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Research Report



‘MA Coursework & Research Report’

Development Studies

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Research Title: Exploring the attitudes and knowledge (s) of HIV prevention of young, internal (South African) migrant, Black men who self-identify as gay in Johannesburg: implications for the development of South Africa’s Pre Exposure Prophylaxis (PrEP) Programme.

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Plagiarism Declaration

I declare that this dissertation is my own unaided work. It is being submitted for the degree of Master of Arts, Development Studies, in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any other degree or examination in any other University.

_____

Derick MacDonald Nyasulu

Signed on the 7th of November, 2017

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I would like to thank my guardians, friends, colleagues for their unconditional love and support throughout the course of the year. I would also like to acknowledge and thank my supervisor whose immerse support towards the production of this thesis I cannot take for granted. A special thank you also goes to all those who took the time to participate in my study, your insights were invaluable.

Dedication

I dedicate this thesis to my mother. Thank you for giving me life and continue being my guarding angel from above. I love you always.

Abstract

The World Health Organisation Commission for the Social Determinants of Health (CSDH, 2008) report calls upon the need to consider the social determinants of health, including migration in health planning. Unfortunately, the introduction of Pre Exposure Prophylaxis (PrEP) in South Africa is being framed as a stand-alone intervention without incorporating the social determinants of health i.e. migration and structural drivers of HIV, despite numerous evidence of failure of one-dimensional HIV approaches. The study aimed to explore the attitudes and knowledge (s) of HIV prevention amongst young, internal migrant, Black self-identifying gay men and its implications for PrEP.

This study used an interpretive qualitative approach by conducting 12 in-depth interviews with both men who have sex with men (MSM) who self-identify as gay individuals and experts working in the field of HIV. Social determinants of health like migration and homophobic attitudes both within the health care system and beyond could impact the uptake of PrEP and continuity access for PrEP among MSM who self-identity as gay within the context of circular migration. Likewise, the study highlights structural drivers of HIV that if left unaddressed could also have a bearing on PrEP as an HIV intervention vis-à-vis PrEP uptake and continuity to PrEP access within a context of circular migration.

Using Weiss (1979) interactive model, the study points out the need for all actors involved in policy making to take into account evidence, such as empirical data, best practices, insights from various stakeholders as a basis upon which South Africa's PrEP policy/programme can be based on.

Abbreviations

AIDS	**Artificial Immunodeficiency Syndrome**
ARVs	**Antiretroviral Drugs**
AVAC	**AIDS Vaccine Advocacy Coalition**
CCP	**Combined Prevention Programme**
CSDH	**Commission on Social Determinant of Health**
FHI360	**Family Health International**
HIV	**Human Immunodeficiency Virus**
HIVT4P	**HIV Taskforce 4 PrEP**
NGO	**Non-Governmental Organisation**
NSP	**National Strategic Plan**
MSM	**Men who have sex with men**
PrEP	**Pre Exposure Prophylaxis**
SAMJ	**South African Medical Journal**
SANAC	**South African National Aids Commission**
SANLGTTI	**South African National Lesbian, Gay, Bisexual, Transgender, Intersex**
UNAIDS	**United Nations Programme on HIV and AIDS**
UNFPA	**United Nations Populations Fund**
UNICEF	**United Nations Children's Fund**
WHO	**World Health Organisation**

Chapter One: Introduction

1.0 INTRODUCTION

The purpose of this study is to explore attitudes and knowledge (s) of HIV[1] prevention of young, internal (South African) migrant, Black[2] men who self-identify as gay in Johannesburg and its implications for the development of South Africa's Pre Exposure Prophylaxis[3] (PrEP) Programme. Currently, Pre-Exposure Prophylaxis (PrEP) -where antiretroviral drugs (ARVs) are administered to someone at risk of sexually acquiring HIV (SAMJ, 2013) - has been added to existing HIV prevention tools as recent studies have demonstrated its efficacy with regards to reducing HIV transmission (Sullivan *et al*., 2012; Chakrapani *et al*., 2015).

The introduction of PrEP[4] is significantly important to high risk populations such as MSM[5]. That is because MSM as part of key population, their social behaviour (the probability to engage in unprotected insertive and receptive anal sex) and interactive spaces of vulnerability (drugs and alcohol abuse) increases their chance of contracting HIV and AIDS (Crepaz *et al*., 2009). Hence, within South Africa's generalised[6] HIV epidemic, it is estimated that 9.2% of new HIV infections are related to MSM sexual act (Welte, 2010 cited in NSP, 2011: 26).

However, the introduction of PrEP is being framed yet as another biomedical intervention. The UNAIDS (2016a: 1) posits that "PrEP adds an extra HIV prevention option to the use of condoms and lubricant, behavioural counselling, post-exposure prophylaxis, treatment for

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[1] According to the South African mid-year population estimates (Statistics South Africa , 2015: 7) South Africa has approximately 6.9 million people living with HIV (11.2% national prevalence for adults aged 15-49 years), which is currently the highest in the world (UNAIDS, 2015). The country's HIV epidemic is driven mostly by heterosexual sexual transmission (NSP, 2011).

[2] Black in this research refers to native Africans according to the South African race classification which excluding Coloureds and Indian (Sandfort *et al*., 2008: 425).

[3] The study refers to oral PrEP which is among the many Antiretroviral (ARV)-based prevention (Quaife *et al.,* 2016)

[4] Truvada® the drug that is part of PrEP, consists of the two reverse transcriptase inhibitors emtricitabine and tenofovir (Jaspal and Daramilas, 2016)

[5] A broader key population group to which self-identifying gay men belong to.

[6] HIV among MSM seems to differ from that of the general South African population, suggesting that while intertwined with the heterosexual epidemic there is also an epidemic among South African MSM with specific dynamics, for instance racial distribution of HIV among MSM which concentrated among the Black MSM community (Sandfort *et al*., 2008: 425)

sexually transmitted infections, voluntary male medical circumcision and antiretroviral therapy for partners living with HIV". Likewise, the South African National Strategic Plan (NSP) on HIV, sexually transmitted infections and tuberculosis specifically calls for its introduction as an added HIV tool (SAJM, 2013; NSP, 2011). Several scholars have however, pointed out the need for Combined Preventive Programmes[7] (CPPs) in the fight against the pandemic as a one dimensional approach has proved to be ineffective (Rotheram-Borus *et al*., 2009; Kurth *et al*., 2011; Sullivan *et al*., 2012; Colchero *et al*., 2016).

It is essentially within this view to incorporate the social determinants of health i.e. migration that this study finds it purpose. Migration is a social determinant of health because when people move depending on the various upstream and downstream socioeconomic factors that are contextual in nature (Pison *et al*., 1993; Mbizvo *et al*., 1996; Mabey and Mayaud, 1997; Brewer *et al*., 1998, Deane *et al*., 2010), their health status might be compromised in one way or the other. Currently, part of high HIV incidence has been linked to spaces of vulnerability associated with migration. In South Africa, despite evidence of different patterns of migration (Crush 2005; Landau, 2005; Lurie, 2006; Lurie and Williams, 2014), internal migration hardly forms part of policy conversations (MacPherson and Gushulak 2001, Anarfi 2005; Vearey *et al*., 2011; Vearey 2014), yet migration can impact one's health.

The interactive model of health planning is the study's theoretical framework which according to Weiss (1979), seeks to promote the development of an informed health policy that is based on empirical data. Apart from research evidence, the model also acknowledges the use of; political insight, experience i.e. best practices and expert insight, pressure from lobby groups when it comes to policy making (see Venn diagram 1). Further, Weiss (1979) posits that an interactive model as a framework allows for both forward and backward linkages between various policy actors.

Based on the position outlined in the literature this study argues that provision of PrEP should be made available to all that are substantially at high risks of acquiring HIV and such programmes should be accompanied by efforts to address the structural drivers of HIV as well as eliminate all existing and potential barriers to HIV prevention health services that marginalise and vulnerable groups such as MSM subsets face. The subsequent sections will

[7] A combined prevention could be defined as a multiple-dimensional intervention that incorporates the contextual social and the structural determinants of health (UNFPA, 2004)

outline the study rational, the project objectives as well as highlight the research question.

1.1 STUDY RATIONALE

The rational of the study is that the adoption of PrEP as an HIV prevention tool may not effectively serve young, internal migrant, Black, gay men who self-identify as gay and considered part of key populations[8], if their attitudes and knowledge(s) of HIV prevention do not informs the development of South Africa's PrEP programme.

Internal migrant, gay men who self- identify as gay and who are aged between 15-49 form an important group vis-à-vis South African's HIV response efforts aimed at reducing incidents. According to the South African mid-year population estimates (Statistics South Africa , 2015: 7) South Africa has approximately 6.9 million people living with HIV (11.2% national prevalence for adults aged 15-49 years), which is currently the highest in the world (UNAIDS, 2015). Out of the aforementioned national HIV statistics, HIV prevalence and incident is high among Black MSM who unfortunately also have limited health care access due to social inequalities that are in existence as a result of the country's historical and current social-economic and political trends that have placed the majority of Black people at a disadvantage (Gilbert *et al*., 1996; Hargreaves *et al*., 2007; Scheibe *et al.,* 2011; Baral *et al.,* 2011;Gilbert and Walker, 2002a; Gilbert and Walker, 2002b).

Further, much as the country's HIV epidemic is driven mostly by heterosexual sexual transmission (NSP, 2011) however, HIV among men who have sex with men (MSM) seems to differ from that of the general South African population, suggesting that while intertwined with the heterosexual epidemic there is also an epidemic among South African MSM with specific dynamics, for instance racial distribution of HIV among MSM which concentrated among the Black MSM community (Sandfort *et al*., 2008: 425). This might undermine the UNAIDS 90-90-90 campaign[9] which among other things aims to reduce HIV incidence, which as indicated early, is high among MSM a population whose sexual encounters have linkages with heterosexual sexual relationships (Colleen *et al*., 2012). Further, migration due to spaces of vulnerability along with other various drivers of HIV form part of the social determinants of health which are equally important in understanding new efforts to address and respond to South African's HIV pandemic (Cruch, 2005; Crepaz *et al*., 2009; Vearey, 2014)

Using Weiss (1979) model which highlights the importance of evidence-driven policies making in health planning, the study was compelled to explore attitudes and knowledge (s) of HIV prevention of young, internal (South African) migrant, Black men who self-identify as gay in Johannesburg and its implications for the development of South Africa's Pre Exposure Prophylaxis (PrEP) Programme.

1.2 PROJECT OBJECTIVES

1.2.1 Research Question

The research question for this study is ***How are attitudes and knowledge (s) of HIV prevention amongst young, internal migrant Black gay men in Johannesburg an important tool in informing the development of a PrEP programme in South Africa?***

Among the various categories of MSM that Beyrer *et al*., (2010) identifies which include: self-identifying as gay, bi-sexual, men who do not identify as gay or bisexual but engage and enjoy same-sex sexual activities, and male sex workers, the study will specifically target self-identifying gay individuals. This group will be easier to identify than other subgroups such as those that do not self-identify as gay (SAMJ, 2013) and other subgroups which could have cost the research time to have them participate in the study.

In order to answer the research question the following are the research objectives and the research instrument to be employed to achieve them:

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[8] Key populations refers to "defined groups who due to specific higher-risk behaviours are at increased risk of HIV, irrespective of the epidemic type or local context and often have legal and social issues related to their behaviours that increase their vulnerability to HIV" (AIWG, 2014: 6). The legal context is however not applicable in South Africa as the constitutions do not allow any form of discrimination based on one's sexual orientation among other things.

[9] UNAIDS recently announced the 90-90-90 HIV campaign which by 2020 aims to have 90% of people living with HIV know their status, 90% of people diagnosed with HIV on treatment and 90% of people on treatment with suppressed viral loads; the proposed plan is linked to a 90% reduction in HIV incidence by 2030 (UNAIDS, 2014).

Table 1: Table presentation of the research Objectives

Objective (s)	Research Instrument
1. To conduct a literature review	Desktop research and document analysis.
2. To identify HIV prevention attitudes and knowledge among young, Black, internal migrant, self-identifying gay men in Johannesburg in the era of PrEP.	Conduct in-depth interviews with young, internal migrant, Black gay men in Johannesburg.
3. To understand if and how how attitudes and knowledge (s) of HIV prevention in the era of PrEP among young, internal, black migrant gay men in Johannesburg are an important tool to inform the development of a South African PrEP programme.	Conduct in-depth interviews with some civil society organisations and experts that are involved in HIV/AIDS management like the South African National AIDS Commission (SANAC).
4. To identify policy gaps that might undermine PrEP as an HIV prevention tool among the key population of young, internal migrant, black, gay men in Johannesburg.	Conduct in-depth interviews with some civil society organisations that are involved in HIV/AIDS policy like the South African National AIDS Commission (SANAC).

1.3 CONCLUSION

HIV is still a major health challenge in South Africa (Statistics South Africa, 2015; UNAIDS, 2015). With the inception of PrEP as added HIV prevention tool, there is renewed hope in the fight against the epidemic. However, health is a result of many influencing factors that emanate from the political, economic, cultural, and environmental spaces (Hart, 1986; Coates *et al.,* 2008). The need for Combined Preventive Programmes unlike stand-alone interventions has proved effective in the fight against HIV (Rotheram-Borus *et al*., 2009; Kurth *et al*., 2011; Sullivan *et al*., 2012; Colchero *et al*., 2016). This then calls for the need to prioritise the social determinants of health including migration as part of health planning vis-à-vis any planned intervention (CSDH, 2008; Imrie *et al.,* 2013 ; Vearey *et al*., 2011; Vearey 2014).

Likewise, there is a need for policy makers to engage with structural drivers of HIV within the policy making process. For instance, an essential element will be to understand the feasibility of a PrEP roll-out within the context of contemporary internal migration patterns.

Key to this is to understand if the current health care system can enable a national PrEP roll-out; PrEP uptake; and continuity to access to PrEP. There is need to understand social factors outside the health system that might hinder PrEP uptake and continuity within a context of rural to urban internal circular migration especially among those that are at high risk such as MSM. Therefore with the introduction of PrEP, it is essential to explore how of attitude and knowledge (s) of HIV prevention amongst young, internal migrant, black gay men in Johannesburg can inform the development of a South African PrEP programme.

Chapter Two: Literature Review

2.0 INTRODUCTION

Based on the position outlined in the subsequent sections, this study makes a position that the provision of PrEP should be made available to all that are substantially at high risks of acquiring HIV and such programmes should be accompanied by efforts to address the social determinants of health, structural drivers of HIV as well as eliminate all existing and potential barriers to HIV prevention health services that marginalised and vulnerable groups such as MSM subsets face (Scheibe *et al*., 2011). The subsequent literature review will demonstrate how the various themes relate to aforementioned position. The theoretical context of the study will come first. Secondly, a number of themes identified in the literature will be presented.

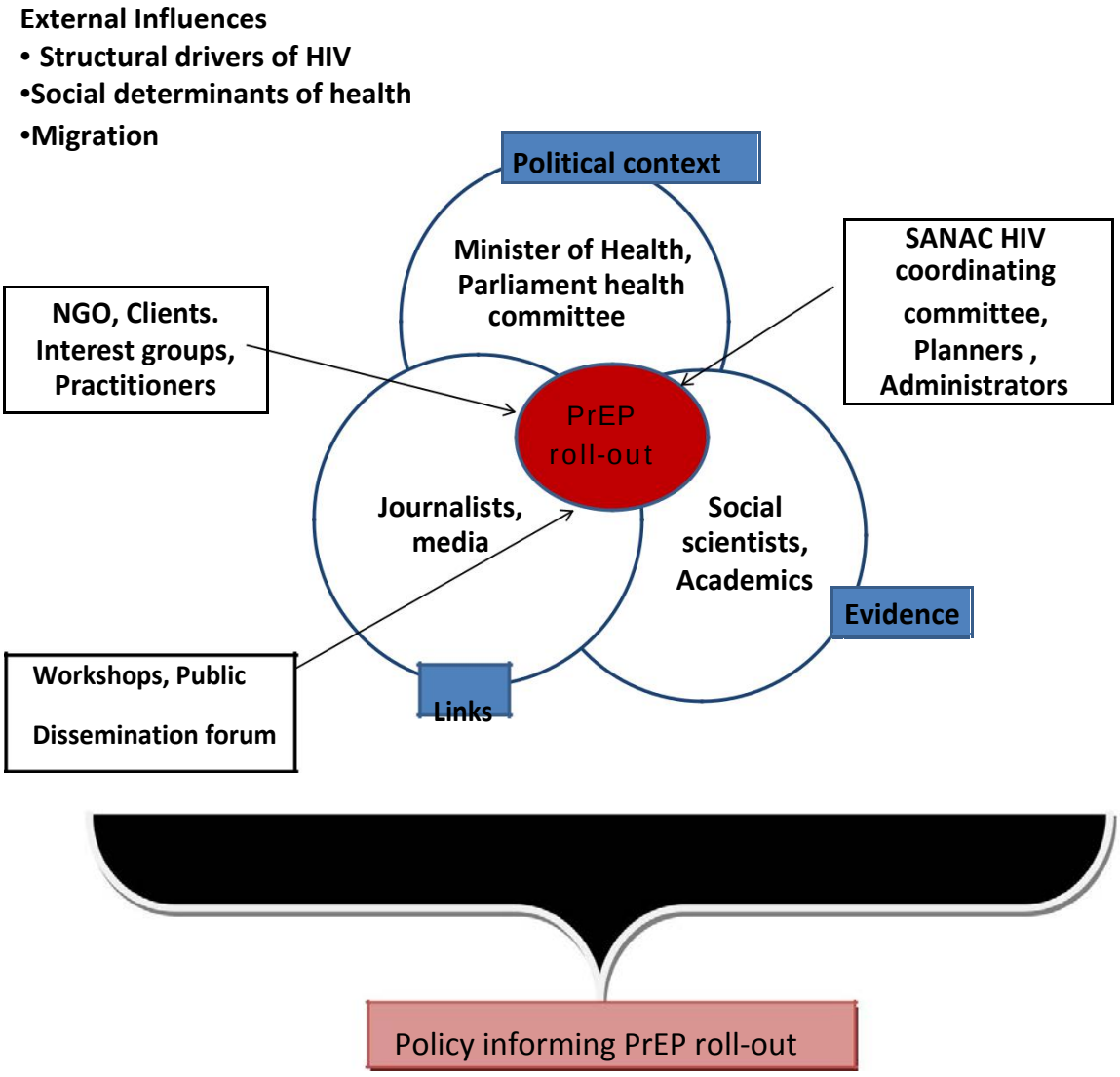
2.1 THEORETICAL CONTEXT

Van Ryn and Heany (1992: 316) define theory as a "systematically organised knowledge applicable in a relative wide variety of circumstances devised to analyse, predict, or otherwise explain the nature or behaviour of a specified set of phenomena that could be used as the basis for action". However, many theories commonly used in health promotion are either not highly developed, or rigorously tested; as a result the term model is mostly used (Nutbeam, 2006: 25). Again, given the range of health problems and their varied social-economic and political health determinants as well as location and population diversity, it follows that no single theory dominates health promotion practice (Nutbeam and Harris, 2004: 7). As such, this study is located within the interactive model pioneered by Carols Weiss (1979).

