibility to HIV of BMSM in Msunduzi Local Municipality can be used to assume how prone they would be to adopting PrEP for HIV transmission.

The second variable of HIV risk perceptions and sexual risk-taking behaviour is the number of male sexual partners depicted in the results below. The research attempted to test whether there was an association between the number of male sexual partners and intention to adopt PrEP daily to prevent HIV. It is apparent

from Table 12 that the chi-square test of associations was violated i.e. cells (50.0%) have expected a count less than 5, therefore, the Likelihood Ratio (0.609) was used as a reference point for making conclusions regarding associations. Since this value (0.609) is larger than our significance level of <0.050, we conclude that the Chi-Square Test did not show any association between the number of male sexual partners and intention to adopt PrEP daily to prevent HIV.

The results below support research by (Brooks *et al.*, 2015), which found that although the respondents reported high-sexual risk behaviours that placed them at higher risk for HIV infection, there was no association between sexual risk behaviours and PrEP adoption. The result of this bivariate analysis showed that sexual risk behaviour such as having multiple sexual partners in the space of 12 months is not statistically associated with PrEP adoption intention. Therefore, it cannot be inferred that the perceived susceptibility of BMSM in Msunduzi Local Municipality to HIV cannot be used to assume how prone they would be to adopting PrEP for HIV transmission.

The third and final variable of HIV risk perceptions and sexual risk-taking behaviour in Table 12 is the number of occurrences of condomless sex with a male sexual partner in the past 12 months. In this section of the above results, the research sought to test whether an association between occurrences of condomless sex with a male sexual partner and intention to adopt PrEP on a daily basis to prevent HIV existed. It is apparent from Table 11 that the Chi-Square Test of associations was violated i.e. cells (50.0%) have expected a count less than 5. Therefore, the Likelihood Ratio (0.046) was used as a reference point for making conclusions regarding associations. Since this value (0.046) is significant at the p = <0.05 level, one can conclude that there was a significant positive correlation between occurrences of condomless sex with a male sexual partner and intention to adopt PrEP daily to prevent HIV. This denotes that there is an association between these two variables.

Table 12: Cross-tabulation of HIV risk perceptions, sexual and risk-taking behaviours by PrEP adoption

HIV Risk Perceptions, Sexual and Risk-Taking Behaviours by PrEP Adoption Intention Crosstabulation – Bivariate Analysis Variables for Analysis **Chi-Square Test Results** (Overall Considerations) (Variables, Actual Calculations) Would you willing be to take PrEP HIV Risk Perceptions, Sexual and Risk-Taking daily to prevent HIV Likelihood Ratio Behaviour transmissions? Asymptotic Value df Significance Total α Yes No (2-sided) Perceived HIV High 40 4 44 Susceptibility (90.9%) (9.1%) (100.0%) 5 Moderate 38 43 (88.4%) (11.6%) (100.0%) 2 Low 25 27 (92.6%) (7.4%) (100.0%) 3 Non-existent 3 6 (50.0%) (50.0%) (100.0%) 106 14 120 2 Total 6.158 0.104 3 (88.3%) (11.7%) (100.0%) (25.0%) Number of None 5 1 6 male sexual (16.7%) (83.3%) (100.0%) partners in the 1-5 12 85 97 past 12 months (87.6%) (12.4%) (100.0%) 6-10 6 1 7 (85.7%) (14.3%) (100.0%) 11-15 7 0 7 (100.0%) (0.0%) (100.0%) >15 3 0 3 (100.0%) (0.0%) (100.0%) 5 Total 106 14 120 2.702 4 0.609 (88.3%) (11.7%) (100.0%) (50%)

Table 12:

Continued

					9.712	4	<0.046*
	106	14	120	5			
	(91.9%)	(8.1%)	(100.0%)				
Never	34	3	37				
	(100.0%)	(0.0%)	(100.0%)				
>15 times	11	0	11				
	(100.0%)	(0.0%)	(100.0%)				
11-15 times	4	0	4				
	(100.0%)	(0.0%)	(100.0%)				
6-10 times	11	0	11				
	(80.7%)	(19.3%)	(100.0%)				
1-5 times	46	11	57				
	6-10 times 11-15 times >15 times	(80.7%) 6-10 times 11 (100.0%) 11-15 times 4 (100.0%) >15 times 11 (100.0%) Never 34 (91.9%)	(80.7%) (19.3%) 6-10 times 11 0 11 0 (100.0%) (0.0%) 11-15 times 4 0 >15 times 11 0 Never 34 3 (91.9%) (8.1%)	(80.7%) (19.3%) (100.0%) 6-10 times 11 0 11 (100.0%) (0.0%) (100.0%) 11-15 times 4 0 4 (100.0%) (0.0%) (100.0%) >15 times 11 0 11 (100.0%) (0.0%) (100.0%) Never 34 3 37 (91.9%) (8.1%) (100.0%)	(80.7%) (19.3%) (100.0%) 6-10 times 11 0 11 (100.0%) (0.0%) (100.0%) 11-15 times 4 0 4 (100.0%) (0.0%) (100.0%) >15 times 11 0 11 (100.0%) (0.0%) (100.0%) Never 34 3 37 (91.9%) (8.1%) (100.0%)	(80.7%)(19.3%)(100.0%)6-10 times11011(100.0%)(0.0%)(100.0%)11-15 times404(100.0%)(0.0%)(100.0%)>15 times11011(100.0%)(0.0%)(100.0%)Never34337(91.9%)(8.1%)(100.0%)	

The Cramer's V test statistic result below indicates that there is a strong association with the statistic value (0.130) = > 0.060 level for strong associations.

Table 13: Cramer's V Symmetric Measures Results

Symmetric Measures			
			Approximate
		Value	Significance
Nominal by Nominal	Phi	.243	.130
	Cramer's V	.243	.130
N of Valid Cases		120	

5.4.4. Associating socio-demographics and barriers to PrEP adoption

This final section of statistical analysis of bivariate association explores, the relationships that could exist between certain demographic characteristics such as income and age.

Individual Chi-Square Tests were conducted for each different variable and the results of the correlational analysis are presented in Table 14-17 below. These tables could not be collated due to the magnitude of the variable options tested under each correlation test and hence each was allocated it's on frequency table and Chi-Square Test table. These would need to be analysed individually to understand how these elements intersect to create the result to the test of socio-demographic variable and barriers to PrEP adoption.

	What we	ould you	prevent	from using	g PrEP								
	Hiah Cost		bad Sloe Effects	social stigma	raking a pili ualiy	Kisk of S II transmission Social Pressure (Pressure	irom sexual parmer) Nono		ourer Bad side-Effects + Taking a pill Daily + Risk of STI	High cost + Bad Side-Effect +	High Cost + Taking a pill daily	+ Social Pressure High Cost + Bad Side-effects- Social Stimme + Other	occial origina - origi
<r1k< td=""><td>24</td><td>15</td><td>4</td><td>15</td><td>0</td><td>6</td><td>15</td><td>0</td><td>1</td><td>1</td><td>1</td><td>0</td><td>82</td></r1k<>	24	15	4	15	0	6	15	0	1	1	1	0	82
	(29.3)	(18.3)	(4.9)	(18.3)	(0.0)	(7.3)	(18.3)	(0.0)	(1.2)	1.2	(1.2)	(0.0)	(100.0)
R1001-	3	2	1	1	0	1	0	1	0	0	0	0	9
R5K	(33.3)	(22.2)	(11.1)	(11.1)	(0.0)	(11.1)	(0.0)	(11.1)	(0.0)	0.0	(0.0)	(0.0)	(100.0)
R5K	3	2	0	1	0	0	0	1	0	0	0	0	7
- R10K	(42.9)	(28.6)	(0.0)	(14.3)	(0.0)	(0.0)	(0.0)	(14.3)	(0.0%)	0.0	(0.0)	(0.0)	(100.0)
R10001	2	1	0	0	0	0	2	1	0	0	0	1	7
-R15K 2	(28.6)	(14.3)	(0.0)	(0.0)	(0.0)	(0.0)	(28.6)	(14.3)	(0.0)	0.0	(0.0)	(14.3)	(100.0)
b = >R15001	3	5	1	2	2	0	2	0	0	0	0	0	15
Personal Income >R12001	(20.0)	(33.3)	(6.7)	(13.3)	13.3	(0.0)	(13.3)	(0.0)	(0.0)	0.0	(0.0)	(0.0)	(100.0)
otal	35	25	6	19	2	7	19	3	1	1	1	1	120
	(29.2)	(20.8)	(5.0)	(15.8)	(1.7)	(5.8)	(15.8)	(2.5)	(0.8)	0.8	(0.8)	(0.8)	(100.0)

Table 14: Cross-tabulation of personal income by barriers to PrEP adoption

In Table 14 above, the research attempted to test whether an association between personal income and the barriers to PrEP adoption existed. The results of the Chi-Square Test (see Table 15 below) reveal that the Chi-Square Test of associations was violated i.e. cells (93.3%) have expected a count less than 5, therefore, the Likelihood Ratio (0.495) was used as a reference point for making conclusions regarding associations. Since this value (0.495) is larger than the significance level of < 0.05, one may conclude that the Chi-Square Test did not show any association between personal income and the various barrier variables that may prevent a BMSM from Msunduzi from adopting PrEP.

		Asymptotic Significance	
	Value	df	(2-sided)
Pearson Chi-Square	56.206ª	44	.103
Likelihood Ratio	43.455	44	.495
Linear-by-Linear Association	.000	1	.987
N of Valid Cases	120		

a. 56 cells (93.3%) have expected count less than 5. The minimum expected count is .06.

Table 15: Chi-Square Test of personal income by barriers to PrEP adoption

In Table 16 below, the researcher attempted to test whether an association between age and the barriers to PrEP adoption. The results of the Chi-Square Test (see Table 17, page 139) reveal that the Chi-Square Test of associations was violated i.e. cells (83.3%) have expected a count less than 5. Therefore, the Likelihood Ratio (0.700) was used as a reference point for making conclusions regarding associations. Since this value (0.700) is larger than the significance level of < 0.05, one may conclude that the Chi-Square Test did not show any association between age and the various barrier variables that will prevent a BMSM in Msunduzi Local Municipality from adopting PrEP.

		What wo	ould you p	orevent	from usi	ng PrEF)							_
		High Cost	Bad Side Effects	Social Stigma	Taking a pill daily	Risk of STI transmission	Pressure from sexual partner	None	Other	Bad side-Effects + Taking a pill Daily +Risk of STI transmission	High cost + Bad Side-Effect + Social stigma and discrimination +	High Cost + Taking a pill daily + Social	Presente High Cost + Bad Side-effects- Social Stigma + د	Other Total
	18-23	. 11	6	2	6	2	3	8	0	0	1	1	0	40
		(27.5)	(15.0)	(5.0)	(15.0)	(5.0)	(7.5)	20.0	0.0	(0.0)	(2.5)	(2.5)	(0.0)	100
	24-29	13	15	3	6	0	0	8	2	1	0	0	1	49
		(26.5)	(30.6)	6.1%	(12.2)	(0.0)	(0.0)	16.3	4.1	(2.0)	(0.0)	(0.0)	2.0%	100
	30-35	10	4	1	5	0	3	3	1	0	0	0	0	27
		(37.0)	(14.8)	(3.7)	(18.5)	(0.0)	(11.1)	11.1	3.7	(0.0)	(0.0)	0.0%	(0.0)	100
	36-40	. 0	0	0	2	0	1	0	0	0	0	0	0	3
		. (0.0)	(0.0)	(0.0)	(66.7)	(0.0)	(33.3)	0.0%	0.0	(0.0)	(0.0)	0.0%	(0.0)	100
Age	>41	.1	0	0	0	0	0	0	0	0	0	0	0	1
		(100.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	0.0%	0.0	(0.0)	(0.0)	0.0%	(0.0)	100
Total		35	25	6	19	2	7	19	3	1	1	1	1	120
		(29.2)	(20.8)	(5.0)	(15.8)	(1.7)	(5.8)	15.8	2.5	(0.8)	(0.8)	0.8%	(0.8)	100.

Age * What would you prevent from using PrEP Cross-tabulation

 Table 16: Crosstabulation of Age by Barriers to PrEP Adoption

			Asymptotic	
			Significance	
	Value	df	(2-sided)	
Pearson Chi-Square	35.927ª	44	.802	
Likelihood Ratio	38.642	44	.700	
Linear-by-Linear Association	1.001	1	.317	
N of Valid Cases	120			

a. 50 cells (83.3%) have expected count less than 5. The minimum expected count is .01.

Table 17: Chi-Square Test of Age by Barriers to PrEP Adoption

5.5. Summary of quantitative results

The above quantitative analyses provided varied results that give insight into the attitudes, perceptions and the communicative practices of BMSM in the Msunduzi Local Municipality. Firstly, the results of this investigation show that there is a reported general awareness of PrEP amongst BMSM. This reported awareness of BMSM in Msunduzi Local Municipality does not support the previous research on American BMSM in lieu of a dearth of South African BMSM research into PrEP. Most studies that focused specifically on BMSM in the USA such as Brooks *et al.* (2015) and Eaton *et al.* (2015) found that awareness levels amongst BMSM in the USA were low as 36%. What is noteworthy though is the disconnect between the reported awareness and actual awareness. What has emerged in the findings is, although there is high awareness reported there was incongruent knowledge on the actual working of PrEP and its uses. This is suggestive of a lack of knowledge or understanding of the information available hence, the inconsistencies in knowledge. The idea of actual information availability is interrogated further in the interview data in Chapter 6. Although more insights can be elicited from the qualitative data, the current findings indicate that there is, therefore, a definite need for more PrEP education interventions targeted at BMSM that will address this incongruence in the information.

Stemming from, elevated awareness results from this study corroborate with earlier African studies e.g. Hugo *et al.* (2016) and Karuga *et al.* (2016), which revealed enthusiasm to use PrEP amongst the populations of Kenyan and South African MSM. Quantitative results indicate that BMSM in Msunduzi Local Municipality were willing to use PrEP with most responding and sighting the need to protect themselves against HIV infection. From the findings that the introduction of PrEP brings, new hoper for many BMSM to protect themselves, as the responses suggest the majority are concerned with HIV infection. Data pertaining to the perceived susceptibility of BMSM revealed that a majority perceived themselves to be at high risk of contracting HIV. When this concern is coupled with findings relating to the efficacy of current preventative methods available to them, associations can be drawn, and suggestions made about the preoccupation of BMSM with the protection against HIV. Results on the adequacy of currently available preventative methods revealed that many BMSM felt that the current methods were not enough. Therefore, if this is considered within the context of a high level of perceived susceptibility to HIV, the enthusiasm to PrEP could be understood as being indicative of a pre-occupation by BMSM in the Municipality Local Municipality with maintaining a seronegative HIV status.

The need to remain HIV negative was the main motivator for most of the questionnaire respondents. This foregrounded the previous discussion on the pre-occupation with HIV. Furthermore, results revealed that the misconception about the uses of PrEP manifests itself in other motivating factors as the results evidenced that the need to protect oneself from STIs featured prominently as another motivator for PrEP uptake with a small group highlighting the need to engage in protected sex as a motivator. Prominent barriers included high costs. This factor can be contextually understood, seeing that most of the respondents had a low SES, cost plays a prominent role in their decision making. These results provide an opportunity for further insights to be gleaned on how most BMSM who had a low SES, envisaged the distribution of PrEP considering their concerns about cost. Other factors which emerged as barriers include the perceived side-effects that would be because of taking PrEP and the impact that taking PrEP would I have on their daily lives, with the task of having to take a pill daily proving to be too much of a burden for MSM. These results support those of previous studies that were conducted with BMSM in the USA (Brooks *et al.*, 2015; Lelutiu-Weinberger and Golub, 2016).

Results for the bivariate analysis established that there were some relationships between certain sociodemographic characteristics and intention to adopt PrEP. The overarching deduction from these findings is that the intention to act cannot be accounted for independently but rather should be understood within the frames of the time and location within which this decision is made. Bivariate results revealed that personal income was related to PrEP adoption. When considered within context, the results illuminate other related results present in the research. As socio-demographic data evidenced, the study sample had a low SES with most respondents surviving on a disposable income of less than R1000 per month. Interestingly, these were most people who intended to take up PrEP. Therefore, barriers such as high cost are recognised within this context of disenfranchisement, the need for better preventative care and lack of income to achieve this. Other associations found in the bivariate analysis include a relationship between the occurrence of condomless sex and the intention to adopt PrEP. What these results revealed is that there was a relationship between perceived risk and the intention to adopt PrEP. This can be linked to the above-mentioned pre-occupation with preventative health which the introduction of PrEP addresses. Finally, conversations amongst friends were the most prominent form of interpersonal sexual health communication that took place between BMSM in the sample. Results revealed that friends were trusted more over health care workers (HCWs) and family members when it came to discussing intimate details e.g. previous sexual encounters and sexual health. This is because friends were believed to have more experience and were relied on to give good advice. The results revealed that conversations dealing with previous sexual encounters, preventative health care and HIV prevention took place frequently amongst BMSM. These conversations were positively positioned to influence and change the sexual health behaviours of those involved. PrEP awareness or information sharing have not been evident in the results suggesting that very little conversations may be happening about PrEP amongst BMSM. Although they do not explicitly evidence engagement on PrEP related matters, these results alluded to being in support of the assertion by Young *et al.* (2018) about the potential of using social networks to encourage PrEP engagement. By evidencing the potential for changing behaviour, the communication inherent in friendship dyads hold potential for effecting change in PrEP if enlisted.

Chapter Six

The choices of BMSM on HIV, its prevention, and how they communicate: A qualitative approach

6.1. Introduction

The communicative practices, attitudes and perceptions of Black Men Who Have Sex with Men (BMSM) in the Msunduzi Local Municipality are explored to best illuminate the feasibility of a PrEP implementation programme in the municipality. This chapter presents findings and offers an analysis of the data generated through in-depth interviews. These interviews were conducted with BMSM following the analysis of the responses to the questionnaires, which were presented in the previous chapter. A series of in-depth, semi-structured, interviews (ten) was conducted with a sample of participants who showed interest in being interviewed. These interviews were conducted to develop a comprehensive understanding of what informed the attitudes and perceptions of BMSM towards PrEP and to better comprehend their communicative practices. Each interview lasted about one hour and it was conducted in IsiZulu or English at various locations across Msunduzi Local Municipality.

The interviews were audio-recorded, transcribed the translated where necessary. The data were analysed using the Thematic Analysis progressive step model recommended by Braun and Clarke (2006). From this thematic analysis, eight themes emerged from the data and these are discussed in detail in this chapter. The data are interrogated in relation to existing literature and the necessary theoretical lenses. The themes which are the focus of this chapter include (1) Being MSM: An Act of Love or Sexual Desire; (2) HIV Awareness and Resonance of Risk; (3) HIV Risks – Battling "Promiscuity" and Alcohol Use; (4) PrEP Awareness and Enthusiasm in a Time of Disparate Information Availability; (5) PrEP, Efficacious in certain Situations More Than Others; (6) PrEP and Personal Interference – Concerns of Self-Efficacy; (7) Dyadic Communication between Friends Essential for Affirming and Experiencing Sexuality and (8) Dyadic Communication for Change Potential for Influencing Behaviours and Health.

6.2. Being MSM: An act of love or sexual desire

An exploration of the category BMSM is the point of departure. This was explored to establish how the BMSM in Msunduzi Local Municipality understood the category MSM and if they found resonance with this. To ensure a general understanding of the study subject, BMSM were asked about the definition of MSM and what being MSM meant to them. Attempting to assess the level of knowledge among those interviewed, the researcher did not give a unified definition of the term MSM (the definition to which this study subscribes is provided in Chapter one). Responses to this revealed a distinct conceptual difference in how BMSM understood and related to the category MSM. A variety of perspectives were expressed with the overarching synthesis being that being MSM was understood along the axis of sexuality and the sexual engagement and to a certain extent the sexual nature of MSM. Conversely, sex was also conceptualised along the axis of love, emotional connection and dating.

An initial common view amongst the interviewees was that being MSM represented enjoying sex and being physical in various sexual ways with other men. The aspect of sexuality was eminent in responses from these interviewees, with their conceptualisation of being MSM mainly concerned with the sexual act, consensual sexual engagement and pleasure linked to being with another man.

As one interviewee put it:

Okay basically being an MSM to me, means, uhm...enjoying sex, the way that I'm built, enjoying being uhm...enjoying being receptive, like any individual from any sexual orientation who engages in sex. That also basically means that for me my sexual play, it's a sexual play that I prefer and that I enjoy the most, uhm... (deep breath) and it's what I love. (Participant One, Gay Receptive Anal Intercourse Partner)

When asked about what being MSM meant to them, one interviewee said:

Eish... being an MSM means that I enjoy being with other guys and enjoy consensual relations with another guy. It does not take from my manhood or that I am in a committed relationship with my girlfriend, but I'm just into guys when the situation allows, I will have sex with another guy (Participant Four, Bisexual Insertive Anal Intercourse Partner) Although the above responses are positioned from different perspectives and are influenced by varying sexual identifications within the category of BMSM, what these responses evidence is the essentialist view of sexuality and sexual behaviour being crucially aligned to understanding MSM categorisation. This finding confirms the suggestion made about sexual behaviour being compositional of the conception of MSM identification. In their definition of MSM, UNAIDS (2009) advance that being MSM is a description of a form of sexual behaviour, whereas being gay is a chosen identity. Hence, the definition of MSM emphasises the population's sexual behaviours, the motivation for partaking in sex and excludes personal identity or identification within any sexual orientation. Therefore, it is evidenced in this study that there is a latent understanding and internalisation of the sexual behavioural nature of MSM categorisation as revealed by some of the interview participants.

