

**An Analysis of Womxn's Understanding of South African Public Health Awareness
Campaigns' Messages on HIV/AIDS Using Cognitive Interviewing.**

A THESIS

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Abstract

Besides having the most extensive antiretroviral therapy (ART) treatment programme, South Africa faces the highest epidemic rate, with womxn and children most affected. Several prevention strategies have been implemented to curb the spread of HIV/AIDS in South Africa, including free access to print form awareness campaigns that come through pamphlets, posters and billboards. However, most public health sector awareness and educational programmes carry uniform messages that are then carried out in heterogeneous contexts leading to the miscomprehension of the intended messages. This study aimed to explore womxn's understanding of public health awareness content on the prevention of HIV/AIDS. The focus was on examining their interpretation of universal HIV/AIDS awareness messages in their heterogeneous contexts, which might provide obstacles to womxn's reproductive health and well-being using a reproductive justice framework. This study employed a cognitive interviewing methodology to collect data from the participants to obtain information about how participants understand and perceive knowledge and how they arrive at specific answers or judgements. Twenty-eight (28) womxn aged between 18 and 30 years were purposively sampled for this study from four (4) local healthcare facilities in Makhanda: the Grahamstown Municipality (Anglo-African) Clinic, the Joza Clinic, the Settlers Day Hospital and the Raglan Road Clinic. Thematic network analysis (Attride-Stirling, 2001) was used to analyse the data collected from the study. One global theme emerged from the dataset: Barriers to HIV prevention, care and treatment. The barriers were identified mainly due to social constructions of hegemonic masculinity, individual versus cultural expectations, and outdated awareness content. The findings from the study suggest that almost all the challenges that womxn faced in terms of understanding and interpreting the awareness materials stemmed from structural factors in the South African context. The findings also suggest that cognitive interviewing methodology can be reconceptualised as an endeavour that cuts across a wide range of fields.

Keywords: HIV/AIDS, cognitive interviewing, womxn, awareness campaigns, South Africa

Chidimbu chetsvakurudzo

Nyika yeSouth Africa ichiri kuwanikwa pakati penyika dzine ruzhinji rwevanhukadzi nevana vane chirwere cheHIV/AIDS, zvisinei nekuti nyika yeSouth Africa iripadanho repamusoro nehurongwa hwekudzivirira chirwere cheHIV kuburikidza neART. South Africa inematanho akasiyanasiyana ekudzivirira nayo kupararira kwedenda reHIV zvinosanganisira zvidzidziso zvemumapepa nemabhodhi makuru. Dambudziko rinowanzosangnikwa naro padzidziso dzeHIV ndedzekuti vanogadzira fundiso idzi vanoshandisa meseji imwechete kuvanhu vakasiyana siyana. Chikonzero chikuru chetsvakurudzo ino chaive chekuongorora kuti madzimai anonzwisisa sei dzidziso dzinouya dziri pamabhiribhodhi nemalepa. Vakadzi makumi maviri nemasere vanogara munharaunda yeMakhanda vakapa muwono wavo wedzidziso dzechirwere cheHIV. Zvakabuda mutsvakurudzo ndezvekuti manzwisisiro anoita vanhu dzidziso dzeHIV anowanzokonzerwa nemagariro netsika dzemunharaunda mavanogara. Vakadzi vakatsanangura zvidziviso zvinowanikwa munharaunda zvinoita kuti madzimai anetsekane nekuzvidzivirira kubva kuHIV zvinosanganisira kudzivirirwa kwemadzimai uye kushandisa dzidziso dzachembera.

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DEDICATION

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Chapter 1: Introduction

1.1 Introduction

This study analysed womxn's¹ understanding of the various South African public health awareness campaigns' messages on HIV/AIDS. This was achieved through cognitive interviewing, a methodology that aims to obtain information about how participants understand and perceive knowledge and how they arrive at specific answers or judgements. The study focused on three significant aspects: the process/es of understanding HIV/AIDS awareness materials, contributions of the awareness content to potential barriers to womxn's reproductive justice, and the usefulness of cognitive interviewing in assessing womxn's understanding of the HIV/AIDS public awareness materials.

This chapter will focus on briefly contextualising, stating the research questions, introducing the conceptual framework, and finally, commenting on the potential significance of the study.

1.2 Context and Background of the Study

HIV/AIDS has remained a global challenge since the first cases were identified in the 1980s, and it has caused massive demographic changes in most of the heavily affected countries (Nyabadza, Chiyaka, Mukandavire & Hove-Musekwa, 2010). South Africa is among the countries that has the biggest and most high-profile HIV epidemic globally, with an estimated 7.7 million people living with HIV in 2018, accounting for a third of all new HIV infections in Southern Africa (UNAIDS, 2019). On the other hand, South Africa has the world's most extensive antiretroviral treatment (ART) programme, financed mainly from its domestic resources (UNAIDS, 2019). Besides having the most extensive ART treatment programme, South Africa faces the highest epidemic rate, with womxn and children most affected. South Africa aims to reduce the annual number of new infections to under 100,000 by 2022 by intensifying prevention efforts in the 27 districts that account for 82% of all people living with HIV and most new infections (SANAC, 2017). Prevention of new infections is currently the global consensus to address the HIV/AIDS epidemic (Nyabadza et al., 2010). Rohleder, Swartz, Kalichman and Simbayi (2009) note that prevention efforts are most effective when their impact is identified, measured and quantified.

¹I use the term 'womxn' to recognise the social construction and fluidity of sex and gender. I intend to be inclusive and intersectional (as transgender and non-binary persons also access HIV/AIDS services).

HIV/AIDS primary prevention strategies that have been utilised include behaviour modification, consistent and accurate use of condoms, minimising the number of sexual partners, and media campaigns (Keikelame, Murphy, Ringheim & Woldehanna, 2010). Most prevention strategies focus on changing sexual behaviours, and this demands a clear understanding of the social context within which the behaviours occur (Flowers et al., 2017). For instance, socio-economic and political factors like inadequate access to health facilities and gender inequalities hinder or promote HIV/AIDS prevention.

Furthermore, most public health sector awareness and educational programmes carry uniform messages that are then carried out in heterogeneous contexts leading to the miscomprehension of the intended message. Recent studies point to persistent inadequacies in HIV transmission knowledge (Griessel et al., 2010; Mall, Middelkoop, Mark, Wood & Bekker, 2013), which have not been adequately addressed by evaluating awareness programmes. According to UNAIDS (2019), only 45.8% of womxn and men 15–24 years old correctly identified ways of preventing the sexual transmission of HIV. Besides the vast amount of research concerning HIV/AIDS in the South African context, little has been done to assess whether knowledge about HIV/AIDS is correctly disseminated and received appropriately by the intended population. Although the epidemic is aggravated by contextual factors, including inadequate public health facilities, high unemployment, poverty, gender-based violence, and lack of essential services such as housing, electricity and water for many citizens, continued misunderstanding of the awareness material on the prevention of HIV/AIDS worsens the status quo.

South Africa is a diverse nation, meaning that if homogeneous awareness campaign material is distributed over various districts, it may carry different meanings and interpretations. The denial and inaccurate messages surrounding the origin and treatment of HIV and AIDS, which characterised the South African government's earlier response to the pandemic (Harrison, Colvin, Kuo, Swartz & Lurie, 2015), has contributed to HIV/AIDS remaining stigmatised and poorly understood in many communities. This study examined the contextually located understandings of, and meanings assigned to, HIV/AIDS awareness and prevention campaign materials among a sample of South African womxn, with particular attention paid to an analysis of womxn's thoughts, feelings and responses to these materials concerning their lived social and cultural contexts.

Therefore, it is vital to analyse how HIV/AIDS awareness content is comprehended and interpreted by womxn in the face of different power relations in their settings.

1.3 Research Questions

This study aimed to explore womxn's understanding of public health awareness content on the prevention of HIV/AIDS. The focus was on examining their interpretation of universal HIV/AIDS awareness messages in their heterogeneous contexts, which might provide obstacles to womxn's reproductive health and well-being. The research question is thus: What are the themes that emerge from womxn's cognitive understanding of public awareness messages on the prevention of HIV/AIDS that might impact their reproductive health? The following are sub-questions:

1. How do womxn audiences understand public health awareness/intervention messages?
2. What differences are there in intended audiences' emergent understandings of HIV/AIDS prevention, and can these be linked to different intervention formats?
3. How do womxn's understandings of HIV/AIDS awareness materials reflect the realities of their social and cultural contexts?
4. In what ways might HIV/AIDS awareness materials be contributing to potential barriers to womxn's reproductive justice?
5. How useful is cognitive interviewing in assessing womxn's understanding of public awareness messages to curb the spread of HIV/AIDS in Makhandu?

1.4 Conceptual Framework

Womxn are disproportionately affected by HIV in South Africa but in the Southern African region as well; of the 7 500 000 adults living with HIV in 2019, 4 700 000 (62.67%) were womxn (UNAIDS, 2019) and 63% of the region's new HIV infections in 2021 (UNAIDS, 2022). HIV treatment is also higher among womxn than men, with 65% of adult womxn living with HIV on treatment, compared to 56% of adult men (UNAIDS, 2019). According to UNAIDS Global AIDS Update 2022, new HIV infections are three times higher among adolescent girls and young womxn (aged 15 to 24 years) than among males of the same age. This indicates that the ongoing HIV/AIDS epidemic is a gendered issue that can be addressed through the reproductive justice framework. Ross (2017) notes that reproductive justice implies an intersectional approach that locates health and reproduction analyses within context. This means that the framework links sexuality, health,

and human rights to social justice movements by placing reproductive health matters in the bigger context of the welfare and health of womxn, families and communities (Macleod, 2018; Ross, 2006; Ross, 2017).

The reproductive justice framework was utilised for this study to unveil multiple understandings and interpretations on the prevention of HIV/AIDS that womxn may arrive at in response to public health awareness material. The conceptual frame of reproductive justice interrogated the ongoing gendered and social power relations embedded within the public health sector that may affect reproduction and HIV/AIDS prevention choices made by womxn. Activists purposely utilise a complex intersectional approach because the theory of reproductive justice is naturally intersectional, based on the indivisibility and universality of its human rights foundation (Ross, 2017). The framework acknowledges that each individual or community have different experiences and effects of oppression, but they somehow share similar characteristics of interdependence, universality, intersectionality, and interdependence (Macleod, 2018; Ross, 2017; Stephens, Patil & Thomas, 2012). This means that although each individual is unique and interprets awareness messages differently, social processes and complex interactions of power relations bind around various axes of discrimination in different social contexts that undermine good reproductive health. It is crucial to understand womxn's cognitive processes in their entirety in understanding HIV/AIDS awareness material and how systemic inequality shapes their choices and decision-making processes that may hinder or promote their reproductive health. Therefore, reproductive justice as a conceptual frame interrogated the ongoing biological and non-biological power relations embedded within the public health sector that affect reproduction and HIV/AIDS prevention choices by womxn.

1.5 The Potential Significance of the Study

This study explored womxn's understanding of the public health awareness content on the prevention of HIV/AIDS that might contribute to potential barriers to womxn's reproductive justice. The study has the potential to accumulate research on whether the knowledge about HIV/AIDS is being correctly disseminated by the health service providers and appropriately received by the intended population. In addition, the study adds to the literature on womxn's accounts of how public awareness material either promotes or hinders their reproductive rights. Furthermore, utilising the cognitive interviewing methodology assisted in assessing the

interpretive value of the awareness material and identifying problems in the wording of these messages. This cognitive interviewing assessment process will aid in advancing public health awareness policies to address the symbolic power relations that permeate womxn's lives at both individual and communal levels, especially those that destabilise their good reproductive results and independence (Stephens et al., 2012). The study will also aid in formulating public awareness content sensitive to differences in societies like culture and socio-economic status, given that people interpret issues and meanings differently. The review is justified because it will fill in the gaps in the present literature on assessing public awareness content from womxn's perspective, being driven by a reproductive justice framework.

1.6 Overview of the Thesis

Chapter two is comprised of the Literature Review, wherein I present the literature related to HIV/AIDS in the South African context. In chapter three, the Theoretical Literature Review, I explain my usage of the reproductive justice framework and how it is different from the mainstream approaches to HIV/AIDS interventions. In chapter four, the Methodology, I describe a step-by-step account of the data collection methods, the use of cognitive interviewing to assess womxn's understanding of HIV/AIDS awareness messages, data analysis procedures, and the ethical procedures undertaken during the entire research process. Chapter five contains the Results, Data Analysis using a Thematic Network Analysis and discussion of findings. In the final chapter, the Conclusion and Recommendations, I conclude the research, pointing out the findings from this research and providing recommendations.