The interactive model is part of evidence-based policy making framework in which according to Nutbeam and Harris (2004: 65), "research knowledge is utilised as one input in the decision-making, alongside experience, political insight and social pressure". With this model, Weiss (1979: 428) posits that policy makers seek information not only from social scientists but from a variety of sources such as planners, clients, administrators and that the policy making process is not linear but is characterised by several interconnected elements that have forward and backward linkages. Evidence- based policy making framework is an important instrument to this study as Nutbeam and Harris (2004: 64) argue "epidemiologists

and other population health researchers often complain that their findings are not taken up by policy makers, while policy makers complain that there is often no relevant evidence for them to base policy on". Below is an adaption of Weiss (1979) interactive model with regards to policy making process for the PrEP roll-out.

Venn diagram: An adaption of Weiss (1979) interactive model on a PrEP policy.



The Venn diagram of the interactive model depicts that "the use of research is only one part of a complicated process that also uses experience, political insight, pressure, social technologies, and judgment" (Weiss 1979: 429). Further, "it has applicability not only to face-to-face settings but also to the multiple ways in which intelligence is gathered through intermediaries and brought to bear and "it describes a familiar process by which decision

makers inform themselves of the range of knowledge and opinion in a policy area" (Weiss 1979: 429).

2.1.1 South African HIV in Context

Since South Africa's first AIDS related case in 1982 among gay men[10], the country's HIV/AIDS landscape has drastically changed as it has now one of the highest HIV new incidence as well the highest HIV prevalence in the world among those aged between 15- 49[11] (Hargreaves *et al*., 2007; Forsyth *et al*., 2008; Mutinta *et al*., 2011; UNAIDS, 2015). A suggestion is made that this increase may be due to expanded access to Anti-Retroviral (ARV) treatments which has resulted in low HIV mortality rates and therefore leading to an increase in prevalence, but there is also evidence of continued HIV incidence among those aged 15 and beyond (Quaife *et al.,* 2016).

However, for South Africa, HIV is not merely a medical challenge as its firm grip on the society is fundamentally embedded within the country's historical socio-economic and political past which placed the majority of Black people at a disadvantage with regards to both social and economic opportunities (Gilbert *et al*., 1996; Hargreaves *et al*., 2007). Still, contemporary democratic South Africa is marked by a racial economy whose social inequalities are seen through the lens of race, class and gender (Gilbert and Walker, 2002a), and as such those most in need of health care especially blacks do not necessarily have access to it," (Gilbert and Walker, 2002b: 654). This has a huge bearing on the roll-out of PrEP with regards to PrEP access among Black MSM, which as a key population in South Africa, currently has higher HIV incidence and prevalence (Scheibe *et al.,* 2011; Baral *et al.,* 2011).

2.1.2 Drivers of HIV

They are multiple drivers of HIV that are associated with social determinants of health, one of which being migration vis-à-vis spaces of vulnerability (Crush, 2005; Crepaz *et al*., 2009;

[10]The gay community is associated with the first case of HIV in South Africa as a historical analysis of the HIV strain commonly found among MSM is one that was prevalent within the gay/bisexual community (Abdool-Karim, 2000; Gilbert and Walker, 2002a)

[11] Presently, HIV whose main mode of transmission is through sexual intercourse is one of South Africa's major health challenges associated with HIV incident in particular among members of black community, (Abdool-Karim, 2000; Gilbert and Walker, 2002a).

Vearey, 2014) and stigma[12] (Johnston, 2001). The other drivers of HIV in South Africa include transactional sex[13], alcohol and substance abuse, multiple sexual partners, stigma, denial, fear, prejudice, discrimination and an active 'othering' of People Living with HIV/AIDS (Cross and Whiteside, 1993; Petros *et al*., 2006; Santos *et al.,* 2011). The notion of othering carries within it the power to attribute risk enhancing behaviour to certain groups as well as blaming them for being at risk (Nelkin and Gilman, 1988; van Niekerk, 2001; Kopelman, 2002), a ground fertile to breed stigma that can manifest through the lens of race, or sexuality[14] (Dear *et al*., 1997).

Stigmatisation[15] is often as a result of prejudicial opinions and behaviour of those individuals affected as well actors involved in the management of HIV such as families, friends, co-workers, health care providers, communities, and government (Cameron, 1993; Jayaraman, 1998; Zierler *et al*., 2000), whose social construct of HIV is influenced by traditional, cultural and religious beliefs and myths associated with the disease and illness (Aggleton, 2000; Aggleton and Chase, 2001; ICRW, 2002; Kalichman and Simbayi, 2003). Some scholars (Van der Vliet, 2001; Stadler, 2003) have cited higher levels of illiteracy and HIV misinformation as part of the factors responsible for presence of various beliefs and myths of HIV, which Grundlingh (1999*:* 56) argues is already a complex disease as it belongs to the venereal category of diseases which "have long been associated with moral decay and corrupt sexualities", as was the case with syphilis (Douglas, 1966). However, "about 85% of HIV transmission is sexual" and "If the pandemic has proved nothing else, it is that a diverse sexual life is part of being human" (Piot *et al*., 2008: 847).

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[12] Stigma towards those who are HIV positive has been signalled out as one of the main challenges to combat HIV (Bond *et al*., 2002; Holzemer and Uys, 2004; Aggleton *et al*., 2005; Forsyth *et al*., 2008), as those affected are forced to conceal their sero status (Johnston, 2001).

[13] Much as transactional sex is open to multiple definitions, and many authors fail to define it (Leclerc-Madlala, 2003; Wamoyi et al., 2010), this study defines it as sex that is predicated on actual or anticipated material gain (instrumental support such as transportation or a place to sleep, material goods or cash (Dunkle et al., 2004)

[14] For example, a South African study by Petros *et al*., (2006) reveals that people living with HIV and AIDS are othered in five independent but closely interlinked specific categories of race, religion, gender, homophobia and xenophobia whose roots come from the country's historical elements of racism, patriarchy and homophobia.

[15] Stigmatisation within the HIV context can be defined as "social psychological processes through which people are discredited when they are perceived to be infected with HIV regardless of whether they actually are infected and of whether they manifest symptoms of AIDS or AIDS-related complex" (Herek and Glunt, 1988: 886-887).

Thus, in an absence of an HIV cure, individual anxiety of those who are HIV negative to avoid contracting HIV further increases stigmatisation (Paterson, 1996), a phenomenon that results in those infected to live in denial or remain silent about their HIV status (Qwana *et al*., 2001; Petros *et al*., 2006). Silence and denial are both detrimental to the fight against HIV as those infected not only miss the opportunity to access treatment but their behaviour could also play a role in driving new HIV incidents (Siegel and Gibson, 1988; Cross and Whiteside, 1993). "The social dimension is far more pervasive and central than we are accustomed to believing," (Treichler, 1989: 35).

Further, social inequality whose one aspect is health inequality is significant in explaining high incidence of HIV in South Africa (Gilbert and Walker, 2002a). The importance of health inequality index as a measure that uses different indices to compare health access between and within different countries' population groups has been recognised (Kaplan 1996; Wilkinson, 1996; Curtis and Taket, 1996), a vital phenomenon that ought to inform health planning[16] (Black, 1991; Benzeval *et al*., 1995; Kaplan and Lynch, 1997). As such, systematic health inequalities are present across a range of societal dimensions of class or income distribution, gender, race, and location (Gillespie and Prior, 1995; Robert and a House 2000; Gilbert and Walker, 2002b) whose interaction with the broader social structure is complex, leading to the production of dynamic social patterns of health and illness across populations (Nettleton, 1995).

The above sections feeds into the discourse of the need for a sociological understanding of health as it allows health planners to grasp that an individual's health is a product of either material or cultural social forces (Hart, 1986), that cannot be explicitly separated (Whitehead, 1988; Macintyre, 1986). Gilbert and Walker (2002a: 1094) also assert that "the ways in which people think, feel and behave are profoundly influenced by their position in society," leading Stronks *et al*., (1996) to argue that an individual's behaviour is to an extent influenced by ones environmental and social set up with regards to issues such as poverty, means of livelihood, and working conditions. With regards to MSM, Stall *et al*., (2003) posit that addressing psychosocial challenges is equally important when designing HIV

[16] However, with the dominant neoliberal economic paradigm, it is often assumed that markets will allocate resources efficiently (Nadal, 2004), leading to increased economic growth that will eventually remove the gaps associated with health inequality, a position that has often proved itself to be a normative statement (Whitehead, 1988; Townsend and Davidson, 1982; Townsend *et al*., 1988; Nettleton, 1995; Kaplan *et al*., 1996; Ben Shlomo *et al*., 1996; Marmot, 1996; Robert and a House, 2000).

interventions. Again, these unaddressed health set-backs can interplay differently both within the homeland and urban setting of internal black MSM involved in circular migration[17].

Hence, within the democratic South Africa, it is paramount to move to changing aspects of the political economy of sex such as high incidence of unemployment rates; increasing numbers of single-headed households; circular migration of both men and women; and transactional sex as a form of livelihood and how the interact with society to understand HIV transmission dynamics[18] (Hunter, 2007). This is important as it enables the implementation of structural interventions which are significant as they are able to identify the contextual causes of health and illnesses or environmental factors that influence behaviour (Blankenship *et al*., 2006), unlike the early HIV inventions that focused merely on behaviour or biomedical interventions[19] (Parker, 2001; Coates *et al*., 2008; Merson *et al*., 2008). Likewise, an analysis of a UNFPA (2004) study posits that any intervention that does not incorporate the social and cultural structural determinants of any setting is bound to be less effective in achieving its set goals.

2.1.3 Migration, Urbanisation and HIV

Vearey *et al*., (2011) posit that high levels of migration[20] of internal than cross-border migrants are observed in South Africa as people move from the homeland to urban centres in order to improve their livelihood. However, these migration patterns involving various migrants groups such as sex workers, labours, informal traders and education seeking individuals are circular in nature, transit, or permanent (Urquia and Gagnon, 2011; Madhavan and Landau, 2011).

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[17] For instance, Imrie *et al*., (2013) discusses the implications of high HIV rates among rural MSM, which is due to the inability to access health care services in the homelands as well as the stigmatizing comments, abuse and negative attitudes they encounter when engaging with health care services

[18] The progressive nature of the South African constitution should act as a guiding principle.

[19] Good interventions, Bertozzi *et al*., (2008) argue, need to be located where the next 1000 new HIV infection are likely to arise from as failure to do so according to Anderson (1996) easily provides room for the spread of the virus.

[20] Different patterns of migration of various migrant groups have been observed in many parts of the globe including Southern Africa (Crush *at al*., 2005; Adepojou, 2006; Castle and Miller, 2009). South Africa as a member state of SADC is one of the recipient of migrants from SADC, a region with high levels of migration, a high communicable disease burden and struggling public healthcare systems (Vearey, 2014: 663). Nonetheless,

The importance of recognising heterogeneous migration patterns taking place within South Africa is an important aspect as it allows for the development of migration-aware health responses that seek to employ a "place-based" approach to address the health of those affected by the migration process, including those who move and those who remain "back home" (Vearey and Nunez, 2010: 6; Vearey, 2016 cited in Yingwana, 2016). "This involves understanding specific contexts in which diverse migrant groups are situated, from where they originate, the migration decisions made, the journeys undertaken, and their households that remain "back home" (Vearey and Nunez, 2010: 6; Vearey, 2015; Vearey, 2016 cited in Yingwana, 2016). Hence, "health can impact the decision to move and migration may affect the health of those who move, those who stay, and perhaps even those who host migrants" (Hull, 1979 cited in Lu, 2008: 1331).

The above section feeds into the debate on migration and the spread of HIV to which two schools of thought have emerged. Voeten et al., (2010) suggests a clear relationship between migration and the spread of HIV although Deane *et al*., (2010) posit that not enough empirical data is available to suggest a direct relationship. While acknowledging how early migration linked to circular labour migration had played an important factor in the spread of the HIV pandemic due to the discovery of gold mines in Johannesburg (Lurie *et al*., 2003; Lurie, 2006; Lurie and Williams, 2014), Vearey (2014) posits that this may not be true with recent migration patterns. To explain this phenomenon Lurie and William, (2014) cite a number of factors such as improved working conditions within the mine industry which has seen more homeland visits of mine workers; improved transportation systems and the reduction of cross-borders migrants recruited into the mine industry.

What has emerged therefore is that there is now increasingly literature acknowledging that the dynamics of migration and the spread of communicable diseases have largely changed and that the relation between migration and the spread of diseases has become even more complex (MacPherson and Gushulak 2001; Banati 2007; Vearey and Nunez 2010; Vearey *et al*., 2011; Vearey, 2014; Lurie and William, 2014; Walls *et al*., 2015). For example, free movement of people in the post-apartheid South Africa has exposed mobile individuals or groups to sexually transmitted infections and HIV as they come in contact with people in the various communities due to spaces of vulnerability[21] associated with migration

(Pison *et al*., 1993; Mbizvo *et al*., 1996; Mabey and Mayaud, 1997; Brewer *et al*., 1998, Deane *et al*., 2010). Likewise, due to strong linkages between contemporary migration patterns and spaces of vulnerability, there is also a need to acknowledge how migration spectrum- from pre-departure to migrant-return phase affect various migrant groups as they come in contact with various spaces of vulnerability which expose migrants to high risk behaviours along the different migration process (Lurie, 2000; Anarfi, 2005; Gushulak and MacPherson, 2006) Banati 2007; Vearey *et al*., 2010; and Vearey, 2011a).

Vearey (2010a) highlights that linkages between migration and health are not linear, paramount to understanding health and migration is the need to identify down-stream and up-stream social structural factors of various migrant groups within spaces of vulnerability as well as to include internal migration which is usually ignored in health planning (MacPherson and Gushulak 2001, Anarfi 2005; Vearey *et al*., 2011; Vearey 2014). Similarly, certain migrant groups also form part of key populations within the context of HIV and AIDS. Therefore, PrEP needs to engage with migration.

2.1.4 Urban HIV

In South Africa, 50.5% of people living with HIV are estimated to reside within the four larger cities (van Renterghem and Jackson 2009) hence, urban areas have both high HIV prevalence and incident rates, approximately 7% and 1.8% in urban informal and formal areas respectively as compared to both 2.7% in rural informal and formal areas (Shisana *et al*., 2005). This phenomenon resembles South African MSM HIV historical context as initial documentation of HIV prevalence was among urban MSM (Wilkinson and Engelbrecht, 2009). Sher (cited Baral *et al*., 2011: 766) indicates that "a study of 250 MSM in Johannesburg in 1983 demonstrated an HIV prevalence of 12.8%" compared to a retrospective rural adjusted study among men who had a history to have had sex with a man by Jewkes *et al*., (2006) that put the estimate at 3.6% . Amidst the urban-rural contrast, the UNAIDS discussion paper (UNAIDS, 2016) posits that between 40-50 percent of new HIV

[21] These are spaces that contain a combination of social, economic and physical conditions that may increase the likelihood of exposure to, and acquisition of, either a non or communicable disease to migrants (Crush *et al.,* 2005b)

infections globally are currently estimated to occur among key populations such as MSM. In South Africa men who have sex with men account for a larger proportion of the epidemic than hitherto assumed, even where heterosexual transmission predominates (Van Griensven cited in Piot *et al*., 2008; Scheibe *et al*., 2011; Baral *et al*., 2011).

2.1.5 Social Networks as a Determinant of Good Health Outcome (s)

Social networks can be defined as social ties that cut across traditional kinship, residential and class groups to explain observed behaviour with regards to access to jobs, political activity or marital roles (Berkman *et al*., 2000). Attempts to analyse social networks as a determinants of migrants' health, often tend to postulate a picture where by their advantages are overstated, while at the same time their potential costs are underestimated (Myroniuk and Vearey, 2014; Whitehouse, 2012; Weil *et al*., 2012). The existence of literature that depicts unidirectional relationship between social networks and positive health outcomes for migrants underscores the need to examine the multidimensional elements under which these two notions operate (CSDH, 2008; Madhavan and Landau, 2011; Whitehouse, 2012).

Berkman *et al*., (2000) posit that there is a need for a structural approach to understand social networks and their impact on improved health outcomes since the relationship between the two is complex when seen within the broader social and cultural context in which up-stream and down –stream factors tend to determine network structures. Likewise, such an approach helps society to understand unproductive health outcomes in spaces of high levels of social capital (Berkman *et al*., 2000). Furthermore, based on a review of literature (Berkman *et al*., 2000; Madhavan and Landau, 2011; Urquia and Gagnon, 2011) the view that social networks are needed for better health outcomes underscores a possible unsmooth transition of migrants' lives in destination areas vis-à-vis inclusion[22] and assimilation[23] as not all migrants are cultural brokers[24] and might use idioms of health and

[22] Urquia and Gagnon (2011: 469) defines inclusion as a "process designed to allow and achieve the full participation of all residents, including immigrants, in economic, social, political and cultural life of a given community or society".

[23] On the other hand assimilation is defined as a "policy of incorporating migrants into the host society through a one-sided process of adaptation by which migrants are supposed to give up their distinctive culture and absorb some or all aspects of the dominant culture (e.g., language, norms, religion) and therefore become indistinguishable from the majority population" (Urquia and Gagnon, 2011: 467).

distress when describing their health (Patel *et al*., 2009). Such unidirectional view of the two, however, signals a simplistic picture of what health and wellbeing means which often times is equated to the western biomedical health approach (Bracken *et al*., 1997; Summerfield, 1999; Pupavac, 2002).

2.1.6 Healthy Migrant Effect Vs Migration- Aware Approach

The healthy migrant effect-a notion that hold the view that migrant exhibit better health than 'locals'- and the loss of this effect can be an important tool if used to analyse migration, mobility and health within the social determinants of migrants' health (CSDH, 2008; Davies *et al*., 2010; Madhavan and Landau, 2011; Vearey, 2014; Mathee and Naicker, 2016; Kearns *et al*., 2016). Nevertheless, based on the review of different literature on healthy migrant effect and the loss of this effect (Madhavan and Landau, 2011; Vearey, 2014; Mathee and Naicker, 2016) more research needs to be done to understand the healthy migrant effect along the different migration journeys i.e. pre departure to return phase. Caution however should be taken as the healthy migrant effect can render other quarters of society to advocate for migrants health rights especially where the health of migrants starts to deteriorate and might lead to 'othering' of migrants and further exclusion from the health system (Malmusi *et al*., 2010; Kearns *et al*., 2016).

The healthy migrant thesis should be seen within the context of both cross-border and internal migration as well as the various patterns of migration spectrum[25] (Gushulak and MacPherson, 2006; Lu, 2008), a position Vearey (2014) posits is important since the majority of those who move are internal migrants (i.e. national citizens of member states). It is then not surprising that internal mobility has been recognised as placing the greatest developmental challenges on national and local government (Launda and Segatti, 2009). Likewise, it important to recognise that both cross-border and internal migrants may face similar challenges relating to hostile reception, language barriers, marginalisation and

[24] A cultural broker refers to a "person with cross-cultural competence who mediates between groups or persons of different cultural backgrounds aiming at reducing or eliminating racial and ethnic disparities in health" (Urquia and Gagnon, 2011: 468).

[25] Studies that seek to validate the healthy migrant effect proposition largely focus on two parts of the migration journey: the pre-migration (see for example Lu, 2008) and the post- arrival phases (see for example Malmusi *et al.,* 2010; Mathee and Naicker, 2016; Kearns et al., 2016).

exclusion (Lu, 2008; Mathee and Naicker, 2016). South Africa is a good example of how some internal migrants groups face these socio-economic conditions due to its long history of "othering" within its society (Misago *et al*., 2015) as well deep inequality as shown by a high Gini coefficient and challenges of poor urbanisation (Mathee and Naicker, 2016).