Although there was a strong skew towards describing being MSM and coordinate behaviours according to sexual constructs as emphasised in comments in this section, a divergent, conflicting discourse emerged. The second prominent discourse that emerged when interviewees were asked to describe what being MSM meant to them was a description of the emotional and spiritual connection that defined these BMSM and their identification. This element elevated the emotional connection that most BMSM had with their "partners". Being MSM was described as grounded in being emotionally connected to another man. These findings suggest a divergent view of MSM identification that not only deviates away from the behavioural descriptive category but also considers the other various factors that influence the identification of non-normative sexual identifies which are just not grounded in same-sexual desire.

I think that personally for me I love other men uhm... maybe not as often as I could but I love other men and for me, it is a full relationship and what goes with loving someone else, yeah and not just a sexual or physical thing. Whereas I think MSM is to cater just for the physical and sexual element because not everyone is characterised as LGBTI (Participant Six, Gay, Receptive Anal Intercourse Partner)

The above view was supported by another interviewee who commented:

So, to answer your question, I think for me, it is part of my sexuality (gay) which is complemented by other factors like being emotionally and spiritually attracted to other men. (Participant Ten, Gay, Receptive Anal Intercourse Partner)

With another comment that highlights that MSM identification is not only grounded in sexual behaviour but that MSM identification can manifest itself and result in a relationship, the following was said;

What being MSM means to is that you are just a male who is attracted to and prefers to date other males and have sexual mating with other males (Participant Eight, Gay, Receptive Anal Intercourse Partner)

What the above highlights is the emotional capacity of being with another man, it moves away from contested reductionist views of the category MSM. This view is argued against by Young and Meyer (2005) who assert that the ubiquitous use of the category MSM deflects attention from social dimensions of sexuality that are critical for understanding sexual health and conceals elements of sexual behaviour that are imperative for public health research and interventions. This view thus considers what is referred to as the diversity, nuances and fluidity of same-sex desire, behaviours, identities and gendered expressions, particularly with reference to the fact that same-sex desire transcends the physical and is more in tune with emotional relationships. This discourse on MSM identification describes how men describe themselves and reflect on their relationships, both socially and sexually with each other (Prestage, 2011). Together these findings provide important insights into understanding the role of self-understanding and determination and how public health discourses and categories may hinder or promote the successful change in the trajectory to the fight against HIV and AIDS. Despite this understanding, as evidenced from these findings, there seemed to be a general failure by most participants to recognise and uniformly agree on what the term MSM entails or means in its various contexts or as per the UNAIDS (2009) definition. The UNAIDS (2009) definition latently speaks to the identification and the positionality of BMSM in identifying their sexual orientation.

What these initial findings indicate is the need for more nuanced reliance on self-determination if health prevention programmes are to be successful. With reference to PrEP and its implementation, these varied notions of identification present stumbling blocks on the road to reaching all those at-risk groups because of their social and sexual relationships. The conscious decision of this study to focus on a group of same-sex

desiring males that are not limited by the delimiting and "neutral" conception of MSM manifested itself through the findings. By electing to consider the disparities to health that are linked to race and to focus on the category of Black Men Who Have Sex with Men (BMSM), this study categorically avoided the tenets of the antagonistic argument that Prestage (2011) presents against the term MSM. Prestage (2011) contends that it [MSM] denies gay communities their visibility and significance and neglects to acknowledge their historic significance and thus limit their identity and social relations. The historic positioning of racial ethnicity in a country like South Africa plays a crucial role in self-determination and defining the identification of groups that were previously marginalised.

The above stance relates to major arguments presented in Chapter Three and Four when arguing for the decolonisation of research methodologies, one of the main projects in decolonial research is that of self-determination. Salazar (2009) asserts that;

by the right to self-determination, indigenous peoples must freely determine their political status and pursue economic, social, and cultural development through maintaining and strengthening their distinct political, legal, economic, social, and cultural institutions, while retaining their rights to participate fully, if they so choose, in the political, economic, social, and cultural life of the state (2009:506).

From a research perspective, Smith (2012) makes a compelling argument that historically, colonial research has been negatively directed at indigenous people, in this regard indigenous South Africans, such as black and Khoi-san descendants. Research under colonial rule was conducted using a Western gaze that saw indigenous people as par standard humans. As a result, Smith (2012) argues that the self-determination of this group of indigenous people is crucial if research is to be carried in such a way as to promote indigenous knowledge, which is a latent pursuit of this study. Because of this position and considering the variety of perspectives expressed above with regards to MSM identification interviewees were asked if they found resonance with the category and to further indicate a category that resonated with them most if MSM did not appeal to them.

Most BMSM who were interviewed disagreed about their position on the resonance of MSM. The participants felt frustration with the category as they believed that it did not consider the nuances that were relevant to same-sex behaviours, desires and relationships. This some of the ways in which BMSM not only spoke about

themselves, as indicated above but also how they spoke to each other. There were feelings of frustration with the category, as one interviewee put it:

For me being MSM at this stage and time is just another social barrier that alienates us from society, also it tends to deviate from the word gay while there are so many components associated with being gay within MSM. I really do feel like it's another umbrella term to shy away from the word gay (Participant Five, Gay, Receptive Anal Intercourse Partner)

In another interview, the participant commented that:

It is sort of like you are hiding away from society it has some sort of shame attached to it yeah, a man who has sex with men, why can't you be gay, or bisexual or transgender. So, I feel like it has some type of shame attached to it. (Participant Nine, Gay, Receptive Anal Intercourse Partner)

The comments above highlight the frustration amongst interviewees because this category hides and to a certain extent erases identification choice that are crucial to this group of individuals' self-determination process. By being compounded into one group, the self-determination and representation of the individuals is eliminated. This concern for the erasure of sexual identification corresponds with the argument that Kaplan *et al.* (2016) advance that one of the troubles that the category MSM has is that it excludes certain men, communities and identities. This dialogue on identification is also quite relevant from an Intersectional perspective. To best contextualise this, Young and Meyer (2005) draw attention to the fact that people vary in self-identity labels historically, and cross-culturally and that self-identities vary according to gender, culture, social class, ethnicity and cohort amongst other factors.

The above is crucial for better understanding the watershed work on identity, Intersectionality Theory, which forms one of the theoretical lenses for this study. Intersectionality Theory offers a richer ontology for understanding lived experiences because it highlights that individuals cannot only belong to one category. It treats the various social constructs that influence identification as relational and draws attention to the multiple positions that individuals can find themselves in, with reference to how these various constructs intersect to form their identity and define their lived experience. Therefore, reflecting on these divergent views by interviewees towards finding positionality with the category MSM, Intersectionality argues that a single

category cannot define a whole group of people and that identification is formed by several constructs. For this study, the constructs are; race, gender and sexual orientation. Therefore, the choice to focus on BMSM sought to allow for this group to own the racial and ethnic constructs that define them and through this process be able to better find a position with other aspects of their identity and diverge from delimiting them to just sexual behaviour.

Further to this and closely linked to the argument towards self-determination that is propagated by decolonial research scholars such as (Louis, 2007; Salazar, 2009; Smith, 2012) the interviews explored the self-determination of interviewees by allowing them to express their views and identify a category that resonated with them the most. Findings from this part of the interview revealed that most interviewees latently found concern with the category for various reasons and that each preferred reference to a common aspect of their sexual identification. This is closely linked to the argument by Louis (2007:132) that "indigenous people need to protect themselves from further misrepresentation, misinterpretation, fragmentation, mystification, commodification, and simplification of Indigenous knowledge". When asked how they preferred to be identified an interviewee commented:

What's frustrating is that they can all be so confusing, I recently just got used to the idea of accepting that I can refer to myself as bisexual. I have always been doing things with guys as long as I can remember and that didn't matter to me because I'm a man and had a girlfriend that I really liked so according to me I was straight). It's only recently when I attended a health workshop that I got to know about different identities beyond straight and gay. It's taken me a while but now I am comfortable with the fact that I am bisexual because I like and enjoy both genders. Eish... you see when you now want to add a new way of describing myself it becomes difficult, I'm bisexual that what works for me (Participant Four, Bisexual, Insertive Anal Intercourse Partner)

Whereas another commented:

To be gay or bisexual or transgender, no the term MSM does not resonate with me at all, because even on the LGBTI flag there is no MSM on it, it doesn't really form part of the whole rainbow community you know" (Participant Nine, Gay, Receptive Anal Intercourse Partner) As evidenced in the above, when given an opportunity to self-determine and define their identification according to their reflexivity, the participants elected to describe themselves within the categories of; homosexual, gay or bisexual. These findings correlate with those presented by Mantell *et al.* (2016) that there is an array of sexual minority community identities and that these do not neatly map into the public health categories that are invented to describe them. Furthermore, these findings describe the diverse nature of these homosexual identities and sexuality narratives of Black Men Who Have Sex with Men (BMSM), that in public health discourse are generally subsumed by MSM category. The implication of this categorisation is the risk of not understanding the various sexual behaviours and HIV risks of the various BMSM within the Msunduzi Local Municipality, particularly when it comes to those individuals who do not want to be bound by the category of MSM and how ignoring this self-determinative outlook of these at-risk individuals could have on the development of effective health promotion programmes such as the development of an implementation plan for PrEP in the Municipality.

What these findings also offer is an understanding of how participants in this category have been grouped within the parameters of BMSM for this study. For example, the findings reflect on self-identify and how within these self-identification categories, BMSM may understand their sexual behaviours and their HIV risks which have bearing on their susceptibility to HIV transmission and ultimately their decisions for preventative methods, in particular, PrEP.

6.3. HIV awareness and resonance of risk

Risk behaviour and factors of vulnerability that BMSM find themselves exposed to are widely reported across the continent and the globe (Lane *et al.*, 2008b; Baral *et al.*, 2009; Dahoma *et al.*, 2011; Jeffries *et al.*, 2013; Quinn, Voisin, Bouris, Jaffe, Kuhns, Eavou and Schneider, 2017). What is most noteworthy is that within the context of new biomedical preventative methods, knowledge about these behaviours as well as their influences

are not being leveraged to better understand their perceived effects on awareness of biomedical preventative methods. This is particularly relevant for at higher risk populations such as BMSM who are not only disproportionately affected by the HIV pandemic but are dually marginalised by an array of structural and social factors which increase their vulnerability. It is, therefore, no surprise that Eaton *et al.* (2015) proposes

that in order to implement PrEP effectively, we must better gauge community response to this prevention strategy.

Gauging community response becomes an unattainable objective in an environment where there is inadequate information on how risk factors for HIV transmission, such as partner overlapping, substance abuse and condomless anal intercourse amongst at higher-risk groups such as BMSM is related to awareness of and intention to use PrEP. Therefore, the interview process focused profoundly on the knowledge the sample of BMSM had on of HIV/AIDS, their relation to their risk behaviour, as well as their actual at-risk behaviours. This provided this study with a depth of knowledge to best contextualise their awareness, perceptions and attitudes towards taking up PrEP.

The ubiquitous nature of HIV and AIDS prevention campaigns presumes that as a result, there will be a vast awareness and knowledge about the infection, although it has been argued that MSM and BMSM in South Africa and Africa at large are underrepresented in these health campaigns. In their study on HIV and AIDS amongst MSM in sub-Saharan Africa, Smith *et al.* (2009) argue that in Africa, the predominant policy and programmatic response to HIV prevention interventions have mainly focused on the heterosexual transmissions and mother to child transmission. Focus on the two presumed dominant modes of HIV transmission leaves at high-risk groups like African MSM on the margins, which presumes a lack of awareness considering the continued rise in infections amongst this population. The findings from this study opposed this view in that most participants were able to describe and define what HIV was and were able to contextualise this to their individual situation and make assessments on their community at large. Common descriptions of what HIV was, transverse from very informed, and health education centred descriptions to the more extreme, emotionally based assessments. This indicates, differential understanding and internalisation of HIV and AIDS awareness and conception amongst BMSM and that these conceptions of HIV are influenced by varying experiences and knowledge.

I do understand a bit about HIV, it's to have a virus that attacks your immune system and if you don't take medications like ARVs then your immune system is going to fail and that's going to cause you to have infections like TB and that essentially, eventually kills you not the HIV, that's what I know. – (Participant Nine, Gay, Receptive Anal Intercourse Partner)

Other participants exhibited, an emotionally based awareness and consideration of what HIV is and reflected on their personal experiences and how these have shaped their awareness and consideration of HIV:

What does HIV mean to me, DEATH that's what it means, those three acronyms they just say death automatically, not sudden death or instant death they just say death – (Participant Three, Bisexual, Insertive Anal Intercourse Partner)

My perception of HIV is deeply influenced by the trauma of watching my father die from it. As a 17year-old boy, I made a promise to myself that I would never "catch" HIV. – (Participant Ten, Gay, Receptive Anal Intercourse Partner)

These varying descriptions offer insights into what the Health Belief Model asserts as *perceived susceptibility*, although the above do not address any issues of risk behaviours but rather address the perception of HIV and the conceptual risk that one may associate with the condition. Buldeo and Gilbert (2015) argue that the HBM casts light on the impact of the social and other factors that influence how people and groups may engage in health-promoting opportunities. This individual, contextual, understanding and internalisation of HIV by the above interviewees was based either on death experience (e.g. witnessing a close relative dying), illness experience or educated knowledge, indicate the social factors that have influenced how these BMSM understand HIV. What this ultimately illuminates are the manners of conceptualisation of HIV and how these affect an individual's perceived susceptibility to the illness and ultimately influence on predicting the possible health behaviours of individuals. So, from an HBM perspective, these varying descriptions of HIV awareness, provide the cues for understanding how BMSM may consider their susceptibility to contracting HIV based on either educational or historical experience.

Although saliently highlighted in the above section, the perceived risk of BMSM to HIV incidence emerged strongly in the interviews, with BMSM immediately associating their sexual identification with HIV susceptibility. This awareness directly corroborates with studies similar to this one, conducted by Rispel *et al.* (2011b), Simbayi *et al.* (2014) and University of California (2015) who all provide epidemiological evidence to support the view that MSM in the country are disproportionately affected by HIV and AIDS. Statistical

results further go to suggest that HIV prevalence amongst MSM is considerably higher than in their heterosexual male counterparts. Further to this, the risk epidemics of MSM are continentally positioned in the meta-analysis study conducted by Baral *et al.* (2007) that reveals that African MSM are nearly four times more likely to be HIV infected than the general population.

In general, therefore what this reveals is that there is a concerted awareness by BMSM towards their risk profiles, which may be because of education programmes or a lived experience awareness. It is therefore important to bear in mind the educational role that lived experience has on the developments of perceptions and attitudes and not to minimise its relevance and elevate only health education programmes.

The above offers important insights for understanding the role of peer health communication and the learnings that peer experiences can have on individual sexual health decisions which will be dealt with later in this chapter. Although this study does not make the presumption to provide epidemiological evidence to the effect of HIV risk amongst this group of BMSM, self-reported sexual risk behaviours and assessment of their risk towards contracting HIV play a crucial role in understanding how they make decisions on preventative methods. Therefore, an awareness of their risk and considerations of this link did not only provide a basis from which preventative behaviour may be predicted as per the health behaviour but offers insights for establishing if there is a relationship between the perceived risk of HIV transmission and actual sexual behaviour and risk factors. The main narrative that grounded the discussion of HIV and how it affected the interviewees was based firstly on an awareness of HIV and the perceived risk associated with being part of an at higher-risk group. Interviewees felt that as BMSM, they were at a higher risk of contracting HIV, based on an array of biological, social and structural factors. Their narration on being affected by HIV was immediately supposed in the risk factors that they experience by being BMSM. When asked how HIV affects the interviewees, the main views expressed in accordance with the narrative of being at most risk included:

It does affect me a lot because you think of high-risk population, they are gay and bisexual men those are the highest risk and there are many gays and bisexual people who are HIV positive and that is very concerning as a gay man in South Africa from KZN. The concern is further exacerbated by the high HIV prevalence in the province. They say KZN has the highest rate of HIV. Most people who are infected with HIV reside in KZN, which is why it is most concerning. (Participant Nine, Gay, Receptive Anal Intercourse Partner) While other more specific references to the linkage between HIV risk to varying factors, the biological impact of same-sex intercourse and the vulnerability of this became apparent:

Uhm…it affects me because me as the bottom [receptive anal partner] I'm the person at most risk of getting the disease and then uhm… (Participant Eight, Gay, Receptive Anal Intercourse Partner)

One participant attributed this risk to a lack of access to appropriate health care and the lack of concerted effort by the government to provided BMSM with the necessary preventative methods to protect themselves:

To me as an MSM, it puts me at high risk of getting opportunistic infections because we MSM are not catered for we don't have the necessary barrier methods that help us to protect ourselves from HIV and that is why you find that MSM or homosexual individuals have high rates of HIV infection. (Participant One, Gay, Receptive Anal Intercourse Partner)

The comments above provide important insights into understanding BMSM's awareness of their at-risk status and reveal an awareness of the factors that influence this at-risk categorisation. The above comments bring to the fore the biological and structural factors that make BMSM more vulnerable to HIV contraction. By establishing that as a receptive partner, Participant Nine, acknowledges the biological effect that unprotected receptive anal intercourse (URAI) has on him as a receptive partner in comparison to his counterpart who is an insertive partner. This correlates with Lane *et al.* (2011), which found that being gay-identified, and having URAI with numerous partners was a predictive indicator of HIV infection among the sample of BMSM. This highlights the biological risk that is associated with engaging in RAI and being a receptive partner. This result indicates an awareness on the part of the BMSM in this study to the risk of HIV infection not being unique to the locality of the Msunduzi Local Municipality and that BMSM in this municipality were vulnerable to biological factors which were further shaped by their sexual identification, i.e. identification as a receptive anal intercourse partner.

Furthermore, what the above comments highlight are the structural factors that influence the HIV risk profile of BMSM. This refers to the lack of availability of preventative methods needed by BMSM for the successful prevention of HIV transmission. The comments by Participant One above underscores the vulnerability that

BMSM experience because of not being catered for in national prevention programmes. The present comments seem to be consistent with findings from other research by Rispel and Metcalf (2009b) and Rispel *et al.* (2011a), which observed that current policies and programmes in South Africa were not inclusive of MSM and hence were unresponsive to their needs despite policy on MSM recurrently appearing in the National Strategic Plans over the years. This non-inclusion translates to limited public health sector programmes that are targeted at MSM that would cater to the accessibility of prevention methods that BMSM would need to amply protect themselves. As adequately argued by Rispel and Metcalf (2009b:141), "major national HIV prevention campaigns target the heterosexual population and do not mention homosexual HIV transmission, whereas targeted health services for bisexual and transgender people are even scarcer, leaving them particularly vulnerable to HIV infection".

The effects of this heightened awareness of risk vulnerability by BMSM results in a variety of outlooks, the majority being a pre-occupation with fear of what could go wrong in a given sexual encounter and how this would translate into HIV infection if the necessary precautions and preventative methods are not taken. The following comments are illustrative:

It makes me very cautious when I'm being intimate, I get very cautious sometimes my partner can sense that sometimes I am not into what I am doing because I get super cautious, you know at times I get concerned that it comes across like I'm showing that I don't trust him or something... (Participant Three, Bisexual, Insertive Anal Intercourse Partner)

So for me, the risk factor that penetrative sex has is actually the inhibiting factor uhm... because even with the usual barrier methods that we use that risk is still there so I guess that is how it affects me, is that you are always cautious of what you are doing and who it's with and so on and so forth I suppose everyone should be but It becomes more of a heightened thing if you are MSM or gay. (Participant Six, Gay, Receptive Anal Intercourse Partner)

From a Health Belief Model perspective, these comments can be understood to be the manifestation of what Rosenstock (1974b) argues to be *perceived threat*, which is the combination of *perceived susceptibility* and *perceived severity* of an HIV infection. These comments are evidence that BMSM in the area consider themselves to be at risk and that the result if this risk is severe, so they are constantly living life within a cloud

of fear, trying to negotiate their lives around the threat that forms a major part of their sexual identity and lived experience. The preoccupation with fear, cautiousness and elevated concern, with contraction of HIV, indicate an internalised concern about their safety. What the Health Belief Model postulates in this regard is that *perceived severity* cannot be established independently without consideration and acknowledgement of *perceived susceptibility*. Since severity may not be an important influence for an individual that does not perceive personal susceptibility because there is no initial acknowledgement of risk and the level of risk, it cannot exist autonomously. Therefore, the combination of both constructs allows for a nuanced understanding of the threat the BMSM feel. As a result, these thoughts of a threat and the preoccupation with fear because of this threat foregrounds an understanding of how this threat [combination of susceptibility and severity] influences the decision to take up PrEP as an additional preventative method.