Chapter 2: Literature Review

2.1 Introduction

This chapter discusses various theoretical perspectives and empirical research findings relating to the HIV/AIDS pandemic relevant to this study. This chapter will provide a holistic review of the HIV/AIDS literature in Southern Africa and analyse various intervention initiatives from the grassroots level to international strategies to address the pandemic. This chapter will commence by discussing the HIV/AIDS pandemic within the broader context of the Southern African region. It then narrows down to the history of HIV/AIDS in the South African context. The chapter further describes and reviews the numerous prevention strategies and interventions the health sector has implemented. This chapter will also discuss the socio-cultural and social issues surrounding HIV/AIDS. Finally, the chapter will focus on the different role players in preventing HIV/AIDS and the use, implementation and evaluation of public awareness campaigns in South Africa.

2.2 HIV/AIDS in Southern Africa

Sub-Saharan Africa hosts the majority of people living with HIV/AIDS, an estimated 67% of the total global cases (Nyabadza et al., 2010). According to the United Nations (UN) and UNAIDS, countries that make up the Southern African region are Angola, Botswana, Lesotho, Eswatini, Mozambique, Namibia, South Africa and Zimbabwe. In 2007, there were an estimated 2.7 million new HIV infections globally, and 35% were from Southern Africa. As of 2010, the epidemic appeared to have stabilised at endemic levels, especially in Southern Africa, with notable reductions in HIV prevalence in Botswana and Zimbabwe (Nyabadza et al., 2010).

Although Southern Africa's HIV epidemic is driven by sexual transmission and is generalised, meaning it affects the population as a whole, certain groups such as sex workers and men who have sex with men (MSM) have significantly higher HIV prevalence rates (Avert, 2019). For example, in 2018, Lesotho reported HIV prevalence among the general population at 23.6%, one of the highest in the world (UNAIDS, 2019). This 23.6% excluded the key populations, including men having sex with men and sex workers. However, the last recorded survey in 2014 revealed some shocking statistics that the prevalence of HIV/AIDS is even higher among sex workers at 72% and men who have sex with men at 33% (Avert, 2019; UNAIDS, 2019). In 2018, 25% of new HIV infections in Southern Africa were among key affected populations and their

sexual partners, despite these groups making up a fraction of the total population (Avert, 2019). In recent years, many countries in the Southern African region, such as Botswana, Lesotho and South Africa, have implemented national campaigns to encourage the uptake of HIV testing and counselling (HTC). Avert (2019) notes that in 2018, 85% of people living with HIV in the Southern African region knew their status, a significant improvement from 77% in 2015 and higher than the global percentage in 2018 (79%). This shows a substantial move towards getting everyone to know their HIV status.

Access to HTC has been a significant barrier to testing uptake, and several strategies have been used to address this. Provider-initiated testing (PIT), popularly known as provider-initiated HIV testing and counselling (PITC), remains the region's primary approach (UNAIDS, 2021). PITC is often an HIV test recommended and initiated by healthcare providers in healthcare facilities for persons whose clinical presentation might result from underlying HIV infection (McNeil, 2015). Health care providers may also initiate testing and counselling as a standard procedure for that certain medical facility (UNAIDS, 2021). However, community-based testing is growing as it effectively reaches huge records of first-time testers, diagnoses people living with HIV at earlier stages of infection, and links those who test positive to care (Avert, 2019). Door-to-door testing and workplace testing by means of rapid diagnostic tests, is also increasing, as well as voluntary counselling and testing (VCT) (McNeil, 2015; Avert, 2019).

2.3 History of HIV/AIDS in South Africa

South Africa has a very controversial history concerning HIV/AIDS. The first AIDS deaths to be experienced in South Africa occurred in late December 1981 and January 1982, with minimal attention to the widespread pandemic over the next decade, which was confined mostly to homosexual men, haemophiliacs and foreign African mineworkers (Butler, 2005; Rohleder, Swartz, Kalichman & Simbayi, 2009; McNeil, 2015). By 1987, however, HIV had a solid and rising existence in the general population (Nunn et al., 2012). The government was however unsure on the best response to the pandemic, being highly impacted with the limited information nationally and globally during those times. Initially, the apartheid government did little to fight against the epidemic. Due to the lack of credibility with the black majority, the government's efforts to uphold HIV/AIDS awareness were considered ineffective (Nunn et al., 2012). By 1990, when the ANC began negotiating with the apartheid government over the transition to democracy,

South Africa's first antenatal HIV surveillance surveys had identified a growing generalised epidemic (Shisana et al., 2015). In 1994, a new democracy brought optimism regarding the country's future. The new administration had to remodel all facets of government and disassemble the socioeconomic and racial inequalities entrenched under apartheid (Nicholas, Rautenbach & Maistry, 2010). In competition with these further unrelenting immediate concerns, the HIV endemic was not an issue of significant concern and thus received marginal attention in the early establishment of a democratic government (Rohleder et al., 2009; Nicholas et al., 2010). One of its main concern and agenda was to deal with the racial divisions among South Africans and addressing the past inequalities (Nicholas et al., 2010).

With significant involvement of the soon-to-be ruling party, the African National Congress, civil society formed a National Advisory Group (NACOSA) to lobby for and eventually draft a National AIDS Plan (Butler, 2005). This plan was approved by the new government three months into their term of office in 1994. Whilst the Mandela government was busy pulling apart and disassembling the legacy of apartheid, HIV pervasiveness rose from 4 % in 1994 to 22.8 % by 1998 (Shisana et al., 2015). The National AIDS Plan focused exclusively on prevention interventions recognised at that time, but its execution was insufficient to put to a halt the surge of new infections. Tragically, Nicholas et al. (2010) argue that the period from 1998 to 2008 proved a testing period for South Africa as the full extent of the HIV epidemic's health impact became apparent in the face of increasing denialism from President Thabo Mbeki (1999 - 2008). On the brighter side, since 2008, there has been a range of public health successes resulting from the introduction of antiretroviral drugs (ARVs) and other prevention strategies to curb the spread of HIV/AIDS in South Africa (Nunn et al., 2012; Sabi & Rieker, 2017).

2.3.1 President Mbeki's Leadership and Position on HIV/AIDS

President Thabo Mbeki, whose term of office lasted from 14 June 1999 to 24 September 2008, and his health ministry brought in controversial views about the toxicity of ARVs (Le Roux, 2013; Kalichman, 2014). They led to many people citing the side effects of the medication as the reason for the discontinuation of treatment (Bateman, 2007). The health ministry, under Dr Manto Tshabalala-Msimang, was characterised by public denial and rejection of ARVs, mentioning that there was vast scientific literature pointing to the toxicity of the drugs, posing some dangers to individuals' health (Kalichman, 2014). At the societal level, the long-term costs and negative

impacts of erroneous public strategies and policies from years past continue to fuel the world's most overwhelming HIV epidemic (Kalichman, 2017). The majority of studies have argued that Thabo Mbeki's presidency is a worst-case situation for health policies ignoring scientific information and facts and denying reality (Le Roux, 2013). Mbeki infamously used pseudoscience and AIDS denialism to validate his verdicts to suppress HIV prevention and reject the scale-up of antiretroviral therapies (Chigwedere & Essex, 2010). Mbeki claimed that in the year 2000, there was still a debate among scientists as to the causes of AIDS. Le Roux (2013) indicates that Mbeki questioned the existence of HIV existed and persisted that antiretroviral therapies were toxic poisons promulgated by a scheme against Africa. Chigwedere, Seage III, Gruskin, Lee and Essex (2008) showed that from 1999 to 2007, beyond 330,000 South Africans carelessly died, and above 35,000 babies were born with HIV as a direct consequence of Mbeki's failure to device essential HIV-related services.

2.3.2 Opposition to President Mbeki's HIV/AIDS Position

The uprisings against Mbeki's position on HIV/AIDS was among the drives and reasons to conduct this study. This is because the uprisings were mainly conducted through awareness campaigns, and a little was done to assess whether the recipients of the awareness messages were receptive and understood the content. Due to the Mbeki presidency's HIV/AIDS denialism, many activists and organisations began campaigns to change official government policies and positions on HIV/AIDS (Kalichman, 2014). These include health activists, visual activist projects and civil society through awareness campaigns, social movements, and activist organisations like the Treatment Action Campaign. South Africa's AIDS movement facilitated in advancing and improving HIV/AIDS policy and rendered significant support to the general public living with HIV/AIDS during and after the country's evolution to democracy (Sabi & Rieker, 2017). However, for numerous years, meagre political leadership, mostly AIDS denialism, prohibited effective cooperation between the state and the AIDS movement. These challenges eventually hindered AIDS policy advancement and access to highly active antiretroviral therapy (HAART) for nearly two decades. They contributed to the country's present-day grave HIV/AIDS epidemic (Nunn et al., 2012).

The Treatment Action Campaign (TAC) was established in December 1998 by HIV-positive treatment access activist Zackie Achmat and a few other activists to improve public policy

response to AIDS (Treatment Action Campaign, n.d.). When TAC was initially established, the chief purpose was to campaign and fight for equitable and rightful treatment access for all people living with HIV/ AIDS in South Africa (Sabi & Rieker, 2017). Achmat vowed to refrain from consuming ARVs up until the treatment was obtainable and accessible to the public (Achmat, 2004). This indicates how adamant the ruling government was regarding the availability of medication. Over the next decade, the TAC established and advanced a countrywide network that erected grassroots provision for AIDS policy reform, stimulated treatment literacy and HIV prevention, and drove to destigmatise HIV/AIDS (Sabi & Rieker, 2017; Coombes, 2019). The TAC also pressured the government with extensive legal action, public protests, social mobilisation, and media campaigns to uphold and impose policy change. In 2002, the TAC, in partnership with the AIDS Law Project, which was established in 1993 to fight for the rights of people living with HIV using legal processes, brought and won a case against the government to force the implementation of national prevention of mother-to-child transmission (PMTCT) programme (Nunn et al., 2012; Sabi & Rieker, 2017). Prevention of mother-to-child transmission (PMTCT) is a range of services and programmes usually provided by the health sector for women of reproductive age living with or at risk of contracting HIV to maintain their health and stop their infants from acquiring HIV (WHO, 2017; McNeil, 2015). The World Health Organisation and other humanitarian agencies such as United Nations Children's Fund (UNICEF) recommend that the PMTCT services be rendered before conception and during the course of pregnancy, labour and breastfeeding. PMTCT services ought to include "early infant diagnosis at four to six weeks after birth, testing at 18 months and/or when breastfeeding ends, and ART initiation as soon as possible for HIV-exposed infants to prevent HIV acquisition" (Avert, 2019).

During 2003, the TAC instigated a civil non-compliance campaign which, amid other positive changes, resulted in President Mbeki's cabinet overruling and challenging his opposition to providing HAART in the public sector, resulting in the country's first commitment to providing HAART (Treatment Action Campaign, n.d.). Nevertheless, these triumphs were hindered by the Mbeki administration's AIDS denialism, unending resistance to HAART rollout and PMTCT programs, the preferment of unconfirmed medical and clinical therapies for AIDS treatment government promulgation of non-medical interventions, such as diet (Nunn, 2012).

The emerging HIV/AIDS epidemic in sub-Saharan Africa, combined with President Thabo Mbeki's scepticism about HIV as the cause of AIDS, presented what seemed to be an impossible challenge. During Mbeki's term of office, activists like 11-year-old Nkosi Johnson increased pressure on the government to provide ARVs and implement policies against the discrimination of people living with HIV/AIDS. Nkosi was South Africa's famous child AIDS activist who was born with HIV and died in 2001 aged 12. At his death, he was the country's longest-surviving child born with HIV (Fox, 2002). One of his significant accomplishments as an activist was to reform public attitude concerning the disease since the stigma surrounding HIV/AIDS was mainly spoken of in pejorative euphemisms, such as 'the whores' disease' (Sabi & Rieker, 2017). Nkosi faced first-hand discrimination when he was denied access to school due to his status and physical appearance. Scholars indicate that this was not the only discriminatory experience he faced; his biological mother, Daphne, had lost her job and place to live because of her HIV status. His self-written speech and address at the 13th International AIDS Conference in Durban rose him to international prominence (Fox, 2002). He concluded his address by saying, "Care for us and accept us. We are all human beings. We are normal. We have hands. We have feet. We can walk, we can talk, we have needs just like everyone else, do not be afraid of us, and we are all the same." His speech was a turning point in the treatment of people living with HIV/AIDS. His health deteriorated months after presenting his speech at the conference. He appealed to Mbeki and his ministry to make ARVs available and accessible to all populations and formulate policies preventing mother-to-child transmission (Chigwedere et al., 2008). Media and journalists published several of Johnson's messages inviting the president to visit him and pleading for availability and access to proper medication for people living with HIV/AIDS (Fox, 2002). His campaign paved the way for a different point of view on HIV because when the first cases were diagnosed, it was thought to be restricted to homosexuals and sexually promiscuous adults (Smith, 2012). Nkosi's condition not only raised awareness of the epidemiological reality of an infection that affected thousands of children, but his suffering made people comprehend a different moral depiction of HIV/AIDS. This drastically shifted the focus of prevention messages that focused on the themes around promiscuity and being responsible, and blaming mainly white homosexuals and later 'promiscuous' African womxn and men (Fox, 2002).