Furthermore, socio-economic determinants of health within the broader migration spectrum ought not to be deferred (Deane *at al*., 2010; Vearey, 2015; Malmusi *et al*., 2016) as structural factors are responsible for the rapid deteriorating of health for migrants (Lu, 2008; Malmusi *et al*., 2016). Different migration phases all have gender, age, socio-economic status and genetics factors as cross cutting features that influences an individual's health and well-being (CSDH, 2008; Vearey, 2015). For example, Davies *et al*., (2010: 10) argue that migrants are exposed to "several experiences throughout the migration process which put their physical, mental and social well-being at risk". However, when it comes to migrant destinations such as in cities, structural factors that impact poor migrants' health outcomes are mostly linked to the inability of various migrant groups to access positive determinants of health, a phenomenon known as the urban health penalty (Vearey, 2013).

2.1.7 Policy Implications of HIV vis-à-vis PrEP

Much as there is a lot of literature on HIV and AIDS in South Africa, not many studies have focused on the importance to have social determinants of health as a critical aspect of health planning (Bouare, 2009). As a result policy responses have been largely criticised for being inadequate taking into account that close to 5.3 million people are current living with HIV (Mutinta *et al*., 2011). A study by Booysen (2004) on social grants and its social economic mitigation impact on HIV/AIDS directs the momentum to the right trajectory as Cluver *et al.,* (2016: 96) highlight that in "high-epidemic conditions, combination of social protection", show strong HIV prevention effects. However, one of the policy dilemmas that can be linked to high HIV prevalence rates in South Africa is President Thabo Mbeki's denial of the causal link between HIV and AIDS (Forbath, 2011). Again, "funding problems and health systems weaknesses facing the current health system have presented additional challenges to the realisation of the right to health and those living with HIV," (Scheepers, 2013: 89).

Characterised with inadequate public health spending, implementation of PrEP could face some critical challenges since Collins (2015a) indicates that currently PrEP has been included

in the WHO treatment guidelines and is also part of the UNAIDS 90:90:90 campaign. Apart from funding, some PrEP policy challenges hinges on "lack of resources and competing priorities- with regards to provision of HIV treatment and services; criminalisation of groups at higher risk (e.g. sex workers in South Africa) and stigma, which frequently impeded their access to HIV services; provision of adequate information and training to healthcare providers; and adherence," (Wheelock *et al*., 2012: 3-4). Similarly, other perceived challenges are issues of costing, distribution, side effects; defining eligibility and medication and HIV testing compliance (Wheelock *et al*., 2012). Finally, a study in India by Chakrapani *et al*., (2015: 569) reveals "potential barriers that emerged around stigma associated with PrEP use, fear of disclosures to one's family, wife, or male steady partner, and being labelled as HIV-positive or promiscuous by peers". This could impact PrEP uptake and continuity for PrEP access.

2.1.8 Pre- Exposure Prophylaxis - PrEP, Key Population and Ethics

The benefits of PrEP as an added intervention amongst identified key population groups such as sex workers and MSM, whose high probability to engage in high risk sexual behaviours, has been recognised (Anderson *et al*., 2012; Bauermeister *et al.,* 2013; Bekker, 2015). Feasibility, safety and adherence to PrEP done elsewhere among MSM and bisexual men have indicated strong efficacy of PrEP as a preventive measure against HIV acquisition under strong adherence plans (Bauermeister *et al.,* 2013; SAMJ, 2013; Rucinski *et al.,* 2013 Mustanski *et al.,* 2013; Kubicek *et al.,* 2015; Pérez-Figueroa *et al.,* 2015).

Nonetheless, the use of PrEP by HIV negative individuals has attracted some criticisms as those not in favour have argued that people living with HIV and AIDS could suffer from drug shortages as they cast a doubt on developing countries ability to ensure the availability of ARV drugs due to minute public health expenditure budgets, which is a characteristic of most poor Third World Countries (Gomez *et al*., 2013). Among the various ethics associated with PrEP that has been widely evaluated is that of cost benefit analysis (Steinbrook, 2012; Jay and Gostin, 2012). Using cost benefit analysis, pro PrEP advocates argue that PrEP is not expensive, in fact, if prescribed early to people at highest risk of HIV it is considerably cheaper than lifelong ARV treatment (SAMJ, 2013; Collins, 2015b). Furthermore, Venter *et al*., (2014: 269) argues that the ethical issues surrounding PrEP such as "disagreements over human rights, controversies over testing policies and questions about sexual morality and individual responsibility are not specific to HIV prophylaxis, but simply standard public

individual responsibility are not specific to HIV prophylaxis, but simply standard public health considerations about resource allocation and striking a balance between individual benefit and public good".

2.1.9 HIV Prevention vis-à-vis MSM

Some of the successes and challenges of HIV prevention tools in MSM which often time were taken as a stand-alone intervention include: behaviour interventions targeting risk behaviour such as unprotected anal sex; condom use with water based lubricants; community interventions that promote comprehensive HIV testing, linkage to care, and viral suppression through treatment with ARVs; microbicide barriers; and vaccination (Sullivan *et al*., 2012). However, many HIV interventions programmes leave out macro-level political, demographic and economic elements that speak to the evolving social and cultural setting of HIV, which are equally important to the design and implementation of successful holistic HIV interventions (UNAIDS, 2007; Piot *et al*., 2008; Rao Gupta *et al*., 2008).

Hence, several scholars have pointed out the need for Combined Preventive Programmes (CPPs) in the fight against the pandemic within the key population of MSM as a one dimensional approach has proved to be ineffective (Rotheram-Borus *et al*., 2009; Kurth *et al*., 2011; Sullivan *et al*., 2012; Colchero *et al*., 2016). Thus, CPPs call for a holistic approach to integrate behaviour change communications; biomedical interventions with structural changes that impede MSM to seek and access health services such as stigma and discrimination; and social dimensions within an individual's spaces of vulnerability such as poverty[26] and access to HIV services (Wilson and Halperin, 2008; Hankins and de Zalduondo, 2010; Beyrer *et al*., 2012). Nevertheless, Kurth *et al*., (2011: 62) among other things argue that "designing the optimal package of interventions that matches the epidemiologic profile of a target population" poses a lot of challenges. Still, PrEP has been received as significant new additional HIV prevention instrument if incorporated within a CPP framework (Youle, 2003; Stephenson, 2004; Smith, 2004; Vissers *et al*., 2008), as its efficacy over the past few years has been demonstrated (Càceres *et al*., 2015).

[26] However, the presumption that poverty increases one's vulnerability to HIV acquisition has been challenged as evidence from the Demographic and Health Survey in eight African countries has shown strong positive correlation between HIV prevalence and wealth (Mishra et *al*., 2007; Shelton, 2007)

2.3 CONCLUSION

The above literature review has highlighted the need to locate social determinants of health including migration and structural drivers of HIV in HIV programmes including the roll-out of PrEP (Rotheram-Borus *et al*., 2009; Hankins and de Zalduondo, 2010; Beyrer *et al*., 2012). To better achieve such HIV interventions, a Combined Preventive Programme framework should take centre stage in which evidence to inform such planned interventions is sufficient (Bouare, 2009; Sullivan *et al.,* 2012; Colchero *et al.,* 2016). The interactive health model is significant in these regard as it ensures that evidence is gathered from multiple sources as a basis to inform policy decisions (Weiss, 1979). The interactive model acknowledges that policy making processes are nonlinear and hence promoting back and forward interconnected linkages among various stakeholders, a process which if utilised can help to get attitudes and knowledge (s) of HIV prevention of an MSM subset across to policy makers vis-à-vis a South African PrEP programme.

Chapter Three: Methodology

3.0 INTRODUCTION

The study employed an interpretative qualitative approach. An interpretative qualitative approach can be described as a research tool whose aspect of enquiry is a situation activity that locates the observer in the world and consists of a set of interpretive, material practices that transform the world and make it visible (Denzin and Lincoln, 2008: 5). Denzin and Lincoln (2008: 5) argue that an interpretive qualitative approach as a research tool "turns the world into a series of interpretations, including field notes, interviews, conversations, photographs, recordings and memos to the self, making a researcher to employ an interpretive and naturalistic approach to data findings". Hence, a qualitative enquiry sets out to uncover how people make sense of their lives, as opposed to quantitative enquiry, which sets out to classify and categorise events and observable phenomena related to human beings (Creswell, 1998). A qualitative methodology was significant to this study as it allowed utilisation of a qualitative analysis which Corbin and Strauss(2008: 1) highlights is "a process of examining and interpreting data in order to elicit meaning, gain understanding, and develop empirical knowledge".

In-depth interviews were conducted with all participants. For self-identifying gay study participants, respondents were drawn into the study by snowballing. Once a participant was connected to the researcher, efforts were made to set up a date, time and place, both convenient to the participant. In the end, 8 open ended interviews using an interview guide (see appendix 3) were conducted. Interviews would on average run for 45 minutes. Before conducting the interviews, a Participants Information Sheet (see appendix 1) was read out to the participants, after which a Participant Consent Form (see appendix 2) was presented to separately seek consent to both conduct the interview and audio record the interview. The 8 participant all gave verbal consent to both. No financial reward was given to the participant except for the reimbursement of transport cost and buying of non-alcoholic drink during the interview.

Likewise, in-depth interviews were also conducted with 4 key experts in the field of HIV. The experts were purposively selected primarily based on the work their institutions undertake with regards to South Africa's HIV policy space. Upon identifying an institution, an e-mail was sent to the organisation requesting an interview on a day and time that was convenient to them. On the day of the interview, a Participant Information Sheet (see appendix 1) was read to the expert and consent (see appendix 5) was also sought to use a tape recorder and the name of the interviewee in the report. An interview guide was utilised to conduct the Interview which on average would run for 40 minutes.

The subsequent sections will highlight the methodology used, methods, sampling techniques, data analysis, and ethical considerations.

3.1 METHODOLOGY

Silverman (2006: 15) defines methodology as choices researchers make as they think about ways of studying social phenomena, appropriate data collection methods and forms of data analysis. Research design according to Burns and Grove (2003: 19) is a "plan that ensures that a study is conducted in a manner in which potential issues that might influence or interfere with validity of the findings are addressed". As such a strategy[27] was put in place effectively execute the purpose of the study which is ***to explore attitudes and knowledge (s) of HIV prevention of young, internal (South African) migrant, Black men who self-identify as gay in Johannesburg and its implications for the development of South Africa's Pre Exposure Prophylaxis (PrEP) Programme.***

3.1.1 Methods

Strauss and Corbin (1990: 3) define methods as "a set of techniques and procedures for gathering and analysing data". For this study, a qualitative methodology was utilised as it allowed an understanding of how people make meaning of the world view by exploring their attitudes and knowledge (s) of HIV prevention. A qualitative research suited this study as it enables the study of the empirical world from the viewpoint of the person under study (Schmid 1981, cited in Krefting, 1991: 214) as opposed to quantitative enquiry, which sets out to classify and categorise events and observable phenomena related to human beings

[27] Categories that informed the purposive sampling strategy included: age (19 to 39), self-identifying as openly gay, length of stay in Johannesburg (less than 1 to 8 months and those who travel either 3 or more times a year back home) and home origin (not born in Gauteng).

(Creswell, 1998). Further, it also allowed for a qualitative analysis which according to Corbin and Strauss(2008: 1) is “a process of examining and interpreting data in order to elicit meaning, gain understanding, and develop empirical knowledge”.

Once an interview had been conducted, the interview was then transcribe and both the transcript and the audio file were sent to the study supervisor for verification and analysis to ensure that the right data was being collected to help answer the research question. After completing all the interviews and transcribing then, a table with 3 columns was made. One column was tilted “main theme” the other “sub theme” and the final one had an excerpt from the transcript which was in support of the two respective mentioned columns. This process was undertaken with the aim to synthesis the collected data as a part of thematic analysis.

Hayes (2007) defines thematic analysis as a comprehensive process where researchers are able to identify numerous cross-references between the data and the research’s evolving themes. Thematic analysis as a method is often used to analyse data in primary qualitative research (Thomas and Harden, NCRM: Working Papers Series Number 10/07) because Attride-Stirling (2001: 387) argues that “thematic analysis seek to unearth the themes salient in a text at different levels”. Since the study’s sample population was determined and defined, Glaser and Strauss (1967) argue that in such a case thematic analysis is best appropriate unlike in the case of a theoretical sampling which is determined during data collection, in which case grounded theory is hence appropriate. Further, Boyatzis (1998) argues that thematic analysis illustrates data in great detail and deals with diverse subjects via interpretations which according to Alhojailan (2012: 10) is “most appropriate for any study that seeks to discover themes using interpretations”. Sandelowski and Barroso (2007) argue that a theme refers to a more implicit and abstract level, which requires interpretation, however, Vaismoradi *et al.,* (2016: 102) posit that “in addition to empiricism, the way to find theme involves intuition that is difficult to be described”.

With regards to this study, upon finishing extracting the relevant quotes, a process of manual sorting and coding was utilised to help strengthen emerging themes and subthemes of the study. Coding in qualitative research is significant as it not only reduces the amount of raw data to that which is relevant to the research question, breaks the data down to

manageable sections, but also takes a researcher through the transformation of raw data to higher-level insights of theme/subtheme development (Forman and Damschroder, 2008; Polit and Beck, 2010; DeCuir-Gunby *et al*., 2011). In the end, after a rigorous process of manual sorting and coding, some theme and subthemes were absorbed and only strong emerging themes (**see Table 4**) were left to help inform the write up of the results and discussion chapter

Further, the location of the study was Johannesburg but Braamfontein, a suburb of Johannesburg, acted as an access point for the MSM participants. Braamfontein was identified as a research access location because this area is one of Johannesburg's gay friendly places and as such act as meeting point for many individuals who come to patronise its urban culture and various entertainment activities i. e. gay friendly bars (Van NiekerK, 1995). Among the MSM subsets that Beyrer *et al.,* (2010) point out, the study targeted self-identifying gay individuals because the researcher was of the view that this group would share their attitudes and knowledge (s) of HIV prevention with easy since they already self-identify as gay and be drawn into the study by snowballing. Easy access to them has allowed the study to be completed in time.

3.1.2 Qualitative Methodology

Quantification of HIV prevention knowledge (s) and attitudes will lack an in-depth insight that a qualitative methodology can provide to the study as the literature has indicated HIV prevention strategies are all embedded within social, structural, and behaviour linked factors that might not have a common effect on individuals (Cohen and Manion, 1980; Creswell, 1994). Hence, in-depth interviews as a research instrument were utilised because "interviews provide a sensitive and meaningful way of recording human experience" (Bless and Higson-Smith, 2000: 38). In addition, individually conducted interviews ensure that the participant is free and safe to express their views and provide an acknowledgement of their private views or feelings about something (Corbin and Strauss, 2008). This in the end strengthens the validity of the findings as data collected this way goes beyond numerical data that quantitative methodologies provide.

3.1.3 Sampling

This section highlights the sampling strategy and study size.

3.1.3.1 Qualitative Sampling and Size

The sampling strategy for the in-depth interviews was purposive and snowballing. Snowball sampling was identified as an effective method as Beirnacki and Waldorf (1981: 141) argue that "this method is particularly applicable when the focus of the study is a sensitive issue and hence requires the knowledge of the insiders to locate people for the study". Categories that informed the purposive sampling strategy included: age (19 to 39), self-identifying as openly gay, length of stay in Johannesburg (less than 1 to 8 months and those who travel either 3 or more times a year back home) and home origin (not born in Gauteng). The age blanket of 19 to 39 was of particularly interest to this study as the National Strategic Plan of 2012-2016 (NSP, 2011) highlights that this is the age group where the HIV incident rates are high.

Similarly, the length of stay was an important aspect to the study at aimed to understand the particular social determinants of health that are of paramount to new internal migrants who are experiencing the city for the first time. Further, with regards to sample size, the researcher conducted in-depth interviews up until the level of saturation. This was an important aspect as the study wanted to broaden the various possible data the MSM participants.

3.1.4 Ethical Considerations

This research commenced upon obtaining permission to carry out the study from the University of the Witwatersrand, Development Studies Department, African Centre for Migration Studies, and the Human Research Ethics Committee under the supervision of Doctor Jo Vearey, as a pre-requisite for the partial fulfilment of the researcher's MA (Development Studies) degree programme.

However, the study acknowledges that concepts of MSM, PrEP, and HIV are surrounded by several social constraints that make it hard for people to easily and freely discuss and share information on them. Taking into account such complexities, the study opted more for verbal consent as well as snowball sampling with regards to the study population. Again, the study ensured anonymity in that what the participants shared has not been linked to any of the participant identity. The study has used pseudonyms in the final write up of the study to protect the identity of the study population due to the context of the research.

The researcher and the supervisor were the only people who had have access to the recordings of the in-depth interviews with the participants. However, the researcher had to also seek consent from the participants if recordings can be used for future research studies. The researcher ensured confidentiality in that the location where the in-depth interviews were conducted were not public or had other people around. In addition, upon the final submission of the thesis, recordings have been stored after editing of all elements that have the potential to link or identify participants to the study.

3.2 CONCLUSION

An interpretive qualitative approach was adopted in order to gain an insight on this study whose purpose is ***to explore attitudes and knowledge (s) of HIV prevention of young, internal (South African) migrant, Black men who self-identify as gay in Johannesburg and its implications for the development of South Africa's Pre Exposure Prophylaxis (PrEP) Programme.*** The methodology section has pointed out that a qualitative approach is best suited for this research as it seek to understand how people make meaning of their world view (Denzin and Lincoln, 2008). The study used snowballing sampling technique as a way of drawing study participants. This technique was adopted due to the complexity that the notion of MSM brings forth with regard to identifying individuals who practice sex-same.

Chapter Four: Results and Discussion

4.0 INTRODUCTION

The subsequent sections will highlight, firstly, an overview of the results and the study participants; and secondly, results and discussion. The final section will give out an analysis as well as the conclusion of the results and discussion.

4.1 OVERVIEW OF RESULTS AND STUDY PARTICIPANTS

A number of important main and sub themes that are vital to the research question have emerged from the data analysis. The table below presents brief information of the study participants. Nonetheless, of the 13 study sample size that agreed to take part in the study, 12 participants[28] met the criteria for inclusion in this analysis.

Table 2: Summary information of the Experts study participants.

Experts in the Field of HIV Policy		
Name	**Position**	**Organisation**
Ms. Mariette Slabbert	Manager National Sex Workers Programme and Social Impact Bond	SANAC
Mr. Albert Ikhile	Senior Technical Advisor	FHI 360
Dr. Oscar Radebe	Senior Clinical Advisor	ANOVA Health Institute
Prof Francois Venter	Deputy Executive Director	Wits Reproductive Health and HIV Institute

[28] (n=8, MSM study participants and n=4, experts on HIV policy)

Table 3: Summary information of MSM Study participant.

Study Participants					
Name (*Pseudo*)	**Age**	**Place of Origin**	**Number of months in Johannesburg**	**Publicly Identifying as Gay**	
Ayanda	32	Eastern Cape	6 months		Yes
Bongani	22	Limpopo	6 months	No	
Chifero	21	North West	6 months	No	
Dumisani	26	Free State	8 months		Yes
Edzani	35	Limpopo	2 months		Yes
Fhulufelo	36	Free State	3 months		Yes
Gomolemo	25	Limpopo	6 months	No	
Sisanda	25	Limpopo	5 months		Yes

Having presented a brief summary of the study participant, the subsequent table provides a layout of the main themes and their sub themes.