Considering this manifestation of the threat of HIV infection that BMSM experience, the consensus view amongst participants is that they were doing all that they could to protect themselves from contracting HIV. These views are premised against the backdrop of the accessible measure that they could take currently and sentiments of satisfaction with these measures providing them with the security to believe that they were doing all that was possible to prevent HIV. Concerns begin to be raised regarding if they are finding it simple and easy to protect themselves against infection. Views in this area are varied with a focus for many being on their capabilities to protect themselves within the given environment. Some interviewees asserted that they were indeed finding it easy to protect themselves, owing to the availability of preventative methods, and the historic nature of the practices that they had implemented to prevention. While others argued against this, noting that in fact, they were not finding it easy to protect themselves, citing concerns about the availability of prevention methods, and struggling to negotiate safe sex because of social pressure from their partners. With a final group explaining that the type of partner they were engaging with sexually played a crucial role in the level of ease or difficulty that they were experiencing in when it came to protecting themselves against HIV infection. The below comments are illustrative of these varying views:

Yes, it is easy to remember and use because for me when I go anywhere, even now if you look at my little bag, there are things that I keep in it constantly, there is a condom and oil. It does not matter how drunk I am. If that is too much for you then we would rather leave everything and not have sex. (Participant Two, Gay, Receptive Anal Intercourse Partner)

While other participants from the opposing group of participants attributed the issue of the difficulty to protect oneself from HIV infection to the social pressures that they experience from their partners, which made it difficult for them to negotiate safe sex even though they were re in what is perceived to be common and monogamous relationship:

Yeah, although it isn't that easy, but communication is vitally important with your partner but at other times your partner will say NO! I don't want to use a condom because it kills the sensation and I want raw sex [condomless sex] and you are like okay...you want to have raw sex? Because you love the person you end up having to sacrifice and not using protection. (Participant Seven, Gay, Receptive Anal Intercourse Partner)

What's making it not easy, is that, for example, like recently I didn't want to have sex with my partner, and he was like, so you are doing it with some other people and all that stuff, so I was like, okay let me just do it. I'm not saying that I just said let me just risk it all and do it for him, but I was like okay let's just do it because I felt that we were both ready for it, even though I was abstaining at the time. (Participant Eight, Gay, Receptive Anal Intercourse)

Another group of participants attributed a varied power relation in protecting themselves based on the type of relationship each one had with the partner at the time. The narrative from these comments were based on the view that using protection was easy with a stable partner who you are in a relationship with in comparison to a one-night-stand partner. This was contested by the view that a one-night-stand occurrence gave the individual more power to protect themselves in comparison to a stable relationship which is prone to condom migration over time.

6.4. HIV risks – Battling "Promiscuity" and alcohol use

Although there is overt agreement over the behavioural and structural factors that influence the risk experienced by BMSM, these are not the only factors that heighten the vulnerability to infection. From the above it is evident that there is an array of biological (risk associated to anatomy), structural (risk associated to lack of preventative methods and policy consideration) and finally as highlighted by the above assessment, social factors (relationship pressures, power relations and gendered expressions) that increase the

vulnerability of BMSM to HIV infection. Though the consensus in the result of the risk, the risk perspective, the efforts to prevent infection and the assessment of difficulty and simplicity of protecting oneself, it all boils down to the implementation of preventative methods. Although there was a variety of perspectives on the varying methods used, by the interviewees, a common view amongst interviewees was that even with these methods that were available to them, there were inherent risky behaviours that impeded on them using these methods, which subtly links to the impediments to prevention methods. The overarching narrative of promiscuity and alcohol and substance use, including challenges of negotiating safe sex and sustaining safe sex practices emerged subtly across a range of responses. This theme came up in discussions around the effect on HIV and AIDS on the sexual expression of BMSM, the efficacy of preventative methods, the consistent use of preventative methods and how easy BMSM were finding it to protect themselves from infection. The ubiquitous nature of this overarching theme on risky behaviour provides insights for the risk profile of these BMSM and allows for an interrogation of the self-efficacy that they may have to adopt and adhere to a new preventative method that maybe be demanding like PrEP.

According to the Health Belief Model, self-efficacy is defined as an individual's confidence in their ability to act in a particular way and adopt a particular behaviour (Rosenstock *et al.*, 1988). Self-efficacy is the final construct of the model which was added to the model in the 1980's. Although it is the least explored construct in this study as highlighted in previous chapters, the findings indicate that it is saliently emerging from discussions that BMSM have about preventative methods. Before the focus is shifted to how these latent sexual behaviours pose concerns for self-efficacy, an exploration of their contextualisation as expressed by the interviewees is needed. In their accounts of the effects that HIV has on their sexual expression, promiscuity emerged as an underscoring factor with the comments below illustrating this:

Because we are promiscuous as MSM, we are very promiscuous, so... (deep breath) being promiscuous as we are, what happens now is that we must restrain ourselves from enjoying our lives in a way that we want to enjoy especially when it comes to sexual plays. Because every time you are with someone you are thinking, ey...HIV is there, it's out there. So yeah, I won't lie sex is very nice but then in this day and age you can't trust anyone. (Participant One, Gay, Receptive Anal Partner)

Another interviewee expressed the notion of promiscuity from a societal perspective highlighting that it is difficult to avoid the effects of promiscuity within the community, placing BMSM at risk:

Sometimes in our gay community, you will find that the community it is very small, and you will find that a person is dating particular person, while at the same time they are dating another person and that is nothing major. (Participant Seven, Gay, Receptive Anal Partner)

Although named by interviewees, in this study from their subjectivity as promiscuity, this finding is not unique to the BMSM community in the Msunduzi Local Municipality. Findings in previous studies on risk behaviors and HIV prevalence among MSM in South Africa (Lane *et al.*, 2011; Rispel *et al.*, 2011b; Arnold *et al.*, 2013) have highlighted the notion of concurrency (having overlapped sexual partners) as a risk factor that heightens risk of HIV transmission in South Africa amongst MSM. This is demonstrated by Arnold *et al.* (2013) who revealed in their study of Sowetan MSM that there was a higher frequency of sexual partner overlap occurrence in Soweto, over three to four-month period, signalling to a manifestation of what interviewees in this study refer to as promiscuity. To better contextualise this in relation to HIV risk probability, an earlier study of MSM in Soweto conducted by Lane *et al.* (2011) asserted that the increased odd of infection was related to having many partners, about six to nine sexual partners in the period of 6 months. This assertion also draws attention to not only the frequency of partners in a short space of time but more importantly to the risks associated with this behaviour. Hence, from this vantage point, the concerns of promiscuity as a risk factor that are emergent in this study are applicable to other studies in similar contexts within South Africa.

Reflecting on the role of alcohol and the effects that it has as an inducer of risky behaviours, the views that emerged focused on alcohol-induced disinhibition particularly focusing on the role that alcohol played in making it difficult to consistently use the necessary preventative methods. A recurrent theme in the interviews was a sense that although they were aware of the preventative methods, they needed to use, the concurrent use of alcohol inhibited their use of these methods and influenced their capability to seek multiple and random sexual partners. These discussion points all influence the risk behaviours they identified and their risk towards HIV transmission. This theme, like that of promiscuity, came up for example in discussions around the effect of HIV and AIDS on the sexual expression of BMSM, the efficacy of preventative methods, the consistent use of preventative methods and how easy BMSM were finding it to protect themselves from infection. The

consensus amongst interviewees was that alcohol posed as an impediment to the development and their progress in protecting themselves effectively. One interviewee said:

Because we know, I know that nje you always window shopping and whenever we are drunk, we just want to do our thing. (Participant One, Gay, Receptive Anal Intercourse Partner)

Another interviewee explicitly linked the use of alcohol to impaired decision making, about the use of PrEP or an alternative preventative method. The interviewee commented that:

I just think that for another person it could be an impaired decision due to substance [alcohol] or simply put drug abuse. (Participant Five, Gay, Receptive Anal Intercourse Partner)

The final interviewee drew on the effects that alcohol has even within a relationship setting, devoid of predominately held notions of it being an issue in casual encounters:

Sometimes you will find that when I and my partner go out drinking together when we get back, we don't bother with protection, we just get back home, jump into bed and the next thing we have had condomless sex. (Participant Seven, Gay, Receptive Anal Intercourse Partner)

The above-varied comments on the concern with alcohol-induced disinhibition reflect the various perspectives from which this concern can be looked at and the varying contexts within which the phenomenon occurs. Taken together, these comments suggest that there is an association between alcohol consumption and elevated risky behaviours, and subtly alludes to concerns of self-efficacy. The present findings seem to be consistent with previous research which found that in township settings across the country, like the ones where the bulk of participants in this study were residing, there was a relationship between increased alcohol consumption and risky sexual behaviours such as unprotected anal intercourse (UAI). In their early study focusing on the relationship between alcohol consumption and risky sexual behaviour in low-income townships in the Gauteng province, Lane *et al.* (2008b) found that, alcohol was the most commonly consumed substance, with later studies (Lane *et al.*, 2011) developing more specific descriptive compositions of this substance use. With this established, what was emergent amongst these studies was that there was a close

correlation between regularly drinking alcohol and the risk of engaging in UAI, hence significantly increasing the risk profile of these men (Lane *et al.*, 2008b; Lane *et al.*, 2011; Rispel *et al.*, 2011b).

The above correlates to the concerns raised by BMSM in this sample about alcohol use and how being under the influence affects their decision-making capabilities. This reference to this impaired decision-making capability, sub-latently addresses issues of self-efficacy. This is one of the less-researched constructs of the HBM which refers to the individual's confidence in their ability to act in a way and adopt a behaviour (Rosenstock, 1974b). The model asserts that this will influence an individual's decision to take behaviour. If the individual has a high perceived self- efficacy, they will be prone to take necessary action or change a behaviour. Through the assertions of the BMSM in the current sample, it is emergent through the concerns about alcohol playing a role in affecting their decisions to consistently use condoms during sex. These comments subtly refer to a lack of self-confidence to maintain their chosen safe-sex behaviour considering their alcohol consumption. These findings raise questions with regards to PrEP and how self-efficient these BMSM will be if they start to use PrEP. The responses to the various questions are discussed in the following section.

6.5. PrEP awareness and enthusiasm in a time of disparate information availability

The first objective of this study was to establish the generalisable awareness of PrEP amongst BMSM in the Msunduzi Local Municipality, which involves ascertaining the knowledge or a lack of knowledge among BMSM regarding PrEP, to foreground their attitudes and perceptions. Therefore, this formed the point of departure during the interviews on BMSM and PrEP. There was a sense of competent knowledge about PrEP amongst the interviewees. These descriptions, considered crucial characteristics of the medication, signifying that these BMSM had technical knowledge and an engaged awareness of PrEP. The common view amongst interviewees was that PrEP was medication or alternatively referred to as a preventative drug that was a combination of ARVs that was used by HIV negative individuals to protect against the transmission of HIV. The above highlights a competent awareness of the intricacies and the composition (drug make up) of PrEP including, its purpose (protection against HIV infection). These descriptions evolved with each interview and expanded to a more comprehensive description that included more nuanced personal understandings of PrEP with some interviewees referring to it as a "little blue pill" (Participant Six, Gay, Receptive Anal Intercourse Partner; Participant Seven, Gay, Receptive Anal Intercourse Partner). This

indicates a deeper more personal and first-hand knowledge of not only the technical aspects but also what it looks like. What is alarming though is that the findings suggest that there was generalisable knowledge of PrEP. However, participants' descriptions of what PrEP was, did not self-report any subtle instructions on how it is used or the regime to be taken. This can be argued to be indicative of a lack of full awareness of PrEP including its uses. When describing their knowledge of PrEP, interviewees asserting their knowledge of PrEP said:

There is a big technical term that is...Pre-Exposure Prophylaxis, but what it really is, is a preventative ARV really, you take ARVs to prevent the chances of you contracting HIV from another human being, really that is what the long and short of it is. Its ARVs same as the ones you take once you are HIV positive, but you just take this as a preventative dose yeah before engaging in sexual intercourse. (Participant Six, Gay, Receptive Anal Intercourse Partner)

PrEP I think it's those tiny blue pills that are used by someone who is not infected with HIV who is HIV negative that they use to protect themselves from HIV infection that is my knowledge of PrEP. (Participant Seven, Gay, Receptive Anal Intercourse Partner)

Whilst the above quotes are indicative of most interviewees and their understanding of PrEP, there was a minority whose responses, and who admitted to being confused about the differences between PrEP and Post-Exposure Prophylaxis (PEP) this speaks to already identified concerns of incomplete knowledge as revealed in the questionnaires. Talking about this issue an interviewee said:

A friend of mine is on PrEP. I know that it reduces your chances of getting HIV. I know that it doesn't reduce your chances of getting other STI's such as chlamydia etc. I am still confused if it is the same drug that one can take if you feel that you have been exposed to HIV like in cases of condoms breaking etc. (Participant Nine, Gay, Receptive Anal Intercourse Partner)

Another participant confused the different methods by commenting that:

The thing that I know about PrEP is that I don't know maybe I'm right maybe I'm wrong uhm...I can say that. Is it true that you have to PrEP first before you go to have sex and then you do sex and that

you can go for PrEP again? My understanding is that if you have had condomless sex you can go to PrEP in 72 hours I think and then you can be on PrEP... that's what I can say from now. (Participant Nine, Gay, Receptive Anal Intercourse Partner)

The above two comments illuminate the information deficit that exists, specifically regarding information that competently addresses the differences between PrEP and PEP. Although the above BMSM exhibited an awareness about the intention of PrEP, the complexities of differentiating it from the different PEP existed. At a subtle level, this confusion among participant's highlights issues of lack of competent awareness of this prevention method amongst BMSM. These findings support an assortment of American studies (Brooks *et al.*, 2015; Eaton *et al.*, 2015; Eaton *et al.*, 2017) suggesting that PrEP awareness may not be reaching the at-risk population that need it. Together, these studies outline that there is limited awareness of PrEP use across BMSM in various states. This view is further supported by Philbin *et al.* (2016) reporting a partial understanding of PrEP's value, possible side-effects, and the regime for effective use.

Interviewees unanimously agreed that there was a dearth of information that was leading to a confusion of PrEP's use and purposes.

No, there is not enough information because what I am finding is that in most of the campaigns that are available, the only thing these talk about is HIV and how people must get tested and if a person then happens to be HIV positive, the narrative is that they must go to the clinic and get their ARV, s. There is no information out there on PrEP at all. There isn't any knowledge. (Participant Seven, Gay, Receptive Anal Intercourse Partner)

I don't think there is enough information because most people do not know about PrEP, that you can prevent HIV and that you can prevent HIV using PrEP. (Participant Seven, Gay, Receptive Anal Intercourse Partner)

Another interviewee commented:

There not enough information about it in the communities, within the LGBTI community, within the heterosexual community, every community in South Africa as a whole. I think the health system

[department] needs to give out more information on Pre-Exposure Prophylaxis because most people don't even know what this pill does and don't even know what it is for." You come to people and be like hey you guys I'm on PrEP and they'll be like what's that? You see, and they don't even know how to get it. (Participant Seven, Gay, Receptive Anal Intercourse Partner)

6.6. PrEP, efficacious in certain situations more than others

Although there was overall enthusiasm about PrEP's availability, which is closely linked to responses in the questionnaires, most interviewees distanced themselves from using PrEP in everyday situations and opted to focus on its use in certain situations in their social lives. They highlighted the applicability of PrEP use only to particular situations of their lives and did not see efficacy with daily use unless negated by social situations. The main social situation was being in a relationship, and or having an overly active sexual life.

When asked if they would be willing to use PrEP, one interviewee said:

If I felt there was a need, I suppose yes currently I don't feel like there is a need because I don't have enough sexual intercourse personally...Motivators would be I have a banging body and a pretty active sex life for me to take PrEP and I'm exercising and all that jazz. if I'm single and nothing exciting is happening definitely not, if I'm in a committed relationship or the person is sufficiently committed to me mmmh probably not but also if we decide to, of which I doubt I would ever do unless we decide to dispense with condom usage and just go hey well we both going to be on PrEP to try and to keep ourselves safe from that. (Participant Six, Gay, Receptive Anal Intercourse Partner)

Others elevated its efficacious of use in a relationship setting:

I would be willing to take it if that is my soul partner, if that is my soul partner, I am willing to take it, if I am with the final one and there will be no one else yeah, I would be willing to take it (Participant Three, Bisexual, Insertive Anal Intercourse Partner) The above was supported by another interviewee who said;

If I am in a committed relationship with someone, that would be the main factor and if I were in a relationship with someone who is HIV positive and I am in a committed relationship, then I would. Because in a committed relationship you are kind weening yourself off condoms, you start using them and then you slowly stop using condoms, yeah that's why. (Participant Eight, Gay, Receptive Anal Intercourse Partner)

Participant eight above had earlier in the interview expressed uncertainty about taking PrEP and the possible issues they have with the idea of taking PrEP daily, under normal circumstances but proceeded to express a need for the use of PrEP within a relationship over concerns of condom migration. The above views highlighted the fluidity in how BMSM conceptualised their need for PrEP with the majority explicating that because of certain compounding issues, the use of PrEP cannot be considered rigid as the protection PrEP offers have no utility in certain life specific situations.

6.7. PrEP and personal interference - concerns of self-efficacy

Although the overall enthusiasm was identified in both the questionnaire data and in earlier comments in this chapter, closer examination revealed that this enthusiasm was met with an underlying concern about the implied effects that PrEP will have on the daily lives of BMSM. This was compounded especially by the need to take a pill daily for its efficacious utility as well as uncertainty about dosage and maintaining the regime. This concern highlights the HBM construct of self-efficacy which is defined as an individual's confidence in their ability to act in a particular way and adopt a particular behaviour (Rosenstock *et al.*, 1988). Self-efficacy in this context highlights the uncertainty that BMSM have about taking a pill a day for the efficacious protection of PrEP.

Some interviewees put it as follows:

The continuous basis is quiet something because it's taking medication that you don't necessarily need for the rest of your life and personally, I struggle to take vitamins every day. Hence, to then embark on this seems to be more extreme. (Participant Six, Gay, Receptive Anal Intercourse Partner)

That is the most dreadful part about it, having to take a pill every day. Not forgetting, and if you forget, what are the repercussions for that do you start a new regiment, or do you start new medication. Do you need to go back to the clinic or what, those questions for me not clear about PrEP? (Participant Nine, Gay, Receptive Anal Intercourse Partner)

One interviewee boldly stated that:

No! I would not be willing to take it daily...that will be too much for me. No! I would not be willing and able to take the pill daily. I would rather continue using condoms than having to take a pill daily. (Participant Two, Gay, Receptive Anal Intercourse Partner)

The responses above are indicative of concern by the participants about the impact that taking a pill daily would have on their lives, with some expressing concern at being able to manage the continuous use of the pill daily. From an HBM perspective, this indicates a lack of self-efficacy which the model suggests is a predictive factor for not adopting a particular health behaviour or action. The findings of the current study are consistent with those of (Lelutiu-Weinberger and Golub, 2016; Atujuna, Newman, Wallace, Eluhu, Rubincam, Brown & Bekker, 2018) who suggested that taking a pill daily was a major concern for the adoption of PrEP amongst MSM.

The concerns about adhering to this medication as revealed by interviewees were based on the notion that PrEP use equated to ARV use for an HIV seropositive status and that there were no differences in these two processes. Interviewees expressed concern about the need to take medication for an illness that they don't have, with the concept of PrEP use being subtly referred to as unrealistic.

Talking about this issue, an interviewee said:

Yeah like I can't move past the issues of adherence, I don't know it's just what I think. I think it is the mentality of taking medication every day as if you are you sick or are you preventing to be sick? I don't know it's very complicated. You know you taking medication, but you are not sick you preventing to be sick, but it is like really, you know. In a way, I'm like come on, just use condoms or abstain. (Participants Eight, Gay, Receptive Anal Intercourse Partner)

So, you start living like you positive before you are positive. So, I'm like what's the point of taking this thing if I'm going to live like I'm positive before I'm positive because if I am positive and take ARVs it's pretty much the same result. I change my lifestyle, I do this I do that and sufficient adherence and my CD4 count is low enough then its non-transmittable is there a real difference between the two? (Participant Six, Gay, Receptive Anal Intercourse Partner)

I am happy with the condom and honestly, rightly or wrongly, taking ARVs because I have HIV makes more sense to me than taking Truvada to reduce my chances. (Participant Six, Gay, Receptive Anal Intercourse Partner).

These findings are consistent with those present by Brooks *et al.* (2015), about the dissonance BMSM in Los Angeles felt about having to fully use PrEP in the same way they would use ARVs. They were concerned about having to take prescription medication for an illness that they did not have. The concern for them was that it was not feasible, and they expressed as also aptly expressed by the interviewees in this study that it made more sense taking lifelong management medication because you are managing the HIV than having to take the medication in the same way to prevent transmission. This was also supported by the study by Philbin *et al.* (2016:284) which asserted that BMSM in New York City "were adamant that healthy people should not put drugs in their bodies, especially if they already struggled with adherence to medications for existing conditions (e.g., diabetes or asthma)." This exhibits that the concern of taking medication that is not necessarily crucial for your well-being is a concern by BMSM in various parts of the globe.