During the years from 1999 to 2006, painting, printmaking, fine art, and other creative practices produced compelling contests to the South African government's AIDS denialism

(Coombes, 2019). A series of essential art exhibitions and demonstrations were staged both within South Africa, remarkably at the Durban Art Gallery under the directorship of Carol Brown, and intercontinentally, in Los Angeles, for example, in partnership with David Gere's global project 'Make Art/Stop AIDS' at the University of California, Los Angeles (UCLA). Coombes (2019) further indicates that visual activism is a dynamic health-education tool that "combines the double impact of the immediacy of the message with the power of legacy: preserving knowledge and passing down lessons regarding sexual and mental health" (p, 147). This indicates that visual activism can shape transformative insights that readdress how people think and act. Rubincam (2014), through her work at the AIDS and Society Research Unit (ASRU) at the University of Cape Town (UCT), suggests that, while "youth may be sceptical of any biomedical scientific rationale for HIV, they will actively engage with experiential explanations" (p. 48). Her research on the Treatment Action Campaign (TAC) work endorses the prominence of several 'rhetoric of persuasion', comprising personal testimonies and parables. Precisely, visual narrative projects might have sustained appeal for adolescents if tailored to appropriate themes and visual languages, including digital media (Fox, 2002; Coombes, 2019).

2.4 The Current State of the HIV/AIDS Pandemic in South Africa

The South African HIV statistics are a mixture of good and slow progress in addressing the epidemic. In 2020, 7.8 million people were documented to be living with HIV, of which 19.1% were adult HIV prevalence, 230,000 were new HIV infections, and 83,000 were AIDS-related deaths (Avert, 2020).

Research indicates that the epidemiology of HIV in South Africa has progressed from an emergency with high mortality rates to one showing the benefits of a vast growth of treatment services and broad coverage (Avert, 2022; UNAIDS, 2017). The government's treatment and prevention policy has been applauded for moving positively toward eradicating the pandemic over the past years. South Africa was the first country in sub-Saharan Africa to fully approve PrEP, which is now being made available to people at high risk of infection, such as sex workers (Avert 2022).

Of late, it has been evidenced that the HIV endemic is not homogenous and standardised but that some geographic areas and populations keep on having high transmission rates (SANAC, 2017). In South Africa, the prevalence of HIV for both men and womxn shows remarkable

geographical variation, with the burden of infection concentrated in the eastern part of the country, among the provinces of *Gauteng, KwaZulu-Natal, Eastern Cape, Limpopo* and *Mpumalanga*, and with a high concentration of PLHIV identified near urban settings of the eastern part of the country, including Johannesburg and Durban (Avert, 2019, 2022; Bekker, Johnson, Cowan, Overs, Besada, Hillier & Cates Jr, 2015; Coetzee et al., 2017). Furthermore, young womxn and girls, and some key populations like sex workers, have high rates of HIV transmission that call for a targeted focus to attain the desirable impact. UNAIDS (2017) notes that the current HIV testing and treatment targets are called the 95-95-95 targets and must be reached by 2025 to end AIDS by 2030. Avert (2022) asserts that in recent years, South Africa has made considerable developments in getting people to test for HIV; for example, in 2018, it met the 2020-target of 90% of people with HIV knowing their status. However, in the past years, HIV testing has been deficient among men from lower socioeconomic backgrounds, rural areas, and key populations such as the LGBTIQ (SANAC, 2017). Epidemiological and empirical evidence suggests a high prevalence rate of HIV/AIDS infections among womxn compared to their male counterparts. The disproportionate impact of the HIV epidemic on womxn can be attributable to several factors, including socio-cultural, economic, biological, behavioural and structural.

2.4.1 Physiological/biological Risk Factors

Studies indicate that womxn are at a higher biological/physiological risk of contracting the epidemic than men. Ramjee and Daniels (2013) highlight that the “physiological changes of the genital tract along with the factors that affect the integrity of the genital tract epithelium such as sexually transmitted infections (STIs) and intravaginal insertion practices, either for cleansing or enhancing sex” may increase susceptibility to HIV by enabling viral entry (p. 3). Studies point out that any factor that undermines the thickness of the genital tract speeds up the transmission of viruses. For instance, womxn tend to douche and insert modern vaginal cleansing products that loosen and weaken the internal female reproductive system making it prone to infections and viruses (Dellar, Dlamini & Karim, 2015). In addition, current data suggest that genital tract inflammation in womxn with asymptomatic and symptomatic STIs may up-regulate HIV-vulnerable target cells at the mucosal level, thereby assisting the transmission (McClelland et al., 2018; Naicker et al., 2015; Passmore, Jaspan & Masson, 2016; Ramjee & Daniels, 2013). In a quest to find out the association between intravaginal practices and the acquirement of HIV infection amongst womxn in sub-Saharan Africa, Low et al. (2011) conducted systematic reviews

and meta-analyses with numerous studies. Their study was driven by the notion that intravaginal practices such as cleaning the vagina with soap or a cloth increase the risk of HIV infection by damaging the vagina's lining or by increasing bacterial vaginosis (a condition in which harmful bacteria disrupt the healthy vaginal flora) (Low et al., 2011). Their conclusion indicated that their study suggested that some intravaginal practices increase the risk of HIV acquisition. However, a direct causal pathway linking intravaginal cleaning with soap, disruption of vaginal flora, and HIV acquisition had not yet been demonstrated. This entails a considerable need to conduct unfathomable research that proves how vaginal inflammation and abrasion due to human practices like washing interior vaginal areas with soap increase the chances of contracting HIV.

Furthermore, adolescent girls have been documented to be at a heightened risk of contracting the virus because of large proportions of genital mucosa primarily present in their immature cervix. UNAIDS (2017) argues that young girls are susceptible to HIV because their genital areas' physical immaturity is prone to tearing and abrasions. Many documented incidences of HIV transmission among adolescents have been explained to have occurred during first sexual encounters that are coerced and forced, especially with older men (Ramjee & Daniels, 2013; UNAIDS, 2017). Therefore, it is highly probable that the risk of HIV acquirement surges even further during acts of sex in which vaginal or cervical trauma and bleeding are common, for instance, forced sex or during the loss of virginity. The biological factors that upsurge the transmission of HIV among young womxn have been explained to be interrelated, and some of them are highly linked to behavioural and structural risk factors. Dellar et al. (2015) note that in most African setups where there are high numbers of aggressive gender-power imbalance, many young womxn find themselves in compromising situations in which the choice to delay first sex is not a decision over which they have control. Many young womxn with immature cervix and underdeveloped reproductive systems cannot decline unwanted sexual advances, and when they have sex, they have limited control over condom use (Low et al., 2011). Therefore, physical injury, for instance, trauma to the genital tract sustained at coital debut due to rape, has a high chance of increasing the risk of HIV transmission.

Scientists have indicated that young womxn are susceptible to severe HIV transmission due to cervical ectopy, the existence of co-factors such as supplementary sexually transmitted diseases or other infections, and the greater easiness of transmission from men to womxn

(Passmore et al., 2016; Flowers et al., 2017). Due to the gender-specific ways HIV/AIDS affects womxn, many womxn have openly indicated that the pandemic is one of the reproductive health issues they face (Nyabadza et al., 2010; Avert, 2019). In addition, the majority of HIV infections are experienced by pregnant and breastfeeding womxn (Avert, 2019). High levels of oestrogen and progesterone either during pregnancy or from exogenous sources could cause changes in the structure of the genital mucosa or cause immunological changes, such as an increase in mucosal lymphoid aggregates or hormone-induced overexpression of co-receptors associated with HIV infection (Passmore et al., 2016; UNAIDS, 2017). Increased oestrogen levels are also associated with cervical ectopy in young womxn, which increases the risk of HIV infection.

A study conducted by McClelland et al. (2018) was aimed at “assessing the association between the concentrations of specific vaginal bacteria and increased risk of HIV acquisition in African womxn” (p. 555). The study provided an in-depth insight into the specific biological conditions that upsurge the chances of womxn getting infected with HIV compared to their male counterparts. In the previous and most studies, scientists and researchers hypothesised that the existence of certain bacteria, such as lactobacillus, was the most significant factor in contracting HIV. However, McClelland et al. (2018) provided evidence that microbial diversity is a crucial factor alongside the concentrations of critical bacteria such as lactobacillus. Microbial diversity entails the presence of multiple bacteria that can be advantageous and dangerous/harmful. Findings from McClelland et al. (2018) were consistent across three distinct risk groups: post-partum womxn, pregnant womxn, female sex workers, and post-partum womxn and womxn in serodiscordant relationships. Serodiscordant relationships have been explained to be mixed, in which, for example, one partner is HIV-positive and the other HIV-negative. Like the other medical researchers, McClelland et al. (2018) concluded that genital inflammation, intermediated by specific bacterial taxa, is likely to influence HIV predisposition. This means that most medical studies have concluded that some disturbance in the genital interiors of womxn upsurges the transmission of HIV. In addition, “many bacteria associated with bacterial vaginosis produce sialidases and mucinases that disrupt the protective cervicovaginal mucus layer” (McClelland et al., 2018, p. 9). The presence of key bacteria has, as a result, been found to be a contributory biological factor in increasing HIV susceptibility through compound possible pathways, including inflammation, production of HIV-inducing factors, and disruption of physical and chemical

barriers to infection (Dellar et al., 2015; McClelland et al., 2018; Naicker et al., 2015; Passmore, Jaspan & Masson, 2016; Ramjee & Daniels, 2013).

2.4.2 Behavioural Risk Factors

Most behavioural risk factors for HIV are measured and observed at an individual level. This is when individuals portray or behave in ways that expose them to spreading or contracting the virus (Sabi & Rieker, 2017). Kalichman (2017) notes that individuals' capability, be they men or womxn, to judge the risks allied with their sexual partners and their capacity to make choices and decisions about their sexual health and HIV prevention and treatment are deeply influenced by behavioural factors. However, having most individual factors does not entail that relational factors do not exist. Relational factors also contribute to the exposure of womxn to HIV/AIDS because they are linked to the relationship between parties involved in the relationship and external factors (UNAIDS, 2017). According to several studies, high-risk sexual behaviour, including transactional sex, having multiple sexual partners, and age-disparate sexual relationships, highly contribute to HIV (Rubincam, 2014; UNAIDS, 2017).

Studies that have been conducted in South Africa indicate that substance use and abuse, including severe consumption of alcohol, highly alter the personal and rational ability to practice safe-sex behaviours (Bekker et al., 2015; Coetzee et al., 2017). Naicker et al. (2015) note that alcohol abuse in many South African parts is characterised by asymmetrical periods of heavy drinking commonly described as weekend bingeing. In most of the findings from the studies examining the effects and the links between the abuse of alcohol and sexual decision-making processes, researchers have discovered and concluded that drinking patterns have distinctive effects on sexual decision-making, condom-negotiation skills and correct condom use (Jewkes & Morrell, 2010; Moreno et al., 2014; Harrison et al., 2015). Studies have revealed that individuals with heavy episodic drinking patterns are more liable to incorrectly and inconsistently use condoms, experience sexual violence, and acquire an STI, including HIV (Avert, 2022; UNAIDS, 2017).

Furthermore, WHO (2017) highlights that age-disparate sex between older men – more probable to be living with HIV – and adolescent girls are crucial to cumulating infection. The power dynamics of age-disparate relationships prevent adolescent girls and young womxn from negotiating condom use with older men (Jewkes & Morrell, 2010). This means that the likelihood

of making rational and informative decisions by young womxn to engage in sex is limited, especially in cases where it will be transactional sex. Early sexual debut, particularly sex before the age of 15, can place girls at high risk; for instance, the sexual partners of adolescent girls are significantly older and more likely to be living with HIV (Ramjee & Daniels, 2013). Besides the ageing phenomenon, young womxn have immature genital and reproductive tissues that are prone to abrasions and tearing, creating heightened transmission of HIV (Dellar et al., 2015; Low et al., 2011). Another factor that exposes individuals to the spread of HIV/AIDS is having multiple and simultaneous sexual partners in which there is a failure to consistently and correctly use condoms.

Despite high HIV mortality and morbidity levels in South Africa, many people still do not believe they are at risk of acquiring HIV (UNAIDS, 2019). For example, in a national household survey conducted by the South African National AIDS Council (SANAC) (2017), half of the respondents infected with HIV reported that they felt being at no risk of getting or spreading the infection. This means that individuals, regardless of gender, may unknowingly engage in risky behaviours due to the lack of accurate information about HIV/AIDS risk factors.

2.4.3 *Structural Vulnerabilities*

Structural factors are "the economic, social, policy, and organisational environments that 'structure' the context in which risk production occurs" (UNAIDS, 2019, p. 19). These risk factors are increasingly acknowledged as significant contributing factors in the acquisition, transmission, and prevalence of HIV infections (Department of Health, 2016; Flowers et al., 2017; UNAIDS, 2019). The gender-based violence/intimate partner violence, gender inequality and migration health-seeking-related stigmas.