Table 4: Overview table presentation of the themes

Cross-cutting Themes	Main Theme	Sub Theme(s)
INERNAL MIGRATION AND URBAN SPACE	1. Knowledge (s), Attitude (s), of HIV Prevention in the era of PrEP	A. Risk Perception of HIV
		B. Knowledge of HIV prevention tools i)knowledge vs Practice
		C. Attitude (s) towards Prep i) Prep acceptability ii) Prep and increase in unprotected sex
	2. Drivers of HIV	A. Precarity of the urban space i) Social networks as a determinant of good health a) Risky Sexual Practices and Risky Behaviour (s) b) Rape c) Lack of Income/access to cash
	3. Health Equity and Access [triangle]	A. Availability of HIV prevention services {(including PrEP)(mobility; Continuity of care/access to PrEP)}
		B. Acceptability of HIV prevention services {(including for PrEP)(Homophobia, stigma and discrimination barrier to health care access)}
		C. Affordability of HIV prevention services (including for PrEP)
	4. Informed HIV Policy	A. Evidence-based HIV programming
		B. Importance of research based HIV programming vis-à-vis Prep roll-out
		C. Government and Civil Society collaboration on HIV policy

4.2 RESULTS AND DISCUSSION

This study has un-earthed both several imperative main and sub themes that should inform the development of a South African PrEP programme. Emerging themes after the process of sorting and coding of raw data include the two crossing-cutting main themes of internal migration and urban space. Interlocking with the two cross-cutting themes are other themes of: One, knowledge (s) and attitudes of HIV prevention in the era of PrEP; Two, Drivers of HIV; Three, health equity and access and HIV policy. The final section provides the conclusions. These themes are significant as they highlight the challenges of PrEP uptake and continuity for access to PrEP within the context of circular migration, hence a need to inform a policy on PrEP.

4.2. 1 Cross-Cutting Themes (Internal Migration and Urban Space)

Migration and Urban space are essentially cross-cutting themes identified in the study. To illustrate this point, one respondent argues that

> *"People come to Jozi having expectation of a good life to live in Joburg only, to find out when you arrive in Joburg, maybe you came to a friend or sibling, to find out that it's been six months still jobless, still hunting and they end up fighting or kicking you out- you end up in the street... and then other gay men will come and say, ok its fine, listen gentleman, I can show you how I live my life... Some of them are sex workers – they are a bit risky, some of them are rent boys"*

Ayanda, 23 September, 2016.

Another respondent posits

> *"In Joburg you experience different nations; you meet different people at the same time, so you can pick and choose"*

Fhulufelo, 18 December, 2016

The above quotes give evidence of how internal migration and urban precarity intersects. For instance, the first quote signals urban precarity of lack of unemployment, lack of shelter, unstable and harmful social networks and lack of access to cash which exposes one to engage in risky sexual practices that might exposure one to HIV such as sex work. Again, the

second quote highlights the freedom that gay men have when they are in the city. Thus, the urban space as a top migrant destination (Crush, 2005; Landau, 2005), has revealed its good element to various migrant groups as it offers various social, economic and political opportunities. In the same vein, urban space has come to be characterised by precarity (Trimikliniotis *et al.,* 2015). Adding a voice to the crossing-cutting theme is Radebe of ANOVA Health Institute who highlights that

> *"an older MSM guy who is a gay indentifying male, and who is married might come and have a boyfriend in a city- this is a weekend off type of thing. So it's kinda of an occasional open relationship...so there are multiple partners everywhere, and when he is not there, this person is also seeing other people"*
>
> Radebe, ANOVA Health, 8 December, 2016

The quote illustrates how within democratic South Africa due to modern transport technologies mobility has become so easy for people. Thus, people are always on the move and this movement is circular in nature (Vearey *et al*., 2011). A vital aspect to consider is to recognise the ever-changing link between migration and the spread of diseases (MacPherson and Gushulak 2001; Banati 2007; Vearey and Nunez 2010; Vearey *et al*., 2011; Vearey, 2014; Lurie and William, 2014; Walls *et al*., 2015).

Hence, there is a need for policy makers to understand the dynamics of internal migration and urban space precarity and how these two cross-cutting themes interlock with the other main themes as they together impact PrEP accessibility and continuity within the context of circular migration. The World Health Organisation Commission on the Social Determinants of Health (CSDH, 2008) acknowledges that various migrant groups face a huge health burden when they migrate and supportive policies for rural-urban migrants to ensure their right to have access to health and other basic needs is maintained. Policy makers should bring up such evidence onto the policy making table as advocated by Weiss (1979) interactive model.

4.2.2 Knowledge (s) and Attitude s of HIV Prevention in the Era of PreP

Since PrEP has been added as an HIV prevention intervention, it important to understand current knowledge (s) and attitudes of HIV prevention in the era of PrEP. That is because despite the lack of social determinants of health being a central tenet for health planning

(Bouare, 2009), Sullivan *et al*., (2012: 388) argue that "available interventions are insufficient, largely untested in most developing countries, and not sufficiently tailored to MSM".

4.2.2.1 Risk Perception of HIV

Much as the benefits of PrEP as an added prevention package among MSM as a key population have been acknowledged (Anderson et al., 2012; Bauermeister et al., 2013; Bekker, 2015), SAMJ editorial (2013) posits that most key populations however, do not identify themselves as being at risk. The study results challenges such a position since the majority of the self-identifying gay males who were part of the study argued that they feel at risk of contracting HIV when they engage in a sexual activity with a man. For example, one participant argues that

> *"even when I'm drunk- I always make sure that I have protection- if I don't have it, I won't have sex"*
>
> Dumisani, 18 December, 2016.

The presented quote highlights that as gay identifying individual, he is cautious of the high risk of acquiring STI and HIV. Both Receptive and insertive anal sex is in many ways a high risk sexual act due to biological factors (Baggaley *et al.,* 2010). Venter of WHRI adds that self-risk identification is common among key populations such as sex workers and MSM unlike in heterosexual relations and is usually accurate (Venter, WHRI, 17 January, 2017). Nonetheless, various studies have document different contextual risk perceptions of gay men (Saberi *et al.,* 2012; Gallagher *et al.,* 2014; Jaspal *et al.,* 2016) that do not equate to gay individuals to be at high risk. For example, Klein and Tilley (2012) revealed that internet-using HIV-negative men who have sex with men tend to underestimate their risk for acquiring HIV, and interventions need to help them accurately assess their risk.

4.2.2.2 Knowledge (s) of HIV Prevention Tools in the Era of Prep

The right HIV prevention information that is also widely accessible is an important aspect in the fight against HIV/AIDS. This statement is equally important with PrEP as a recently added HIV prevention tool. With previous well-known and problematic prevention methods of A, B, C (**Abraham *et al.,* 2002**); only one participant mentioned Abstinence; similarly, one

participant mentioned being faithful while the majority of the respondent signalled condom use as a method of prevention. However, Radebe of ANOVA Health Institute says

> *"Some MSM use a lot of lubrication instead of condoms – they are thinking lubricants are more effective than condoms... some use spit for lubrication, others use olive oil, Vaseline"*
>
> Radebe, ANOVA Health, 8 December, 2016.

The above data presents a challenge to health planners as it indicates that some people still do not have the right information when it comes to protecting themselves from STIs and HIV. Again, it speaks to growing discourse of condom dislike among same-sex practicing individuals. Similarly, the data could be a pointer to MSM subgroups not accessing the right information and health care services due to unavailability of widely distributed MSM friendly clinics. These challenges continue to put the health of gay men in jeopardy since lubrication[29] is only part of a protection package- works together with a condom- but is not in itself a barrier method. Hence, the use of condom is still vital as an effective barrier method but needs to used alongside the right compatible lubrication (**The American Psychological Association, 2015**)

Further, knowledge of PrEP (as another preventative tool) was measured by asking a yes/no question about PrEP and follow up questions in the event that the respondent answered yes. Depending on the respondent's answers to follow up questions, judgment was made on the participant knowledge of PrEP. The study however, found that only 1 out of the 8 study participants has the right information regarding what PrEP is and how it works. This participant also acknowledges that

> *"When you are on Prep, it doesn't mean that you need to stop using condoms because remember Prep is only protecting you only from HIV not all STI. There are other difficult STI outside- Gonorrhoea, Chlamydia, Syphilis"*
>
> Ayanda, 23 September, 2016.

[29] Lubrication rather simply reduces the intense friction that comes with receptive insertive anal sex which greatly increases the chances of exposure due to tiring of the inner membrane layering

Contrary to this, the following quote feeds into how many people are not well-informed on how PrEP works as one participant posits that

> *"if someone has had unprotected sex and doesn't know that the status of the person with whom they have had sex with, one can go to the clinic to get their blood cleared within a 48 to 72 hours period"*

Dumisani, 18 December, 2016

The contrast of PrEP knowledge through the above presented evidence signals that the right information of PrEP as an HIV prevention tool has not been well disseminated across individuals who are at high risk of exposure to HIV such as MSM subsets. Further, an issue of concern is also what Makofane of City Press (2017) highlights that there is reckless reporting of PrEP due to "conceptual misunderstanding which equates sex without a condom" among PrEP users as "reckless" and "some factual errors". This can hinder the uptake of PrEP among people who are at high risk of HIV acquisition especially subsets of MSM whose sexual lifestyle according to (Jakobsson, 2010; le Grange, 2010; Vu et al., 2011) is still not well accepted among most members of the society, such as Health Care Workers (Scheibe *et al.,* 2011). There is a need therefore to embark on an awareness campaign targeting key populations that are at high risk. Such awareness campaigns also need to emphasise the issue of adherence once one is on PrEP. Several scholars (*see* Bauermeister *et al.,* 2013; SAMJ, 2013; Rucinski *et al.,* 2013 Mustanski *et al.,* 2013; Kubicek *et al.,* 2015; Pérez-Figueroa *et al.,* 2015) have highlighted the issue of adherence as being crucial to PrEP efficacy. Hence, Venter argues that

> *"Much as Prep is a very exciting technology it works quite well for communities where adherence is also certainly going to be good"*

Venter, WHRI, 17 January, 2017.

However, commenting on the link between risk perception and knowledge (s) of HIV prevention, Slabbert of SANAC argues that

> *"Prevention does not always equate to practice of actual engagement in safe sex"*

Slabbert, SANAC, 7 November, 2016

Nonetheless, an awareness campaign before the roll-out of PrEP cannot be underestimated. Already the majority of the participants cited the need for such interventions. For example, one participant points out that

> *"The information about Prep is not broad in our community. The government needs to make PrEP related information widely accessible - on billboards, advertisement… there is need for campaigns that will make people aware that being on Prep does not mean that you should not use condoms…this might help people to know more about Prep before they even roll it out"*
>
> Dumisani, 18 December, 2016.

There are a number of possible ways on how massive awareness can be conducted in order to reach those that are marginalised. Heywood (2016) argues that the 3,182 clinics and the 331 community health centres alongside shebeens, churches, football clubs, and burial societies should be part and parcel of community mobilisation efforts vis-à-vis ward based outreach efforts so that they are empowered and trained on capacity building skills. In addition, one respondent reasons that

> *"Government should do more awareness and education campaigns in rural areas so that more people can have knowledge of PrEP so that they should know what do; where to go when they need Prep"*
>
> Fhulufelo, 18 December, 2016.

Further, Venter of WRHI also echoes similar sentiments as he argues that

> *"I think we need to educate people about what it means, why they take it, and how they must take it"*
>
> Venter, WHRI, 17 January, 2017.

Besides, a well-informed national wide campaign on PrEP, the above quotes also highlight the need to develop message and disseminate such information in a way that people can easily understand. The use of a local language and respecting people cultures with regards to information dissemination are some key elements that should inform such campaigns.

4.2.2.2.1 Knowledge (s) of HIV Prevention Vs Practice

The above discussion has both touched on risk perception of HIV and the knowledge (s) of HIV prevention in the era of PrEP. However, further research could be done to explore the causality between the two. At present the findings are suggesting that individual risk perception and knowledge (s) of HIV prevention might not always translate to intentions to use protection or let alone the actually practice to use protection. For instance one states that

> *"I can be free and hook up with everybody that I want like in Joburg or in different places but back at my mind there is prevention, there is protection... I'm gonna give you time- few days, like seeing each other but not doing anything- just seeing each other chilling, chatting, fun and then we go until I learn to accept now I think "kuli" (that) -ok you are a good person to have fun with."*
>
> Ayanda, 23 September, 2016.

The above quote is a perfect example to solidify the position that individual risk perception and knowledge (s) of HIV prevention might not always translate to intentions to use protection or let alone the actually practice to use protection. When it comes to HIV protection, it is not about how long one has been in a relationship or whether treatment from a partner is good. Based on the high HIV prevalence and incident rates among the MSM population (Welte, 2010 cited in NSP, 2011; Rispel *et al.,* 2011; UNAIDS, 2016) one can easily lean towards the position the study is suggesting that actual practice/behaviour to use protection as a last stage from the knowledge stage to the intention stage is low[30]. Shading light on this position, Ikhile of FHI 360) explains that

> *"Due to social economic challenges that one is facing there times when one does not even think of using condom in spite of having the knowledge that having unprotected sex could lead one to acquiring HIV and other STIs"*
>
> Ikhile, FHI30, 22 November, 2016

[30] That is to say: one, an individual might be aware that receptive anal sex carries a high risk; two, the same individual might intend to use protection during sex; three, the person forgo protection during sex and end up having unprotected sex.

Hence, a sociological aspect among policy actors who are key in policy making will make them aware what several scholars (Stronks *et al*., 1996; Gilbert and Walker, 2002a; Vearey, 2014) have pointed out that health and well-being is a result of several interlocking factors. Without such effort, we will then continue to see what Radebe of ANOVA describes

> "*The majority of the cases we see in clinics are STIs related- meaning people are having sex without protection"*
>
> Radebe, ANOVA Health, 8 December, 2016.

With an imminent South Africa PrEP roll-out programme targeting those at high risk of HIV acquisition such MSM as a key population, it is vital to locate upstream as well as the downstream structural elements that greatly impact people health and wellness. This is significant as McIntyre *et al.,* (2013) argue that various structural factors affecting HIV incident rate among MSM in South Africa have not been well addressed by HIV prevention programmes to date.

4.2.2.3 Attitude (s) of PrEP

The attitude (s) of PrEP among internal migrant Black gay form an important conservation with regards to the uptake of PrEP as well as continuity of PrEP access within the context of circular migration. The following aspect: PrEP acceptability; PrEP and higher cases of unprotected sex were notions that the study incorporated as part of efforts to understand attitude (s) of PrEP. Thus, policy makers need to take account of the evidence presented below as part of the forward and backward interconnected linkages within the policy space as presented by Weiss (1979) interactive model.

4.2.2.2.1 PrEP Acceptability

The study defines acceptability as the individual choice of want to use PrEP as an HIV prevention tool on top of the already existing methods of prevention. Ayala *et al.,* (2013: 1) argue that "if MSM are to benefit from approaches that combine new and existing biomedical, behavioral, and structural interventions, factors that impact access to and acceptability of these interventions for MSM must be clearly described and addressed". The study found that the majority of the study participants expressed keen interest to use Prep

seeing it as a good HIV prevention tool, a position that goes beyond possible rumoured side effects of weight gain as well as stigma and discrimination associated with decades of ARVs that PrEP uses might experience. For instance, one respondent reasons that

> *"it you drink PrEP knowing that you are protecting yourself from a disease that is deadly, whether you gain weight, gives you pimples or a rush, you gonna drink it because a rash is something that is far better than being infected"*
>
> Edzani, 18 December, 2016.

Likewise, another participants argues that

> *"if I found out that after taking PrEP I'm gaining weight, it doesn't matter because it's for myself- I want to take care of myself, I don't care about what the other person will say"*
>
> Dumisani, 18 December, 2016.

The above quotes come from a history of highly toxic ARVs during the initial stages of the drug in which many HIV positive individuals experienced various body changes. The various body changes fuelled discriminatory attitudes towards people living with HIV (Makoae *et al.,* 2009). However, such societal attitude of stigma attached to ARVs seem to be changing as one participant describes that people who are taking PrEP can tell others openly that they are drinking PrEP, stating

> *"A person who is staying in Lesego would not disclose his HIV status to the people in Lesego; you know the stigma of being HIV. But the different becomes with PrEP- because you can go and say I'm drinking Prep- because when you say you are on PrEP- they would know that you are negative... and they will encourage you to take even more often"*
>
> Edzani, 18 December, 2016.

Further Radebe of ANOVA Health Institute adds that

> *"ARVs when they started unfortunately they were not seen in a good light, it's like HIV- it was obviously a diagnosis that you were gonna die. But when you look at PrEP- it also gives an opportunity that you actually can take ARVs and still be ok... I*

think one of the opportunities that PrEP brings forth is the opportunity to de-stigmatising ARVs that it's not only for HIV positive people but also for negative people in the form of PrEP"

Radebe, ANOVA, 8 December, 2016.

Nonetheless, since PrEP is part of an Antiretroviral regime, its possible for PrEP user to face discriminatory attitude. But this is an area that needs research to provide enough evidence once the pill is rolled out. Nonetheless, as a way of health planning, policy aspects could speak to ways on how such possible discrimination could be averted. However, the study acknowledges that PrEP acceptability does not translate to direct usability of PrEP as the first preferred prevention method of choice. The expected study results from Quaife *et al.,* (2016) study[31] could help to provide more clarity about how popular PrEP will be when measured against other prevention products such as condoms. At the moment, a study by Chakrapani *et al.,* (2015) done in India offers some insights as it reveals potential barriers associated with PrEP use such as fear of disclosure to one's family, wife or male steady partner and being labelled HIV-positive. Hence, location and cultural context could be some of the factors that could contribute to either higher or lower PrEP acceptability, although more research should be done to establish strong evidence. Nonetheless, a study by Ayala *et al.,* (2013) revealed that acceptability of PrEP was independently associated with lower PrEP stigma.

Further, one participant with low knowledge of PrEP still mentioned PrEP moderate efficacy as a reason for his non-acceptability position, stating that

"I don't know for me am still not comfortable with it. The paranoia of chances of it not working for me, are the ones that makes me question the whole thing...I think if people I know are using it and they later share that this thing works. I think I will be more open about it and say- you know what let me try it too"

Bongani, 28 October, 2016.

[31] The title of the study is "Preference for ARV-based HIV Prevention Methods among Men and Women, Adolescent Girls and Female-sex Workers Gauteng Province, South Africa: A Protocol for a Discrete Choice in Experiment" (Quaife *et al*., 2016).

The above quote is in line with what other scholars (Galea *et al*., 2011; Brooks *et al*., 2012) have documented as potential limitations to PrEP uptake which include intervention's costs, its moderate efficacy, and potential side effects. However, PrEP is proving to be effecting in reducing HIV incident and policy makers need to capitalise on such evidence (Wilson, 2017) although the need for a sociological understanding of health within the South African context should equally prioritised by policy makers. Wilson (2017: 1) points out that "4 London sexual health clinics have registered a dramatic fall in new HIV infection among gay men due a likely increase usage of PrEP, even though the decline has generally been attributed to a mix of better prevention, diagnosis and treatment methods without singling out PrEP".

The key underlying factor could be the benefits that come with PrEP usage, which could explain acceptability besides rumoured side effects. For instance, Pilane (2017) highlights that a PrEP user who is a student still takes the pill to prevent herself from acquiring HIV despite expressing challenges related with swallowing the pill and the need to take the pill at the same time every day. Hence further to this, Ikhile of FHI360 outlines that

> "*PrEP is a great idea and which I think if it's actually taken out to people- it will help so much, most the populations that are at most at risk, most especially the population of MSM and they are really looking forward to it and have access to it*"
>
> Ikhile,FHI 360, 22 November, 2016.