6.8. Dyadic communication between friend's essential for affirming and experiencing sexuality

When asked about their communicative practices with regards to their sexuality and sexual health, most interviewees indicated that conversations with their friends were crucial. They expressed that these conversations were important for them to express themselves and their sexuality. These conversations took on many trajectories and were informed by trust and reciprocity. The overarching ideal though was the free expression of their sexuality.

When asked about the necessity of these conversations, one interviewee said:

It is important to share notes. It enhances my experience of my sexuality. I feel comfortable knowing that I am not doing things on my own and that we are. (Participant Ten, Gay, Receptive Anal Intercourse Partner)

Ways in which these discussions expressed and affirmed the sexuality of the participants emerged when interviewees were asked about the nature and topics discussed. The first thing mentioned by most interviewees was the conversations about their sexual experiences and encounters. This finding is consistent with those of McDavitt and Mutchler (2014), although they asserted that conversations with friends are a crucial source of information about sexuality for young gay men. Relations can be drawn with young South African black men of differing sexual identification and how they express and affirm their sexuality. The sharing of sexual conversations by these men affirms their sexuality and gives them the freedom to talk openly about their sexuality.

One interviewee commented when asked about the topics discussed:

I would start the conversation by say... "my friend, when we started, we did this... and that" secondly would be very intimate details such as, how does he start penetration, is it big, or then there are situations where you are in a relationship with someone and after the two of you have sex, [him penetrating you] he would turn around and ask you to top him, these are the shocking revelations that we would then discuss. (Participant Two, Gay, Receptive Anal Intercourse Partner)

Another commented:

Maybe I meet someone at the groove over the weekend and went home with them and I felt like I don't remember what happened between me and the guy. I think I might be infected with an STI or HIV and they can be able to help to tell me that yeah go to this department you know... maybe I feel that I'm pregnant (giggles), such things...and probably when engaging in sexual activities the tips we give each other. (Participant One, Gay, Receptive Anal Intercourse Partner)

In another interview, the interviewee expressed the need, not to go into too much detail:

Like how was it, was it good sex, bad sex, was it medium, are they a good kisser or a bad kisser those types of things not too much details of the whole scenario, no it's not like we go into hectic details of the scenario, it's very surface, it was good, it was bad, or I would do it again, I wouldn't do it again those type of conversations. (Participant Nine, Gay, Receptive Anal Intercourse Partner)

Therefore, from the above, the emancipatory nature of these conversations is evident. Mutchler and McDavitt (2011) make the argument that communication about sexual health topics with friends are particularly important for young gay men because many of them cannot safely discuss sexuality without being stigmatised for being gay. This would be particularly relevant for young straight-identified men who form an integral part of this study's sample. These men would not be able to discuss their same-sex desires with other heterosexual men who are not same-sex desiring without being ostracised or discriminated against. This statement highlights how there is a need for these kinds of conversations and how these conversations influence self-identity and awareness of one's sexuality.

6.9. Dyadic communication for change - Towards positively influencing health behaviour

In their most recent article from their series of articles that contend with the issue of dyadic communication between friends, Mutchler *et al.* (2015:499) propose that "given that emerging adults are often highly influenced by peer norms, the involvement of friends in prevention interventions could facilitate the adoption of new norms and behaviour regarding innovative biomedical advances such as PrEP and PEP". It is based on this belief that this study attempted to understand if dyadic communication amongst friends would have influenced the perceptions and attitudes of BMSM in Msunduzi Local Municipality towards PrEP. Findings revealed that there were low levels of engagement about PrEP amongst friends. This can be accounted for by the asserted lack of information available to BMSM that inhibits conversations of this nature. However, in instances where there were engagements, there were positive correlations reported by the interview participants.

Firstly, what emerged was that BMSM engaged their friends on an array of sexual health topics, holding each other accountable for practising safer sex. Participants indicated that HIV and health promotion formed an integral part of these conversations.

When asked if the conversations they had with friends included HIV preventative advice and sexual health matters one interviewee commented:

Of course, they do. These come in the form of discussing if there was any protection during these encounters and establishing what are the best ways to ensure that I do not run the risk of infection in the future. (Participant Ten, Gay, Receptive Anal Intercourse Partner)

The other interviewee said:

Yes, we have discussed condoms, other barrier methods and PrEP on various occasions. If abstinence is a form of HIV prevention, then I discussed that a lot when I took a long break from penetrative and oral sex. (Participant Six, Gay, Receptive Anal Intercourse Partner)

The main conclusion based on these comments was that these conversations on sexual health and preventative methods were salient amongst BMSM and they played a role in changing the sexual behaviours of BMSM in Msunduzi Local Municipality or considering changing behaviour.

In instances particularly where these conversations involved PrEP, either through a friend being on PrEP, sharing information or a being an HCW, this is what some interviewees had to say about the results of conversations about PrEP with friends:

I guess the fact that I know some information about PrEP and have decided against going on it means that I have decided about personal health. One of those situations where you can take the horse to the river but certainly can't force it to drink the water (Participant Ten, Gay, Receptive Anal Intercourse Partner)

Yes, it really did open my mind to the fact that if I really am interested in having condomless sex then I can use PrEP, but my concern was how will I be able to access it? Who will I approach looking for it then I did not continue googling where I can find it, I just had the idea in my head. (Participant Seven, Gay, Receptive Anal Intercourse Partner)

One clear way is that I am seriously considering starting a PrEP regimen within the next month. On a general note, I have also given more thought to safer sex. (Participant Six, Gay, Receptive Anal Intercourse Partner)

The above underscores, the culminative role that dyadic communication amongst peers can play in shaping perceptions and influencing a change in sexual behaviours. Instances of dyadic communication on PrEP reported by the interviewees indicated that these instances influenced an individual's decision-making processes and persuaded their intention to adopt or not adopt PrEP. Assumptions that urge for a totalising outlook on sexual health communication to influence the engagement with a particular health behaviour here are flawed and strips an individual of their agency. Therefore, the affirmations by interviewees in this study support research by Mutchler and McDavitt (2011), who argue that individuals and their friends reinforce and negotiate held sexual health ideals on an interpersonal level through conversations with their closest friends. This is exhibited by the reported establishment and change of perceptions on PrEP based on dyadic communication. Finally, dyadic communication holds potential for disseminating information and influencing individuals held sexual norms.

6.10. Surmising the overall findings

The above quantitative and qualitative analyses revealed several findings that give insight into the attitudes, perceptions and the communicative practices of BMSM in the Msunduzi Local Municipality. Firstly, the results of this investigation show that there is a reported general awareness amongst BMSM. This reported awareness of BMSM in Msunduzi Local Municipality does not support the previous research. Most studies that focused specifically on BMSM in the USA such as Brooks *et al.* (2015) and Eaton *et al.* (2015) which

found that awareness levels amongst BMSM in the USA were as low as 36%. What is noteworthy though is the disconnect that exists between the reported awareness and actual awareness. What emerged in the findings is, although there was high awareness reported, there was incongruent knowledge on the actual workings of PrEP and its uses. This is suggestive of a lack of knowledge or understanding of the information available hence, the inconsistencies in knowledge. What was emergent in the interview data was that BMSM were cognisant of a lack of information around and asserted the need for information. Furthermore, this lack of information manifested itself in a lack of awareness and confusions by participants about the difference between PrEP and PEP. The findings indicate that there is, therefore, a need for more PrEP education interventions targeted at MSM, that will address the incongruence in the information.

Stemming from elevated awareness, findings from this study corroborate with earlier African studies, Hugo *et al.* (2016) and Karuga *et al.* (2016), which revealed enthusiasm to use PrEP amongst the populations of Kenyan and South African MSM. Quantitative results indicated that BMSM in Msunduzi Local Municipality were willing to use PrEP, with the majority sighting the need to protect themselves against HIV infection. From the findings that the introduction of PrEP brings new hope for many BMSM to protect themselves, as the responses suggest, the majority were concerned with HIV infection. Data pertaining to the perceived susceptibility of BMSM revealed that a majority perceived themselves to be at high risk of contracting HIV. When this concern is coupled with findings relating to the efficacy of current preventative methods available to them, an association can be drawn, and suggestions made about the pre-occupation of MSM with the protection against HIV. Results on the adequacy of the currently available preventative method revealed that many BMSM felt that the current methods were not enough. Therefore, if this is considered within the context of a high level of perceived susceptibility to HIV, the enthusiasm with the use of PrEP could be understood as being indicative of a pre-occupation by BMSM within the municipality to maintain a seronegative HIV status.

The need to remain HIV negative was the main motivator for most of the questionnaire respondents, and this foregrounds the previous discussion on the pre-occupation with HIV. Furthermore, findings revealed that the misconception about the uses of PrEP manifests itself in other motivating factors as the results evidenced

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that the need to protect oneself from STIs featured prominently as another motivator for PrEP uptake with a small group highlighting the need to engage in condomless sex as a motivator.

Prominent barriers included high cost, and this factor can be contextually understood seeing that most respondents had a low SES, hence costing plays a prominent role in their decision making. These findings provide an opportunity for further insights to be gleaned on how BMSM, the bulk of which have a low SES, envisage the distribution of PrEP that considers their concerns about cost. Other factors which emerged as barriers include the perceived side-effects that would be because of taking PrEP as well as the impact that taking PrEP will have on their daily lives, with the task of having to take a pill daily proving to be too much of a burden for MSM. These findings support those of previous studies that were conducted with BMSM in the USA (Brooks *et al.*, 2015; Lelutiu-Weinberger & Golub, 2016).

An overarching concern that became apparent for BMSM I relates to self-efficacy and was linked to the use of PrEP daily, although, questionnaire results presented an assortment of barriers to adoption this evolved in the interview data collected. Interview data shifted the trajectory of the gusto towards PrEP adoption referred to earlier and BMSM expressed their concern with the effects that daily PrEP use will have on their daily lives. The main concerns were the regime and concerns about maintaining the regime. These were illuminated in adherence concerns and boiled down to concerns about taking a pill daily. Finally, there were concerns about the feasibility of having to take medication for an illness that you do not have. Participants revealed that they would rather take ARVs for managing an HIV seropositive status than to take medication to prevent a perceived medical condition. They felt that adherence and the required commitment would be forthcoming than in trying to prevent illness they may not have currently.

Although there was enthusiasm triggered by sheer knowledge of the availability of PrEP and intended adoption of PrEP, there was a consensus amongst BMSM that despite PrEP being such a promising innovation, it did not fit a one size fits all approach. Participants were cognisant of its utility in certain situations and but also understood that not all situations were apparent, hence this belief is closely linked to certain concerns (barriers) that BMSM had identified. Therefore, PrEP and its use became a particular decision process that would be based on the particular situation. Its use when in a relationship was identified for its

mitigating opportunities in the face of condom migration that many participants described as characteristic of stable relationships. The overarching intention to protect against HIV also linked to the intent to use PrEP in the backdrop of an eventful and busy sexual life, highlighting its inefficiency in an uneventful sexual life.

Finally, conversations among friends were the most prominent form of inter-personal sexual health communication in the sample. Findings revealed that friends were trusted more than health care workers (HCWs) and family members when it came to the intimate details of previous sexual encounters and sexual health. This is because friends were more trustworthy, were believed to have more experience and were trusted for giving good advice. The results indicated that conversations dealing with the previous sexual encounter, preventative health care and HIV prevention took place frequently amongst BMSM. These conversations were positively positioned to influence the changing sexual health behaviours of MSM. PrEP awareness or information sharing have not been evident in the results suggest that very little conversations may happen amongst BMSM about PrEP. Although they do not explicitly evidence engagement on PrEP related matters these, results suggest being in support of the assertion by Young *et al.* (2018) on the potential use of social networks to encourage PrEP engagement. By evidencing the potential for changing behaviour, the communication inherent in friendship dyads holds potential for effecting change if PrEP is enlisted.

Dyadic communication between friends was an important way that BMSM expressed, affirmed and experienced their sexuality and hence these conversations had saliency amongst this population. This type of communication also revealed that it had a positive influence on the changing of sexual behaviours and developing sexual norms. Most prevalent to this study is the effect of dyadic communication on the development of perceptions and attitudes towards PrEP. The finding revealed that dyadic communication amongst friends influenced the attitudes and perceptions of BMSM in Msunduzi Local Municipality towards PrEP. Although there was a moderate frequency of these conversations, which suggested to be based on the lack of communication, but conversations about PrEP yielded a developed position amongst the participants about the adoption of PrEP.

Chapter Seven

Lessons on voicing BMSM in the Msunduzi Local Municipality – Hope for PrEP in the age of HIV/AIDS

7.1. Introduction

The purpose of this study was to explore the communicative practices, attitudes, and perceptions of BMSM in the Msunduzi Local Municipality towards PrEP. Using a mixed-methods approach, the data collection methods comprised of a questionnaire and semi-structured in-depth interviews. For the quantitative phase, 120 respondents of all races were recruited using respondent-driven sampling and convenience sampling to complete the survey. The researcher excluded 11 respondents from the sample for a non-black identification. Data from the questionnaire was statistically analysed through IBM Statistical Package for Social Sciences (SPSS) using sequential univariate and bivariate analysis. This analysis informed the content and focus of the subsequent 10 qualitative interviews conducted in either isiZulu or English. These were audio-recorded, transcribed and translated where necessary. The qualitative data were analysed using Thematic Analysis. This chapter provides an overview of the key study findings, reflects on the population and makes recommendations for an implementation plan to increase knowledge, acceptability and accessibility of PrEP among BMSM in the Msunduzi Local Municipality.

7.2. Awareness of PrEP and positive adoption intention

The key findings of this study revealed that there was a generalisable awareness about PrEP amongst BMSM. Data collected from the questionnaires revealed that even though respondents self-reported awareness of PrEP, there was a lack of competent knowledge on its purpose and its uses. This confusion was revealed through the interview data to be based on a contextual confusion between PrEP and PEP. This confusion is quite alarming because PEP has been widely available and accessible for several years now but key populations that should use this method are not aware of its use and end up confusing it with newer technologies. This is indicative of there not being enough information being disseminated about PrEP as well and PEP amongst BMSM. The problem of information accessibility and education confirms assertions made earlier in this dissertation about the exclusion of key populations from national health promotion programs

and campaigns. This exclusion and erasure has manifest itself in these knowledge discrepancies that exist amongst BMSM.

Despite BMSM knowing about the existence of PrEP, they were unaware of its actual functions. Findings on PrEP Adoption Intention revealed that, although there was enthusiasm about PrEP adoption, deeper engagement with participants during interviews revealed a myriad of concerns and barriers to access. These include issues of self-efficacy and the effects that being on a PrEP regime will have on the quality of life. Adherence in taking a pill daily featured prominently as a barrier for most BMSM with other socially driven barriers such as high cost, contextualised according to the low SES of BMSM in this sample featuring.

7.3. Communication potential for enhanced PrEP engagement

The findings from this study highlighted the critical role that communication plays in how BMSM experience and engage with their sexuality. Due to the social stigma and discrimination that is assigned to same-sex desire in society, members of sexual minorities find it difficult to express their desire for fear of discrimination. That is where conversations with other individuals who belong to the same community about sexual desires and sexuality function. In this study, this was highlighted by the number of BMSM who had conversations about the previous sexual encounters with their friends. Most respondents (62%) stated in the questionnaire that they discussed sexual health matters and previous sexual encounters with friends. Respondents felt that it was important discussing these matters and analogised these conversations with friends as "sharing notes", which enhanced their sexuality and affirmed them and how they engaged with their sexuality. Value was placed on the reciprocity of information sharing during these conversations, with important values such as confidentiality, trust, proximity and openness playing a vital role in terms of who would participate in these conversations and how.

Findings suggest that these conversations become more than just a source of sharing but rather they became a source of vital health advice. Although a considerable number of BMSM attested to these types of conversations as well as anecdotal conversations about previous sexual encounters that were coloured with explicit details of their sexual partners were prominent, these individuals also shared an array of different information. Results from the questionnaire affirmed this with 24.7% of respondents confirming that these information-sharing conversations dealt with ways of protecting themselves from illnesses, and 22.9% confirming that HIV prevention was the main topic of engagement. What this underscores is the educational role that communication plays in the creation and development of perceptions and attitudes.

Despite the important role that these conversations had in informing BMSM about sexual health matters, PrEP did not feature prominently in these conversations. This may be due to the fact that PrEP is relatively a new preventative method that is not well known amongst the majority of key populations. These findings reveal this by exhibiting that although many BMSM reported awareness of PrEP, evidence from the questionnaire and interviews showed contradictory views on their actual knowledge about PrEP. The few conversations about PrEP and respondents revealed that these conversations played a role in facilitating and cementing the attitudes and perceptions of BMSM regarding PrEP. It is worth noting that these attitudes and perceptions could either be in favour or against PrEP adoption but dyadic communication amongst friends influenced these positions. Therefore, this study revealed the influential possibility of peer communication, with many respondents, in both the questionnaires and interviews attesting that this type of communication had positively influenced how they made sexual health decisions, regarding protection, multiple partners and other associated risky sexual behaviour. It concludes by suggesting the role that these kinds of dyads can play in persuading friends to be involved in the uptake of PrEP if the strategy of social networking or peer leadership was employed in PrEP related education campaigns.

7.4. Pathways towards a PrEP Implementation Programme for BMSM in Msunduzi

An overarching subliminal aim of this study, within the auspices of a transformative perspective, was to create a wealth of knowledge that could be used when considering the implementation of PrEP for key populations such as BMSM in the Msunduzi Local Municipality. These objectives were reliant on the establishment of a generalisable awareness of PrEP amongst this population, the establishment of PrEP adoption intention that considered barriers and motivators for this adoption. Finally, it was to determine the utility of interpersonal communication practices amongst BMSM to ascertain its utility in driving implementation.

A generalisable awareness has been determined but, any effort to implement PrEP amongst BMSM in the municipality needs to firstly involve a far-reaching PrEP education campaign which is targeted at the population. This is important because respondents in the study lamented the unavailability of information that is MSM specific. This was also evidenced by inconsistencies in the knowledge relating to the purpose and uses of PrEP vis-à-vis other methods such as PEP. Consequently, if there is to be a successful attempt at implementing this preventative method, all information concerning its use, those eligible for use, pro's and con's and vital information such as the preceding HIV test need to be communicated. This communication is advised to be made available through the mainstream media and community (BMSM) specific outlets, details on this will be explicated in later parts of this section.

Implementation should not exclude local same-sex non-governmental organisations (NGOs) such as the Gay and Lesbian Network (GLN) if the programme is to be successful. Although not within the scope of this study, there is a need for the establishment of safe and non-discriminatory places where PrEP can be accessed by BMSM and the larger MSM community. The current trajectory in the rest of the country is to distribute PrEP through LGBTI specialised health facilities such as H4M facilities (Health24, 2017). Therefore, GLN within the local context cannot be excluded in the consideration for the development of an implementation plan. This is also largely based on the favourability that it enjoys amongst BMSM who have varying sexual identified in the Msunduzi Local Municipality. The Gay and Lesbian Network (GLN) is a crucial information resource for BMSM who cannot access information and it also serves as a safe gap between BMSM and the public health sector in terms of sexual health tools and apparatus.

A successful implementation programme will need to include an effective continuum of care, as it is evidenced in the study's findings that there is a growing concern with adherence efficacy amongst BMSM. Therefore, if PrEP will be effectively used to maximise its protection and decrease the trajectory of new infections amongst BMSM and MSM at large in the Municipality, interventions for encouraging adherence need to be devised. There is potential here to use social networks and peer health communication to encourage adherence. The prominence of peer sexual health communication amongst BMSM is suggestive of a new way of communicating adherence, through the consent and involvement of close peers in individuals' PrEP uptake journey this could curtail increased default and PrEP migration.

As briefly highlighted above, the entrenchment of peer sexual health communication amongst BMSM in the Msunduzi Local Municipality presents an opportunity for increased engagement on PrEP uptake. By using social networks for information dissemination and peer leader engagement, this could encourage other BMSM. If this method is to be used, it needs to be driven by the individuals within the groups themselves as it is vitally important to maintain confidentially and not to lose this method's potential for reach. This is because those who confirmed to having sexual health conversations with their peers highlighted the importance of confidentiality, rapport, proximity and shared lived experiences as influencing factors for their involvement in these conversations.

Although, this study uses the all-encompassing category BMSM for its utility as a health category that considers the racial disparities customarily not given prominence in MSM health research in South Africa. It has emerged through the interview data that there were concerns with the category amongst some respondents for its totalising nature of compounding the varying sexual behaviours of various sexual identifying individuals into one. Furthermore, it is problematised for erasing the emotional influences that may be present in love relationships. Therefore, if a successful programme is to take place, it needs to be cognisant of the diversity of individuals in this grouping and attempt to reframe the naming of individuals according to their preference. Because using the incorrect names will fail to interpolate the members of the group who do not find resonance with that name. Self-determination and agency are crucial conditions for the emancipation of marginalised groups and are foremost considerations for answering to issues of social justice. Therefore, the importance of naming and assuming the relevant name is crucial for the reaching hard to reach population members.