2.4.3.1 Socioeconomic Issues and Risk of HIV Infection. Low to poor socioeconomic statuses, including poverty in the community, often drives the spread of HIV in South Africa (UNAIDS, 2017). Although both men and womxn are at high risk of contracting HIV due to poor socioeconomic status, womxn have been documented to be at a more significant disadvantage (Harrison et al., 2015). Some identified HIV risk factors linked to low socioeconomic status amongst individuals and communities include engaging in sexual relationships at a tender age and transactional sex. Sabi and Rieker (2017) argue that South Africa's checkered or unevenly distributed socio-political history has unrelenting impacts on the education of womxn. Numerous studies have pinpointed the significance of education as a key driving factor in the susceptibility

of womxn to HIV (Nyabadza et al., 2010; Peltzer et al., 2012; Sabi & Rieker, 2017). In a study conducted by Coetzee, Jewkes and Gray (2017), 75% of female sex workers from their study population reported incomplete education, compared with 58% in the general population. Therefore, in many instances, “poor educational outcomes have been found to fuel an informal sex-for-money economy” (Coetzee et al., 2017, p. 15), increasing the likelihood of the spread of HIV. South Africa's official unemployment rate in the third quarter of 2021 was 34.9%, the highest since the start of the Quarterly Labour Force Survey (QLFS) in 2008 (Department of Statistics, 2021). In addition, the survey conducted by the Department of Statistics in 2021 indicates that the South African labour market is more favourable to men than it is to womxn (Department of Statistics, 2021). This is because the proportion of men in employment is higher than that of womxn; more men than womxn were participating in the labour market as the labour force participation rate of men was higher than that of womxn; and the unemployment rate among men (32.9%) was lower than among womxn (37.3) (Department of Statistics, 2021). In many authors' views, the overall low levels of education in their studies contribute to amplified susceptibility to HIV and economic marginalisation (Bekker et al., 2015; Coetzee et al., 2017; Papworth et al., 2014).

2.4.3.2 Harmful Gender Norms. Ongoing research indicates that the AIDS epidemic has spotlighted the many fault lines in society. Where there are “inequalities, power imbalances, violence, marginalisation, taboos and stigma and discrimination, HIV takes hold” (UNAIDS, 2019, p. 4). This is evidenced in situations in which the sexual and reproductive health and rights of womxn and young people are still too often denied. In South Africa, womxn and children have frequently “borne the brunt” of the HIV legacy and are unswervingly affected in quite specific ways: economic provisions of sex work, with its amplified risks; mother-to-child transmission; and the emotional and economic responsibilities of family care (Sia, Onadja, Hajizadeh, Heymann, Brewer & Nandi, 2016). Increases in male-to-female transmission have been ascribed to intensified gender discrimination, ever-increasing sexual violence against womxn and a high occurrence of so-called ‘corrective’ rape committed against black lesbians (Coombes, 2019). This legacy is “trans-generational, with many grandmothers having borne the burden of parenting numbers of children orphaned by the AIDS pandemic” (Sia et al., 2016, p. 38).

Harmful gender norms can reduce the access of womxn and girls to education, suppress their career opportunities, refute them economic independence and limit their decision-making power

at home and within society (Krishnan et al., 2008). Nearly 30% of womxn globally experience physical and/or sexual violence at the hands of an intimate partner at least once in their lifetime (García-Moreno et al., 2013). In a study conducted by Machisa, Jewkes, Morna and Rama (2011), more than half (51%) of womxn in Gauteng province had suffered gender-based violence in their lifetime, including 19% who experienced sexual violence by their intimate partners. In addition, many men (76%) acknowledged having perpetrated gender-based violence, with 37% admitting to sexual violence (including 18% against their intimate partners). Furthermore, sexual homicides (gender-based violence, including rape, leading to death) were also considered a severe worry in South Africa (Machisa et al., 2011). In 2009 it was estimated that three adult womxn (18+) and one girl child (0–17) per 100 000 had been murdered through sexual homicide (Abrahams, Mathews, Lombard, Martin & Jewkes, 2017). This indicates that sexual violence is a common feature in the lives of many adult womxn and children in South Africa, and sexual homicides are therefore located within the broader context of gender inequality and the underlying system of patriarchy that drives violence against womxn and children (Abrahams et al., 2017).

The statistical picture of HIV/AIDS in Southern Africa underscores how gender relations structure patterns of HIV risk (Jewkes & Morrell, 2010). Harrison et al. (2015) note that unequal gender relations are profound in narrow negotiating power within households and relationships, in young womxn's sexual relationships with their older men, and in the prevalent rise of gender-based violence. Research points out that gender power inequity in partnerships/relationships and intimate partner violence place womxn at heightened risk of HIV infection (Jewkes & Morrell, 2010). For example, in a particular relationship, hegemonic masculine men may expect womxn to comply and be faithful whilst they sleep around. As a result, Jewkes and Morrell (2010) acknowledge that "gender differences take many different forms in different settings, but an area of commonality lies in differentials in power" (p. 1). In other words, gender inequality is shaped and propagated partly by social norms that mandate culturally apposite roles and conduct for womxn and men (Sabi & Rieker, 2017). Therefore, the hierarchical gender roles such as the lower socioeconomic power of womxn and sexual entitlement by men result in fewer leadership roles for womxn, the lack of support for womxn, and disempowerment of womxn.

2.4.3.3 HIV/AIDS-related Stigma and Discrimination. Stigma is a social phenomenon that requires a contextual thoughtful and understanding of its nature and practice (Mall et al., 2013;

Harrison et al., 2015). It presents in many forms that may result in adverse experiences, such as “exclusion, rejection, blame or devaluation, and social judgment about a person or groups identified with specific health problems” (Mall et al., 2013, p.47). Over the last ten years, in high-prevalence countries like those in Southern Africa, “increasing (and increasingly visible) AIDS-related mortality, mass prevention and education campaigns, political and community mobilisation, and public-sector ART programs” have meant that HIV is progressively more normalised in some important ways (Colvin, 2011, p. 67). Sia et al. (2016) opinionated that disclosure is still challenging but no longer rare, as public figures, including politicians, increasingly address HIV openly and to extents of publicly getting tested. This has been helping in addressing some notions and myths about taking HIV infection as a spontaneous death sentence (Colvin, 2011; Mall et al., 2013). This is not to say that full normalisation has been achieved by any means—only that the social forms and understandings of the disease have reformed significantly in recent years (Coombes, 2019).

While there is substantiation that HIV stigma is declining, stigma is weakly researched and theorised, leading to difficulties in making generalisations (WHO, 2017). It is also essential to remember that changes in stigma have been, and will continue to be, “uneven and unpredictable”. It may, in some situations, unpredictably surge, even in the existence of accessible ART programs and community mobilisation (Colvin, 2011). Stigma can also negatively impact different groups, like children or sex workers, and require different strategies and interventions (Coombes, 2019). Womxn have frequently suffered and faced the substantial affliction of HIV discrimination and stigma (Ramjee & Daniels, 2013; UNAIDS, 2019; Coombes, 2019). Due to the societal norms and expectations, womxn are time and again anticipated to maintain the moral traditions of their societies; being HIV-positive is depicted as having failed the mandate (Kirtley & Chien, 2013). Instead of receiving support within families, communities, social and legal services, workplaces and healthcare institutions, womxn often experience all kinds of human rights violations like stigma and discrimination. In some setups, womxn are sometimes denied access to proper health, legal and socioeconomic services. Some womxn mention that the primary reason for not seeking HIV/AIDS services like testing and counselling is due to the judgemental attitudes they face upon consultation and lack of confidentiality, especially in communal clinics (Sabi & Rieker, 2017; UNAIDS, 2019).

As the HIV epidemic continues to be persistent in South Africa, it is progressively critical to contest and eliminate the epidemic's drivers. During the commemorations of World AIDS day on December 1, 2022, Joe Phaahla, the Minister of Health in South Africa reiterated the words of the former South African president, Nelson Mandela that those infected with HIV are not killed by the epidemic but rather with the stigma that they face from those around them and the society at large. Joe Phaahla urged everyone in community leadership positions to mobilise community members in aiming to alter society's norms and attitudes that usually from the communities' socialization processes (Phaahla, 2022). UNAIDS has recognised stigma, discrimination, and gender inequality as the top factors contributing to HIV risk and vulnerability in most countries today (UNAIDS, 2019). These are clearly among the most severe and obstinate factors driving the epidemic in South Africa, significantly impeding determinations to diminish the susceptibility of young women to new HIV infections, keeping people from finding out about their status, preventing HIV-positive individuals from gaining access to lifesaving treatment for themselves, and coercing persons in need of care and support to live in isolation (Jewkes & Morrell, 2010; Keikelame et al., 2010; UNAIDS, 2019). Among those living with HIV or AIDS, the psychological distress resultant from HIV/AIDS stigma obstructs with coping and destabilises HIV-prevention efforts (Mall et al., 2013; Nunn et al., 2012; WHO, 2017).

2.4.3.4 Prevalence of HIV-Related Illness among Migrant Population. Research into HIV and migrant populations has point out that mobile populations are more susceptible to HIV/AIDS compared to non-mobile populations (International Organisation for Migration, 2010; Silvestre, Weiner & Hutchinson, 2016). This is of concern in Southern Africa, where movement from one country to another for employment opportunities is common and well-established (Silvestre et al., 2016). Kim, Chikombero and Modie-Moroka (2013) argue that countries like Zimbabwe, Nigeria, Congo and Malawi have been experiencing economic hardships which have forced their citizens to move to countries like South Africa. Several studies have shown that mobile populations are most likely to engage in risky behaviours, such as commercial sex, limited/no use of condoms, and multiple sexual partners (Mall et al., 2013; Silvestre et al., 2016; Temin, Milford, Beksinska, Van Zyl & Cockburn, 2021; UNAIDS, 2017). Kim et al. (2013) argue that migrants have limited perceived risk for HIV and lower HIV prevention knowledge in some instances. An assessment carried out by the International Organisation for Migration (2010) in Southern Africa found that immigrants are often at risk due to factors like language barriers with health providers,

fear of deportation, possible discriminatory and xenophobic attitudes, and ignorance of the availability of services. Therefore, the mobile population is at higher risk of getting HIV whilst away from home and a potential source of infection to their non-travelling sexual partners when they return home (Silvestre et al., 2016).

Avert (2022) highlights that to address the prevalence of HIV transmission among migrant populations, numerous programs must be implemented, especially among 'cross-border' traders. Temin et al. (2021) believe that although efforts have been made to increase awareness, ease stereotypes and discrimination, promote behavioural changes, and provide treatment and medication, migrant populations still face challenges accessing proper and efficient healthcare services. Temin et al. (2021) further shed light that young womxn's disproportionately high HIV risk in South Africa cross over to foreign migrants in South Africa. Simbayi et al. (2015) argue that foreign immigrants are at a heightened disadvantage in health services, especially prevention and treatment of HIV services. Immigrants' challenges include barriers to health services, inequitable relationships anchored in material exchange, failure to access proper education/schooling, economic instability, and limited social support. In South Africa, multiple media provide health communication to reach out to all populations. For instance, the public health sector displays HIV prevention and treatment messages on posters and billboards on several national roads and border posts (Simbayi et al., 2015). However, research has indicated that the health communication efforts go in vain as there is conflicting evidence that the targeted population does not use the services or the communication, especially among the undocumented and illegal immigrants (Mall et al., 2013). Furthermore, Silvestre et al. (2016) point out that "few programs have targeted mobile population with consistent cross border messaging" (p. 218). This indicates the insufficiency of HIV-related programs that directly address the migrant population.

Moreover, there is limited research to evaluate the existing programs targeted to the migrant population. Kim et al. (2013) argue that although some research and health programs have addressed and promoted immigrants' health, systemic barriers have stalled development. Cultural differences have been determined to be one reason for the delay in improvements concerning the HIV/AIDS prevalence among the migrant population (Kim et al., 2013; WHO, 2017). This is because some cultures still maintain some HIV/AIDS myths, for instance, having multiple sexual partners to maintain social status or having sex with a virgin to cure HIV. These behavioural and

cultural attributes are argued to reduce the efficacy of interventions and impede the sustainability of both new and existing health promotion programs (Mall et al., 2013).

2.4.3.5 Key Population HIV Prevalence. UNAIDS (2019) points out that the HIV/AIDS epidemic context has changed over the past years; in 2018, more than half of all new HIV infections were among key populations. UNAIDS (2021) indicates that in 2020, key populations, categorised as "sex workers and their clients, gay men and other men who have sex with men (MSM), people who inject drugs (PWID), transgender people and their sexual partners accounted for 65% of HIV infections globally" (p. 6). These statistics perhaps indicate an imbalance between the HIV services rendered to the key populations and the rest of the population. The South African National AIDS Council (2012) identifies key populations as those at a greater risk of transmitting or being infected by HIV than the general population. Brown, Duby and Van Dyk (2013) point out that key populations in South Africa experience an extremely high burden of HIV but face manifold constraints and barriers when accessing public health care. This disproportionate burden reveals both behaviours common among members of these populations and specific social and legal issues that intensify their vulnerability, yet, HIV services for key populations remain principally insufficient (Coetzee et al., 2017). Papworth et al. (2014) support the verdict, arguing that although South Africa has a 'generalised' HIV epidemic, there are still higher transmission and infection levels within key populations.