Similarly, Radebe of ANOVA Health Institute argues that

> *"PrEP is actually an opportunity for us although it will bring more people to present with STIs but at the same time it also gives an opportunity to prevent themselves better from HIV infection"*
>
> Radebe,ANOVA, 8 December, 2016.

The presented data reaffirms various PrEP efficacy test as feasibility, safety and adherence to PrEP done elsewhere among MSM and bisexual men have indicated strong efficacy of PrEP as a preventive measure against HIV acquisition under strong adherence plans (Bauermeister *et al.,* 2013; SAMJ, 2013; Rucinski *et al.,* 2013 Mustanski *et al.,* 2013; kubicek *et al.,* 2015; Pérez-Figueroa *et al.,* 2015). Again, it is a reminder that condom use

is still low among those that are sexually active within the MSM community, hence the need to provide PrEP to all individuals that are at high risk.

4.2.2.2.2 Could PrEP fuel higher Cases of Unprotected Sex?

This is an important sub theme as it is among the various ethics associated with PrEP that has been widely evaluated (Steinbrook, 2012; Jay and Gostin, 2012; Chakrapani *et al.,* 2015) in light of emerging discourse that other scholars have highlighted (Venter *et al.,* 2014; Chakrapani *et al.,* 2015) about questions around sexual morality due to PrEP. This study has found that less than half of the participants do not share the belief that PrEP will lead to more cases of unprotected sex as one participant for instance argues that

> *"To be promiscuous it's on your mind- its inside the person- so I can say that if I love sex I love sex, it's not all about PrEP"*
>
> Ayanda, 23 September, 2016.

Likewise, another respondent adds that

> *"Even still with the availability of PrEP, I have to still protect myself"*
>
> Fhulufelo, 18 December, 2016.

On the other hand, more than half of the participants fear the availability of PrEP might lead to an increase in sexual activities among people who engage in same-sex. One study participant points out that

> *"People will always find a reason to sleep around and always find a reason not to use a condom just because they are on the pill"*
>
> Chifero, 6 December, 2016.

Another participant also says

> *"I think people are gonna sleep around...Knowing that I'm on PrEP, why not?*
>
> Edzani, 18 December, 2016.

The various presented quotes are all embedded within the discourse that seems to suggest the introduction of PrEP will fuel high cases of unprotected sex leading to sexual moral decay. This sort of discourse is similar to early narratives of the spread of HIV which was seen to be associated with moral decay (Grundling, 1999). Such a worldview exert pressure on people since sex which is a natural part of humanity is put under intense moral lens. As such the argument of whether it lead to sexual immorality or not, should not be part of efforts of health promotion. Hence, Venter *et al*., (2014: 269) argue that the ethical issues surrounding PrEP such as "disagreements over human rights, controversies over testing policies and questions about sexual morality and individual responsibility are not specific to HIV prophylaxis". Venter of WRHI adds that with

> *"Malaria you take the drug to treat it and you take the drug to prevent it, so, I don't understand what the big deal is... here is the drug we use to treat HIV and you can also use it to stop HIV just like Malaria... and with Prep the talk is also around we encouraging sex, but how it this different from preventing one from getting malaria?"*
>
> Venter, WHRI, 17 January, 2017.

That is to say, focus should be on health promotion which among its various components Green (1999) highlights is disease prevention. Likewise, Venter *et al.,* (2014: 269) posit that the main focus of health promotion is "simply standard public health considerations" and "striking a balance between individual benefit and public good."

4.2.3 Drivers of HIV

UNAIDS discussion paper (UNAIDS, 2016) posits that between 40-50 percent of new HIV infections globally are currently estimated to occur among key populations, MSM being one of them. Thus, drivers of HIV as part of the discourse to inform the development of a South African PrEP Programme within MSM subsets cannot be undermined.

4.2.3.1 Urban Precarity

The study agrees with Trimikliniotis *et al.,* (2015: 2) proposal to read precarity as "a function of time-dislocation spatialised and manifested as the logic of fragmentation, which is structurally connected to the logics of a unifying world. Precarity within the urban space is hence a discourse for policy makers to engage with as migrants might experience

social-economic challenges such as unemployment, lack of accommodation and access to cash/income. Further, Vearey *et al*., (2011) posit that high levels of internal than cross-border migration are observed as people move from the homeland to urban centres in order to improve their livelihood. Further, Trimikliniotis *et al.,* (2015: 3) highlight that within the spectrum of circular migration- "in today's fluid and uncertain times, we observe an extension and multiplication of the modes and terrains of struggles in what we refer to as precarious spaces". This is in a way is similarly to the notion of spaces of vulnerability[32]. To illustrate the case in point, one study participant explains that

> *"I've got a friend from Free State, he came here- I would say like through getting lifts on the roads to come to Joburg with no money, and he didn't use protection...When they screened him for STIs and HIV, they found him HIV positive because it wasn't the first time for him to travel... He took transport and exchanged it with sex"*
>
> Dumisani, 18 December, 2016.

The above quote points to the social determinants of health that are present thought out the different migration phrases. The presented evidence speaks to lack of income generating ways within the pre-migration phase such as employment. Thus, as the time come to embark on journey to Johannesburg, the migrant does not have money to finance his trip. Nonetheless, since he decides to take the journey either way, he is challenged with the notion commonly referred to as space of vulnerability, out of which his health status might be compromised. Thus, "migration can pose heightened risks" for certain migrant groups although "the mental and physical health effects of migration on individuals are many and varied" (Abubakar *et al.,* 2016: 1141).

Similarly, another respondent elaborates on how spaces of vulnerability intersects with the social determinants of health he highlights that

> *"They (self-identifying gay male as a migrant group) don't have money to come to Joburg, they hitch-hike here- to visit Joburg; there is a problem when they have to go*

[32] Crush *et al.,* (2005b) defines spaces of vulnerability as spaces that contain a combination of social, economic and physical conditions that may increase the likelihood of exposure to, and acquisition of, either a communicable or non-communicable disease to migrants

back home because they don't have money; they meet someone who say I will give you money; adding 'can we have sex, we don't use condom'- they agree"

Fhulufelo, 18 December, 2016.

Here we are seeing an extension of spaces of vulnerability to the arrival stage. Nonetheless, since migration is circular in nature, the above quote highlight that a migrant who visited Johannesburg and wants to go back home now also interact with his space of vulnerability due to lack of money to pay for his transportation fee to go back home. Further, urban precarity within the lens of migration hence "runs contrary to the misguided depiction of globalization as an irresistible, inevitable and linear set of processes of a world increasingly unifying and unified, 'becoming one'" (Trimikliniotis *et al.,* 2015: 2). Below is another quote to highlight the point being presented here

"Some guys out of desperation, they will be like I don't have a place to stay and I came here looking for a job, or I am studying at Wits and I don't have funding or I don't have someone to pay for my fees. There are guys who come forth and these guys accept their proposals agreeing to sleep with them in exchange for money"

Gomolemo, 30 January, 2017.

What is vital to note here is that the there are various forces that act upon spaces of vulnerability. These forces come from a social, economic and physical condition or at times from a combination of two or even all forces, but any or all having the potential to increase the risks to exposure of STI and HIV. Such is the case because the often times the easiest way out to negotiate such spaces usually involves one in taking risky sexual practices and as well as risky behaviours. The results and discussion above reaffirms Vearey (2010a) position who posits that linkages between migration and health are not linear and hence paramount to understanding health and migration, is the need to identify social complex challenges of various migrant groups within spaces of vulnerability. Hence, Venter of WRHI states that

"*If migration cause risk taking behaviour at the end of migration either way... let us make sure that Prep is available at both ends of the migration patterns"*

Venter, WRHI, 17 January, 2017.

Nonetheless, Venter cautions that

> *"Mobile populations have been stigmatised as being HIV high risk for decades... We've just finished a large study looking at truck drivers, and their HIV rate is almost exactly the same as that of the general population... so mobility in itself is not part of the conversation"*
>
> Venter, WRHI, 17 January, 2017.

Still, Slabbert of SANAC admits that

> *"I think what we are doing wrong is that we don't unpack the social drivers enough... So, I think that's a good starting point for all us and I think that's why this time research is so important, is to start unpacking these social drivers"*
>
> Slabbert, SANAC, 7 November, 2016.

These are key messages for policy makers to take into account as it directs their attention to migration-aware health responses. Migration-aware health responses should therefore be seen within the context of "strengthening the understanding of the role of migration" to "assist in the development of migration-aware responses that are needed to support a more successful response to the complex relationship of health and migration (Vearey, 2016 cited in Yingwana, 2016). Such an approach acknowledges the need to engage with population mobility and migration and examine how both spaces of vulnerability and different layers of socio-economic factors affect the various phases of the migration spectrum.

4.2.3.1.1 Social Networks a Determinant Health

This section examines the notion of social networks as determinant of health by looking at social networks that migrants come into contact with along their circular migration journeys. To this, one study participant highlights that sometimes when one finds themselves in a four-some sexually activity where top-gay[33] guys would want to bareback[34] bottom-gay guys and everyone is willing to proceed; in that moment one feels

[33] A sexually partner in a gay relationship who performs insertive anal.

[34] To have unprotected insertive and receptive anal sex.

it is acceptable to look away and have sex without a condom so you do not miss out on the fun (Bongani**,** 28 October, 2016). Again, one respondent posits that

> *"If I am surrounded by friends who are sex workers, one ends up being a sex worker too because they got money every now and then unlike me who works at a certain retail shop and get 500 Rands per month while they get 500 Rands per day" but however within the sex work industry "there are certain people who doesn't want protection and prevention- they don't want you to use condom"*
>
> Ayanda**,** 23 September, 2016.

Both presented quotes challenge the discourse that depicts social networks as a determinant of good health outcomes as other authors have also documented (Whitehouse, 2012; Weil *et al*., 2012; Myroniuk and Vearey, 2014).However, this signals the need to understand context. For example, with the first respondent, the decision to indulge in unprotected four-some sexual activity emanates from the sexual positions that are established within same-sex relations. Individuals who are top-gay, out of which are responsible for performing insertive anal sex, hold power over bottom-gay guys who are receptive of insertive anal sex. The prevailing sexual power positions arise from homonormativity[35].

Hence the top sexual partner assumes the masculine role of man while the bottom sexual partner assumes the feminine role of a woman. SANLGBTIF (2016: 7) highlights that "these regulatory norms and practices need not necessarily be modelled on heteronormative assumptions, but they often are". Further, men who are gay-bottom are numerous in numbers compared to those who are gay-top and as such gay-bottom individuals are always in search of men who are top which make it harder for them to have equal power when it comes to sexual decisions. The fear of missing out on a sexual encounter with a top-gay guy puts pressure on those that are gay-bottom since they know that it is usually hard to find top-gay guys as they are usually part of the hidden MSM sub population (Kort, 2015). Similarly, the second quote illustrates unequal power relationship based on the source of income earnings. The key element underlying this interaction is about livelihoods

[35] Homonormativity refers to "the system of regulatory norms and practices that emerges within homosexual communities and that serves a normative and disciplining function" (SANLGBTIF, 2016: 7).

determining health. That is, an individual's livelihood characterised by less income earnings to sustain a particular choice of lifestyle seem to determine one's decisions to engage in sex work, an industry where unprotected sex is common. The respondent reveals that by virtue of being around social networks, who happen to be sex workers, one ends up joining the sex industry in order to make more money. However sex work can also be a determinant of health (*see* a section of sex work under social determinants of health in the subsequent sections).

The study reaffirms Berkman *et al*., (2000) position of the need for a multidimensional structural approach in understanding the relationship between social networks and health outcomes as evident from the research data of internal migrant, self-identifying gay men interviewed in Johannesburg.

To further solidify this perspective, another participant highlights that

> *"when we are in Joburg we like to be in groups and know I can be in a relationship with a guy who has been going out with my friend just to prove to my friend that ok I also can do what you did with him (have sex with him) since we all want to be seen doing what other people are doing and we also want to let them know that we are capable of doing it better than them"*
>
> Edzani**,** 18 December 2016.

The given quote highlights that social networks might bring unhealthy competition among the gay community with regards to who is living and portraying a better gay lifestyle and experience. It is out of such competition that one is bound to make decisions that again can impact their health status. The urban space seems to be a good ground for such competition as individuals who engage in same-sex sexual activity are free within such space as evidence being the following quotes presented below.

> ***"****For me to relocate to Joburg it has given me a good experience in term of living style, sexual health style and sexual behaviour ...Here in Joburg there are gay clubs, there are nude clubs for gay men. There is a lot of places where gay men go, and when you go there, you see that everyone is free and then you also feel free to do whatever you feel"*
>
> Ayanda, 23 September, 2016.

Similarly, another respondent points out that

> *"many people do understand me in Joburg as they do understand gay people unlike in the rural areas like Dennisville; it's like here I'm living normal- with my life because at back home they don't understand it"*
>
> Fhulufelo, 18 December, 2016.

Both respondents provide us with evidence that the experience of the city allows gay identifying males to be free to express and live a gay lifestyle. The city being a metropolitan space is very accommodative of several sexual lifestyles including same-sex relationships, and several scholars (D'Augelli & Hart, 1987; Oswald & Culton, 2003; Weston, 1995) have documented the same although with a focus on American cities. Still this could apply to South Africa cities since in the rural areas due to culture, same-sex relations are not acceptable (Msibi, 2011). However, of particular interest is how social networks that are formed act as a determinant of health.

4.2.2.1.1.1 Risky Sexual Practices and Risky Behaviour (s)

One way of how social networks could lead to appositive health outcome (s) for migrants is when such networks exposes a migrant to risky sexual practices such as sex work and transactional sex. This study defines sex work[36; 37] as the "exchange of sexual services for financial reward (Gould and Fick, cited in Richter and Vearey, 2016: 268). Closer to sex work is transactional sex (which is association with the notion of '*rent boys*' [38]) as another driver of HIV. Much as transactional sex is open to multiple definitions, and many authors fail to define it (Leclerc-Madlala, 2003; Wamoyi *et al*., 2010), this study defines it as sex that is predicated on actual or anticipated material gain (instrumental support such as transportation or a place to sleep, material goods or cash (Dunkle *et al*., 2004). Both

[36] Embedded within this definition is the notion that "sex work involves adult, consensual sex and does not include trafficking or the sexual exploitation of children" (Richter and Vearey, 2016: 268).

[37] The given working definition is vital as Chipamaunga *et al.,* (2010: 49) argue that many health programmes fall into the trap of viewing sex workers as a homogenous group. As such health responses are in adequate as they fail to recognise the complexity of various groups involved in sex work (Vearey *et al*., 2011).

[38] "These are boys who are willing to do any sexually favours with their sexually partners that are taking care of them financially. For instance renter will say ' I will give you money and you do my service or I will give you money and I am taking you to Cape Town or you will travel with me and you give the service'", (Ayanda**,** 23 September, 2016).

however, are risky sexual practices as evident from one study participant with regards to sex who argues that

> *"There are certain people (sex worker clients) who doesn't want protection and prevention, they don't want you to use condom, if you say condom they say I'll pay more- and you agree because what you looking forward is the money not the sensation or the enjoyment of the sex"*
>
> Ayanda, 23 September, 2016.

The quote above highlights how sex work is a contributing factor to higher HIV transmission. Within the sex industry, money is the major motivating factor for people to engage in sex work. Fortunately, sex work clients who have more money have an upper hand when it comes to making a decision to either use protection or not. That is to say the bargaining power of whether to use a condom or not entirely rest on how much money a sex client is willing to give. Hence, money sets in unbalanced sexual relationship between the sex work and his client. Since a sex worker's goal is to make more money, one is bound to go with a decision to forgo protection and have unprotected sex. Obviously, this does not imply that sex workers naturally want to engage in unprotected hence initiating a talk on the desire to use protection.

However, unprotected sexual practice between a sex worker and his client is risky and can lead to one being infected with Sexual Transmitted Infections and HIV. Sex work thus features as a determinant of health as such a risky practice (to have unprotected sex) can impact one's health status. Further, sex work is evidently a driver of HIV as Wariki *et al.,* (2011) point out that the sex worker populations have a high risk of HIV infection due to their multiple overlapping vulnerabilities vis-à-vis their working conditions. Some of the HIV risks associated vulnerabilities include: multiple sex partners with different social backgrounds and sexual histories, unprotected sexual intercourse and expose to higher than average numbers to Sexual Transmitted Infections (STIs) (Wariki *et al.,* 2011).

In addition, transactional sex as part of risky sexually practices is yet another driver of HIV (Petros *et al.,* 2006; Santos *et al.,* 2011). More than half of the respondents cited transactional sex as part of a survivalist strategy to cope with the various city lifestyle demands. One study participant posits that

"*They (self-identifying gay males) want money for clothes or alcohol or for travelling and you know people (their sexual partners) don't want to use condom"*

Edzani, 18 December, 2016.

While another participant points out that

"*People feel the need to date someone whose already working or has money to subside their living costs"*

Bongani**,** 28 October. 2016.

The above quotes all allude to how transactional sex is a risky sexual practice. When people are involved in sexually relationship that is transactional in nature, there is bound to be inconsistency condom use since demanding a condom might raise questions of being unfaithful. However, much as trust in such relationships is an elusive term, the desire to be showered with material gifts of various kinds might undermines one's decision to insist on the use of protection for fear of being seen promiscuous. Further, the notion of a "*rent boys"*[39] where one provides various material and financial support to a sexual partner is implicated in this discourse since according to Jewkes *et al.,* (2012) transactional sex is associated with public health challenges as those who indulge in such an activity are often vulnerable to HIV and other sexually transmitted infections.

Furthermore, inter-generational sex, having multiple sexual partners and having sex with an MSM subset which is a hidden group are also part of risky behaviours. Inter-generational same sex between young MSM and older MSM carries with it the risks for HIV transmission from both ends. For instance, young MSM face high risk of HIV infection due to several unique vulnerabilities that increase their risk of HIV infection (Valleroy *et al.,* 2000; Beck *et al* 2012). Beck *et al.,* (2012) argues that due to a largely homophobic South African society, young MSM often loose financial and other forms of support from family members once their sexual orientation is disclosed. The loss of such family support in the form of stable housing and income are both associated with increased HIV risk as

[39]"These are boys who are willing to do any sexually favours with their sexually partners that are taking care of them financially. For instance renter will say ' I will give you money and you do my service or I will give you money and I am taking you to Cape Town or you will travel with me and you give the service'", (Ayanda**,** 23 September, 2016).

they look for alternative survivalist mechanisms (Leaver *et al*., 2007; Henderson and Shefer, 2008). For instance, Ikhile of FHI 360 narrates a story of a young MSM who was disowned by his family for being gay

> *"recently we met a very young 15 year guy whom we tried to convince to go for an HIV test...the test came out positive after inquiring about his sex networks (so he can inform them of his status) he said he only had one blesser (sexual partner who is a source of financial support) (a 55 old Member of Parliament staying in Pretoria)... who has children...and is married to two wives"*
>
> (Ikhile, FHI360, 22 November, 2016).

Reading the above data, there is a possibility that the younger MSM guy went into a sexually relationship with an older gay man for financial and other material support. On the other hand, Lyons *et al.,* (2010) argues that due to societal values and expected sexual gender norms older MSM also face increased risk of HIV acquisition. Older MSM are often subjected to negative psychosocial factors such as depression, isolation, concerns about living up to the idealised standards of younger gay men, and feelings of worthlessness which lead them to engage in riskier sexual behaviours in order to fulfill their emotional needs (Murray and Adam, 2001; Lyons *et a*l., 2010; Heath *et a*l., 2012). To substantiate this, Venter of WRHI argues that

> *"lots of men in the closet indulge unbelievably in high risk behaviours when the shame, the stigma bubbles over in whatever form... down low phenomenon is a major public health concern because it's where most HIV transmission happen among young Black gay in the closet who are in denial, who are often married or in heterosexual relationships"*
>
> Venter, WRHI, 17 January, 2017.