7.5. Further considerations and directions for future research

For PrEP to work successfully amongst BMSM and for it to reach optimal levels of efficacy as an HIV preventative tool it must be targeted at HIV negative BMSM. As highlighted by Avert.Org, PrEP is "a course of HIV drugs taken daily by HIV-negative people most at risk of HIV to reduce their risk of HIV infection" (2018: para 1). Although this study explored a previously relegated population of BMSM and established a relative awareness and intention to adopt PrEP, this study relied on the self-reporting of intent and

awareness. Further medical research is needed that will involve testing for HIV to firstly establish the epidemics of BMSM in Msunduzi Local Municipality and ascertain if there is an actual target population that intends to adopt PrEP. Furthermore, more representative data on its actual acceptability, accessibility and affordability would be determined from a sample of BMSM who are eligible to take PrEP due to an HIV seronegative status.

An assortment of issues were raised by BMSM regarding motivators and barriers to uptake, the main motivator for a majority of BMSM although guised as protection from HIV. The subtle references made by respondents revealed that the social determinants such as being in a relationship and the dynamics that underpin the desire for healthier sexual choices within the confines of a relationship emerged as important. Whereas a barrier that emerged saliently was adherence to a daily regime to maintain the protective efficacy of PrEP. These motivators and barriers offer fertile grounds for further research explorations, with specific reference to developing ways of addressing these concerns and laying them at bay through education campaigns.

Further research is needed to account for the varying need for prevented care that is determined by being in a relationship as opposed to more casual sexual engagements. The incongruency of a need for additional protection while in a relationship as opposed to much riskier multiple partners sexual engagement needs research that will better understand the social determinants that encourage this outlook amongst BMSM. This kind of research will also be beneficial the devising how PrEP could be communicated or marketed as a prevention method that has multiple uses and efficaciousness.

Furthermore, considerably more work needs to be done to determine sources of adherence and self-efficacy dissonance that were emergent amongst respondents in this study. Research is needed to determine and interrogate the social, biological and structural factors that influence this outlook. If PrEP is to be effectively implemented to successfully provide the protection clinical trials have exhibited, the impediments to uptake need to be rigorously explored and addressed through health education and other interventions.

Although, this study did not deeply engage participants on issues of marginalisation and discrimination that BMSM experiences, the findings exhibited that there is a considerable amount of BMSM in Msunduzi Local Municipality who have lower social economic status (SES). A large controlled populational survey would be the catalyst to establish the composition of Msunduzi MSM. This would give cues to the most accessible points of health care for the majority of BMSM in the municipality. This is needed to establish accessible points for implementation that would be inclusive of all men's sexual identifications, with particular reference to straight-identified MSM who become invisible in MSM health care provision. Considering, the lack of research focus on Msunduzi Local Municipality, there is vast potential for the development of studies that could lead to the efficacious implementation and uptake of PrEP amongst this key population.

Bibliography

Abraham, C. & Sheeran, P. (2005). The Health Belief Model. In: Conner, M. & Norman, P. (eds.) *Predicting Health Behaviour: Research and Practice with Social Cognition Models*. 2nd edition. London: Open University Press, 28-80

Aggleton, P. & Parker, R. (2015). Moving Beyond Biomedicalization in the HIV Response: Implications for Community Involvement and Community Leadership Among Men Who Have Sex with Men and Transgender People. *American Journal of Public Health*, 105(8): 1552-1558.

AMFAR, IAVI, JHU-CPHHR & UNDP. (2011). Best Practices Guidance in Conducting HIV Research with Gay, Bisexual and Other Men Who Have Sex with Men (MSM) in Rights Constrained Environments. Washington IAVI.

Arnold, M. P., Struthers, H., McIntyre, J. & Lane, T. (2013). Contextual Correlates of Per Partner Condomless Anal Intercourse Rates Among MSM in Soweto. *South Africa. AIDS and Behavior*, 17(1): 4-11.

Arreola, S., Santos, G. M., Beck, J., Sundararaj, M., Wilson, P. A., Hebert, P., Makofane, K., Do, T. D. & Ayala, G. (2015). Sexual Stigma, Criminalization, Investment, and Access to HIV Services Among Men Who Have Sex with Men Worldwide. *AIDS and Behavior*, 19(2): 227-234.

Atujuna, M., Newman, P. A., Wallace, M., Eluhu, M., Rubincam, C., Brown, B. & Bekker, L. G. (2018). Contexts of Vulnerability and the Acceptability of New Biomedical HIV Prevention Technologies Among Key Populations in South Africa: A Qualitative Study. *PLOS One*, 13(2): 1-17.

Avert.Org. (2018). *HIV and AIDS in South Africa* [Online]. Available: <u>https://www.avert.org/professionals/hiv-around-world/sub-saharan-africa/south-africa#footnote1_1dir02r</u> [Accessed 6 November 2018].

Babbie, E. & Mouton, J. (2001). *The Practice of Social Research*. Cape Town: Oxford University Press - Southen Africa.

Bakker, A., Buunk, B., Siero, F. & Van Den Eijden, R. (1997). Application of a Modified Health Belief Model to HIV Preventative Behaviorial Intentions Among Gay and Bisexual Men. *Psychology and Health*, 12, (4): 481-492.

Baral, S., Sifakis, F., Cleghorn, F. & Beyrer, C. (2007). Elevated Risk for HIV Infection Among Men Who Have Sex with Men in Low and Middle-Income Countries 2000-2006: A Systematic Review. *PLOS Medicine*, 4(12): 1901-1911.

Baral, S., Trapence, G., Motimedi, F., Umar, E., lipinge, S., Dausab, F., Beyrer, C. & Ng, L. F. P. (2009). HIV Prevalence, Risks for HIV Infection, and Human Rights among Men Who Have Sex with Men (MSM) in Malawi, Namibia, and Botswana. *PLOS One*, 4(3): e4997.

Baral, S., Burrell, E., Scheibe, A., Brown, B., Beyrer, C. & Bekker, L.G. (2011). HIV Risk and Associations of HIV Infection Among Men Who Have Sex with Men in Peri-Urban Cape Town, South Africa. *BMC Public Health*, 11(1): 766-774.

Bauer, G. R. (2014). Incorporating Intersectionality Theory into Population Health Research Methodology: Challenges and the Potential to Advance Health Equity. *Social Science & Medicine*, 110(1): 10-17.

Bekker, L. G., Rebe, K., Brown, B., Budnik, P., De Swardt, G., Duby, Z., Geffen, N., Kanyemba, B., McIntyre, J., Myer, L., Scheibe, A., Schowalter, L., Sonderup, M., Spearman, W., Toledo, C., Tucker, T., Van Dyk, R. & Van Zyl, G. (2012). Southern African Guidelines for the Safe Use of Pre-Exposure Prophylaxis in Men Who Have Sex with Men Who Are at Risk for HIV Infection: Guidelines. *Southern African Journal of HIV Medicine*, 13(2): 40-55.

Bekker, L. G., Hughes, J., Roux, S., Amico, K. R., Hendrix, C., Anderson, P. L., Dye, B., Elharrar, V., Stiratt,
M. J. & Grant, R. (2015). HPTN 067/ADAPT *Cape Town: A Comparison of Daily and Nondaily PrEP Dosing in African Women.* In Conference on Retroviruses and Opportunistic Infections, 23-26.

Beyrer, C. (2007). HIV Epidemiology Update and Transmission Factors: Risks and Risk Contexts-16th International AIDS Conference Epidemiology Plenary. Clinical Infectious Diseases: *An Official Publication of the Infectious Diseases Society of America*, 44(7): 981-987.

Beyrer, C., Baral, S. D., Collins, C., Richardson, E. T., Sullivan, P. S., Sanchez, J., Trapence, G., Katabira, E., Kazatchkine, M., Ryan, O., Wirtz, A. L. & Mayer, K. H. (2016). The Global Response to HIV in Men Who Have Sex with Men. *The Lancet*, 388(10040): 198-206.

Biko, S. (1977). Black Consciousness and the Quest for a True Humanity. *Ufahamu: Journal of the African Studies*, 8(3): 10-20.

Biruk, C. (2014). Aid for Gays: The Moral and the Material in African Homophobia in Post-2009 Malawi. The *Journal of Modern African Studies*, 52 (3): 447-473.

Boellstorff, T. (2011). But Do Not Identify As Gay: A Proleptic Genealogy of the MSM Category. *Cultural Anthropology*, 26(2): 287-312.

Braun, V. & Clarke, V. (2006). Using Thematic Analysis in Psychology. *Qualitative Research in Psychology*, 3(2): 77-101.

Brooks, R. A., Kaplan, R. L., Lieber, E., Landovitz, R. J., Lee, S. J. & Leibowitz, A. A. (2011). Motivators, Concerns, And Barriers to Adoption of Preexposure Prophylaxis for HIV Prevention Among Gay and Bisexual Men In HIV-Serodiscordant Male Relationships. *AIDS Care*, 23(9): 1136-1145.

Brooks, R. A., Landovitz, R. J., Regan, R., Lee, S. J. & Allen, V. C., Jr. (2015). Perceptions of and Intentions to Adopt HIV Pre-Exposure Prophylaxis Among Black Men Who Have Sex with Men in Los Angeles. *International Journal of STD & AIDS*, 26(14): 1040-1048.

Brunswick, A. F. & Banaszak-Holl, J. (1996). HIV Risk Behavior and the Health Belief Model: An Empirical Test in an African American Community Sample. *JCOP Journal of Community Psychology*, 24(1): 44-65.

Buldeo, P. & Gilbert, L. (2015). Exploring the Health Belief Model and First-Year Students' Responses to HIV/AIDS and VCT at a South African University. *African Journal of AIDS Research*, 14(3): 209-218.

Burrell, E., Mark, D., Grant, R., Wood, R. & Bekker, L-G. (2010). Sexual Risk Behaviours and HIV-1 Prevalence Among Urban Men Who Have Sex with Men in Cape Town, *South Africa. Sexual Health*, 7(2): 149-153.

Carroll, A. (2016). State Sponsored Homophobia 2016: A World Survey of Sexual Orientation Laws: *Criminalisation, Protection and Recognition*. Geneva: International Lesbian, Gay, Bisexual, Trans and Intersex Association (IGLA) Centres For Disease Control And Prevention (2012). *Estimated HIV Incidence in the United States, 2007-2010.* Atlanta, GA: US Department of Health and Human Sciences.

Christensen, A-D. & Jensen, S. Q. (2012). Doing Intersectional Analysis: Methodological Implications for Qualitative Research. *NORA-Nordic Journal of Feminist and Gender Research*, 20 (2); 109-125.

Cloete, A., Simbayi, L. C., Kalichman, S. C., Strebel, A. & Henda, N. (2008). Stigma and Discrimination Experiences of HIV-Positive Men Who Have Sex with Men In Cape Town, South Africa. *AIDS Care*, 20(9): 1105-1110.

Corcoran, N. (2007a). *Communicating Health: Strategies for Health Promotion*. Los Angeles: SAGE Publications.

Corcoran, N. (2007b). Theories and Models in Communicating Health Messages In: CORCORAN, N. (ed.) *Communicating Health: Strategies for Health Promotion*. Los Angeles: SAGE Publications, 5 – 39.

Crenshaw, K. (1989). Demarginalizing the Intersection of Race and Sex: A Black Feminist Critique of Antidiscrimination Doctrine, Feminist Theory and Antiracist Politics. *The University of Chicago Legal Forum*, 1989 (1): 139-167.

Crenshaw, K. (1991). Mapping the Margins: Intersectionality, Identity Politics, and Violence Against Women of Color. *Stanford Law Review*, 43(6): 1241-1299.

Crenshaw, K. (2018). Interviewer Unknown for National Association of Independent Schools (NAIS) YouTube Channel, 22 June. Available at https://www.youtube.com/watch?v=ViDtnfQ9FHc [Viewed 30 August 2018]

Dahoma, M., Johnston, L. G., Holman, A., Miller, L. A., Mussa, M., Othman, A., Khatib, A., Issa, R., Kendall, C. & Kim, A. A. (2011). HIV and Related Risk Behavior Among Men Who Have Sex with Men in Zanzibar, Tanzania: Results of a Behavioral Surveillance Survey. *AIDS and Behavior: AIDS Behav* 15 (1): 186-192.

Davies, O., Ustianowski, A. & Fox, J. (2016). Pre-Exposure Prophylaxis for HIV Prevention: Why, What, Who and How. *Infectious Diseases and Therapy*, 5(4): 407-416.

Debarros, L. (2015). PrEP approved in SA: What does it mean for you? [Online]. Available: https://www.mambaonline.com/2015/12/09/prep-approved-sa-men/ [Accessed 19 July 2017].

Department of Health (2015). District Health Plan 2015/2016 – uMgungundlovu Health District KwaZulu-Natal. Pietermaritzburg: Department of Health - KwaZulu-Natal.

Department of Health (2016). *National Policy on HIV Pre-exposure Prophylaxis (PrEP) and Test and Treat (T&T)*. Pretoria: Government Communications and Information Systems.

Dhamoon, R. K. (2011). Considerations on Mainstreaming Intersectionality. *Political Research Quarterly*, 64(1): 230-243.

Simon and I (2002). [DVD] Directed by Ditse, B. & Newman, N. South Africa: Day Zero Film and Video -See Thru Media

Du Plooy, G. M. (2009). Communication Research: Techniques, Methods and Applications. Cape Town: Juta.

Dutta, M. J. (2008). Communicating Health: [A Culture-Centered Approach]. Cambridge, UK: Polity.

Eaton, L. A., Driffin, D. D., Smith, H., Conway-Washington, C., White, D. & Cherry, C. (2014). Psychosocial Factors Related to Willingness to Use Pre-Exposure Prophylaxis for HIV Prevention Among Black Men Who Have Sex with Men Attending a Community Event. *Sexual Health*, 11(3): 244-251.

Eaton, L. A., Driffin, D. D., Bauermeister, J., Smith, H. & Conway-Washington, C. (2015). Minimal Awareness and Stalled Uptake of Pre-Exposure Prophylaxis (PrEP) Among at Risk, HIV-Negative, Black Men Who Have Sex with Men. *AIDS Patient Care and STDs*, 29 (8): 423-429.

Eaton, L. A., Matthews, D. D., Driffin, D. D., Bukowski, L., Wilson, P. A., Stall, R. D. & Team, P. S. (2017). A Multi-US City Assessment of Awareness and Uptake of Pre-Exposure Prophylaxis (PrEP) for HIV Prevention Among Black Men and Transgender Women Who Have Sex with Men. Prevention Science: *The Official Journal Of The Society For Prevention Research*, 18(5): 505-516.

Edberg, M. (2015). *Essentials of Health Behaviour: Social and Behavioral Theory in Public Health*. Manhattan, NY: Jones and Bartlett Learning.

Edgar, T. & Volkman, J. E. (2012). Using Communication Theory for Health Promotion. *Health Promotion Practice*, 13(5): 587-590.

Eisingerich, A. B., Wheelock, A., Gomez, G. B., Garnett, G. P., Dybul, M. R. & Piot, P. K. (2012). Attitudes and Acceptance of Oral and Parenteral HIV Pre-Exposure Prophylaxis Among Potential User Groups: A Multinational Study. *PLOS One*, 7(1): e28238.

Fanon, F. (1967). The Wretched of the Earth. London: Penguin Books

Farmer, M. M. & Ferraro, K. F. (2005). Are Racial Disparities in Health Conditional on Socioeconomic Status? *Social Science & Medicine*, 60(1): 191-204.

Fields, E. L., Bogart, L. M., Smith, K. C., Malebranche, D. J., Ellen, J. & Schuster, M. A. (2015). "I Always Felt I Had to Prove My Manhood": Homosexuality, Masculinity, Gender Role Strain, and HIV Risk Among Young Black Men Who Have Sex With Men. *American Journal of Public Health*, 105(1): 122-131.

Flick, U. (2014). An Introduction to Qualitative Research. Los Angeles: SAGE Publications.

Fontana, A. & James, F. (1994). Interviewing: The Art of Science. In: Denzin, N. A. (ed.) *Handbook of Qualitative Research*. Thousand Oaks: SAGE Publications

Garry, A. (2011). Intersectionality, Metaphors, and the Multiplicity of Gender. Hypatia, 26(4): 826-850.

Glick, M., Muzyka, B. C., Salkin, L. M. & Lurie, D. (1994). Necrotizing Ulcerative Periodontitis: A Marker for Immune Deterioration and a Predictor for the Diagnosis of AIDS. *Journal of Periodontology*, 65(5): 393.

Google Maps. (2018). Msunduzi Municipality, 1:1:1000. Google Maps [Online]. Available: https://www.google.com/maps/place/Msunduzi+Municipality/@29.6347009,30.310515,8z/dara=!4m2!3m1!1s 0x1ef6bcd88adf458b:0xadf5c068da07622a [Accessed 19 October 2018]

Gopaldas, A. (2013). Intersectionality 101. Journal of Public Policy & Marketing, 32(1): 90-94.

Gottwald, M. & Goodman-Brown, J. (2012). Health Promotion Models And Application To Practice In: Gottwald, M. & Goodman-Brown, J. (Eds.) *A Guide To Practical Health Promotion*. England: Open University Press, 55-87

Govender, E. M., Mansoor, L. E. & Abdool Karim, Q. (2017). Influences of geo-spatial location on pre-exposure prophylaxis use in South Africa: positioning microbicides for better product uptake, *AIDS Care*, 29(6): 734-740

Govender, E. & Abdool Karim, Q. (2018). Understanding women and men's acceptability of current and new HIV prevention technologies in KwaZulu-Natal, South Africa. *AIDS Care*, 30(10): 1311-1314

Gqola, P. D. (2015). Rape: A South African Nightmare, Auckland Park: MF Books Joburg.

Gredig, D., Uggowitzer, F., Hassler, B., Weber, P. & Nideröst, S. (2016). Acceptability and Willingness to Use HIV Pre-Exposure Prophylaxis Among HIV-Negative Men Who Have Sex with Men in Switzerland. *AIDS Care*, 28(1): 44-47.

Greehy, P. S. (2016). Assessing Knowledge, Attitudes and Practices of KwaZulu-Natal Health Professionals towards Men Who Have Sex with Men (MSM): Exploring Access to Mainstream Public Healthcare Services. Master of Social Science: University of KwaZulu Natal.

Green, M. A., Evans, C. R. & Subramanian, S. V. (2017). Can Intersectionality Theory Enrich Population Health Research? SSM - Social Science & Medicine, 178(1): 214-216.

Gupta, G. R., Parkhurst, J. O., Ogden, J. A., Aggleton, P. & Mahal, A. (2008). Structural Approaches to HIV Prevention. *The Lancet*, 372(9640): 764-775.

Hancock, A-M. (2007). When Multiplication doesn't Equal Quick Addition: Examining Intersectionality as a Research Paradigm. *Perspectives on Politics*, 5(1): 63-79.

Hayden, J. (2009). Introduction to Health Behavior Theory, Manhattan, NY: Jones and Barlett Publishers.

Health24. (2017). *Health Needs of Men Who Have Sex with Men Neglected in SA* [Online]. Available: <u>http://www.health24.com/Medical/HIV-AIDS/Transmission-of-HIV/health-needs-of-men-who-have-sex-with-men-neglected-in-sa-20170404</u>. [Accessed 23 May 2017]. Hochbaum, G. M. (1958). *Public Participation in Medical Screening Programs; A Socio-Psychological Study*. Washington: Government Printing Office.

HSRC (2018). The Fifth South African National HIV Prevalence, Incidence, Behaviour and Communication Survey, 2017: HIV Impact Assessment Summary Report. Cape Town: Human Sciences Research Council (HSRC).

Hugo, J. M., Stall, R. D., Rebe, K., Egan, J. E., De Swardt, G., Struthers, H. & McIntyre, J. A. (2016). Anti-Retroviral Therapy Based HIV Prevention Among A Sample of Men Who Have Sex with Men in Cape Town, South Africa: Use of Post-Exposure Prophylaxis and Knowledge on Pre-Exposure Prophylaxis. *AIDS and Behavior*, 20(3): 357-364.

IBM Corp. Released (2016). IBM SPSS Statistics for Windows, Version 24.0. Armonk, NY: IBM Corp.

Imrie, J., Hoddinott, G., Fuller, S., Oliver, S. & Newell, M-L. (2013). Why MSM in Rural South African Communities Should be an HIV Prevention Research Priority. *AIDS and Behavior*, 17(1): 70-76.

Irvin, R., Wilton, L., Scott, H., Beauchamp, G., Wang, L., Betancourt, J., Lubensky, M., Wallace, J. & Buchbinder, S. (2014). A Study of Perceived Racial Discrimination in Black Men Who Have Sex with Men (MSM) and its Association with Healthcare Utilization and HIV Testing. *AIDS and Behavior: AIDS Behav* 18(7): 1272-1278.

Janz, N. & Becker, M. (1984). The Health Belief Model: A Decade Later. *Health Education Quarterly*, 11(1): 1-47.