HIV incidence in key populations increases in many settings, even as incidence stabilises or declines in the general population (World Health Organization, 2017). For these reasons, key populations should also be included in the planning and execution interventions, such as provincial strategic implementation plans. Country programmes and other end-users have shown the prominence of amalgamating the World Health Organisation's key population guidance to help national programme managers and service providers, including community-based and community-led programmes, in the development, implementation and evaluation of services (Coetzee et al., 2017; World Health Organization, 2017). The World Health Organisation has developed normative guidance separately for each of the five key populations to date. However, that guidance has not entirely speak to the overarching issues common to all key populations (UNAIDS, 2019). At the same time, other WHO global HIV guidance, including the 2013 consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection and the 2015 update,

which centres on people living with HIV, has not explicitly reflected on the issues relating to key populations (World Health Organization, 2017).

Research indicates that key populations, like the general population, engage in risky behaviours that put them at a higher risk of contracting or being infected with HIV/STIs, comprising of having unprotected sex and multiple sexual partners. Brown et al. (2013) posit that they also experience added social and structural factors contributing to their greater risk for HIV/STIs, unlike the general population. For instance, they experience and face high levels of social stigma that, in turn, create barriers to accessing appropriate and adequate health care services. In addition, very few health care services are sensitised to provide enough support and care to these key populations (Papworth et al., 2014). The body of literature emphasises amplified levels of violence in South Africa, particularly those to which sex workers are exposed.

Additionally, despite violence against womxn having reached epidemic proportions, South Africa has no national strategy to preclude violence against womxn (Bekker et al., 2014). This situation is aggravated by the unrelenting illegalisation of sex work, which obstructs sex workers' ability to report cases of assault and rape. It propagates discrimination, which often inflames violence against sex workers.

2.4.4 'Unanticipated' Impact of COVID-19 on HIV/AIDS Related Services

COVID-19 has been documented to have had a huge impact on the routine HIV/AIDS centred healthcare services, not only in South Africa, but worldwide (Eike, Hogrebe, Kifle, Tregilgas, Uppal & Calmy, 2022). UNAIDS (2022) argue that COVID-19 pandemic led to disruptions to key HIV treatment and prevention services, millions of girls out of school, and spikes in teenage pregnancies and gender-based violence. The lockdown restrictions that were enforced in March 2020 limited the movement of individuals and outpatient services. This entails that individuals seeking HIV healthcare services like HIV testing, STI treatment and even general enquiries were limited to do so due to the lockdown regulations (van Staden, Laurenzi & Toska, 2022). In addition, the already constrained and overburdened healthcare resources were reallocated from HIV care and treatment services, including the public sector healthworkers who were redeployed to manage the spread of COVID-19 (Karim & Karim, 2020). Not only did COVID-19 impact the resource distribution, but South Africa recorded the huge decline in CD4 test count, HIV and TB testing and routine ARV collection visits (van Staden et al., 2022). Although statistics might

indicate that the already diagnosed individuals continued receiving some elements of HIV care, the health system's ability to detect and respond to new infections and support people at risk of developing AIDS was substantially diminished, risking fragile gains in HIV care (Dorward et al., 2021). Prioritization of individuals with COVID-19 symptoms side-lined some crucial healthcare services like pre- and post-test HIV counselling and HIV knowledge dissemination programs in healthcare facilities (Karim & Karim, 2020). Awareness campaigns during the initial phases of the COVID-19 pandemic mainly dwelt on the methods and ways to curb the spread of COVID-19, this affected the response to HIV/AIDS awareness campaigns through visual display like posters and billboards (Dorward et al., 2021). On World AIDS day, December 1 2022, Minister of Health Joe Phaahla mentioned that there are a number of inequalities that negatively impact the eradication of AIDS that include poverty and exclusion and these were compounded by the COVID-19 pandemic (Phaahla, 2022). The COVID-19 waves saw a decrease in the socio-structural support of people living with HIV and those at risk of contracting the virus. Eike et al. (2022) argue that due to isolation and economic inactivity, womxn were at a heightened rate of being victims of gender-based violence and little to no support was available due to the lockdown restrictions.

2.5 South Africa's Public Health Sector HIV/AIDS Prevention Strategies

Prevention programmes are strategies and interventions that aim to stop the transmission of HIV, which are biomedical, structural and behavioural. In the past two decades, the global focus has been shifted from implementing isolated strategies to combination prevention (Kurth, Celum, Baeten, Vermund & Wasserheit, 2011). This has been due to the complex nature of the global epidemic that needs to consider the underlying socio-cultural, political, economic, legal, and other contextual factors. Prevention of new infections is currently the global consensus for reversing the HIV/AIDS epidemic (Nyabadza et al., 2010). Rohleder et al. (2009) note that prevention efforts are most effective when their impact is identified, measured, and quantified. HIV/AIDS primary prevention strategies include behaviour modification, consistent and accurate use of condoms, minimising the number of sexual partners, and media campaigns (Keikelame, Murphy, Ringheim & Woldehanna, 2010). The Government of South Africa has continuously stressed that HIV-prevention efforts need to be urgently strengthened and sustained (South African National AIDS Council, 2012) to lessen the epidemic. Minister of Health in South Africa during the commemorations of World AIDS 2022 claimed that the government's main goal is "to make sure

that all parts of a person's health care work together in a single system so that everyone always gets the best care possible” (Phaahla, 2022, para. 10). He further mentioned that the fight against COVID-19 pandemic has highlighted the need for primary health care to be at the centre of all health systems and the government must “equalise and integrate services to speed up HIV prevention, treatment, care, and support” (Phaahla, 2022, para. 12). In South Africa, HIV prevention focuses on the distribution of both female and male condoms, voluntary medical male circumcision, prevention of mother-to-child transmission, provision of PrEP and management of sexually transmitted infections (STIs), including partner infections linked closely to HIV testing services (Avert, 2022; UNAIDS, 2019).

2.5.1 Behavioural Interventions

Flowers et al. (2017) define behavioural interventions as strategies to reduce the risk of HIV/AIDS transmission by addressing risky behaviours. Through this approach, interventions are conducted to maximise HIV/AIDS knowledge and change attitudes and risk perceptions, including perceptions of personal risks. They also involve the provision/dissemination of information, safe infant feeding guidelines, programmes that aim to eradicate stigma and discrimination, counselling services and other forms of psycho-social support. Initially, this strategy focused primarily on the ABC approach (Abstinence, Being faithful, Condom use) in response to the epidemic (Flowers et al., 2017). However, in the past years, it has become evident that behaviour change should not be based on an individual level only but rather addressing the cultural context within which risky behaviours occur. Coates, Richter and Caceres (2008) highlight that the intervention may aim to improve treatment adherence among people living with HIV; reduce the number of sexual partners that individuals have; increase the consistent and correct use of condoms; increase the use of clean and sterilised needles among people who inject drugs.

The use of condoms is among the major initiatives by the public health sector to prevent the spread of HIV/AIDS across South Africa. Although survey data is self-reported and susceptible to social desirability bias, national surveys in South Africa have indicated condom use ranging from 50 to 80% for both young women and men reporting condom use at the last sexual encounter (UNAIDS, 2019). This is a general indication that individuals are taking positive stances against the spread of HIV-related infections. However, condom use remains stigmatised at societal levels and in committed relationships (Coates et al., 2008). Partners in committed relationships may be

accused of infidelity if they request to use condoms. Reported condom use in casual relationships is inconsistent, especially among adolescents and commercial sex workers, which is a concern that needs to be addressed at several levels of intervention (Harrison et al., 2015). Structural and community level and behavioural interventions thus have a very significant role in increasing condom use (Moreno et al., 2014; Harrison et al., 2015).

Empirical studies that have been conducted in the past five years indicate that despite the failure of behavioural interventions in addressing complex issues around HIV/AIDS, the models are still being utilised in many countries and settings. Investment in programmes that promote faithfulness and abstinence still occurs in most East and Southern African countries (Avert, 2019). Flowers et al. (2017) indicate that prevention that promotes attitudinal and behavioural change towards low-risk sexual behaviour has been highly recommended as a practical strategy to control HIV infection. Media coverage and information dissemination have unprecedented effects on behaviour change in some social settings. However, these interventions fail to significantly reduce multiple sexual partnerships and teenage pregnancy (UNAIDS, 2016). According to Avert (2019) and UNAIDS (2019), three interconnected reasons seem to underpin the failure to implement effective programmes at scale: lack of political commitment and, as a result, inadequate investments; reluctance to address sensitive issues related to young people's sexual and reproductive needs and rights, and key populations and harm reduction; and a lack of systematic prevention implementation, even where policy environments permit it.

2.5.2 *Biomedical Interventions*

These interventions utilise the combination of medical and clinical approaches to reduce the transmission of HIV/AIDS (Padian, Buvé, Balkus, Serwadda & Cates, 2008). Some examples of medical interventions include voluntary male circumcision; HIV testing and counselling; male and female condoms; blood screening; testing and treatment of STIs; sex and reproductive health services; needle and syringe programmes, and ARVs for the prevention of mother-to-child transmission, pre-exposure prophylaxis, and post-exposure prophylaxis (Avert, 2022; Coombes, 2019; UNAIDS, 2019). Biomedical interventions have been heralded for their remarkable clinical results in reducing HIV transmission (Chigwedere et al., 2008). However, Padian et al. (2008) suggest that policymakers must identify how such costly interventions fit within regional and national HIV implementation plans and budgets, particularly in resource-limited countries.

Krishnan et al. (2008) indicate that biomedical interventions are rarely implemented independently as they are often utilised in collaboration with behavioural interventions. For instance, when a man is medically circumcised, he often receives counselling, is tested for HIV and is educated on using condoms and practising safer sex (Coombes, 2019). This indicates how costly the interventions may become and how policymakers should effectively utilise the available resources to render quality services.

In response to a national government-led HIV Testing and Counselling (HTC) campaign that started in 2010 and the adoption of the “know your status” as a key prevention message, HIV testing has consequently increased in the past years. South Africa has made impressive progress in getting more people to test for HIV. In 2017, South Africa reached the first 90-90-90 targets, with 90% of people living with HIV aware of their status, up from 85% in 2015 (UNAIDS, 2019). Nevertheless, the progress made in getting people to test has been ruttled; in South Africa, womxn are much more likely to test than men (Dellar et al., 2015). This is partly because PMTCT programs enable womxn to access HIV testing services during routine antenatal appointments (Avert, 2019). Harrison et al. (2015) indicate that improvement is needed, although all the statistics are promising, especially in a generalised epidemic setting. Some factors that aid the uptake of HTC include easing access to testing, testing initiatives free from HIV-related stigma, and the involvement of multiple sectors that offer support and care to the people living with HIV/AIDS (UNAIDS, 2019). Hence, establishing the cost-effectiveness of biomedical interventions is required for optimum resource provision and ascertaining inadequacies within prevention programs.

Furthermore, there have been substantial changes in the public health response to HIV. Moves towards political and financial investments in ART programmes and health systems solidification have meant that many governments are now obligating to mainstreaming, integrating, and decentralising HIV care (Nunn et al., 2012). Harrison et al. (2015) argue that this process has, not surprisingly, been uneven, especially in an unequal society like South Africa, where politicians and people in leadership positions misuse funds meant for ART distribution. The integration of HIV care into primary care services has seen a range of critical successes in countries as varied as Brazil, the Dominican Republic and Zimbabwe, but it has also put enormous strain on many of these systems and exposed serious underlying weaknesses (Nunn et al., 2012; Papworth et al., 2014). Activists and researchers have devised ways to deal with biomedical interventions'

weaknesses to maximise the fair and equal distribution of biomedical services to those who need them (Bekker et al., 2014). One suggestion has been to move tasks and de-professionalise HIV care by, for example, nurses initiating ART on their own, permitting lay counsellors to do finger pricks as part of bulk testing campaigns, and requesting community health workers to function as the front line of care provision (Harrison et al., 2015). These changes reveal an increasingly popular model of HIV care and support that comprehends the disease as a long-term condition to be managed as much in the family and community as in the clinic (WHO, 2017).

Research on biomedical interventions poses daunting challenges. Complications with product adherence and the possibility of sexual disinhibition are important concerns that have been highlighted in most studies (Padian et al., 2008). From empirical studies, biomedical interventions need to be part of an integrative package that includes biomedical, behavioural, and structural interventions (Bekker et al., 2014; Nunn et al., 2012). However, assessment of such multi-component approaches with moderate effects seems to be difficult, which entails that issues that need to be considered include the nature of control groups and the effect of adherence on the actual effectiveness of the intervention (Padian et al., 2008; Flowers et al., 2017).