Likewise, Radebe of ANOVA Health Institute expolains that

> *"We found that an older MSM guy who is a gay indentifying male but married might come and have a boyfriend in a city… but also have multiple partners everywhere since he know that once he goes back home he won't be free to easily engage in same sex behaviour"*
>
> Radebe, ANOVA Health, 8 December, 2016.

The above quotes again speak to challenges faced by the MSM community when living in a society that promotes heterosexism[40]. Pressure is thus exerted on members who self-identify as gay to fit within a heteronormativity[41] society (Subhrajit, 2014). This can have a bearing on both uptake of PrEP and continuity access for PrEP as some MSM subsets might not easily share their health needs. Hence, due to such societal pressure certain MSM remain hidden. For example one respondent explains that

> *"I can sleep with a heterosexually guy for 5 years or for more than 10 years and make sure that people they don't see me with that person…but will also have other people that I am sleeping with, other people that I want other people to see me with and other that I don't want people to see me with"*
>
> (Edzani, 18 December, 2016).

These are important insight for policy makers to address such barriers outside the health care system that might hinder PrEP uptake or continuity access for PrEP since such barriers as part of the social determinant of health might be present across the migration spectrum. Further evidence to the issue at hand is substantiated by the data present below

> *"It's very difficult for men who have sex with other men to come forward and say I need PrEP"*
>
> (Sisanda, 30 January, 2017).

This rest on the dominant societal view that one respondent explains which is

> *"If you are a man- you have to be a man in my location at Dennisville"*
>
> (Fhulufelo, 18 December, 2016).

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[40] Heterosexism refers to "a system of beliefs that privileges heterosexuality and discriminates against other sexual orientations. It assumes that heterosexuality is the only normal or natural option for human relationships, and posits that all other sexual relationships are either subordinate to or perversions of heterosexual relationships. In everyday life, this manifests as the assumption
that everyone is heterosexual until proven otherwise" (SANLGBTIF, 2016: 6).

[41] Heteronormativity refers to "the privileged position associated with heterosexuality based on the normative assumptions that there are only two genders, that gender always reflects the person's biological sex as assigned at birth, and that only sexual attraction between these 'opposite' genders is considered normal or natural. The influence of heteronormativity extends beyond sexuality to also determine what is regarded as viable or socially valued masculine and feminine identities, that is, it serves to regulate not only sexuality but also gender" (SANLGBTIF, 2016: 6).

While another participant points out that

> *"I am a Xhosa; I have to play this and that role in my family including the community. There is a lot of expectation s when you are born male...It's not easy to be comfortable and be coming out as a gay man in such a community because of stigma and the chief or the king will disown you, or the family will be looked down. They will never recognize or respect the whole family because of a gay man that belongs to that family"*
>
> (Ayanda, 23 September, 2016).

Without doubt, such attitudes are not conducive for a PrEP roll-out. Again, besides acting as a hindrance to access men's health related HIV services, the presence of homophobic attitudes can also lead to hidden multiple and concurrent sexual partners. What is problematic is that concurrent sexual partnerships are widely believed to be one of the main drivers of the HIV (RHM, 2011) as people become part of a sexually web that is invisible. For instance, Radebe of ANOVA explains that

> *"someone who is in the rural area is not gonna talk about his gay identifying gay men, he is not free to engage in that aspect, he might have one or two people that he goes to have sex privately with at night"*
>
> Radebe, ANOVA Health, 8 December, 2016.

Further, individuals who either practice either any of the above cited risky sexual practices might also be involved in drug and alcohol abuse before engaging or during sex. Santos *et al.,* (2011) articulate the link between drug and alcohol use and HIV risk taking behaviours among MSM. The University of California (2015) agrees with Santos *et al.,* (2011) as it highlights that there is a significant increase in unprotected anal intercourse with multiple sexual partners as wells as a significant decrease in condom usage among MSM who are also alcohol abusers. This study reaffirms this position as one respondent states that

> *"From a club people say, they hooked up with someone, went home with that person and ended up having unprotected sex as they didn't have condoms; saying they*

were drunk and they just had to have sex as they didn't have time to go to the garage, but sex just needed to happen right there"

Bongani, 28 October. 2016.

Another study participant points out that

"Some of them (gay individuals) once they are drunk they forget that they slept with a guy and they didn't use a condom"

Dumisami, 18 December, 2016.

The above data explains how drug and alcohol abuse before or during sex is a risky behaviour as the evidence points to irrational decisions that are made when one is under the influence of such substances. The study results presented here are in tandem with Lane *et al*., (2008) study conducted is Soweto which found an increased risk of unprotected anal intercourse among MSM who reported regular drinking.

4.2.2.1.1.2 Rape

Another driver of HIV among the same-sex population is rape. This study defines rape narrowly as coercion with physical force that occurs on a spectrum which may among other things include: threats, abuse of power, authority and position, blackmail, trickery, abuse of trust and age-related power, temptation through material goods, undermining resistance with drink and drugs as well as use of aggression and (Jewkes and Abrahams 2002; Sikweyiya and Jewkes, 2009). For example one respondent points out that

"*Sometimes we are in a bar and someone wants you but you don't want him. So when you get drug they take advantage, follow you and rape you"*

Fhulufelo, 18 December, 2016.

Another study participants argues that

"Sometimes you might be forced to sleep with someone you don't want"

Edzani, 18 December. 2016.

The above quotes are similar with the early explanation on alcohol abuse and its relationship to unprotected sex. However, the major difference here is the unwanted

aspect of not wanting to have sex. That is to say, sex becomes a forced act. Alcohol abuse can increase chances of blurring one's judgement or reasoning ability to decipher other people intentions or gestures that might lead to rape. For instance, a victim of rape might have accepted alcoholic drinks from a potential rapist and overconsumption might trigger and make it easy for the rapist to perform or take advantage of his potential prey.

Furthermore, as stated in the given definition, sexual coercion plays out in different forms and it is not only gay men who are forced into having unwanted sex but rather at times they might also be the ones to initiate a sexual act to heterosexual men when they are drunk. A good example is the quote presented below

> *"Sometimes maybe when they (heterosexually men) are drunk, we take advantage and want to have sex with them; and if you get that chance and that person doesn't have a condom-one ends up having unprotected sex either way"*
>
> Edzani, 18 December, 2016.

Often times gay identifying individuals love men who are heterosexual as well as those that are gay but heterosexual looking; a better term used is within the MSM community is men who are '*straight looking/acting*' (Kort, 2015). In such instances, protection from any STIs and HIV is not a priority but rather the desire to seize the moment.

Rape can be a part of structural forces within spaces of vulnerability or urban precarity which all have strong links to migration. It is thus important for policy makers to be aware of such issues because a study by Kalichman and Rompo (1995) highlight that 92 percent of the sexually coercive events among men involved in unprotected insertive and receptive anal sex conferred significant risks for HIV infection.

4.2.2.1.1.3 Lack of income/access to cash

Lack of income/ access to cash as one of the characteristics of poverty is yet another issue when signalling drivers of HIV. The study acknowledges that the presumption that poverty increases one's vulnerability to HIV acquisition has been challenged as evidence from the Demographic and Health Survey in eight African countries has shown strong positive correlation between HIV prevalence and wealth (Mishra et *al*., 2007; Shelton, 2007). Nonetheless, Nattrass (2009: 833) highlights that "poverty may play a role in the HIV epidemic in some countries (and may well be a factor affecting the vulnerability of some

people to HIV infection in all countries) but that its overall impact is dwarfed by social and behavior factors". Hence, although the relationship between one's social economic status and its impact on HIV is highly contested (Braveman *et al*., 2005; Krieger *et al.,* 1997; Doyal and Doyal, 2013), still available evidence suggest that the relationship between the two is bi-directional[42] (Barnighausen *et al.,* 2007). For example, one respondent explains that

> *"If you are from a poverty stricken background, it's quite difficult to have access to a lot of resources"*
>
> Sisanda, 30 January, 2017.

To which Radebe of ANOVA of Health Institute posits

> *"The socio-economic conditions of our country have put us in a situation where unprotected anal intercourse has been on the rise… there are guys who can't find a job because obviously they just cannot get a job, then they end up doing sex work"*
>
> Radebe, ANOVA Health, 8 December, 2016.

Hence Mariette Slabbert who works at SANAC as a Manager- National Sex Workers Programme and Social Impact Bond argues that

> *"If we can improve opportunities in the rural areas and stuff, then we can prevent a lot of that desperation"*
>
> Slabbert, SANAC, 7 November, 2016

The above presented evidence highlight that the broader characteristics of poverty need to inform policy as part of social determinants of health. Access to cash- the need to pay for transport cost is a vital aspect as in the context of high levels of circular migration. The above sections have touched on how this is plays out. In the end however, both location and the social context are equally important aspects in understanding the impact of poverty on HIV, a position that is well explained in the literature review. Venter of WRHI adds a voice to this pointing out that

[42] In other words, an individual's social economic status may contribute to one's vulnerability to HIV; but again, on the other hand HIV infection may have impact on the social economic status.

"The social determinants are really important for treatment, poverty…collates with risk taking behaviour and risk of acquiring HIV"

Venter, WRHI, 17 January, 2017.

Besides the impact of poverty on health being contextual and location specific, the presented data also highlight Coates' *et al.,* (2008) argument which highlights that a vital element with regards to the call for combined HIV prevention interventions touches on the recognition that the ability of individuals to practice HIV risk reduction behavioural change is strongly affected by the context in which they live.

4.2.3 Health Equity and Access

The term health equity is a contested notion hence it is almost impossible to offer a singular definition. Nonetheless, in an attempt to offer a working definition, this study defines health equity as "equal access to health care according to need" in which "equal utilisation of health care according to need" is guaranteed (Green, 1999: 51). The term access does not simply refer to physical access alone but rather also concerns utilisation of health care services which is usually affected by issues of class, ethnicity and gender (Townsend *et al.,* 1982; CSDH, 2008: Green, 1999). Thus, health equity and access concerns equitable distribution of health services, availability, acceptability and affordability of health services. The following sections discusses these notions with regards to PrEP uptake and PrEP continued access within the context of a mobile population.

4.2.3.1 Availability of HIV Prevention Health Services

Inequalities in health care are related to a variety of socioeconomic and cultural factors such as ethnicity, gender and rural/urban dwelling (CSDH, 2008). With this study, issues of ethnicity (Black), gender (same-sex), and rural/urban residency (internal migration/mobility) are vitals notions as they offer insight on availability of health services within the MSM population. For instance Ikhile of FHI360 highlights that

"If you look at the urban gay society, you find a lot of migration (internal). When a party is happening in Joburg, people will fly down, key population- MSM are colourful people, enjoying life and things like that.., Having access to condom and lubricant is an issue"

Ikhile, FHI360, 22 November, 2016.

The above quote signals that internal migration is part of South African society and that health planning need to incorporate migration as a social determinant of health as well as eliminate all barriers that might hinder access to HIV prevention health services, a position well documented within literature (CSDH, 2008; Vearey, 2014). This position is even stronger with the imminent national roll-out of PrEP. Adding a layer to this discussion, the majority of the participants expressed their concern with the inequitable distribution of health care services within the country. For instance, one respondent observes that

> *"It's not easy to access PrEP in the rural areas, even in the pharmacy when you go there and ask for Prep they will ask what is that because they don't have it, and even if they do have ARVs, all kinds of ARVs but they don't even know which ARVs can be part of PrEP… we need to make sure that even the rural area local clinics or hospitals must have those things so that the community must access it easily"*
>
> Fhulufelo, 18 December, 2016

Similarly, another participant posits that

> *"It's not fair that in certain areas people still don't have ambulances and one has to wait for hours and hours to get help... I know that there is quite a distance that you need either walk or someone drives you or you have to use a taxi. So, I think that is going to be an issue because clinics are not easy accessible there and also hospitals- it's quite a distance; and also clinics operate for a certain amount of time; I've haven't heard of a 24 hour clinic in a rural area. So, I guess for access, it's really gonna be another thing"*
>
> Sisanda, 31 January, 2017.

Further, another respondent highlights that

> *"In small town- there is always a shortage- we are always behind on certain things... The government should distribute these drugs equally, they should not be like-just because Joburg is the ANC or Joburg is the capital city so it should have more of an advantage than all the other provinces"*
>
> Chifelo, 6 December, 2016.

The above quotes highlight the big questions policy makers need to engage with such as: are there HIV prevention services including PrEP that are equitably distributed within the country? Are the operating times of the available services convenient to the intended users? and are services within reach? Further, as policy makers who are key actors in policy making process, they need to guard against the politicisation of public service delivery based on where the ruling government get most of its votes as such tendencies can lead to the creation inequitable distribution of public services. In this regard, policy makers need to emphasise to government what Marmot (2007) argues which is that every aspect of government and the economy has a strong bearing on health equity which has the potential to affect health outcomes. In this regard, a critical starting point of a social determinants approach of health is to look within the health sector itself,for example, to ensure the promotion of health equity by giving specific attention to the circumstances and needs of socially disadvantaged and marginalised groups (HSKN, 2007).

This is a vital element because within the South African health care system, local clinics as part of Primary Health Care (PHC) are an important part of health delivery as they are the first point of call for most people in need of health care (SANC, 2013). To illustrate this point, one respondent highlight that

> *"Make it available in places where it's most needed… in areas where people are poor and prevalence is the highest…but make sure it's also available in clinics because that's where most disadvantaged people access health services"*
>
> Bongani, 28 October, 2016.

While acknowledging the inequitable distribution of health services, Slabbert of SANAC argues that

> "*We must make sure that at least in the highest areas where the biggest need is that it's available and that it's accessible"*
>
> Slabbert, SANAC, 7 November, 2016.

The presented data hence demand policy makers to challenge government to fulfil its duties of taking care of it people. For it is in the interest of government to look after its citizen without looking at people's political affiliations, religion and sexuality just to mention a few.

4.2.3.2 Acceptability of HIV Prevention Health Services

The different international agreements that seek to promote health for all such as the Alma-Ata Declaration acknowledges that "political, economic, social, cultural, environmental, behavioural, biological factors" (CSDH, 2008: 110) can all have an impact on healthy equity and health outcomes. A policy that is pro-equity hence has to eliminate all barriers to health care access. Such is the case because health equity is underpinned by the WHO 1978 Alma-Ata Declaration whose goal is to ensure health for all as the declaration has been an essential core component in shaping the philosophy of Primary Health Care and its governing policies (WHO and UNICEF, 1978). Unfortunately, the majority of study participants highlighted homophobic[43] attitudes of Health Care Workers (HCW) that bring about stigma and discrimination towards self-identifying gay individuals. For instance, one participant posits that

> *"Government should work on the attitude of health workers...you don't go there because you need to be discriminated"*
>
> Edzani, 18 December, 2016.

Similarly, another participant argues that

> *"when they see that you are gay...they will send you to that one (a nurse) and when you go to that room; he/she will call that other nurse and say he is gay. So when you go to that room they around know that you are gay- they make fun of us"*
>
> Fhulufelo, 18, December 2016.

Further, another respondent adds

> *"I am gay yes; but I am a human being; just like any other person I am there going to access the facilities"*
>
> Sisanda, 30 January, 2017.

[43] The study defines homophobic attitudes loosely as enacted hostility towards same-sex sexuality and same-sex practicing individuals (Altman, 2008; Johnson, 2007).

The above quotes are a recurrent theme with regard to experiences of same-sex practicing males when they try to access health care services. The study reaffirms a numbers of South African study findings within the public health sector that have documented stigma and discrimination experiences of MSM especially those who are femme[44] by HCWs when they seek health care services (Rebe and McIntyre, 2014; Lane *et al*., 2014; Oberth, 2014; Pieterse, 2016; Mambanga *et al.,* 2016). This has a bearing on acceptability of available HIV prevention services including PrEP i.e. could impact the uptake of PrEP and continuity for access to PrEP.

This could ultimately have severe implication on efforts to getting to Zero of an HIV generation as well as the ambitious UNAIDS 90-90-90 campaign. UNAIDS report (2014) echoes a similarly message as it states that "it will be impossible to achieve universal access or to realize the vision of zero new HIV infections, zero discrimination and zero AIDS-related deaths without effectively addressing the HIV-related needs of gay men and other men who have sex with men". At the moment Esom (2016: 1) highlights that "stigma, discrimination and deliberate exclusion continues to drive the HIV epidemic among key population".

Albert Ikhile who works with FHI360 as Senior Technical Advisor explains that a lot of MSM do not like going to local clinics and usually choose not to seek health care because of issues of stigma and discrimination, attitude of health care workers in the local clinics (22 November, 2016). Likewise, Mariette Slabbert who works at SANAC as a Manager- National Sex Workers Programme and Social Impact Bond echoes the same sentiments, only this time adds particular reference to department of health clinics and calls for the elimination of stigma and other barriers to Prep (7 November, 2016).

The call for change is also in line with the Alma- Ata Declaration which is an essential component to inform Primary Health Care. The Declaration "calls for a major change in attitude both towards the concept of health and in our understanding of appropriate actions to improve the unacceptably low health status of many groups in society" (Green, 1999: 43), the majority of which are marginalised groups such as MSM and the poor. Further, the Declaration also acknowledges the need to form "new relationship between service professionals and members of the community", (Green, 1999: 43). This is particular important as one participant posits that

[44] Femme refers to "an identity or expression that leans toward femininity" (SANLGBTIF, 2016: 6).

"*The people who are giving the product they shouldn't have that approach where they giving the eye or they are trying to question what you want to do with the product because we all know what you want to do with the product*"

Bongani, 28 October, 2016.

This is to say that as long as one is an adult, health workers and service providers should refrain from policing sex. However, due to persistent occurrence of homophobic attitudes within the health space, many MSM embark on a long journeys an endeavour that exposes them to spaces of vulnerability in an attempt to seek friendly men's health services[45] run by Non-Governmental Organisations. For instance, one respondent explains that

"*at Free State they don't have Health for Men- that's why I came here in Joburg so that I can go to Health for Men so I can have good treatment there...at the clinic in Free State treatment is not good...they still have discrimination of gay men"*

Dumisani, 18 December, 2016

However, the challenge with relying on NGO run clinics as Pieterse (2016) posits is that they do not have a wide coverage within the country, leaving the majority of MSM with no choice but to still rely on the largely un sensitive public health care system. Again, such low coverage of unfriendly MSM health facilities poses as challenge with regards to the frequent observed internal migration of self-identifying gay men within the country vis-à-vis the guidance of PrEP uptake where regularly HIV testing and adherence issues are key to making PrEP an effective HIV prevention tool.

As a remedy to achieve a friendly MSM health care system, the majority of participants indicate the need for training of health workers on issues regaining the lifestyle of men who have sex with men, such as self-identifying gay males and their sexually needs. Thus, one participant argues

"health workers should be trained to know that you don't have to give someone a certain eye or judge them" and as such their work should mirror the work of HIV

[45] Some self-identifying gay males travel to areas such as Johannesburg where health for men friendly health services are being offered by Non-Governmental Organisations such as ANOVA Health Institute.

counsellors who do not judge their clients regardless of their HIV test result out comes regardless of their HIV test result out comes"

Bongani, 28 October, 2016.