Jaspal, R., Daramilas, C. & Lee, A. (2016). Perceptions of Pre-Exposure Prophylaxis (PrEP) Among HIV-Negative And HIV-Positive Men Who Have Sex with Men (MSM). *Cogent Medicine*, 3(1): 1-16.

Jeffries, W. L. T., Marks, G., Lauby, J., Murrill, C. S. & Millett, G. A. (2013). Homophobia Is Associated with Sexual Behavior That Increases Risk of Acquiring and Transmitting HIV Infection Among Black Men Who Have Sex with Men. *AIDS and Behavior*, 17(4): 1442-1453.

Johnston, L., Khanam, R., Reza, M., Khan, S., Banu, S., Alam, M., Rahman, M. & Azim, T. (2008). The Effectiveness of Respondent Driven Sampling for Recruiting Males Who have Sex with Males in Dhaka, Bangladesh. *AIDS and Behavior*, 12(2): 294-304.

Kaighobadi, F., Knox, J., Reddy, V. & Sandfort, T. (2014). Age and Sexual Risk Among Black Men Who Have Sex with Men in South Africa: The Mediating Role of Attitudes Toward Condoms. *Journal of Health Psychology*, 19(10): 1271-1278.

Kaplan, R. L., Sevelius, J. & Ribeiro, K. (2016). In the Name of Brevity: The Problem with Binary HIV Risk Categories. *Global Public Health*, 11(7-8): 824-834.

Karuga, R. N., Njenga, S. N., Mulwa, R., Kilonzo, N., Bahati, P., O'reilley, K., Gelmon, L., Mbaabu, S., Wachihi,
C., Githuka, G. & Kiragu, M. (2016). "How I Wish This Thing Was Initiated 100 Years Ago!" Willingness to Take
Daily Oral Pre-Exposure Prophylaxis among Men Who Have Sex with Men in Kenya. *PLOS One*, 11(4): 1-13.

Kasl, S. V. & Cobb, S. (1966). Health Behavior, Illness Behavior and Sick Role Behavior. Archives of Environmental Health: An International Journal, 12(2): 246-266.

Kesler, M. A., Kaul, R., Myers, T., Liu, J., Loutfy, M., Remis, R. S. & Gesink, D. (2016). Perceived HIV Risk, Actual Sexual HIV Risk and Willingness to Take Pre-Exposure Prophylaxis Among Men Who Have Sex with Men in Toronto, Canada. *AIDS Care*, 28(11): 1378-1385.

Khoza, N., Scorgie, F., Ramskin, L., Makgamathe, K., Baron, D., & Delany-Moretlwe, S. (2018) Motivations for initiating PrEP: a qualitative study among adolescent girls and young women in Johannesburg, South Africa. Wits Reproductive Health and HIV Institute (Wits RHI), Johannesburg.

Kirscht, J. & Joseph, J. (1989). The Health Belief Model: Some Implications for Behaviour Change with Reference to Homosexual Males. In: Mays, V., Albee, G. & Schneider, S. (eds.) *Primary Preventions of AIDS: Psychological Approaches*. California: SAGE Publications, 33-64

Knox, J., Sandfort, T., Yi, H., Reddy, V. & Maimane, S. (2011). Social Vulnerability and HIV Testing among South African Men Who Have Sex with Men. *International Journal of STD & AIDS*, 22(12): 709-713.

Krakower, D. S. & Mayer, K. H. (2015). Pre-Exposure Prophylaxis to Prevent HIV Infection: Current Status, Future Opportunities and Challenges. *Drugs*, 75(3): 243-251.

Kreps, G. L. & Bonaguro, E. W. (2009). Health Communication as Applied Communication Inquiry In: Frey, L. R. & Cissna, K. N. (eds.) *Routledge Handbook of Applied Communication Research*. New York: Routledge, 372-399.

Kretz, A. J. (2013). From "Kill the Gays"; to "Kill the Gay Rights Movement": The Future of Homosexuality Legislation in Africa. *Northwestern University Journal of International Human Rights*, 11(2): 208-244.

Kubicek, K., Arauz-Cuadra, C. & Kipke, M. D. (2015). Attitudes and Perceptions of Biomedical HIV Prevention Methods: Voices from Young Men Who Have Sex with Men. Archives of Sexual Behavior: *The Official Publication of the International Academy of Sex Research*, 44(2): 487-497.

Kwakwa, H. A., Bessias, S., Sturgis, D., Mvula, N., Wahome, R., Coyle, C. & Flanigan, T. P. (2016). Attitudes Toward HIV Pre-Exposure Prophylaxis in a United States Urban Clinic Population. *AIDS and Behavior*, 20(7): 1443-1450.

Laher, S. & Botha, A. (2012). Methods Of Sampling In: Wagner, C., Kawulich, B. & Garner, M. (Eds.). *Doing Social Research: A Global Context*. Berkshire: Mcgraw-Hill Education, 86-99

Lane, T., Mogale, T., Struthers, H., McIntyre, J. & Kegeles, S. M. (2008a). "They See You as A Different Thing": The Experiences of Men Who Have Sex with Men with Healthcare Workers in South African Township Communities. Sexually Transmitted Infections, 84(6): 430-433.

Lane, T., Shade, S. B., McIntyre, J. & Morin, S. F. (2008b). Alcohol and Sexual Risk Behavior Among Men Who Have Sex with Men in South African Township Communities. *AIDS and Behavior*, 12(4): 78-85.

Lane, T., Raymond, H. F., Dladla, S., Rasethe, J., Struthers, H., Mcfarland, W. & McIntyre, J. (2011). High HIV Prevalence Among Men Who Have Sex with Men in Soweto, South Africa: Results from the Soweto Men's Study. *AIDS and Behavior*, 15(3): 626-634.

Lane, T., Osmand, T., Marr, A., Shade, S. B., Dunkle, K., Sandfort, T., Struthers, H., Kegeles, S., McIntyre, J. A. & Graham, S. M. (2014). The Mpumalanga Men's Study (MPMS): Results of a Baseline Biological and Behavioral HIV Surveillance Survey in Two MSM Communities in South Africa. *PLOS One*, 9(11): e111063.

Lee, M., Sandfort, T., Collier, K., Lane, T. & Reddy, V. (2017). Breakage is the Norm: Use of Condoms and Lubrication in Anal Sex Among Black South African Men Who Have Sex with Men. *Culture, Health & Sexuality*, 19(4): 501-514.

Lelutiu-Weinberger, C. & Golub, S. A. (2016). Enhancing PrEP Access for Black and Latino Men Who Have Sex With Men. *Journal of Acquired Immune Deficiency Syndromes*, 73(5): 547-555.

Louis, R. P. (2007). Can You Hear Us Now? Voices from The Margin: Using Indigenous Methodologies in Geographic Research. *Geographical Research*, 45(2): 130-139.

Luke, N. & Kurz, K. (2002). Cross-Generational and Transactional Sexual Relations in Sub-Saharan Africa. International Center for Research On Women.

Mantell, J. E., Tocco, J. U., Osmand, T., Sandfort, T. & Lane, T. (2016). Switching on After Nine: Black Gay-Identified Men's Perceptions of Sexual Identities and Partnerships in South African Towns. *Global Public Health*, 11(7-8): 953-965.

Manu, F. & Sriram, V. (1999). The Health Belief Model and AIDS-Preventive Behavior in a Ghana Student Population. *Journal of International Consumer Marketing*, 11(2): 59-78.

Masvawure, T. B., Sandfort, T. G., Reddy, V., Collier, K. L. & Lane, T. (2015). 'They Think That Gays Have Money': Gender Identity and Transactional Sex Among Black Men Who Have Sex with Men in Four South African Townships. *Culture, Health & Sexuality*, 17(7): 891-905.

Mavhandu-Mudzusi, A. H. & Ganga-Limando, M. (2014). Being Lesbian, Gay, Bisexual, Transgender and Intersex (LGBTI) Students at a South African Rural University: Implications for HIV Prevention. *Africa Journal of Nursing and Midwifery*, 16(2): 125-138.

Mayosi, B. M., Lawn, J. E., Van Niekerk, A., Bradshaw, D., Karim, S. S. A., Coovadia, H. M. & Lancet South Africa Team. (2012). Health in South Africa: Changes and Challenges Since 2009. *The Lancet*, 380(9858): 2029-2043.

McDavitt, B. & Mutchler, M. G. (2014). "Dude, You're Such a Slut!" Barriers and Facilitators of Sexual Communication Among Young Gay Men and Their Best Friends. *Journal of Adolescent Research*, 29(4): 464-498.

McIntyre, J. A. & Struthers, H. (2013). *MSM in South Africa: What do We Know*. Cape Town: Anova Health Institute.

McIntyre, J., Jobson, G., Struthers, H., De Swardt, G. & Rebe, K. (2013). *Rapid Assessment of HIV Prevention, Care and Treatment Programming in MSM in South Africa. Assessment Report 2013.* Johannesburg: Annova Health Institute.

McKenna, N. (1996). On the Margins: Men Who Have Sex with Men and HIV in the Developing World. London: Panos.

McNaghten, A. D., Kearns, R., Siegler, A. J., Phaswana-Mafuya, N., Bekker, L.-G., Stephenson, R., Baral, S. D., Brookmeyer, R., Yah, C. S., Lambert, A. J., Brown, B., Rosenberg, E., Blalock Tharp, M., De Voux, A., Beyrer, C. & Sullivan, P. S. (2014). Sibanye Methods for Prevention Packages Program Project Protocol: Pilot Study of HIV Prevention Interventions for Men Who Have Sex With Men in South Africa. *JMIR Research Protocols*, 3(4): e55.

Mentz, M. (2012). Survey Research In: Wagner, C., Kawulich, B. & Garner, M. (eds.) *Doing Social Research: A Global Context*. Berkshire: McGraw-Hill Education, 100-113

Mentz, M. & Botha, A. (2012). Descriptive Statistics In: Wagner, C., Kawulich, B. & Garner, M. (eds.) *Doing Social Research: A Global Context*. Berkshire: McGraw-Hill Education, 176-202

Merrigan, M., Azeez, A., Afolabi, B., Chabikuli, O. N., Onyekwena, O., Eluwa, G., Aiyenigba, B., Kawu, I., Ogungbemi, K. & Hamelmann, C. (2011). HIV Prevalence and Risk Behaviours Among Men Having Sex with Men in Nigeria. *Sexually Transmitted Infections*, 87(1): 65-70.

Mertens, D. M. (2007). Transformative Paradigm: Mixed Methods and Social Justice. *Journal of Mixed Methods Research*, 1(3): 212-225.

Mertens, D. M. (2008). Mixed Methods and the Politics of Human Research: The Transformative Emancipatory Perspective In: Plano Clark, V. L. & Creswell, J. W. (eds.) *The Mixed Methods Readers*. California: Sage Publications, 66-105

Mertens, D. M. (2009). Transformative Research and Evaluation. New York: The Guilford Press.

Mertens, D. M. (2010). Transformative Mixed Methods Research. Qualitative Inquiry, 16(6): 469-474.

Meyer, W., Costenbader, E. C., Zule, W. A., Otiashvili, D. & Kirtadze, I. (2010). 'We Are Ordinary Men': MSM Identity Categories in Tbilisi, Georgia. *Culture, Health & Sexuality*, 12(8): 955-971.

Millett, G. A., Jeffries 4th, W. L., Peterson, J. L., Malebranche, D. J., Lane, T., Flores, S. A., Fenton, K. A., Wilson, P. A., Steiner, R. & Heilig, C. M. (2012). Common Roots: a Contextual Review of HIV Epidemics in Black Men Who Have Sex with Men Across the African Diaspora. *The Lancet*, 380 (9839): 411-423.

Mitchell, J. W., Lee, J.-Y., Woodyatt, C., Bauermeister, J., Sullivan, P. & Stephenson, R. (2016). HIV-Negative Male Couples Attitudes About Pre-Exposure Prophylaxis (Prep) And Using Prep with a Sexual Agreement. *AIDS Care*, 28(8): 994-999.

Moskowitz, D., Rieger, G. & Roloff, M. (2008). Tops, Bottoms and Versatiles. *Sexual & Relationship Therapy*, 23(3): 191-202.

Mpofu, W. J. (2013). Coloniality in the Scramble for African Knowledge: A Decolonial Political Perspective. *Africanus*, 43(2): 105-117.

MSM Initiative (2008). *MSM, HIV, and the Road to Universal Access: How Far Have We Come?*. New York: AmfAR.

Msunduzi Municipality (2013). *Msunduzi Municipality Integrated Development Plan (IDP) Review for 2013/2014*. Pietermaritzburg: Msunduzi Municipality IDP Office.

Muraguri, N., Temmerman, M. & Geibel, S. (2012). A Decade of Research Involving Men Who Have Sex with Men in Sub-Saharan Africa: Current Knowledge and Future Directions. SAHARA: *Journal of Social Aspects of HIV/AIDS Research Alliance*, 9(3): 137-147.

Mutchler, M. G. & McDavitt, B. (2011). 'Gay Boy Talk' Meets 'Girl Talk': HIV Risk Assessment Assumptions in Young Gay Men's Sexual Health Communication with Best Friends. *Health Education Research*, 26(3): 489-505.

Mutchler, M. G., McDavitt, B., Ghani, M. A., Nogg, K., Winder, T. J. & Soto, J. K. (2015). Getting PrEPared for HIV Prevention Navigation: Young Black Gay Men Talk About HIV Prevention in the Biomedical Era. *AIDS Patient Care and STDs*, 29(9): 490-502.

Nash, J. C. (2008). Re-Thinking Intersectionality. Feminist Review, 89(1): 1-15.

Ndlovu, M. & Makoni, E. N. (2014). The Globality of the Local? A Decolonial Perspective on Local Economic Development in South Africa. *Local Economy*, 29(4-5): 503-518.

Nelson, L. E., Wilton, L., Moineddin, R., Zhang, N., Siddiqi, A., Sa, T., Harawa, N., Regan, R., Dyer, T. P., Watson, C. C., Koblin, B., Del Rio, C., Buchbinder, S., Wheeler, D. P. & Mayer, K. H. (2016). Economic, Legal, and Social Hardships Associated with HIV Risk among Black Men Who Have Sex with Men in Six US Cities. *Journal of Urban Health: Bulletin of the New York Academy of Medicine*, 93(1): 170-188.

News24. (2015). *Homosexuality Contrary to our Values, Mugabe Tells UN* [Online]. Available: <u>https://www.news24.com/Africa/Zimbabwe/Homosexuality-contrary-to-our-values-Mugabe-tells-UN-</u>20150929 [Accessed 23 September 2017].

Orisakwe, E. E., Ross, A. J. & Ocholla, P. O. (2012). Correlation between knowledge of HIV, attitudes and perceptions of HIV and a willingness to test for HIV at a regional hospital in KwaZulu-Natal, South Africa. *African Journal of Primary Health Care & Family Medicine*, 4(1): 1-8.

Parent, M. C., Deblaere, C. & Moradi, B. (2013). Approaches to Research on Intersectionality: Perspectives on Gender, LGBT, and Racial/Ethnic Identities Sex Roles: *A Journal of Research*, 68(11): 639-645.

Parker, R., Aggleton, P. & Perez-Brumer, A. G. (2016). The Trouble With 'Categories': Rethinking Men Who Have Sex with Men, Transgender and Their Equivalents in HIV Prevention and Health Promotion. *Global Public Health*, 11(7-8): 819-823.

Philbin, M. M., Parker, C. M., Parker, R. G., Wilson, P. A., Garcia, J. & Hirsch, J. S. (2016). The Promise of Pre-Exposure Prophylaxis for Black Men Who Have Sex with Men: An Ecological Approach to Attitudes, Beliefs, and Barriers. *AIDS Patient Care and STDs*, 30(6): 282-290.

Podsakoff, P. M., Mackenzie, S. B., Lee, J.-Y. & Podsakoff, N. P. (2003). Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies. *Journal of Applied Psychology*, 88(5): 879-903.

Potter, C. (2012). Multi-Method Research In: Wagner, C., Kawulich, B. & Garner, M. (eds.) *Doing Social Research: A Global Context*. Berkshire: McGraw-Hill Education, 161-174

Prep Watch. (2018). *South Africa* [Online]. Available: <u>https://www.prepwatch.org/south-africa/</u> [Accessed 18 January 2018].

Prestage, G. (2011). *The Term 'MSM' Demeans us All*. University of New South Wales: The Kirby Institute (formerly the National Centre in HIV Epidemiology and Clinical Research).

Quinn, K & Dickson-Gomez, J (2016). Homonegativity, Religiosity, and the Intersecting Identities of Young Black Men Who Have Sex with Men. *AIDS and Behavior: AIDS Behav*, 20(1): 51-64.

Quinn, K., Voisin, D. R., Bouris, A., Jaffe, K., Kuhns, L., Eavou, R. & Schneider, J. (2017). Multiple Dimensions of Stigma and Health-Related Factors Among Young Black Men Who Have Sex with Men. *AIDS and Behavior: AIDS Behav*, 21(1): 207-216.

Rebe, K. B., De Swardt, G., Struthers, H. & McIntyre, J. A. (2013). Towards `Men Who Have Sex with Men-Appropriate' Health Services in South Africa. *Southern African Journal of HIV Medicine*, 14(2): 52-57.

Rebe, K. (2017). Hot Topics in PrEP: Lessons from MSM PrEP Pilots. Johannesburg: Anova Health Institute.

Riggs, D. & Das Nair, R. (2012). Intersecting Identities. In: Das Nair, R. & Butler, C. (eds.) *Intersectionality, Sexuality and Psychological Therapies: Working with Lesbian, Gay and Bisexual Diversity*. Oxford: Blackwell Publishing, 9-30

Rispel, L. & Metcalf, C. (2009a). Are South African HIV Policies and Programmes Meeting and the Needs of Same-Sex Practicing Individuals. In: Reddy, V., Sandfort, T. G. & Rispel, L. (eds.) *From Social Silence to Social Science: Same-Sex Sexuality, HIV & AIDS and Gender in South Africa: Conference Proceedings*. Cape Town: HSRC Press,176-189

Rispel, L. C. & Metcalf, C. A. (2009b). Breaking the Silence: South African HIV Policies and the Needs of Men Who Have Sex with Men. *Reproductive Health Matters - RHM*, 17(33): 133-142.

Rispel, L. C., Metcalf, C. A., Cloete, A., Moorman, J. & Reddy, V. (2011a). You Become Afraid To Tell Them That You Are Gay: Health Service Utilization By Men Who Have Sex With Men In South African Cities. *Journal of Public Health Policy*, 32(1): 137-51.

Rispel, L. C., Metcalf, C. A., Cloete, A., Reddy, V. & Lombard, C. (2011b). HIV Prevalence and Risk Practices Among Men Who Have Sex With Men in Two South African Cities. *Journal of Acquired Immune Deficiency Syndromes*, 57(1): 69-76.

Rosenstock, I. (1974a). The Health Belief Model and Preventative Health Behavior. *Health Education Monographs*, 2(4): 354-386.

Rosenstock, I. (1974b). Historical Origins of the Health Belief Model. *Health Education Monographs*, 2(4): 328-335.

Rosenstock, I., Strecher, V. & Becker, M. (1988). Social Learning Theory and the Health Belief Model. *Health Education & Behavior*, 15(2): 175-183.

Rosenstock, I., Strecher, V. & Becker, M. (1994). The Healthbelief model and HIV Risk Behavior Change In: Diclemente, R. & Peterson, J. (eds.) *Preventing AIDS: Theories and Methods of Behavioral Interventions*. New York: Plenum Press, 5-22 Ross, M. W., Nyoni, J., Ahaneku, H. O., Mbwambo, J., Mcclelland, R. S. & Mccurdy, S. A. (2014). High HIV Seroprevalence, Rectal STI's and Risky Sexual Behaviour in Men Who Have Sex with Men in Dar es Salaam and Tanga, Tanzania. *BMJ Open*, 4(8): 1-8.

Salazar, J. F. (2009). Self-Determination in Practice: The Critical Making of Indigenous Media. *Development in Practice*, 19(4-5): 504-513.

SANAC (2012). *National Strategic Plan on HIV, STIs and TB, 2012-2016*, Pretoria, South Africa, South African National AIDS Council.

SANAC (2016). South African National LGBTI HIV Framework 2017-2022. Pretoria, South Africa: South African National AIDS Council.

SANAC (2017). *National Strategic Plan on HIV, STIs and TB, 2017-2022*. Pretoria, South Africa: South African National AIDS Council.

Sandfort, T. G., Nel, J., Rich, E., Reddy, V. & Yi, H. (2008). HIV Testing and Self-Reported HIV Status in South African Men Who Have Sex with Men: Results from a Community-Based Survey. *Sexually Transmitted Infections*, 84(6): 425-429.

Sandfort, T. G. M., Lane, T., Dolezal, C. & Reddy, V. (2015). Gender Expression and Risk of HIV Infection Among Black South African Men Who Have Sex with Men. *AIDS and Behavior: AIDS Behav*, 19(12): 2270-2279.