2.5.3 *Structural Interventions*

Interventions of this sort seek to address causal factors that expose individuals and groups to the vulnerability of being infected with HIV, including socioeconomic, environmental and political risk factors. "HIV-related vulnerabilities are fuelled by inequalities and prejudices entrenched within the society's legal, social and economic structures" (UNAIDS, 2016, p. 18). The simple fact that 90% of the world's HIV occur in developing countries whose weak social, political and economic structures shape vulnerability and drive risky behaviours further supports this (UNAIDS, 2019).

For instance, most African countries' laws criminalise same-sex relationships that hinder these groups from accessing public health services like sexual health knowledge and acquiring condoms (UNAIDS, 2019). Gender inequality also paves the way for vulnerability and exposure to HIV infection. For example, the subordinate status of womxn affects their ability to negotiate condom use, whilst men sexually engage with multiple partners (Abrahams et al., 2017; Sia et al., 2016). Impoverished societies are also at a high risk of exposing groups to HIV infection due to inadequate access to proper health facilities (Avert, 2022). To address these risk factors, some

intervention research at the community level has employed peer-led AIDS education to reach people at high risk for HIV infection who may not be willing to participate in small-group/programs and to change norms in the community as a whole (Peltzer, Parker, Mabaso, Makonko, Zuma & Ramlagan, 2012). In addition, there is the execution of risk-reduction education and counselling that include explicit messages about equitable decision-making among partners, including violence against womxn and its links to HIV/AIDS (Bekker et al., 2014). These initiatives are meant to support womxn in negotiating safer sex in unequal power relationships and provide referrals to support services (WHO, 2017). Several successful interventions that address gender and intimate partner violence as part of broader empowerment programmes for womxn in the African continent include “SASA!”, a community mobilisation programme developed by Raising Voices in Kampala, Uganda; “DREAMS” in sub-Saharan Africa, and “She Conquers” in South Africa (Peltzer et al., 2012; WHO, 2017). Furthermore, healthcare workers should be professionally and effectively trained to recognise the early signs and symptoms of intimate partner violence, promote gender equality in the community, increase womxn’s access to services and teach womxn about partner communication and negotiation skills (WHO, 2017). Therefore, by addressing some of the above-mentioned structural barriers, individuals, especially womxn, are empowered and able to access HIV prevention services.

2.5.4 *Combination Interventions*

Hankins and de Zaluondo (2010) define combination prevention programmes as “rights-based, evidence-informed, and community-owned programmes” (p. 72) that use a blend of behavioural, biomedical, and structural interventions, prioritised to meet the HIV prevention needs of individuals and communities, to have the most significant continual impact on reducing new infections. The South African Department of Health (2016), in its HIV prevention strategy, further highlights that combination interventions operate on multiple levels (individual, couple, community and societal) to make efficient use of available resources by prioritising engagement and partnerships with the affected communities. A variety of scholars have indicated that to implement the combination prevention services successfully, health sectors need to ensure that they identify and know the target populations and accordingly design activities, policies and services that suit the wide-ranging target population and context (Hankins & de Zaluondo, 2010; Kurth et al., 2011; Department of Health, 2016). For instance, the National Department of Health’s (NDoH) HIV strategy for 2016-2021 identified adolescents, young womxn and girls (AYWG) as

a priority population that must be prioritised with combination prevention interventions. Sex workers, PWID and MSM, have also been identified as key populations that should urgently be targeted with combination prevention interventions (Department of Health, 2016). One of the 2025 global and international target is to ensure that 95% of people at risk of HIV infection, within all epidemiologically relevant groups, age groups and geographic settings, have access to and use appropriate, prioritized, person-centred and effective combination prevention options (UNAIDS, 2022). Unlike other prevention strategies implemented in isolation, combination strategies necessitate coordination and partnerships by mobilising the community, private sector, government, and global resources in a collective undertaking (Peltzer et al., 2012). Over a decade of unsatisfactory individual-focused behavioural interventions led to calls to review the models and theories of behaviour change and consider the societal circumstances, such as poverty, sexual cultures, gender inequalities, and access to HIV services, that challenge people's capacity to act on prevention advice (UNAIDS, 2009; Hankins & de Zaluendo, 2010). The National Youth HIV Prevention Strategy highlight HIV prevention interventions have been more successful at promoting health-seeking behaviour and the uptake of biomedical prevention methods than changing sexual behaviours that increase the risk of acquiring HIV (SANAC, 2022). This suggests that one of the focus of the Youth HIV Prevention Campaign is focusing more on biomedical prevention and the barriers to using these methods, as well as on the social and economic factors behind high risk sexual practices. This indicates a shift from individualised prevention strategies to combined, multifaceted and integrated HIV prevention strategies.

Research in African countries has hailed combination prevention strategies as the best in reducing HIV infections. This is based on the assumption and compelling evidence that no single HIV prevention strategy is sufficient to control the HIV pandemic (Kurth et al., 2011). In addition, combination strategies are fluid, grounding on the fact that geographic regions (provinces, districts and sub-districts) and communities are not homogenous; there is not a 'one-size-fits-all' approach to prevention, as sections of the population are exposed to different HIV infection risks (Department of Health, 2016). While the combination of these HIV prevention packages can prevent more than 90% of HIV transmission during vaginal and anal sexual intercourse, their use is mainly influenced by relationship type and the form of partnerships (Flowers et al., 2017). For example, condom use is generally highest in commercial sex work and lower and inconsistent in non-commercial and regular partnerships (Coombes, 2019). Studies indicate that the majority of

womxn are generally unable to negotiate consistent male or female condom use which is mainly dependent on male partner cooperation (Harrison et al., 2015; Coombes, 2019). Although increases in male condom distribution and use played a key role in declining HIV incidence from 2000 to 2008, the major challenge has been sustaining consistent condom use so men can protect themselves and their partners (Sia et al., 2016). Similarly, HIV counselling and testing (HCT) has been tested through several models to enhance knowledge of HIV status, access to HIV prevention and treatment programs and minimise stigma and discrimination associated with HIV (Avert, 2022; UNAIDS, 2019). Although these innovative approaches and services have been fundamental in promoting knowledge of HIV status to access treatment and preventing onward transmission, knowledge of HIV status remains low (Harrison et al., 2015).

2.6 Different Role Players in the Prevention of HIV/AIDS

South Africa aims to reduce the annual number of new infections to under 100,000 by 2022 (SANAC, 2017). The government plans to achieve this by intensifying prevention efforts in the 27 districts that account for 82% of all people living with HIV and most new infections. It has also committed to achieving zero new infections due to mother-to-child transmission by 2022 (SANAC, 2017). To achieve these, civil societies, the media and other organisations have since played very significant roles in the fight against the increase of HIV infections.

2.6.1 *Roles of Civil Society and Communities in Addressing HIV/AIDS*

UNAIDS (2019) and WHO (2017) suggest that the wide range of expertise within communities and civil society organisations makes them ideal role players in response to the AIDS epidemic worldwide. The full spectrum of community and civil society includes networks of people living with HIV, trade unions, faith-based organisations, community-based organisations, young people, people living with disabilities and many more (Bekker et al., 2014). Kim et al. (2013) highlight that “civil society and communities speak with many voices and represent many different perspectives, all of which can be valuable when monitoring and evaluating a country’s AIDS response” (p. 21). While the cooperation and leadership of civil society are needed in all aspects of HIV and AIDS prevention, care, support and treatment, it is especially needed in combating stigma and discrimination.

Study findings have highlighted that when communities organise and people empower each other, oppression can be replaced by increased rights and access to HIV services (Nunn et al.,

2012; Peltzer et al., 2012). Peer-to-peer counsellors, community health workers, door-to-door service providers, grassroots activists, and networks of people living with or affected by HIV all have vital roles in response to HIV (Peltzer et al., 2012). This shows that civil society and community leaders in the AIDS response help ensure that HIV services are relevant and reach the people who need them the most. Civil society organisations have been reported to mobilise and engage with communities at the grassroots level, rendering direct and indirect HIV/AIDS-related services, including prevention, care, support, and counselling to a large number of communities, yet, little has been documented of these efforts (Keikelame et al., 2010). The scant research conducted to assess civil societies' work in HIV and AIDS includes surveys, evaluations, and literature reviews of varying quality, scope and geographical focus. Nunn et al. (2012) argue that there is very peripheral mention of the role of, for instance, faith-based organisations in mitigating HIV/AIDS stigma within the African context. This indicates that more research needs to be conducted to fill in the research-related gaps in the field of HIV/AIDS.

2.6.2 Reflection on Awareness Campaigns in the South African Context

There have been some exciting instances of NGOs and social movements working fruitfully across disease categories, addressing broader health rights and social justice issues, and highlighting the social determinants of health (Coombes, 2019). Avert (2022) asserts that implementing an awareness campaign in South Africa is not limited to nongovernmental organisations but extends through government initiatives. Public awareness has been used as primary prevention and post-exposure risk reduction strategy (Keikelame et al., 2010). In recent years, South Africa has been utilising public awareness campaigns to impact combating HIV/AIDS to the target audience (Coombes, 2019). Therefore, the major purposes for implementing awareness campaigns include spreading knowledge and understanding of the modes of HIV/AIDS transmission modes, challenging some of the harmful social norms and promoting HIV/AIDS services that aim to prevent the continued transmission of sexually related illnesses (Peltzer et al., 2012; UNAIDS, 2019). The Department of Health (2016) indicates that some of the widespread awareness campaigns include, but are not limited to, *Soul City*, *Soul Buddyz*, *Brothers for Life*, *Love Life*, *Khomanani* and *Scrutinise*. Most critics report that although all these campaigns have different objectives and approaches to raising awareness, they have significantly impacted the fighting HIV/AIDS in South Africa (Hofisi & Kachidza, 2013). Several methods are used to raise awareness in South Africa which include the use of pamphlets, posters and graffiti to inform people

about different information; talks, marches and events that mobilise people; use of loudhailers and information tables in busy places like taxi ranks (Peltzer et al., 2012). Most awareness campaigns target the youths as they are regarded as the ones at a greater risk of contracting the epidemic than any other group in the South African context (Hofisi & Kachidza, 2013).

Despite the efforts and measures being implemented to raise public awareness of HIV/AIDS, erroneous but widely spread information often undermines public health promotion efforts (Nyabadza et al., 2010). Public health awareness campaigns are received in different forms by the intended populations. Research has indicated that there may be misconceptions, ignorance, and ambiguity regarding the awareness campaigns' messages (Nyabadza et al., 2010; Peltzer et al., 2012). A study conducted by Kim et al. (2013) found misconceptions and ambiguity of health information in one of the most extensive governmental HIV/AIDS prevention campaigns in Botswana. This research suggests that public awareness campaign materials need to offer understandable and clear messages; otherwise, the campaigns are misinterpreted or ignored by the public (Kim et al., 2013).

2.6.3 Art and Visual Activism in the HIV/AIDS Awareness Campaigns

The influence of media coverage on communicable diseases has recently been demonstrated. Public awareness campaign posters are designed to tell particular HIV/AIDS stories and work simultaneously to self-consciously create photographic idioms (Nyabadza et al., 2010; Peltzer et al., 2012; Coombes, 2019). A series of posters makes explicit a variety of documentary and portraiture photography conventions, thus appealing the viewer and the subject to identify how the different conventions might get involved in the construction of meaning (Coombes, 2019). Some awareness campaigns utilise art and visuals as pedagogic tools. They can be broadly spread and cheaply produced, disseminate affirmative attitude, mutual respect, messages about safe sex and information to assist compliance with complex drug regimens (Sabi & Rieker, 2017). In addition, HIV-positive activists also visually participate in the process of representing their own stories of diagnosis and living with HIV, using their own words beneath their photographic portrait to challenge the stigma attached to disclosure. Coombes (2019) suggests that promoting such extraordinarily hopeful and courageous first-hand accounts through the eyes and words of those directly affected is a powerful counter to the images of victimhood and hopelessness that have been the main message of depictions of HIV diagnoses.

Although art has been counted on for public health initiatives, empowerment and therapy in different cases, the models and delivery have been distinctive in significant ways. Initiatives that have successfully encouraged disclosure and promoted awareness, testing, and adherence have not functioned as bureaucratic structures (Sabi & Rieker, 2017). Instead, these initiatives harness local inventiveness and knowledge so that the participants 'own' the projects.

2.7 HIV/AIDS 'Evidence-Based' Research

There is a relationship between research, policy development and implementation. The literature reviewed for this chapter has indicated that this relationship is often assumed and/or misunderstood but rarely analysed. HIV/AIDS researchers believe their research should influence policy, especially if the studies are conclusive and rigorous. On the other hand, policymakers assume that research may seem one of the less relevant and more impenetrable of the many influences, including political pressures, to which they are subjected (Kim et al., 2013). There are questions on whether HIV/AIDS is being over-researched and whether the research findings are ethically and accurately applied. Harrison et al. (2015) argue that HIV/AIDS epidemic is complex, fuelled by biomedical, social, economic and political forces. Hence, it can never be said that it has been over-researched. In addition, HIV/AIDS research spans the spectrum of basic science, prevention interventions, clinical research, policy developments, ethics, social sciences and operations research (García-Moreno et al., 2013). Rohleder et al. (2009) argue that even though HIV/AIDS has possibly been the most studied disease in modern history, it remains a "significant global issue and an impediment to development" (p. 2). Regardless of the number of studies that have been conducted, HIV/AIDS remains an important research area due to South Africa's controversial history of HIV healthcare policy and the current trends and factors that play different roles that pose challenges in fighting HIV/AIDS pandemic.