Likewise, another participant points out that

"To be a nurse you just don't go to a nursing school and be a nurse – they need to be trained on how to remove their different stereotypes"

Edzani, 18 December, 2016.

But unfortunately, Ikhile pf FHI 360 indicates that

"going into the clinics you find someone who will say my tradition doesn't allow me to go into issues regarding MSM... female nurses who say we can't go into people's anal- it's 'a taboo' prompting him to argue that 'you don't put your Christianity (religion beliefs emphasis added); your traditions into your work' since you actually made an oath to serve the people...and not because you wanted to start looking at people's sexual orientation and start stigmatising and discriminating them"

Ikhile, FHI 360, 22 November, 2016.

The above presented data point to the challenge of efforts to transform long deep –seated social values and norms. However, society is not static and as such certain values and norms that are detrimental to people's health needs should therefore be challenged and transformed. Those in charge of health care service at every level should also be agents of change and intensify the voice of change in order to accommodate marginalised and vulnerable groups within society such as MSM. According to the South African Nursing Council (2013) it is fundamental that all HCWs apply professional values when confronted with conflicting situations during the course of their duties. For this to occur, nurses ought to be objective in their approach and not have their personal values supersede the professional values (Johnstone and Hutchinson, 2015).

Hence, Slabbert of SANAC argues that

"unless clinics are sensitised and trained to deliver appropriate services to key population, MSM such as gay men will not go there and as such even if PrEP is made

available in every clinic, failure to reach out to people who are at risk of acquiring HIV might result in the downfall of PrEP as an HIV prevention strategy"

Slabbert, SANAC, 7 November, 2016.

Such training should however involve all health workers as Ikhile of FHI360 highlights that if a self-identifying gay male walks into the premises of a clinic, the attitude of the people working at the entrance of that health facility will make the person to be comfortable to proceed and go and access health services within the clinic (22 November, 2016).

The call to reform the health care system and make it MSM friendly or completely non-judgemental cannot be undermined (*see* Lane et al,. 2014; Rebe and McIntyre, 2014) as the South African constitution section 9 guarantees for the progressive realisation of the right to have access to health care services regardless of sexual orientation, race, gender or religion (Hivos, 2014; Pieterse, 2016). Hence further along the call for reform of the health care sector, Venter (17 January, 2017) argues that government need to strengthen both legislation and reporting channels of unfair treatment based on sexual orientation or gender perpetuated by HCWs towards health care seekers.

Again, legal frameworks to support the right to have access to health care need to be put in place to deal with HCWs found guilty of breaking their Bothelo work ethics which promotes nursing values as oppose to personal values (UNAIDS, 2014; SANLGBTI, 2016; Zahn *et al.,* 2016). Likewise, Piot *et al.,* (2015: 3) posit that "practical solutions are needed to expedite changes in laws, policies and public attitudes that violate the human rights of vulnerable populations who might be at particular risk of HIV infection" such as MSM and migrants. Venter (17 January, 2017) argues that such a mechanism will send a strong message to HCWs who bleach their nursing principles as currently is the case, since as Zahn *et al.,* (2016) points out they know that there is little room for them to be held uncountable for their misconduct.

4.2.3.3 Affordability of HIV Prevention Health Services

In the event that HIV prevention services are available and acceptable as discussed above, there also need to ensure that such services are affordable. Recently, concerns have been raised about the ability of Third World Countries to finance the use of PrEP amid minute public health expenditure budgets which might impact the availability of ARVs drug

especially to those living with HIV (Gomez at al., 2013), there by suggesting a PrEP user fee.The majority of the participants however said that they would rather have government provide it for free and while in the case of a user fee, government should still ensure PrEP accessibility to those who cannot afford to pay for it. One respondent explains that

> *"I won't say I can pay for it, I would prefer government to provide for free. If people are made to pay for it, not everyone will afford it- some people don't have money or are unemployed so the percentage of high risk (incidents) will not drop but rather still go up. So if the government will give them free, it will be fine"*
>
> Dumisani, 18 December, 2016

Another participant echoed a similar position

> *"I would pay for PrEP but on certain conditions that if I happen to be working and if I pay for PrEP- some of the money needs to go towards ensuring that PrEP is available in rural areas- to communities that do not have access/the means to pay for PrEP... because we live in a world where we don't have access to the same resources and often those with money can afford those resources and if you don't make it free then the poor will often suffer the most"*
>
> Sidanda, 31 January, 2017.

Currently, Radebe of ANOVA Health Institute explains that

> *"If you look at the clientele of PrEP- - mostly it would be those who are coming from more affluent communities – in the suburb areas, in the metro cities, but in the rural areas- we might not necessarily find someone who is educated about Prep"*
>
> Radebe, ANOVA Health, 8 December, 2016.

The above quotes signals the inability of majority of Black South Africa to afford health care in the country. Application of a historical lens to the above presented data is vital to enable one grasp the notion of health care affordability within the South Africa context. Health care affordability and the issue of HIV, is not merely a medical challenge as its firm grip on the society is fundamentally embedded within the country's historical socio-economic and political past which placed the majority of Black people at a disadvantage with regards to

both social and economic opportunities (Gilbert et al., 1996; Hargreaves et al., 2007). As such, in 2016 a joint initiative of several civil society organisations produced a petition backed by a 'Community Consensus Statement on Access to HIV Treatment and Its Use for Prevention" which called upon the need for equal access to HIV drugs as treatment and as PrEP regardless of people's income, gender, sexuality and age, just to mention a few (HIVT4P, 2016).

In line with the interactive model, pressure groups are also an important part to the policy making process. With regards to the cost of PrEP, using cost benefit analysis, pro PrEP advocates argue that PrEP is not expensive, in fact, if prescribed early to people at highest risk of HIV it is considerably cheaper than lifelong ARV treatment (SAMJ, 2013; Collins, 2015b). Hence, Slabbert of SANAC posits that

> *"I understand that we don't have a budget to make it available to the general population at this stage, but I do think it's important to make it available to the key populations where we know there will be up take"*
>
> Slabbert, SANAC, 7 November, 2016.

This above data again needs to feed into health planning vis-à-vis health policy. What is good is that government seem to be aware of the need to expand PrEP access to all that needs it but, financial constraints seem to be a barrier. Still pressure groups need to challenge government to find ways of financing a PrEP national roll-out programme as, Venter *et al.,* (2014: 269) argue that effective "resource allocation" is key to deal with government related budget challenges vis-à-vis health planning.

4.2.4 Informed HIV Policy

The study defines policy as "statements of broad intent by an organisation" and "does not arise from a vacuum but as a result of result of analysis coupled with value judgement" (Green, 1999: 37). Thus, policy is often times informed by evidence backed by research and as such the importance of research cannot be over emphasised. However, often times marginalised and vulnerable populations are largely excluded in HIV prevention research as evidence indicates that only 6 percent of trial participants in 2013 were from a high risk population (AVAC, 2014). Further, based on the review of the previous 4 National Strategic

Plans (NSP) Heywood (2016) points out that the various NSPs were not well strategic as each respectively lacked the insight to articulate pressing social issues that were paramount to the country's HIV response.

4.2.4.1 Evidence-Based HIV Programming

Piot *et al.,* (2015) argue that in a changing HIV research landscape coupled with increased competition from other health priorities and minute resources for HIV as well as stagnant or decreasing budget allocations, priority setting is crucial. Such current socio-economic challenges have brought an increasingly interest in both evidence-based medicine and economic appraisal (Green, 1999). Evidence-based HIV programming has thus become an essential core component as it allows for the ability to translate efficacious HIV interventions into measured goals and outputs. For instance, Ikhile of FHI30 highlights that

> *"With ANOVA- we noticed that most MSM doesn't like going to the local clinics... because of issues of stigma and discrimination, attitude of health care workers...we then had to train the health workers (the gateman, the doctors, the nurses, the clinicians) to be able to understand most especially issues regarding MSM. With the training we've been able to create a safe space for them- MSM able to go in and get the services that they want...in the end reducing the rate of people dying; of people getting re-infected"*
>
> Ikhile, FHI360, 22 November, 2016

Similarly, Radebe of ANOVA Health Institute posits that

> *"We provide training for experts and also private doctors because gay men other than coming to the clinic where they face stigma they would rather pay and go see a GP, that General Practitioner must be educated, must be trained, most also be monitored with us… MSM are able to go to such clinics"*
>
> Radebe, ANOVA Health, 8 December, 2016.

Further Ikhile adds that

> *"we did this package (Pre-packed ANOVA condoms[46]) was for migration purposes. You give it to someone, they just throw it inside their bag- there is quite a lot of lubricants and condoms in the package."*
>
> Ikhile, FHI360, 22 November, 2016.

[46] See Appendix 6

The various presented quotes all speak to how evidence was being used to inform the development of HIV programmes that in the end according to Piot *et al.,* (2015) help in the "creation of safe service havens for marginalised and vulnerable groups at risk of HIV" and ensures that "no one is denied access to health care. As part of the interactive model, experience is key and there is need for policy representative from the NGO clinics to challenge government to adopt their model and implement it across the public health care system. Non- State organisation have been "perceived as more efficient health care providers than the public sector", although limited empirical data is available to prove this (Green, 1999: 64).

4.2.4.2 Importance of Research-based HIV Programming vis-à-vis PrEP Roll-out

More than anything, "HIV is a profoundly a social disease" as "its causes and consequences" are deeply embedded in the social, culture and political processes that shape national development, social institutions, civil society, interpersonal relations and everyday lives" (Kadasia, 2011: 1). Again, HIV is still the major cause of death (accounting for 50 percent of deaths) (Oni and Mayosi 2016). Further, even though PrEP is the biggest development in the area of HIV management, the best modalities to expand PrEP access to those at high risks of acquiring HIV still need to be worked out (Medical Chronicle, 2016). Of particular interest to this study has been the need to understand the feasibility of a PrEP roll-out within the context of contemporary internal migration patterns. Key to this is to understand if the current health care system can enable a national PrEP roll-out; PrEP uptake; and continuity to access to PrEP. Again, the study has outlined some of the social factors both within the health system and beyond that might hinder PrEP uptake and continuity within a context of rural to urban internal circular migration. Hence, in line with aim of the study, Slabbert of SANAC argues that

> *"It's crucial, unless you get the opinions of the people that we want to program for- we won't even know if we are on the right track...so we need to get to the highest risk individuals in the key population"*
>
> Slabbert, SANAC, 7 November, 2016.

Similarly, Ikhile of FHI360 points out that

> *"a lot of time we sit here and put a programme together, without actually accessing the needs of the people at the ground level...you need to engage people on the ground level to make sure that you hear their views and they have a buying into the decision making process right at the inception"*
>
> Ikhile, FHI360, 22 November, 2016.

The presented data point to the need to intensify a bottom-up approach within the policy making process so that programmes that are guided by such a policy (in this case PrEP) can easily save the needs of the people. Likewise, the UNAIDS 'Know your epidemic, know your response' is a good reference framework as it calls for the need to identify HIV pathways in one specific geographical area to enable better HIV responses (UNAIDS, 2007). Further, with regards to the South African HIV context, the importance of knowing your epidemic for better response cannot be overemphasised as Radebe argues that

> *"I think from the point of where we are in South Africa, in terms of prevalence of HIV, we are not going anywhere. We've had decades of HIV in our country, we see new infections that have gone up- and it's on vulnerable groups that are not accessing services, not accessing health care. And also from key population side, we've ignored that particular group... we are falling in terms of - how we reach out, coverage and whether effectively we were sending a correct message across the board- from younger people to older people... it's an opportunity for us to engage with especially the most at risk population (MSM subgroups) - to look at better ways of preventing themselves"*
>
> Radebe, ANOVA, 8 December, 2016

A number of backward and forward linkages and engagement with different stakeholders such as potential service users, policy makers and health planners should be strengthened as such a process is vital to being relevant evidence from which policy can be based on.

4.2.4.2 Government and Civil Society Collaboration on HIV Policy

Within the South African context, the South African National Council (SANAC) expected to build consensus across all concerned actors such as government and the civil society to drive an enhanced country response to HIV, TB and STIs. SANAC is thus mandated to provide

technical guidance on all HIV, TB and STIs related policies and the National Strategic Plan has been instrumental in providing the direction of HIV response within the country by setting priority areas and targets (SANAC, 2016). The SANAC HIV technical team is pivotal in coordinating consensuses around HIV. Hence, Slabbert of SANAC posits that

> *"SANAC, is a coordinated mechanism, so we don't research or implement ourselves, we work closely with those who do. So, we obviously follow research studies…for MSMs, we work closely with TB care, and ANOVA"*
>
> Slabbert, SANAC, 7 November, 2016.

Again, other experts on HIV policy who were part of the study also mentioned of their respective collaboration with government. For instance, Ikhile of FHI360 indicates that

> *"Government has been trying to engage us in most of the meetings that we do… government rely on the NGOs the Civil Society most especial because they know that most of the times they are the ones on the ground level, and they (government) want to connect with us just for them to know the needs on the ground level so that their (government's) own objectives can be able to match together to their (the people's) needs"*
>
> Ikhile, FHI360, 22 November, 2016.

Further, when asked if government (SANAC) does lend other stakeholders involved in the policy making process a listening ear, Radebe of ANOVA Health Institution argues that

> *"Government has been listening to us - they even came in into the site to actually see and get informed and ask relevant questions. 'How are you guys doing it? How can we work together to do it?"*
>
> Radebe, ANOVA Health, 8 December, 2016.

The above quotes signal government efforts to locate its policy making processes within the interactive model of policy making. However, within such a process, Weiss (1979: 428) reminds us that "the process is not of one linear order from research to decision but a disorderly set of interconnections and back-and-forthness that defies neat diagrams". At the moment, judging by an open letter to Deputy President Cyril Ramaphose as Chairperson of SANAC by former deputy chairman of SANAC Mark Heywood (2016), SANAC need to

rigorously reconfigured how its policy making process can have a strong backbone aspect of backward and forward linkages to which all stakeholders' voices are represented as Heywood was critical of some of the other civil society representatives to SANAC's HIV coordinating committee. Heywood (2016) argues that "many who represent civil society in SANAC are pretenders who "are out of touch and disconnected from real people" as "they are their own insular civil society" and that "they have formed a world in a parasitic ecosystem".

Heywood hence (2016) challenges government that if such representatives continue their acts which is "to guard the gates of the AIDS response" then the next National Strategic Plan will not help solve South Africa's greatest health challenge yet. This is an important message to heed since in as much as PrEP brings renewed hope to the fight against HIV, ignoring the structural drivers of HIV; social determinants of health; lack of checking feasibility of a PrEP roll-out using the current health system; understanding the mechanisms of continuity to PrEP access within the context of internal rural to urban circular migration; and understanding other external factors outside the health care system that might hinder one's PrEP uptake and continuity to PrEP access will in the end impact PrEP as an HIV prevention method.

4.3 THEORETICAL FRAMEWORK JUXTAPOSED WITH THE RESULTS

The interactive model is a significant theory within the health promotion space as it promotes evidence based policy making. Research is thus an essential core component of this model. Nutbeam and Harris (2004) argue that research knowledge is vital in the decision-making process coupled with experience, political insights and social pressure. As the Venn diagram 1 illustrates, the model allows policy makers to source relevant information from multiple sources such as social scientists, planners, clients, administrations and recognises that the policy making process is linear but rather one that is characterised by various interlinked components that have forward and backward linkages (Weiss: 1979).

In line with the study's purpose ***to explore attitudes and knowledge (s) of HIV prevention of young, internal (South African) migrant, Black[2] men who self-identify as gay in Johannesburg and its implications for the development of South Africa's Pre Exposure Prophylaxis (PrEP) Programme*** **-**the study has revealed several themes such as the need to

incorporate structural drivers of HIV and social determinants of health-migration inclusive. These all manifest in different layers when placed against migration and the roll-out f PrEP. For example, homophobic attitudes by HCWs towards health users who are part of the key population of MSM act as a barrier to access HIV prevention health services; and this could have a bearing on PrEP uptake and continued access to PrEP within the context of circular migration. Likewise, homophobic attitude within certain communities could also hinder one uptake of PrEP as well as continuity access to PrEP depending on location. Further, the research has challenged policy makers to examine health equity and access with regards to issues of availability, accessibility and affordability. From an interactive model perspective that Weiss (1979) highlights, the evidence presented in this paper should be taken as part of evidence by policy makers in their policy making processes vis-à-vis PrEP roll-out in South Africa.

4.4 STUDY LIMITATIONS

This study has a number of limitations. Firstly, this research was explicitly focused on the attitudes and knowledge (s) of HIV prevention in the era of PrEP of self-identifying internal migrant gay men in Gauteng, which is a single South African province, and the results may not be generalisable to the entire country. However, Gauteng is the wealthiest, most urban and most cosmopolitan of South Africa's provinces, which attracts a lot of internal migrants and where an MSM population highly visible. Secondly, the study relied on snowball sampling and it is possible that results are limited to social cycles of internal migrant Black gay men who are visible and assertive of their sexual orientation. As a way of addressing this, the study incorporated multiple first point of contacts that helped in getting in study participants, hence it is possible that study findings may represent the best-case scenario of internal migrant Black gay men across the country. Similarly, due to snowballing as sampling strategy, many gay identifying individuals even upon been asked by their close friend to participant in the study, they did not easily come forth. Biernacki and Waldorf (1981: 142) pointed out this challenge highlighting that "the chain referral method of sampling is a self-sustained and self-propelled phenomenon, in that once it is started it somehow magically proceeds on its own". This unfortunately is not usually the case as such Beirnacki and Waldorf (1981: 142) argue that "the researcher must actively and deliberately develop and control the sample's initiation, progress and termination". The incorporation of multiple point of contacts as pointed out ended up being useful.

Thirdly, while the study is aware of the various MSM subgroups, the research sampling methodology favoured the recruitment of self-identifying gay men who were comfortable discussing their sexuality and social lives. This was done to ensure that the study was completed in time by virtue of it being a Master's research project which has a well - stipulated time frame. Finally, getting interviews and transcribing them was a demanding task. Nonetheless the researcher had developed a work flow chart that enabled the researcher to monitor and evaluate the progress of the study. In addition, the researcher's supervisor datelines made it possible for this study to be completed on time.

4.5 CONCLUSION

In light of the interactive model which is the theoretical framework of the research, the study has revealed that weaker back and forward interconnected linkages exist among the HIV health planning policy space within the country. Since the interactive model acknowledges multidirectional processes of gathering evidence to inform policy making decisions, the lack thereof will potentially render any South African PrEP program targeting MSM as a key population ineffective. Hence, despite the need to provide PrEP to people who are substantial at high risks of acquiring HIV, the attitude of the health workers could undermine the utilisation of PrEP among internal migrant Black self-identifying gay men. Further, the policy making process which ought characterised by interconnected backward and forward linkages need incorporate structural drivers of HIV and social determinants of health-migration inclusive.

Further, the discussion alludes that social determinants of health such as migration could impact the uptake of PrEP and continuity of PrEP access as an HIV prevention tool in the event of a full PrEP roll-out by those who are at risk of acquiring HIV, in particular, self-identifying gay men as a subgroup of MSM key population. The discussion has located challenges of PrEP uptake and continuity of PrEP access for mobile self-identifying gay men as they engage in rural and urban circular migration due to according to literature (Anarfi, 2005; Crush et al., 2005b; MacPherson and Gushulak, 2001; Vearey *et al*., 2011; Vearey 2014) structural drivers of HIV and various social determinants of health, both of which are contextual and location specific within the spectrum of circular migration.