Scheibe, A., Kanyemba, B., Syvertsen, J., Adebajo, S. & Baral, S. (2014). Money, Power And HIV: Economic Influences and HIV Among Men Who Have Sex with Men in Sub-Saharan Africa. *African Journal of Reproductive Health*, 18(3): 84-92.

Schnall, R., Rojas, M. & Travers, J. (2015). Understanding HIV testing behaviors of minority adolescents: a health behavior model analysis. *The Journal of the Association of Nurses in AIDS Care: JANAC*, 26(3): 246-258

Semugoma, P., Nemande, S. & Baral, S. D. (2012). The Irony of Homophobia in Africa. *The Lancet*, 379(9839): 312-314.

Sharma, M. & Romas, J. (2012). *Theoretical Foundations of Health Education and Health Promotion*. Sudbury: Jones and Barlett Learning

Shenton, A. K. (2004). Strategies for Ensuring Trustworthiness in Qualitative Research Projects. *Education for Information*, 22(2): 63-75.

Simbayi, L. C., Rehle, T., Naidoo, P., Cloete, A. & Ntsepe, Y. (2014). *The South African Marang Men's Project: HIV Bio-Behavioural Surveys Conducted Among Men Who Have Sex with Men in Cape Town, Durban and Johannesburg, Using Respondent-Driven Sampling.* Pretoria: HSRC Publishers

Simons-Morton, B., Mcleroy, K. & Wendel, M. (2012). *Behavior Theory in Health Promotion Practice and Research*. Manhattan: Jones & Bartlett Publishers.

Smith, A. D., Jaffe, H. W., Tapsoba, P., Peshu, N. & Sanders, E. J. (2009). Men Who Have Sex with Men and HIV/AIDS in sub-Saharan Africa. *The Lancet*, 374(9687): 416-422.

Smith, L. T. (2012). Decolonizing Methodologies: Research and Indigenous Peoples. London: Zed Books Ltd.

STATS SA. (2018a). *Mid-Year Population Estimates - Media Release* [Online]. Available: http://www.statssa.gov.za/?p=11341 [Accessed 12 October 2018].

STATSSA.(2018b).MsunduziMunicipality[Online].Available:http://www.statssa.gov.za/?page_id=993&id=the-msunduzi-municipality# [Accessed 15 September 2017].

STATS SA (2018c). Quarterly Labour Force Survey - Quarter 3: 2018. Pretoria: Statistics South Africa

Sullivan, P. S., Carballo-Diéguez, A., Coates, T., Goodreau, S. M., Mcgowan, I., Sanders, E. J., Smith, A., Goswami, P. & Sanchez, J. (2012). Successes and Challenges of HIV Prevention in Men Who Have Sex with Men. *The Lancet*, 380(9839): 388-399.

Taylor, D., Bury, M., Campling, N., Carter, S., Garfield, S., Newbould, J. & Rennie, T. (2006). A Review of the use of the Health Belief Model (HBM), the Theory of Reasoned Action (TRA), the Theory of Planned Behaviour

(TPB) and the Trans-Theoretical Model (TTM) to Study and Predict Health Related Behaviour Change. London, UK: National Institute for Health and Clinical Excellence.

Truong, N., Perez-Brumer, A., Burton, M., Gipson, J. & Hickson, D. (2016). What is in A Label? Multiple Meanings Of 'MSM' Among Same-Gender-Loving Black Men in Mississippi. *Global Public Health*, 11(7-8): 937–952.

Tshaka, R. S. (2007). African, You Are on Your Own! The Need for African Reformed Christians To Seriously Engage Their Africanity In Their Reformed Theological Reflections. Scriptura: *International Journal of Bible, Religion and Theology in Southern Africa*, 96(1): 533-548.

Tun, W., Kellerman, S., Maimane, S., Fipaza, Z., Sheehy, M., Vu, L. & Nel, D. (2012). HIV-Related Conspiracy Beliefs and its Relationships with HIV Testing and Condomless Sex Among Men Who Have Sex with Men in Tshwane (Pretoria), South Africa. *AIDS Care*, 24(4): 459-467.

uMngungundlovu District Municipality (2017). uMgungundlovu DIP Plus. SA AIDS Conference. Durban.

UNAIDS. (2009). UNAIDS Action Framework: Universal Access for Men who have Sex with Men and Transgender People. Geneva Joint United Nations Programme on HIV/AIDS (UNAIDS).

UNAIDS. (2014). The Gap Report. Geneva: Joint United Nations Programme on HIV/AIDS (UNAIDS).

UNAIDS. (2015). South Africa HIV Epidemic Profile, 2014. Pretoria: Joint United Nations Programme on HIV/AIDS (UNAIDS).

UNAIDS. (2016a). *Global AIDS Update 2016*. Geneva: Joint United Nations Programme on HIV/AIDS (UNAIDS).

UNAIDS. (2016b). PrEP in South Africa [Online]. Available: http://www.unaids.org/en/resources/presscentre/featurestories/2016/november/20161104 PrEP-ZA [Accessed 18 September 2017].

University Of California, San Fransisco. (2015). *Report of the South Africa Men-Who-Have-Sex-With Men Data Triangulation Project*. San Francisco: UCSF Global Health Sciences.

Van Niekerk, G. (2017). *PrEP: Miracle HIV-Prevention Pill Could Save SA Lives*. Huffington Post South Africa [Online]. Available: <u>http://www.huffingtonpost.co.za/amp/2017/12/01/prep-miracle-hiv-prevention-pill-could-save-sa-lives_a_23293823</u> [Accessed 22 March 2018]

Vu, L., Tun, W., Sheehy, M. & Nel, D. (2012). Levels and Correlates of Internalized Homophobia Among Men Who Have Sex with Men in Pretoria, South Africa. *AIDS and Behavior*, 16(3): 717-723.

Watkins-Hayes, C. (2014). Intersectionality and the Sociology of HIV/AIDS: Past, Present, and Future Research Directions. Annual Review of Sociology, 40 (1): 431-457.

Wegner, T. (2016). Applied Business Statistics: Methods and Excel-Based Applications. Cape Town: Juta.

Wells, H. & Louise, P. (2006). Anti-Gay Hate Crimes in South Africa: Prevalence, Reporting Practices, and Experiences of the Police. *Agenda: Empowering Women for Gender Equity* no 67, 2(3): 20-28.

Williams, D. R. & Jackson, P. B. (2005). Social Sources of Racial Disparities in Health. Health Affairs, 24(2) 325-334.

Williams, D. R. & Mohammed, S. A. (2009). Discrimination and Racial Disparities in Health: Evidence and Needed Research. *Journal of Behavioral Medicine*, 32(1): 20-47.

Wilson, S. F. & Peggy, M. Z. (2016). Sources of Discrimination and Their Associations With Health in Sexual Minority Adults. *Journal of Homosexuality*, 63(6): 743-763.

Winter, G. (2000). A Comparative Discussion of the Notion of Validity in Qualitative and Quantitative Research. *The Qualitative Report*, 4(3): 1-14.

Witzel, T. C., Nutland, W. & Bourne, A. (2018). What Qualities in a Potential HIV Pre-Exposure Prophylaxis Service are Valued by Black Men Who Have Sex with Men in London? A Qualitative Acceptability Study. *International Journal of STD and AIDS*, 29(8): 760-765.

Wyatt, G. E., Gómez, C. A., Hamilton, A. B., Valencia-Garcia, D., Gant, L. M. & Graham, C. E. (2013). The Intersection of Gender and Ethnicity in HIV Risk, Interventions, and Prevention: *New Frontiers for Psychology. The American Psychologist*, 68(4): 247-259.

Young, R. M. & Meyer, I. H. (2005). The Trouble with "MSM" And "WSW": Erasure of The Sexual-Minority Person in Public Health Discourse. *American Journal of Public Health and the Nations Health*, 95(7): 1144-1149.

Young, L. E., Schumm, P., Alon, L., Bouris, A., Ferreira, M., Hill, B., Khanna, A. S., Valente, T. W. & Schneider, J. A. (2018). PrEP Chicago: A Randomized Controlled Peer Change Agent Intervention to Promote the Adoption of Pre-Exposure Prophylaxis for HIV Prevention Among Young Black Men Who Have Sex with Men. *Clinical Trials*, 15(1): 44-52.

Zabus, C. J. (2013). *Out in Africa: Same-Sex Desire in Sub-Saharan Literatures & Cultures*. Suffolk James: Currey Ltd.

Zahn, R., Grosso, A., Scheibe, A., Bekker, L. G., Ketende, S., Dausab, F., lipinge, S., Beyrer, C., Trapance, G. & Baral, S. (2016). Human Rights Violations among Men Who Have Sex with Men in Southern Africa: Comparisons between Legal Contexts. *PLOS One*, 11 (1): 1-12.

Appendix 1 – Information Sheet and Informed Consent Form

INFORMED CONSENT TEMPLATE

Good day,

My name is Melusi Mntungwa from theDepartment of Media and Cultural studies at the University of KwaZulu-Natal (Howard Campus). **Contact number** – 078 518 5862 and **Email** - melusi.mntungwa@yahoo.com.

You are being invited to consider participating in the study "Voicing the Voiceless: Exploring the Communicative Practices, Attitudes and Perceptions of Black Men who have sex with Men (BMSM) in the Msunduzi Municipality towards Pre-Exposure Prophylaxis (PrEP)."

The aim and purpose of this research is to investigate the perceptions and attitudes of Black Men who have sex with Men (BMSM) in the Msunduzi area towards Pre-Exposure Prophylaxis (PrEP) commonly known as Truvada. The study is expected to enrol 100 participants, these will be separated as follows; 100 participants to take part in a survey, and 8–15 participants to take part in individual semi-structured interviews that will be conducted within the Msunduzi Municipality at various discreet venues that will be announced. This study will, therefore, involve two data generating procedures which will be a self-administered questionnaire, and in-depth interviews. The study will be executed from the 1 January 2018 – 30 June 2018; therefore, its expected completion date is 30 June 2018. Your participation in the study will be requested during this period and will be discussed with you prior to ensure that it best suits your availability.

This is a scholarly study and therefore does not have a sponsor or any external funding. All costs for the planning and execution of the study are covered by me as the main researcher. This ensures that I do not have any contractual obligations which will affect the execution of the study of the topics discussed and the responses generated.

The study may involve some discomfort which will arise from the sensitive nature of the content covered which may be embarrassing for some participants. Should you participate in this study, you will be the first participants to be involved in a study of this nature in the Msunduzi Local Municipality which will be very important for the development of knowledge and creating awareness of MSM health issues within the Municipality.

The services of a Counselling Psychologist, Nandisa Tushini (HPCSA – Reg.No. PS 0117323; Pr. No. 0451053) will be available at the sessions and will be readily available to participants who wish to utilize these services after the intervention.

Your participation is voluntary, and you are free to decline to participate or to withdraw from the study at any practicable time, without experiencing any disadvantage or providing any explanation. Should you need to change your mind on participation in the study, kindly notify me as the main researcher, either in person or using the contact details provided above.

You have the right to access information about yourself collected as part of the study. This can be arranged with myself at the beginning or end of each research intervention and I will arrange to have this information available to you in a reasonable time frame.

As participants, you will be told of any new information about adverse or beneficial effects related to the study that becomes available during the study that may have an impact on your health and your decision to take part in the study. You will be updated throughout the process of any changes to the study.

You as the participant will not incur any financial cost for participation in this study. The main resource that I am requesting from you is your time. I am not offering any remuneration for your involvement in this study, as this practice is not permitted according to the research Ethical guidelines of the University of KwaZulu-Natal which guide this study, as overseen by the Humanities & Social Sciences Research Ethics Committee, contact details. Cognisance is taken of the fact that you have travelled from various parts of the Municipality to participate in this study. A small daily transport stipend of R80 per person will be offered for participants involved in the in-depth interview sessions.

This stipend is available to strictly cover travelling costs incurred by you as the participant when travelling to and from the intervention venues. The amount will be paid out at the end of each session in the following two ways: if group transportation has been organized the stipend will be paid directly to the transport provider which has provided the transportation to the venue. If individual transport has been arranged by you personally in the form of normal taxi's, this amount will be paid to you in cash. This stipend is in no way a payment or remuneration for your involvement in the study but is in place to ensure you can make it to and from the intervention venues safely and payment and distribution of funds will be handled strategically to ensure that.

One of my main objectives as the researcher is to ensure that I protect your rights, privacy, confidentiality as well as your physical safety during the various stages of the research study period. I will ensure that you are protected in the following ways throughout the study period;

- No names and personal details will be required on the questionnaire thus keeping your identity private and making your responses anonymous.
- During the interviews, you are not required to utilize your name and have the option to elect to use a pseudonym that you will be referred to throughout the intervention and furthermore, this is how your information will be transcribed and presented in the research findings and report.
- Your contact and personal details will be accessed only by myself as the main researcher on a codeprotected cellphone or a protected electronic computer folder.
- Your personal information, including the conversations to set up interventions, will not be shared with any third party.
- Interviews will be conducted in a secure venue that is neutral and that will be accessible to you. I will ensure that the venues for the interviews happen in a secured location, with security where available, behind closed doors and will be handled discreetly to ensure your comfort and safety.

This study has been ethically reviewed and approved by the UKZN Humanities and Social Sciences Research Ethics Committee (HSS-2055-017M).

In the event of any problems or concerns/questions, you may contact the researcher

Name:	Mr. Melusi Mntungwa
Address:	Media and Cultural Studies, Howard College Campus
Phone:	078 518 5862
Email:	melusi.mntungwa@yahoo.com

If you have any questions, concerns or complaints about the study at any stage, you can contact the study supervisor:

Name:	Ms. Luthando Ngema
Address:	Media and Cultural Studies, Howard College Campus
Phone:	031 260 2310
Email:	ngemal@ukzn.ac.za

Or the UKZN Humanities & Social Sciences Research Ethics Committee, contact details as follows:

HUMANITIES & SOCIAL SCIENCES RESEARCH ETHICS ADMINISTRATION Research Office, Westville Campus Govan Mbeki Building Private Bag X 54001 Durban 4000 KwaZulu-Natal, SOUTH AFRICA Tel: 27 31 2604557- Fax: 27 31 2604609 Email: HSSREC@ukzn.ac.za

CONSENT FORM

I understand the purpose and procedures of the study.

I have been given an opportunity to answer questions about the study and have had answers to my satisfaction.

I declare that my participation in this study is entirely voluntary and that I may withdraw at any time without affecting any of the benefits that I usually am entitled to.

I have been informed about any available compensation or medical treatment if an injury occurs to me because of study-related procedures.

If I have any further questions/concerns or queries related to the study, I understand that I may contact the researcher at;

Name:	Mr. Melusi Mntungwa
Address:	Media and Cultural Studies, Howard College Campus
Phone:	078 518 5862
Email:	melusi.mntungwa@yahoo.com

If I have any questions or concerns about my rights as a study participant, or if I am concerned about any aspect of the study or the researchers then I may contact:

HUMANITIES & SOCIAL SCIENCES RESEARCH ETHICS ADMINISTRATION

Research Office, Westville Campus Govan Mbeki Building Private Bag X 54001 Durban 4000 KwaZulu-Natal, SOUTH AFRICA Tel: 27 31 2604557 - Fax: 27 31 2604609 Email: HSSREC@ukzn.ac.za

ADDITIONAL CONSENT

I hereby provide consent for you to:

Audio-record my interview YES / NO

Signature of Participant

Date

Study Title:	Voicing the Voiceless: Exploring the Communicative Practices Attitudes and Perceptions of Black Men who have sex with Men (BMSM) in the Msunduzi Municipality towards Pre-Exposure Prophylaxis (PrEP)				
Institution:	University of KwaZulu-Natal	Lead Researcher:	Melusi Mntungwa		
Degree:	Master of Art	Contact phone number:	078 518 5862		
Ethics committee ref.:	HSS-2055-017M	Email Address:	melusi.mntungwa@yahoo.com		
Supervisor:	Luthando Ngema	Supervisor Email:	ngemal@ukzn.ac.za		

Appendix 2 – Informed Consent Questionnaire

Dear Respondent

Thank you for taking part in this research study. Your input will add significant value to the above-titled research project.

This study aims to explore the attitudes and perceptions which Black Men Who Have Sex with Men (BMSM) in the Msunduzi Municipality have towards Pre-Exposure Prophylaxis (PrEP) for HIV prevention. This research is conducted by Melusi Mntungwa (Student No: 205514579) towards his Master of Arts degree.

Please be advised that you may choose not to participate in this research study and would you wish to withdraw at any stage, you have the full right to do so and your action will not be of any disadvantage to you in any way.

Your participation in this research will be through filling out this questionnaire which will be arranged to ensure minimal disruption to your schedule. The information obtained will be treated as confidential; pseudonyms will be used in identifying respondents or participants when necessary. This will be safely stored at the University of KwaZulu-Natal, Howard College Campus.

I..... (Full names of participant) hereby confirm that.

	Please Initial Box
I have read and understood the information sheet for the above study and I have had the opportunity to ask questions.	
I understand that my participation is voluntary and that I am free to withdraw at any time, without giving reason.	

Ι	understand	the	purpose	and	the	procedures	of	the	study.	
la	gree to take p	art in	the above	study.						

Signature of Participant

Date

PrEP Attitudes and Perceptions Questionnaire



This study aims to explore the general awareness and perceptions and attitudes of MSM in the Msunduzi Municipality towards Pre-Exposure Prophylaxis. This survey aims to gather demographic information, establish generalizable awareness of PrEP and get a better understanding of your thoughts on PrEP. Thank you for taking the time to fill out this survey. You do not need to provide your name as individual responses are not reported on.

DEMOGRAPHICS				
1. Ethnicity				
Black	Indian		Asian	
White		b	Other – please specify	
2. Age				
□18–23		24–29		
□30–35		36–40		
>41				
3. Sexual Orientation				
☐Gay		Bisexual		
Straight				
Pansexual		Asexual		
4. Level of Education Attained				
Primary Education (Grade 7)		Secondary Ed	ucation (Matric)	

Diploma	Bachelor's degree
Postgraduate Diploma or Honours degree	Master's degree or Doctorate
None	
5. Employment Status	
	Student
Employed	Retired
6. Personal Income	
□ <r1 000<="" td=""><td>□R1 001 – R5 000</td></r1>	□R1 001 – R5 000
□R5 001 – R10 000	□ R10 001 – R15 000
□> R15 0001	

SEXUAL RISK INDICATORS				
1. Do you know your HIV status?				
Yes	No			
2. When last did you have an HIV Test?				
□< 3 months ago	□3 – 6 months ago			
6 – 12 months ago	□> 1 year ago			
3. Have you had a male sexual partner in the past 12 months?				
Yes	No			
4. If yes, how many sexual partners have you had in this period?				
None	□1 – 5			
<u>5 – 10</u>	□11 – 15			

□ >15				
5. Sexual Role?				
Insertive (Top)	Receptive (Bottom)			
Both (Versatile)	Oral			
6. Relationship Status				
Single	Dating			
Married	Divorced			
7. Which of the following HIV prevention	methods do you trust most?			
	Using Condom and Lubricant			
Ensuring your partner has been circumcised	Ensuring your partner has been circumcised and using a condom plus lubricant			
	I do not trust any HIV prevention method			
8. Do you think that the HIV prevention methods available are adequate?				
□Yes	No			
9. How often do you use a condom with a male sexual partner?				
Always	□Very often			
Occasionally	Rarely			
Never				
10. How often have you had condomless sex with a male sexual partner in the past 12 months?				
□1 – 5 times	☐6 – 10 times			
□11 – 15 times	□>15 times			
Never				
11. I believe my risk of contracting HIV is?				

High	Moderate
Low	Non-existent

PrEP MOTIVATORS AND BARRIERS				
1. Do you know about Pre-Exposure Prophylaxis – Truvada?				
□Yes	No			
2. If yes, where did you find out about Pr	EP?			
TV	Friends /Family			
Health Facility (Clinic /Doctor/Hospital)	Leaflets and information booklets			
Social Media	Articles in magazines or newspapers			
Billboard	Other - please specify below			
3. Which statement best describes your I	knowledge of PrEP?			
PrEP is an				
Antiretroviral drug to protect against HIV Transmission	Antiretroviral drug to protect against STIs			
Antiretroviral drug to protect against HIV and STIs	Antiretroviral drug you take so you can stop using condoms			
4. Have you used PrEP before?				
□Yes	No			
5. Would you be willing to take PrEP daily to prevent HIV transmission?				
□Yes	No			
6. What would be your motivation for taking PrEP?				
Protection against HIV	Protection against STIs			
Being able to have condom-less sex	Other – please specify below			

7. What would prevent you from using PrEP?			
High Cost	Bad Side-Effects		
Social Stigma – discrimination from friends and sexual partners	Taking a pill daily		
Risk of STI transmission	Pressure from sexual partner		
None	Other – please specify below		

SEXUAL HEALTH COMMUNICATION				
1. Who do you communicate matters related to sexual health with?				
Friends	Family			
Health Practitioner	Other - please specify below			
2. Why do you communicate with these people?				
I trust them to be confidential	They offer valuable advice			
They have experience and I trust them	They are the only person/people I can talk to			
3. How often do you have discussions with these people about sexual health matters?				
Very Frequently	Frequently			
Occasionally	Rarely			
Very Rarely	Never			
4. What topics do you discuss?				
Previous sexual encounters	Ways to prevent illness and diseases			
HIV prevention methods	Other – please specify below			

5. Has this advice assisted you in changing your sexual health behaviours?	
Yes	□No

Further Research Consent

Thank you for taking the time to fill in this questionnaire. If you would like to be part of further research (interviews) around this topic, please follow the below instructions.