2.8 Conclusion

This chapter was focused on critically determining what is known on the research topic, how well this knowledge is established and where future research might best be directed. This chapter evaluated the current situation regarding HIV/AIDS in the Southern African region, critically citing the roles being played by the international bodies to manage the spread of HIV/AIDS. I also tracked down the history of HIV/AIDS in the South African context that might have directly or indirectly led to the current challenges of the government and health sector in

dealing with HIV/AIDS. The chapter also critically evaluated the numerous risk factors that make individuals vulnerable to contracting HIV/AIDS and the different preventative measures that have been implemented in the South African context. Finally, the chapter evaluated the different role players in the fight against HIV/AIDS in South Africa. In the following chapter, I will critically evaluate the various theories around HIV/AIDS and launch the reproductive justice framework utilised for this study.

Chapter 3: Theoretical Literature Review

3.1 Introduction

Relevant theoretical perspectives are an essential component in most successful health promotion interventions. Research has indicated that, implicitly or explicitly, all prevention interventions are based on theory and theoretically informed interventions play a crucial/significant role in HIV/AIDS prevention (Michielsen, Chersich, Temmerman, Doms & Van Rossem, 2012). Behavioural theories have been widely utilised to understand the contributing factors of safe and risky sexual behaviour, thus helping identify underlying principles of people's behavioural change (Buldeo & Gilbert, 2015). “Beyond providing constructs, theories can also provide the basis for testing the effectiveness of interventions” (Michielsen et al., 2012, p. 2). The literature reviewed indicated that several cognitive theories have typically been drawn upon to understand health-related behaviours and develop intervention strategies. The most dominant theoretical perspectives include the Health Belief Model (HBM), Social Learning/Cognitive Theory (SCT), and Theory of Reasoned Action (TRA) (Michielsen et al., 2012). These perspectives and initiatives have set the foundation and paved the way for addressing HIV/AIDS prevention and intervention strategies globally.

Nevertheless, scholars increasingly view these theoretical perspectives on health behaviours as insufficient in light of the structural and social inequities that explain many individuals' lives, especially those of womxn (Ross, 2017). Scholars argue that it should be noted that the battle to minimise the HIV epidemic does not only revolve around condom use and adherence to medication (Buldeo & Gilbert, 2015). Therefore, this chapter will discuss the different theoretical perspectives that researchers, scholars, organisations and other entities have adopted to address the health-related behaviours associated with the risk of contracting HIV/AIDS. The chapter will first discuss the mainstream theoretical approaches that have traditionally informed the implementation of HIV/AIDS prevention or intervention approaches, how useful they have been, the existence of possible gaps and shortcomings in these approaches and the way forward in addressing these shortcomings. Finally, the chapter will discuss one of the more recent critical theories that have been useful in challenging the reproductive health injustices and structural inequities concerning the HIV/AIDS pandemic, especially regarding the challenges posed by this pandemic womxn. This perspective will be discussed to illuminate the multiple inequities surrounding sexual and reproductive health faced by womxn and to ask how public

health initiatives regarding HIV/AIDS may be better attuned to promoting health and social justice in a comprehensive and multifaceted way. Kaufman, Cornish, Zimmerman and Johnson (2014) point out that HIV risk and AIDS care comprise very complex behaviours ranging from individuals' attitudes, emotions, knowledge, and risk perception, to power dynamics between partners, the criminalisation of vulnerable groups, economic inequalities, and policies that make HIV/AIDS a priority health issue.

3.2 Mainstream Approaches to HIV/AIDS Intervention

HIV/AIDS prevention strategies have long been premised on the belief that immorality and promiscuity are the major contributors to the spread of the epidemic (Traube, Holloway & Smith, 2011). This has led many researchers and policy-makers to adopt the traditional and mainstream views of aiming to change individual behaviour viewed as risky (Abolfotouh et al., 2015). Public health preventive efforts frequently ensure access to medication and sexuality education programmes and initiatives such as youth-friendly clinics (Gobind & Ukpere, 2014). These mainstream approaches also focus predominantly on individuals and their behaviours or choices concerning health-related issues.

3.2.1 Theories and Models Focusing on Individuals

The foundation for most prevention interventions for HIV/AIDS has been provided by theories and models that focus on how individuals change their behaviour (Abolfotouh et al., 2015; Michielsen et al., 2012). Affective, motivational, and cognitive-attitudinal constructs have been generally used to create these theories (Traube et al., 2011). Individual behavioural change theories and models, to a certain extent, take into consideration the interaction of environmental, cultural, and social issues as independent of individual factors; thus, they are more diagnostic and geared towards understanding the psychological factors that explain or predict a specific behaviour (Kaufman et al., 2014; Michielsen et al., 2012). While all the theories have unique assumptions, they mention that behavioural changes occur by changing potential risk-producing conditions and attitudes, intentions, self-efficacy beliefs, and outcome expectations (Michielsen et al., 2012).

3.2.1.1 The Health Belief Model. Traube et al. (2011) highlight that this theory holds that health behaviour results from an individual's knowledge, socio-demographic characteristics, and attitudes. The Health Belief Model (HBM) is one of the most effective health behaviour-change models that comprises six constructs (perceived susceptibility, severity, benefits, barriers, cues to

action, and self-efficacy), which explain why an individual may or may not adopt preventive measures against the disease of interest (Abolfotouh et al., 2015). This model deals with how individuals evaluate their risk for poor health behaviours or practices, evaluate the risk's seriousness, contemplate the benefits of certain behaviours, and deal with the barriers to the action (Abolfotouh et al., 2015). The HBM advances that an individual's subjective situation analysis influences health behaviours and preventive actions. The model is based on the assumption that an individual takes a health-related action like using contraceptives or abstaining from sexual intercourse if (a) s/he feels that an adverse health condition like HIV can be avoided; (b) has positive anticipation that if they follow the recommended actions, they can avoid an undesirable condition; and (c) believes that s/he can successfully take a recommended health action like using condoms with confidence (Gobind & Ukpere, 2014).

According to the Health Belief Model, a precondition for pursuing medical care is the individual's acknowledgement that they are liable to certain risks, such as HIV and/or STIs (Michielsen et al., 2012). This recognition thus drives individuals to follow recommended prevention measures, for instance, using condoms to minimise the spread of HIV/AIDS. Individuals must also recognise that the severity of the condition is worth evading for them to take a commended action, for example, discovering their HIV status by going for voluntary counselling and testing (Gobind & Ukpere, 2014). Moreover, the HBM suggests that help-seeking behaviour is subjective to a person's perception of a risk posed by a particular problem and that the values related with the action/s aim to reduce that threat (Buldeo & Gilbert, 2015). Hence, to promote behavioural change, the focus is paid to the need for individuals to change their personal beliefs. Michielsen et al. (2012) note that for this change to occur, the benefits of the health-seeking action should be perceived to outweigh the costs of engaging in the action. Abolfotouh et al. (2015) point out that HIV/AIDS interventions are thus designed to target people's perceptions of risk, individual beliefs on the severity of HIV/AIDS, beliefs on the efficacy of condom use, and their beliefs regarding the appropriateness of condom use or other strategies, such as abstinence. Thus the HBM suggests that preventive action occurs when people believe in recommended preventative actions. Buldeo and Gilbert (2015), therefore, take the HBM as a health-specific social cognition model which "postulates that knowledge, attitudes and perceptions of risk affect behaviour" while "the social context of cognitions act as predictors and precursors to health behaviour" (p. 210). This highlights that as much as the individual's rational choice and psychological factors influence

behaviour, these factors do not impact behaviour on their own. The particular social context of that individual also has a role in their health beliefs and decisions regarding how they behave. However, many empirical studies have demonstrated barriers that impede individuals from seeking medical assistance when the need arises or perceive that they are at risk (Hampanda, Ybarra & Bull, 2014). These barriers include but are not limited to: fear of being maltreated by health care providers, fear of infringement of confidentiality, stigma, and lack of family support (Hampanda et al., 2014; Schnall, Rojas & Travers, 2015).

This means that most awareness campaigns through different modes of communication need to target and make efforts to increase HIV testing rates in various high-risk populations through understanding their health beliefs and advancing targeted interventions to meet the needs of those populations. Schnall et al. (2015) argue that although many adolescents in their study were interested and willing to be tested for HIV, they reported several barriers to HIV testing. This means there is a need to address these barriers and make testing accessible. Therefore, interventions should increase knowledge about the risks associated with HIV and improve access to HIV testing information and services. For instance, Buldeo and Gilbert (2015) conducted a study to “determine how first-year university students consider HIV/AIDS and explore the factors associated with their reported use and non-use of VCT services, which might explain the lower prevalence among university students” (p. 210). Their findings emphasised that “the socio-behavioural and contextual settings students find themselves in shape their HIV/AIDS knowledge, awareness and behaviours” (Buldeo & Gilbert, 2015, p. 216). Therefore, interventions inclined to the Health Belief Model aim to raise awareness for individuals to take charge of their health by knowing their HIV status, seeking medical assistance, and changing their perceptions and myths surrounding HIV/AIDS.

3.2.1.2 Social Cognitive (Learning) Theories. This perspective assumes that individuals learn new behaviour through modelling from others or through direct experience (Bandura, 1977; Kaufman et al., 2014; Reynolds et al., 2010). Bandura (1977) purported that human behaviour is a continuous interaction between behavioural, cognitive, and environmental factors. Reynolds et al. (2010) further support that the “environment provides models for behaviour via observational learning” (p. 33). The theory's central principles are self-efficacy and outcome expectancies (George et al., 2014). The former entails the belief in the ability to execute the essential behaviour,

such as insisting on condoms with a partner. The latter are beliefs that the current use of condoms prevents HIV/AIDS infection (Reynolds et al., 2010). In brief, this model postulates that individuals undergo a cognitive process contemplating the pros and cons of practising safer sex, for example, considering understanding HIV, expectancies associated with using condoms, and the social norms (George et al., 2014). This, in turn, impacts an individual's self-efficacy (i.e. confidence in one's ability to practice safer sex in all situations) (George et al., 2014). Wouabe and Brown (2013) add that self-efficacy, in turn, becomes a critical factor in determining whether or not one will practice safer sex. Kaufman et al. (2014) note that programmes based on this theory "integrate information and attitudinal change to enhance motivation and reinforcement of risk reduction skills and self-efficacy" (p. 88). Specifically, activities focus on people's different experiences discussing and negotiating sex and condom use and environmental barriers to risk reduction. While social cognitive theory (SCT) has rational cognitive decision-making at the core of understanding behaviour, it also provides a framework for considering the broader context, including the social, cultural, and historical constructs in which individuals find themselves making choices (George et al., 2014).

Social cognitive theory has been employed in many studies to aid an intervention or a framework to evaluate specific HIV/AIDS interventions. George et al. (2014) utilised the SCT as a framework to explore factors driving or inhibiting the uptake of voluntary medical male circumcision (VMMC) by adolescents, mainly through understanding the impact of individual factors and the community in which they live, including cultural, environmental, politics and social factors. They conducted twelve focus group discussions with selected boys who had gone through VMMC and seven with a group of boys who were not asked to disclose circumcision status. While most of the boys interviewed had undergone circumcisions, the feedback received revolved heavily around perceptions and concerns around VMMC's rollout, including actual and anecdotal experiences of the procedure (George et al., 2014). They concluded that the facilitators and barriers for the uptake of VMMC during the adolescent stage are similar on a general basis in related contexts as they are driven by individual beliefs, attitudes, and experiences (George et al., 2014).

Social factors influencing decisions revolve around partner and parental influences, the experiences of their circumcised peers, and cultural and community norms (George et al., 2014; Hatzold, 2014; Reynolds et al., 2010). Barriers found in previous studies, such as the fear of pain

and adverse events; threats to masculinity; the costs (primarily implicit) associated with VMMC; cultural and religious concerns (Wouabe & Brown, 2013); as well as fears around HIV counselling and testing (HCT) (Hatzold, 2014), were found among the adolescent cohort. Facilitating factors found in existing literature include improved hygiene, protection from (STIs), perceptions of sexual performance and satisfaction, positive peer pressure, and preferences of female intimate sexual partners (Wouabe & Brown, 2013) were also consistent with the findings in the study conducted by George et al. (2014). However, there is a need to consider the context and broader social perspectives to become an integral part of HIV intervention programmes. Although several studies have analysed the factors that affect the uptake of voluntary male circumcision, there is still a lack of robust research on whether men who undergo VMMC cognitively understand public health content on the usefulness of male circumcision in minimising the contraction of STIs and HIV/AIDS.