Chapter Five: Study Conclusions

5.0 INTRODUCTION

South Africa is still struggling to fight and eradicate one of its major health challenges in decades. According to the South African mid-year population estimates (Statistics South Africa , 2015: 7) South Africa has approximately 6.9 million people living with HIV (11.2% national prevalence for adults aged 15-49 years), which is currently the highest in the world (UNAIDS, 2015). The country's HIV epidemic is driven mostly by heterosexual sexual transmission (NSP, 2011). However, HIV among men who have sex with men (MSM) seems to differ from that of the general South African population, suggesting that while intertwined with the heterosexual epidemic there is also an epidemic among South African MSM with specific dynamics, for instance racial distribution of HIV among MSM which concentrated among the Black MSM community (Sandfort *et al*., 2008: 425).

The introduction of PrEP[47; 48] is of significant importance in this regard to high risk populations such as MSM. That is because, MSM as part of key population their social behaviour (the probability to engage in unprotected insertive and receptive anal sex) and interactive spaces of vulnerability (drugs and alcohol abuse) increases their chance of contracting HIV and AIDS (Crepaz *et al*., 2009). Similarly, with reference to the South Africa HIV context, several scholars have argued that men who have sex with men (MSM) are at high-risk of HIV acquisition and transmission (Arnold *et al*., 2013; Siegler *et al*., 2014), due to increased risks which are connected to structural, social, behavior and biological factors (Sanders *et al*., 2007; Baral *et al*., 2007; Sifikis *et al*., 2007; van Griensven *et al*., 2009; Rispel *et al*., 2011) and high HIV prevalence in male partners (Beyrer *et al*., 2012).

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[47] The study refers to oral PrEP which is among the many Antiretroviral (ARV)-based prevention (Quaife *et al.,* 2016)

[48] Truvada® the drug that is part of PrEP, consists of the two reverse transcriptase inhibitors emtricitabine and tenofovir (Jaspal and Daramilas, 2016)

Seemingly, however, the introduction of PrEP is being framed yet as another biomedical intervention. The UNAIDS (2016: 1) posits that "PrEP adds an extra HIV prevention option to the use of condoms and lubricant, behavioural counselling, post-exposure prophylaxis, treatment for sexually transmitted infections, voluntary male medical circumcision and antiretroviral therapy for partners living with HIV". Likewise, the South African National Strategic Plan (NSP) on HIV, sexually transmitted infections and tuberculosis specifically calls for its introduction as an added HIV tool (SAJM, 2013; NSP, 2011). Several scholars have however, pointed out the need for Combined Preventive Programmes (CPPs) in the fight against the pandemic as a one dimensional approach has proved to be ineffective (Rotheram-Borus *et al*., 2009; Kurth *et al*., 2011; Sullivan *et al*., 2012; Colchero *et al*., 2016).

A combined prevention could be defined as a multiple-dimensional intervention that incorporates the contextual social and the structural determinants of health (UNFPA, 2004). Such a view of health recognises the need to see health beyond the Western Biomedical perspective. As such health should be within the broader spectrum of health and well-being in which down-ward and up-ward structural factors intersect with one's health outcome (s) in multiple ways.

It is within this realm of thinking that this study finds its purpose. The aim of the study was to explore the attitudes and knowledge (s) of HIV prevention of young, internal (South African) migrant, Black men who self-identify as gay in Johannesburg and its implications for the development of South Africa's Pre Exposure Prophylaxis programme. Within the context of circular migration which many scholars have documented (Crush, 2005; Crush *et al.,* 2005b; Vearey, 2014) the study wanted to understand and highlight both existing and potential socioeconomic barriers that might hinder the uptake of PrEP among young internal migrant Black men who self indentify as gay.

The study is underpinned by an Interactive model of health planning as its theoretical framework which according to Weiss (1979), seeks to promote the development of an informed health policy that is based on empirical data. Based on the position outlined in the literature this study has argued that provision of PrEP should be made available to all that are substantially at high risks of acquiring HIV and such programmes should be accompanied by efforts to address the structural drivers of HIV as well as eliminate all existing and potential barriers to HIV prevention health services that marginalise and vulnerable groups

such as MSM subsets face. More importantly, based on Weiss (1979) interaction model attitudes and knowledge (s) should inform the development of a PrEP programme as they are vital to ensure that the programme will be effective as an added HIV prevention tool.

Further, the study's literature review highlighted several themes such as structural drivers of HIV; migration, urbanization and HIV; social networks as determinant of health; health migrant Vs migration-aware approach, all of which reaffirm the need for a sociological understanding of health. Hence, with regards to the research topic, the literature section signal the need to locate social determinants of health including migration and structural drivers of HIV in HIV programmes including the roll-out of PrEP (Rotheram-Borus *et al*., 2009; Hankins and de Zalduondo, 2010; Beyrer *et al*., 2012).

Furthermore, in line with the purpose of the study **- to explore attitudes and knowledge (s) of HIV prevention of young, internal (South African) migrant, Black men who self-identify as gay in Johannesburg and its implications for the development of South Africa's Pre Exposure Prophylaxis (PrEP) Programme-** the study adopted a qualitative research methodology in which in-depth interviews as a research instrument was used to collect data from the study participants. A qualitative enquiry was employed due to the nature of the research question since Creswell, (1998) posits that it sets out to uncover how people make sense of their lives, as opposed to quantitative enquiry, which sets out to classify and categorise events and observable phenomena related to human beings. Snowballing was utilised to purposively to select study participants. In total, 12 in-depth interviews were conducted with all the participants based on established research ethics protocol set by the University of the Witwatersrand Human Research Ethics Committee.

The study results have pointed out to a number of issues that need to form part of policy discussion with regards to PrEP with a context of internal migration. The results have reaffirmed a number of recurrent themes such: Structural drivers of HIV such as transactional sex, sex work and alcohol abuse (Lane *et al*., 2008; Santos *et al.,* 2011; Wariki *et al.,* 2011; Jewkes *et al.,* 2012); homophobic attitudes of Health Care Workers towards MSM (Scheibe et al., 2011; Rebe and McIntyre, 2014; Lane *et al*., 2014; Oberth, 2014; Pieterse, 2016; Mambanga *et al.,* 2016); homophobic attitudes in the South Africa rural setting (Epprecht, 2008; Msibi, 2011; Beck *et al.,* 2012); and urban precarity and spaces of vulnerability both associated with migration (MacPherson and Gushulak 2001; Crush *et al.,*

2005b; Crush, 2005; Landau, 2005 Banati 2007; Vearey and Nunez 2010; Vearey *et al*., 2011; Vearey, 2014; Lurie and William, 2014; Walls *et al*., 2015; Trimikliniotis *et al.,* 2015). All of these themes if they do not inform the development of South Africa's PrEP programme within the context of circular migration could have a bearing on the uptake of PrEP and continuity for access to PrEP. Further, the study found high PrEP acceptability regardless of rumoured side-effect of weight gain and potential stigma of being perceived HIV-positive among the MSM study participants despite low knowledge of PrEP.

5.1 RECOMENDATIONS

The study makes several recommendations. Firstly the study reaffirms the need to strengthen reporting system and the legal frameworks to deal with HCWs found guilty of breaking their Bothelo work ethics which promotes nursing values as oppose to personal values (UNAIDS, 2014; SANLGBTI, 2016; Zahn *et al.,* 2016). The study therefore agrees with Piot *et al.,* (2015: 3) who posit that "practical solutions are needed to expedite changes in laws, policies and public attitudes that violate the human rights of vulnerable populations who might be at particular risk of HIV infection" such as MSM.

Secondly, government need to expand its collaboration with NGO working in the field of men's health to intensify sensitive training of HCWs on the psychosocial and the health needs of MSM across the public health care facilities in the country. HCWs that have already been part of previous training can be appointed as ambassadors of change and be entrusted with peer education to their fellow members of staff. Such a mechanism can be a vital tool as Van der Elst (2013) posits that at times trained HCWs who go through training end up becoming sensitive and sympathetic to health needs of MSM, easily become frustrated by their untrained counterparts. Again, with the age of technology, government in collaboration with NGOs whose work champion men's health can initiate free online courses for HCWs to help them understand issues of gender, sexuality and health as well challenge their internalised prejudice. A similar initiative helped to reduce levels of homophobic attitudes in the Kenyan health care system (Dijkastra *et al.,* 2015).

Thirdly, since PrEP is part of an Antiretroviral regime, it possible for PrEP user to face discriminatory attitude. But this is an area that needs research to provide enough evidence once the pill is rolled out. Such a study could possibly examine attitudes and perceptions of people towards PrEP users and their potential impact on PrEP adherence.

Nonetheless, as a way of health planning, policy makers could seek ways of how to avert certain possible discrimination. One way of doing this could entail relaxing control on the distribution channels. That is extending PrEP access point and not to heavily rely on the public health system.

Finally, the majority of the study participant belief that PrEP as HIV tool will lead to many MSM who will be on PrEP to have unprotected sex. The study suggests that a quantitative study to examine the causality between the two should be undertaken.

5.3. CONCLUSION

South Africa is still struggling to deal with one of its 21 Centaury major health challenges-the HIV pandemic (UNAIDS, 2015; Statistics South Africa, 2015) as there is evidence of continued HIV incidence among those aged 15 and beyond (Quaife *et al.,* 2016). However, within a generalised HIV epidemic, several scholars have argued that men who have sex with men are at high-risk of HIV acquisition and transmission (Arnold *et al*., 2013; Siegler *et al*., 2014), due to increased risks which are connected to structural, social, behavior and biological factors (Sanders *et al*., 2007; Baral *et al*., 2007; Sifikis *et al*., 2007; van Griensven *et al*., 2009; Rispel *et al*., 2011). Hence, the introduction of PrEP is of significant importance in this regard to high risk populations such as MSM.

However, with the introduction of PrEP there is a need to design Combined Prevention Program that intrinsically carries with them a sociological understanding of health so that society does not miss out on the opportunities that PrEP presents. The interactive model which is theoretical framework of the study, allows for policy makers to utilise evidence such as empirical data and experience as a basis for policy formulation as Weiss (1979: 428) posits that policy makers seek information not only from social scientists but from a variety of sources such as planners, clients, administrators and that the policy making process is not linear but is characterised by several interconnected elements that have forward and backward linkages.

As such there is a need for policy makers to engage with structural drivers of HIV within the policy making process. Hence for instance, an essential element will be to understand the feasibility of a PrEP roll-out within the context of contemporary internal migration patterns. Key to this is to understand if the current health care system can enable a national PrEP

roll-out; PrEP uptake; and continuity to access to PrEP. Again, there is need to understand social factors outside the health system that might hinder PrEP uptake and continuity within a context of rural to urban internal circular migration. The interactive model can be an effective tool to help policy makers bring the cited issues on the policy table vis-à-vis a PrEP roll-out.

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APPENDICES

Appendix 1: PARTICIPANTS INFORMATION SHEET

Title of research project: Exploring the attitudes and knowledge of HIV prevention of young, internal migrant, black, gay men in Johannesburg: *implications for the development of the South African PreP programme*

Research Protocol number: **DEV16/06/09**

Student name: Derick Mac Donald Nyasulu

Student email: dericknyasulu@yahoo.co.uk

Student contact number: 0728856647

Supervisor name: Joanna Vearey

Supervisor email: jovearey@gmail.com

Supervisor contact number: 011 717 4041

University of the Witwatersrand Research Ethics Committee (non-medical) contact:

Lucille.Mooragan@wits.ac.za

011 717 1408

Hello! My name is Derick Mac Donald Nyasulu and I would like to know from you since I am conducting a study that aims to examine how attitudes (ones feelings, views, opinions) and knowledge (s) of HIV prevention among men who have sex with men during this present time where

antiretroviral drugs (ARVs) can be administered to someone who is at risk of sexually acquiring HIV is important tool to inform the direction of a South African programme that will be dealing with such HIV prevention strategy.

I would like to invite you to take part in this study as it will help us to understand how the implementation of a programme that will have antiretroviral drugs (ARVs) administered to someone who is at risk of sexually acquiring HIV can understand the views of prospective clients (end users) to form as a tool to direct its implementation.

What does this study entail?

Your participation in this study will include the following:

- 45 minutes to one-hour in-depth interviews with young, internal migrant, Black gay men who have been referred to the study by their friend or colleague
- 45 minutes to one- hour in-depth interviews with experts who are part of the civil society and working on issues of HIV.

Risks: I will ask you some personal questions about your life and work. You may experience some discomfort in discussing some of the topics in the interview. If for any reason you are uncomfortable you can skip a question or chose to stop the interview at any time.

Benefits: You may not receive any direct benefit from participating in this study. But, this research will help us to understand how the implementation of a programme that will have antiretroviral drugs (ARVs) administered to someone at risk of sexually acquiring HIV can understand the views of prospective clients to form as a tool to direct its implementation.

Costs: There will be some direct costs associated with this research project such as time

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The information that will be collected is purely for research purposes and to learn more about how

the implementation of a programme that will have antiretroviral drugs (ARVs) administered to someone at risk of sexually acquiring HIV can understand the views of prospective clients to form as a tool to direct its implementation.

The information that you share with me may be written up in research reports. We will NOT use any of your personal details and it will not be possible to identify you personally in any of the research reports.

Your responses may be made available in an anonymised format for a variety of subsequent purposes, including for future teaching and research projects.

Participation is completely voluntary; you are under no obligation to take part in this project.

You may withdraw from this project at any stage; this will not affect you in any way.

- **Do you have any questions?**

- **Would you like to go ahead with being part of this research project?**

Appendix 2: VERBAL/WRITTEN INFORMED CONSENT

Title of research project: Exploring the attitudes and knowledge of HIV prevention of young, internal migrant, black, gay men in Johannesburg: *implications for the development of the South African PreP programme*

Research Protocol number: **DEV16/06/09**

Student name: Derick Mac Donald Nyasulu

Student email: dericknyasulu@yahoo.co.uk

Student contact number: 0728856647

Supervisor name: Joanna Vearey

Supervisor email: jovearey@gmail.com

Supervisor contact number: 011 717 4041

University of the Witwatersrand Research Ethics Committee (non-medical) contact:

Lucille.Mooragan@wits.ac.za

011 717 1408

	Yes	No
I have read and understood the participant information sheet, and have had the opportunity to ask questions.		
I understand that I am free to withdraw from this study at any time with no negative consequences.		

I understand that all information will be confidential and my responses anonymised. It will not be possible to identify me in the final report.		
I give consent for my responses to be made available in an anonymised format for a variety of subsequent purposes, including for future teaching and research projects		
I give my consent to be audio taped during the interviews. I understand that after the tapes will be kept for 2 years after publication, or for 6 years if no publication results. I also understand that I am free to withdraw this consent at any time.		
I consent to participate in this study.		

FOR VERBAL CONSENT

PARTICIPANT:

Printed Name of Participant Date

Person who sought consent (research assistant)

- **I (*Derick Mac Donald Nyasulu*), herewith confirm that the above participant has been fully informed about the study and has given verbal consent to participate as indicated above.**

Derick Nyasulu

Printed Name Signature Date

FOR WRITTEN/SIGNED CONSENT

PARTICIPANT:

Printed Name of Participant Date

- **I herewith confirm that I have been fully informed about the study and have given consent to participate as indicated above.**

Printed Name Signature Date

Appendix 3: IN-DEPTH INTERVIEW GUIDE FOR MSM STUDY PARTICIPANTS

IN-DEPTH INTERVIEW GUIDE FOR YOUNG, INTERNAL MIGRRANT, BLACK GAY MEN IN JOHANNESBURG

Section A: Biographic data

Name:

Age:

Place of Birth:

Number of years in Johannesburg:

Section B: How are attitudes and knowledge (s) of HIV prevention in the era of Prep for young, internal migrant black[49] gay men in Johannesburg an important tool in informing the development of a PrEP programme in South Africa?

1. Please share with me your experience of migrating to Johannesburg?
2. How have you experienced the city so far as a gay individual?

   Prompt: Would you please share with me your gay experience in Johannesburg?
3. How would you describe the sex life of a self-identifying gay man in Johannesburg?
4. How often do you visit your place of birth/province?
5. Is your sex experience different when you visit home?
6. What situations would you say make young, migrant gay men to engage in risky sexually behaviour?
7. Please share with me your safe sex experiences?
8. Have you heard of PrEP?
9. What is your opinion on using PrEP?
10. Do you think PrEP would make people engage in gay sex easily?
11. What would make you use PrEP?
12. Would you pay a fee to access PrEP?
13. What would be the challenges of using PrEP back home?
14. What ways do you think government should follow to make PrEP an effective HIV prevention tool?
15. Any other thing you would like to share?

[49] black in this research refers to native Africans excluding Coloureds, and Indian.

Appendix 4: WRITTEN INFORMED CONSENT (EXPERTS)

Title of research project: Exploring the attitudes and knowledge of HIV prevention of young, internal migrant, black, gay men in Johannesburg: *implications for the development of the South African PreP programme*

Research Protocol number: **DEV16/06/09**

Student name: Derick Mac Donald Nyasulu

Student email:dericknyasulu@yahoo.co.uk

Student contact number: 0728856647

Supervisor name: Joanna Vearey

Supervisor email: jovearey@gmail.com

Supervisor contact number: 011 717 4041

University of the Witwatersrand Research Ethics Committee (non-medical) contact:

Lucille.Mooragan@wits.ac.za

011 717 1408

	Yes	No
I have read and understood the participant information sheet, and have had the opportunity to ask questions.		

I understand that I am free to withdraw from this study at any time with no negative consequences.		
I understand that all information will be used for the final report write up.		
I give consent for my responses to be made available with my name as within my official capacity for a variety of subsequent purposes, including for future teaching and research projects.		
I give my consent to be audio taped during the interviews. I understand that after the tapes will be kept for 2 years after publication, or for 6 years if no publication results. I also understand that I am free to withdraw this consent at any time.		
I consent to participate in this study.		

PARTICIPANT:

Printed Name of Participant Date

- **I herewith confirm that I have been fully informed about the study and have given consent to participate as indicated above.**

Printed Name Signature Date

Appendix 5: IN-DEPTH INTERVIEW GUIDE FOR EXPERTS

IN-DEPTH INTERVIEW GUIDE FOR EXPERTS

Section A: Biographic data

Name:

Organisation:

Position:

Section B: How are attitudes and knowledge (s) of HIV prevention in the era of Prep for young, internal migrant black[50] gay men in Johannesburg an important tool in informing the development of a PrEP programme in South Africa?

1. What is your opinion on PrEP as a new HIV prevention strategy?
2. What would make PrEP an effective HIV prevention tool for key populations such as men who have sex with men?
3. How important would it be to look at key populations' opinions such as men who sex with men as a starting point to inform a South African PrEP programme?
4. How is internal migration of men who have sex with men an important aspect to inform the direction of a PrEP programme?
5. How has your institution helped government to look at attitudes and knowledge (s) of HI V prevention of migrant men who have sex with men?
6. What would be an effective way for government to solicit attitudes and knowledge (s) from the key populations such as men who have sex with men to inform the direction of a PrEP Programme in South Africa?
7. In your opinion, is government currently doing enough to solicit attitudes and know ledge(s) of HIV prevention in the era of PrEP?
8. Please share with me the impact of failure to have a PrEP programme guided by the attitudes and knowledge (s) of key populations e.g MSM?
9. Any other thing you would like to share?

[50] black in this research refers to native Africans excluding Coloureds, and Indian.

Appendix 6: PRE-PACKED ANOVA SAFETY CONDOM PACK