Would you like to be part of further research into this topic?	
Yes	□No

If YES, please furnish us with an email address below in order to contact you.

Appendix 4 – In-depth Interview Consent Form

Interview Consent Form

Study Title:	Voicing the Voiceless: Exploring the Communicative Practices, Attitudes and Perceptions of Black Men who have sex with Men (BMSM) in the Msunduzi Municipality towards Pre-Exposure Prophylaxis (PrEP)		
Institution:	University of KwaZulu-Natal	Lead Researcher:	Melusi Mntungwa
Degree:	Master of Art	Contact phone number:	078 518 5862
Ethics committee ref:	HSS-2055-017M	Email Address:	melusi.mntungwa@yahoo.com
Supervisor:	Luthando Ngema	Supervisor Email:	ngemal@ukzn.ac.za

Dear Participant

Thank you for agreeing to participate in this interview. I am very interested to hear your valuable opinion on taking PrEP to prevent HIV transmission and how peer communication has assisted in developing your knowledge about health issues including PrEP and how this has influenced your perceptions and attitudes towards health and the use of PrEP.

I would like to reiterate important information about this process.

- The purpose of this study is to understand what Black Men who have sex with Men (BMSM) who live in the Msunduzi Municipality think of PrEP as a prevention method for HIV transmission and to better understand if you would be willing to take PrEP, and if not why?
- I understand how important it is that this information is kept private and confidential. The information you
 give me is completely confidential, and I will not associate your name with anything you say in this
 interview.
- You have the option to select a pseudonym that we can use in this interview and this is how your information will be marked in the report.
- You may refuse to answer any question or withdraw from the interview at any time.
- I would like to tape the interview so that I can make sure to capture the thoughts, opinions, and ideas I hear from you. No names will be attached to the interview and the recordings will be stored in a code-locked system until they are disposed of.

• If you have any questions now or after you have completed the consent form, you can always contact me on the phone numbers available on the participant information form.

Please check the below boxes and sign to show that you agree to participate in this interview.

	Please Initial Box
I have read and understood the information for the above study and I have had the opportunity to ask questions.	
I understand that my participation is voluntary and that I am free to withdraw at any time, without giving a reason.	
I understand the purpose and the procedures of the study.	
I agree to take part in this interview.	
I agree to the interview being audio recorded.	
I agree to the use of anonymised quotes in publications.	

Signature of Participant

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Date

Appendix 5 – English Interview Guide

Semi -Structured Interview Guide

Welcome

Thanks for coming today. The goal of today's discussion is to understand your attitude and perceptions towards Pre-Exposure Prophylaxis (PrEP). I hope to get a better understanding of your thoughts on taking PrEP to prevent HIV transmission. Furthermore, I hope to get a better understanding of your thoughts on how peer communication has in the past assisted in developing your knowledge about health issues which might include PrEP and how this has influenced your perceptions and attitudes towards health and PrEP.

Logistics

- This interview will last about an hour to two hours.
- Where is the bathroom or the exit?

Ground Rules

There are only a few basic rules to keep in mind while participating today:

- a. There are no "right" or "wrong" answers.
- b. Speak freely and let me know if you need thinking time.
- c. Note taking is for reporting purposes only and will be used for analysis. The pseudonym you have provided will be attached to the notes and no name.
- d. All information gathered will be analysed to determine trends and establish themes, and discussion topics apparent from today's discussion.
- e. All feedback received today will remain anonymous. To maintain anonymity, I ask that anything that is said during our session is not repeated outside of our session.

- f. Turn off cell phones if possible.
- g. Relax and enjoy it.

Final Questions

Do you have any questions before we get started? These will be addressed now, and the interview can begin.

Turn on Tape Recorder

Introductory Questions

Let's start the discussion by talking about being MSM and the intersection of being MSM and how and where HIV fits into our identity.

- What does being a Man Who Has Sex with Men (MSM) mean to you?
- Does the term MSM resonate with you? If not, what term resonates with you or which term do you prefer to be identified by?
- If you responded **No**, to the previous question, I would like to understand why does the term MSM not resonate with you? What do you find is the problem with it?
- What does HIV mean to you and how does it affect you as a Man Who Has Sex with Other Men (MSM)?

HIV Prevention Strategies Questions

- Are you doing all that you can to protect yourself and prevent the transmission of HIV?
- Do you find it easy to protect yourself from HIV transmission whether you are having sex with a partner you are in a relationship with or during a one-night stand?
- What preventative methods are you using to prevent yourself from getting HIV?
- How consistently are you using these methods to prevent HIV transmission?
- How would you rate the efficacy of the measures that you use as a toolkit to prevent HIV transmission?

PrEP Knowledge

- What do you know about Pre-Exposure Prophylaxis (PrEP), commonly known as a Truvada and how it's used?
- What are your thoughts on Truvada being available in South Africa and the amount of information that is available about it?
- Would you be willing to take Truvada daily to prevent HIV transmission?
- Considering your above response, would you be willing to take Truvada daily to prevent HIV transmission?
- If **Yes**, why would you be willing to take Truvada?
- If **No**, why would you not be willing to take Truvada?

- How would Truvada be used, would it add to your existing toolkit of preventative methods or would you use it independently?
- Why would you use PrEP in this manner?

Based on the responses to the above questions, the motivators and barriers for PrEP uptake will become apparent which will inform the following questions:

Barriers and Motivators Questions

- What are the main factors that would influence you to take PrEP daily as a prevention method?
- Why is taking PrEP important as part of your prevention toolkit?
- Having heard and become aware of some of the possible factors that prevent people from taking PrEP (*high cost, bad side-effects, taking a pill a day*), why would you remain committed to taking PrEP?
- What are the main factors that would deter you from taking PrEP daily as a prevention method?
- Why are these factors so important that they would stop you from making PrEP part of your prevention toolkit?
- Having heard and become aware of some of the positive factors that influence people to take PrEP (*decreased chances of HIV transmission, engaging in condomless sex without fear*), why would you remain committed to not taking PrEP?
- How would you mitigate these [negative] factors in order to make PrEP an accessible preventative method for you?

- e.g. Cost would decreasing the price or PrEP being available for free influence your choice?
- e.g. Side-Effects if there is medication to decrease side effects freely available, would this influence your decision to take PrEP?

Peer Communication Questions

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- Do you commonly discuss the intimate details of your sexual encounters and sexual health with people of your age group that you classify as your peers?
- Who do you find most comfortable to discuss sexual matters and sexual health matters with and why?
- Why is this the person/or group of people you discuss these matters with?
- What factors influence how open you are when you have this type of discussions with your peer/s?
- Why is it important to discuss this aspect of your personal life?
- Why do you have these kinds of discussions?
- What are the general topics of discussion when having these conversations?
- Do these discussions ever include HIV preventative advice and matters?
- Have topics on alternative preventative health methods such as the use of PrEP ever formed part of these discussions?
- If **Yes**, how has your knowledge of PrEP as well as your attitudes and perceptions towards PrEP changed following discussing it with peers?

- Did these conversations influence your consideration of taking PrEP after you have discussed it with your peers?
- Have these discussions been beneficial to your decision-making, when it comes to sexual health?
- If **Yes**, how have these discussions and the information gained influenced your future sexual health decisions and how you behave during sexual encounters?
- If No, why do you feel that you have not gained anything from these discussions?
- How beneficial do you think it would be to have group peer discussions to discuss sexual health issues, and how do you think these would influence overall group sexual health patterns and the kind of preventative measures that people use?

Closing Question

 Is there anything else that you would like to share with me about the topics we have discussed today, namely;

HIV Prevention,

PrEP,

Peer sexual health communication and your views on its applicability to promoting HIV prevention amongst BMSM in the Msunduzi Municipality.

Conclusion

That concludes our interview. Thank you so much for coming and sharing your thoughts and opinions with me. Your feedback will be collected and included in my Masters' dissertation

(all feedback will be reported anonymously). I hope you have found the discussion interesting. I would like to remind you that any comments featuring in my dissertation will be anonymous.

Your insights will help me understand what BMSM in the Msunduzi Municipality think of PrEP and what influences these thoughts. If there is anything you are unhappy with or wish to complain about, please feel free to contact me later. Again, thanks for your time, you can help yourselves to the refreshments provided.

Materials and supplies for interview

- Consent forms (one copy for participants, one copy for the team)
- Interview Guide for Interviewer
- 1 recording device
- Batteries for recording device
- Extra batteries for recording device
- Notebook for note-taking

Umhlahlandlela Wemibuzo Yenhlangano

Ngiyakwamukela

Ngiyabonga ngokuza kwakho namhlanje. Inhloso yengxoxo yanamhlanje ukwazi kabanzi isimo somqondo wakho nendlela oyibuka ngayo i-Pre-Exposure (PrEP). Ngifisa ukwazi kangcono imicabango yakho ngokuphuza i-PrEP ukuzivikela ukutheleleka ngesandulela ngculazi. Ngaphezulu kwalokho, ngifisa ukwazi kabanzi ukuthi ucabangani ngendlela okhuluma ngayo Kanye nontanga bakho – ingabe ikusizile; ingabe kukhona indima eyidlalile ukucija ulwazi lwakho ngezempilo esingafaka kuyo i-PrEP nokuthi ingabe lezi zinkulumo zibe nawo yini umthelela ngendlela oyazi ngayo nangesimo somqondo wakho uma siza kwi-PrEP.

Ukuphathwa kwe ngxoxo

- Le-intavyu izoba phakathi kwehora elilodwa namabili.
- Ingakuphi indlu yangasese nokuthi kuphumwa kuphi.

Imithetho

Mincane imithetho okumele ihlale emqondweni wakho namhlanje:

- a. Akukho mpendulo elungile nengalunganga.
- b. Khuluma ukhululeke, ungazise uma udinga ukucabanga.
- c. Lokhu engikubhalayo kuzongisiza futhi ngikwenzela ukuhlaziya kahle. Igama lakho lepeni yilo elizosetshenziswa noma ngeke kube khona gama.
- d. Lonke ulwazi engizolithola yilo elizosiza ukuhlaziya kabanzi futhi yilo elizosiza ukuthi ngithole futhi ngihlaziye ingqikithi anye nemikhuba yesihloko sami.

- e. Zonke izimpendulo zanamhlanje ngeke kwaziwe ukuthi zishiwo ubani. Ukuqinisiseka ukuthi zingaveli, ngicela konke esikhuluma ngakho singakuphindi kwabanye abantu uma sesiqedile.
- f. Ngicela uma ungakwazi uthi ucime umakhalekhukhwini.
- g. Nethezeka, thokoze.

Imibuzo yokugcina

Ingabe unayo imibuzo ngaphambi kokuthi siqale?

Imibuzo isingaqala, ne-inthavyu isingaqala.

Ukukhanyiswa Kwesiqopha Mazwi.

Imibuzo Eyisingeniso

Asiqale ngokukhuluma ngokuba i-MSM nezinhlangano zokuba yi-MSM nokuthi isandulela ngculazi singena kanjani esithombeni sbunikazi bokuzazi kwethu.

- Kuchaza ukuthini ukuba indoda eya ocansini namanye amadoda (MSM) kuwena?
- Lihalala kahle yini leligama lesisbizo elithi-MSM kuwena? Uma uthi cha, yiliphi igama lesibizo ofisa ukuchazwa ngalo?
- Uma ngaphe uphendule ngo-cha kulombuzo ongemuva, ngifisa ukwazi ukuthi yini leligama lesibizo elithi MSM lingahlali kahle? Yiziphi izingqinamba onazo ngalo?
- Sichaza ukuthini kuwena isandulela ngculazi, futhi sikuthinta kanjani wena njengendoda eya ocansini namadoda (MSM)?

Imibuzo Emayelana Namaqhinga okuzivikela Kwisandulela Ngculazi

- Ingabe ukwenza konke onamandla akho ukuzivikela ekutholeni isandulela ngculazi?
- Kulula yini kuwena ukuzivikela kwisandulela ngculazi uma unomaqondana wakho noma kulula uma unomuntu ongazimisele ngaye umuntu ongalala naye ubusuku obubodwa?
- Iziphi izindlela ozikhethile ukuzivikela kwisandulela ngculazi?
- Ingabe lezi zindlela uzisebenzisa njalo?
- Ungalibeka kuphi izinga lendlela yakho nokuphumelela kwayo ekuzivikeleni ngesandulela ngculazi?

Ulwazi lwe-PrEP

- Wazini nge-Pre-Exposure Prophylaxis (PrEP), eyaziwa kakhulu ngokithi i-Truvada nokuthi isetshenziswa kanjani?
- Ithini imicabango yakho ngokuba khona kwe-Truvada lapha eMzansi Africa nangolwazi olukhona ngayo?
- Ungazimisela ukuphuza i-Truvada zonke izinsuku ukuze uzivikele kwisandulela ngculazi?
- Singakhohliwe impendulo yakho ngaphezulu, ungazimisela yini ukuphuza i-Truvada ukuzivikela ekutholeni isandulela ngculazi?
- Uma uvuma, kungani ungazimisela ukuphiza i-Truvada?
- Uma uthi **Cha**, kungani ungazimisele ukuphuza i-Truvada?
- Ungayisebenzisa kanjani i-Truvada, ingabe ungayisebenzisa Kanye nezinye izindlela zakho zokuziphephisa noma ungayisebenzisa yodwa vo?
- Yin indaba ungasebenzisa i-PrEP ngalendlela?

Izimpendulo zangasenhla ziyisisekelo zalembuzo elandelayo ngoba ziveza impokophelo Kanye nokungafuni lutho nge-PrEP.

Imibuzo Emayelana Nezithiyo kanye Nezikhuthazi

- Yisiphi isizathu esibalulekile nesibanzi esingakwenza uphuze i-PrEP njengesihawu sokukuzivikela?
- Kungani kubalulekile kuwe ukuphuza i-PrEP njengenye yamahawu okuzivikela?
- Usuzwile izingqinamba abanye ababhekana nazo ezibavimbayo ekutheni baphuze i-PrEP, (iyabiza, okuqhamukayo emva kokuyiphuza, ukuphuza iphilisi zonke izinsuku), ungama kanjani ekuphuzeni i-PrEP?
- Yini engakuqeda ugqozi lokuphuza i-PrEP ekuzivikeleni?
- Yini engakuvimba uma sibuka loku okungaphezulu ukuthi ungasithathi isinqumo sokuphuza i-PrEP?
- Usukuzwile okuhle okwenza abantu baphuze i-PrEP (ukwehlisa amathuba okuthola isandulela ngculazi, ukuya ocansini olungavikelekile ngaphandle kokusaba), yini engakwenza uzimisele ngokungayiphuzi?
- Yiziphi izingqinamba ongazama ukuzilwa ukuze kube lula ukutholakala kwe-PrEP empilweni yakho?
 - Njenge: Izindleko Ingabe ukwehliswa kwenani le-PrEP kungakushintsha umqondo noma ukutholakala kwayo mahhala?
 - Njenge: Okuqhamuka uma uphuza amaphilisi uma kungaba khona imithi eyehlisa ukungaphatheki kahle emzimbeni, ingakwenza shintshe umqondo nge-PrEP?

Imibuzo Emayelana Nezingxoxo Zontanga

- Ingabe uyaxoxa ngomcimbi wasekamelweni, ukuya ocansini Kanye nezifo zocansi nabantu abangontanga bakho?
- Ngubani okhululekile kuyena ukuxoxa izindaba zocansi Kanye nempilo yocansi.
 Ngobani?
- Yini eyenza lomuntu ukhululeke uma ukhuluma naye?
- Zikhona yini izinto ezikwenza ukuthi ukhululeke nokuthi uvule isifuba sakho uma ukhuluma ngalezizindaba?
- Kungani kubalulekile ukuxoxa ngempilo yakho yangasese?
- Kungani nixoxa ngalezi zindaba?
- Iziphi izihloko enijwayele ukukhuluma ngazo uma nikhuluma lezizindaba.
- Uma nikhuluma, niyakhuluma futhi ninikane izaluleko ngokuzivikela kwisandulela ngculazi?
- Nike nikhulume ngokuzivikela ezifweni zocansi ikakhulukazi ngokusebenzisa i-PrEP.
- Uma uthi **Yebo**, likhona yini iqhaza elidlalwe yilezi zinkulumo Kanye nontanga bakho, ingabe sishintshile isimo somqondo nangendlela oyibona ngayo i-PrEP?
- Ingabe lezi zingxoxo zibe naso isandla ekwenzeni ukuthi ucabange ngokuphuza i-PrEP.
- Ingabe lezi zingxoxo zibe nakho yini ukukwakha futhi ngabe kukhona yini ezikwenzile ezinqumweni zakho uma kukhulunywa ngempilo yocansi.
- Uma uthi Yebo, ikhona imithelela ephume kulezizingxoxo, ingabe ulwazi olutholayo linesandla ezinqumeni ozozenza ngempilo yezocansi nangendlela oziphatha ngayo uma uya ocansini?
- Uma uthi **Cha**, yini eyenza uzizwe engathi awuzuzanga lutho kulezizingxoxo?

 Uyasibona yini isidingo sokukhuluma ngalezi zindaba Kanye nontanga bakho, izindaba sempilo yocansi. Ingabe ubona zingaba nomthelela empilweni yenu nasemaqhingeni enu okuzivikela ezifweni zocansi?

Imibuzo yokugcina

Kukhona ofisa ukungitshela ngakho kulezizihloko esikhulume ngazo;
 Ukuzivikela kwisandulela ngculazi
 I-PrEP,
 Izingxoxo Kanye nontanga nemibono yakho ekutheni zingasabalala kanjani kuMasipala wase-Msunduzi

Isiphetho

Iphela kanjalo i-inthavyu yethu. Ngiyabonga kakhulu ngokuza uzongitshela imicabango yakho Kanye nemibono yakho. Izimpendulo zakho ngizozibeka futhi ngizozifaka ezifundweni zami ze-Masters (zonke izimpendulo ngeke zisho gama lamuntu). Ngiyathemba ulijabulele ithuba lokukhuluma name. Ngifisa ukugcizelela ukuthi konke okushiwo namhlanje kuphakathi kwethu sobabili, ngeke ngilisho igama lakho.

Ukuqonda kwakho kuzongisiza ukuthi ngazi ukuthi i-BMSM yoMasipala waseMsunduzi icabangani nge-PrEP nokuthi iziphi izinto ezinomthelela ekutheni icabange kanjalo. Uma kukhona okungakuthokozisi noma ofisa ukukhononda ngakho, ngicela ukhululeke ungithinte. Ngiyabonga, ngibonga isikhathi sakho. Ngicela uzitike ngokuya ethunjini.

Izimpahla zokwenza I-Intayvu

- Amafomu emvume (eyodwa eyomhlanganyeli, eyodwa eyethimba)
- Isiqondiso somholi ngxoxo.
- 1 Isiqophamazwi
- Ama-bhetri esiqophamazwi
- Ama-bhetri angeziwe esiqophamazwi
- Ibhuku lokubhala

Appendix 7 – Ethical Clearance Letter



09 February 2018

Mr Melusi Mntungwa 205514579 School of Arts Howard College Campus

Dear Mr Mntungwa

Protocol reference number: H55/2055/017M

Project title: Voicing the voiceless : Exploring the attitudes and perceptions of MSM (Men who have Sex with Men) in the Msunduzi Municipality towards Pre-Exposure Prophylaxis.

Full Approval - Committee Reviewed Protocol

With regards to your response to queries received 24 January 2018 to our letter of 18 December 2017, the Humanities & Social Sciences Research Ethics Committee has considered the above mentioned application and the protocol has been granted Full Approval.

Any alterations to the approved research protocol i.e. Questionnaire/interview Schedule, informed Consent Form, Title of the Project, Location of the Study, Research Approach/Methods must be reviewed and approved through an amendment /modification prior to its implementation. Please quote the above reference number for all queries relating to this study. Please note: Research data should be securely stored in the discipline/department for a period of 5 years.

The ethical clearance certificate is only valid for a period of 3 years from the date of issue. Thereafter Recertification must be applied for on an annual basis.

Best wishes for the successful completion of your research protocol.

Yours faithfully

Prof S Singh (Chair)

/px

cc Supervisor: Ms Luthando Ngema cc Academic Leader Research: Dr GB Mazibuko cc School Administrator: Ms Debbie Bowen

Humanities & Social Sciences Research Ethios Committee Prof Sheruka Singh (Chair) Wostville Campus, Govan Miseki Building Postal Address: Privale Bag X54001, Duton 4000 Trieglower: #27 (0) 31 266 3697/936004607 Pasalenie: #21 (0) 31 204 4607 Ethios <u>Campus Campus </u>