In light of this wide usage of the Social Cognitive Theory to unearth the facilitators and barriers to uptake specific HIV/AIDS intervention strategies, Strauss, Rhodes and George (2015) also targeted the adolescent age group. They analysed the facilitators and barriers impacting the utilisation of HCT services amongst school-going youth using social cognitive theory as the theoretical framework. The interactions and relations between factors at each system level from the individual level are mainly established to understand why learners may or may not be eager to test (George et al., 2014; Strauss et al., 2015). However, in an era of rapidly changing societal setups, it is of more significant usage to analyse the modes in which testing knowledge and communication are passed from one community to another, which might directly impact an individual's decision to be tested (Michielsen et al., 2012). Despite the increased statistics of HCT uptake, few studies have researched how the intended population receives knowledge and awareness campaigns to unearth why some individuals still adhere to not being tested, even after receiving education and awareness. Several studies have indicated that fear is the prevailing driver of low HCT uptake, and this fear is driven by HIV-related stigma and discrimination (George et al., 2014; Harrison et al., 2015; Strauss et al., 2015). Lessening stigma by accumulating understanding and nurturing an environment in which learners feel they have a good support network is crucial to the successful attainment of HCT programmes targeting young people (Hampanda et al., 2014; Schnall et al., 2015; Strauss et al., 2015). Accumulating education about the importance of HCT and creating awareness about available HCT services will not be enough

to increase uptake in schools in South Africa (George et al., 2014; Strauss et al., 2015). This is due mainly to the different interpretations of awareness messages in campaigns designed by the public health sector.

Most importantly, efforts to minimise the stigma around HIV and HCT by incorporating testing into general and sexual reproductive health services will go some way to lessening fears around testing, particularly if interventions are sensitive to pervasive personal and social-level factors (Avert, 2019; Harrison et al., 2015; UNAIDS, 2019). Therefore, there should be an assessment of whether the awareness content and knowledge are being received as intended. This will deepen the understanding of how perceptions about self-efficacy, goals, and outcome expectancies, influenced by personal, interpersonal, and environmental factors and behaviour, can ultimately affect demand for HIV/AIDS prevention services.

SCT as a framework for understanding perceptions and attitudes in healthcare has been critiqued for its concentration on individual cognitive rational decision-making as a base for behaviour (George et al., 2014). This is mainly the case for many HIV risk reduction interventions that call for consistent choices, even in unanticipated sexual encounters (e.g. condom use, reducing sexual partners), where rational cognitive decision-making and intentions are often not crucial determinants of behaviour (Kelly et al., 2001). This is a concern for the sustainability of behavioural change, given that even one lapse in commitment to a behavioural change (e.g. condom use) can lead to HIV transmission (George et al., 2014).

3.2.1.3 Theory of Reasoned Action and Theory of Planned Behaviour. The Theory of Reasoned Action (TRA) (Fishbein & Ajzen, 1975) and its extension, the Theory of Planned Behaviour (TPB) (Ajzen & Madden, 1986), have been widely used in the health behaviour investigation, including condom use, among several samples (Andrew et al., 2016; Armitage & Conner, 2001; Noar & Zimmerman, 2005). For both models, the best indicator of behaviour is the intention, which is anticipated by the attitude towards behaviour and the subjective norm (Kaufman et al., 2014). Fishbein and Ajzen (1975) advanced the theory of reasoned action based on the assumption that people are rational beings that make logical use of available information. This means that people rationally weigh the consequences of their actions before they engage or decide not to engage in any action (Kaufman et al., 2014). Scholars have articulated that the theory of reasoned action is conceptually related to the Health Belief Model (Kaufman et al., 2014;

Michielsen et al., 2012). However, the Theory of Reasoned Action adds the construct of behavioural intention as an influential factor in health behaviour (Traube et al., 2011). Specifically, the Theory of Reasoned Action focuses on an individual's intention in the determination to execute a particular behaviour (Montaño & Kasprzyk, 2015). A person's intention is a function of two major fundamental determinants: attitude towards the behaviour and subjective norms like social influence (Protogerou, Flisher, Aarø & Mathews, 2012).

Interventions that have implemented this theory focus on the “attitudes about risk-reduction, response to social norms, and intentions to change risky behaviours” (Traube et al., 2011, p. 60), for example, enhancing an individual's level of intention to make use of condom for safer sex (Gomes & Nunes, 2017). While the fragile relationship between behaviour and attitudes has long been recognised, recent research has concentrated on identifying the factors that reinforce this relationship. The Theory of Reasoned Action has succeeded and become one of the more influential social psychological theories on decision-making (Gomes & Nunes, 2017; Montaño & Kasprzyk, 2015; Protogerou et al., 2012). The Theory of Planned Behaviour (Ajzen, 1991; Ajzen & Madden, 1986) presents an extension of the Theory of Reasoned Action model, incorporating the construct "perceived control". In this model, individuals' beliefs about how they can affect the intended behaviour are included as an explanatory variable, together with attitudes and subjective norms (Gomes & Nunes, 2017; Montaño & Kasprzyk, 2015).

The Theory of Reasoned Action and the Theory of Planned Behaviour have been the focus of extensive research. They have been used to explain intentions and behaviours, ranging from health to commercial behaviour (Montaño & Kasprzyk, 2015). Several meta-analytic studies have found high correlations between the models' various factors, confirming their explanatory power (Gomes & Nunes, 2017; Protogerou et al., 2012). In addition, these models have been applied successfully to a wide range of cultures and ethnic groups, including caregivers for people living with HIV/AIDS (Heeren, Jemmott III, Sidloyi, Ngwane & Tyler, 2012; Jemmott III et al., 2014), and adolescents (Jemmott et al., 2014; Montaño & Kasprzyk, 2015) among others. Of particular relevance for this paper is that the Fishbein-Ajzen model has been used extensively and with considerable success to predict a wide range of sex-related behaviours (Bleakley & Hennessy, 2012; Chitamun & Finchilescu, 2003; Jemmott et al., 2014; Montaño & Kasprzyk, 2015). Most of the studies in this category have focused on condom use and safe-sex behaviour, such as adolescent

contraceptive behaviour (Campbell, Nair & Maimane, 2007), condom use (Chitamun & Finchilescu, 2003; Gomes & Nunes, 2017), and safe-sex behaviour (Jemmott et al., 2014). Recent research has also studied factors involved in decisions to engage in sexual activity and predicting condom use, comparing the Theory of Reasoned Action and the Theory of Planned Behaviour (Gomes & Nunes, 2017). This explains how valuable the theories have been in addressing the reasons individuals provide to rationalise behaving in a particular manner that might expose them to risk or protect them from getting infected.

However, there is a need for such research to be recurrently replicated to consider varying norms and societal contexts. Chitamun and Finchilescu (2003) utilised the Fishbein-Ajzen prediction model to “understand the factors influencing the decision to engage or not to engage in premarital sexual intercourse” among a sample of heterosexual South African womxn students (p. 155). This study focused on the intention of womxn, who, at that time, was sexually inexperienced, to engage in sexual activity, and did not monitor actual behaviour. They decided not to include perceived self-efficacy or control measures, as suggested by the TPB, as this might have elicited fears of rape and sexual assault, which would have contaminated the perception of free intention (Chitamun & Finchilescu, 2003). According to their results, Chitamun and Finchilescu (2003) indicated that “the intention of South African female students to engage in premarital sexual relations is influenced mainly by attitudinal factors, with subjective norms playing a lesser but significant role” (p. 158). They further argue that these factors explain a large proportion of the variability of the intention scores, confirming the predictive usefulness of the TRA (Chitamun & Finchilescu, 2003; Montaña & Kasprzyk, 2015).

The study indicated a clear awareness of the threat of HIV contamination through sexual activity (Chitamun & Finchilescu, 2003). The sexually inexperienced and sexually experienced participants perceived contracting a sexually transmitted disease as very high (Chitamun & Finchilescu, 2003). Although Chitamun and Finchilescu (2003) found that sexually experienced participants used condoms regularly, there were vast fears of having unwanted pregnancies, contracting sexually transmitted infections, and being rejected by their partners due to continued condom use negotiations that take place between partners. This indicates that even though one will be prepared and intentionally engage in protected and safe sex, fears of losing a partner after failure to negotiate or conflicts that arise for the use of condoms are very high in the South African context

(Kriel et al., 2019; Maxwell, Devries, Zions, Alhusen & Campbell, 2015). Therefore, the willingness, especially by womxn, to engage in safe sex is compromised by their male counterparts, who tend to use forced sex and face challenges in the negotiation for condom use. These issues have been found to be the critical pathways for the association between intimate partner violence and contraception use in South Africa (Chitamun & Finchilescu, 2003; Kriel et al., 2019; Maxwell et al., 2015).

Some studies have also been conducted to test the effectiveness of both models in different contexts. Montañó and Kasprzyk (2015) argue that “cross-sectional studies are often used to test the Theory of Reasoned Action but may provide poor prediction and understanding of previous behaviour” (p. 102). This is because the time order of motivations and behaviour cannot be discerned. Concerning the analysis methods, structural equation and regression methods are frequently used to test relationships in the Theory of Reasoned Action (Montañó & Kasprzyk, 2015). While these analyses are commonly used in cross-sectional studies, they are best utilised in longitudinal, prospective study designs to assess causal relationships (Bleakley & Hennessy, 2012; Montañó & Kasprzyk, 2015). This proves that both theories are vital when predicting behaviour in various contextual settings.

With escalating evidence demonstrating that caregivers often do not disclose to HIV-positive children that the children are living with HIV, Jemmott III et al. (2014) examined the theory-of-planned-behaviour predictors of the intention to disclose to children their HIV diagnosis. “Theory-of-planned-behaviour variables were assessed with items rated on a 5-point Likert scale from 1 (disagree strongly) to 5 (agree strongly), and intention to disclose was measured with a single item: *‘I plan to tell my child he or she has HIV in the next three months’*” (Jemmott III et al., 2014, p. 1029). They used descriptive statistics to describe the sample and Pearson product-moment correlation coefficients (r) to identify intention to disclose and used proportional-odds logistic regression analysis to identify predictors of intention to disclose (Jemmott III et al., 2014). Their results suggested that the Theory of Planned Behaviour's normative belief and self-efficacy constructs are related to a stronger intention to disclose HIV serostatus to South African children living with HIV, whereas the disclosure beliefs that the children would have a negative emotional response, deny the diagnosis, tell others, or have a positive reaction (Jemmott III et al., 2014). Numerous studies have identified beliefs about paediatric HIV disclosure, reporting the reasons

caregivers give for not disclosing, the reasons caregivers give for disclosing, and the holistic reactions of the children upon and after the disclosure (Heeren, 2012; Vaz et al., 2011). This indicates that this theory can be utilised to formulate HIV/AIDS prevention strategies and interventions for supporting caregivers for people living with HIV/AIDS.

The literature on the Theory of Reasoned Action and Theory of Planned Behaviour indicates that many studies have utilised the theories to formulate interventions for South African adolescents. Jemmott et al. (2014) observed an urgent need for behaviour-change interventions to reduce the incidence of HIV among adolescents in South Africa; however, there are few such interventions with proven efficacy for South African adolescents, especially young adolescents. Therefore, they used the reasoned action theory to develop the 'Let Us Protect Our Future!' HIV/STD risk-reduction intervention for Grade 6 South African adolescents (mean age = 12.4 years). The Theory of Reasoned Action and the Theory of Planned Behaviour collectively are called the 'Reasoned Action Approach' (Fishbein & Ajzen, 2011). Hence Jemmott et al. (2014) noticed that the “theory’s focus on norms of peers and partners was particularly appropriate for young adolescents, who are engaged in the process of identity formation through social comparison” (p. 167). Although the Reasoned Action Approach has limitations for use in South African cultures, where family and the broader community have prominent influences on behaviour, Jemmott et al. (2014) utilised many of the approach's features to formulate the HIV/STD risk-reduction intervention. For instance, cross-cultural lending utility in that the strategy identifies the relevant behavioural, normative and control beliefs. Therefore, they conducted formative research with the population to identify population-relevant beliefs about the behaviour, which may differ for different populations (Fishbein & Ajzen, 2011; Jemmott et al., 2014). Parents who participated in the study were uncomfortable discussing sexual matters with their children. The taboo regarding sexual matters also arose when the researchers wanted to provide knowledge about puberty and reproductive anatomy. It was considered culturally inappropriate to cover this material in mixed-gender groups (Jemmott et al., 2014). This indicates how different cultural setups may have a massive impact on the intentionality of an individual to partake in a specific decision.

On the other hand, St Lawrence and Fortenberry (2007) argue that the name Theory of Reasoned Action has often led to the misconception that the sole focus of the theory is entirely

rational behaviour. Montaña and Kasprzyk (2015) defend the theory by highlighting that one of the significant strengths of the Theory of Reasoned Action is that it provides a framework for understanding and discerning the reasons that motivate a certain behaviour of interest for every distinct population. Furthermore, they indicate that based on the TRA's assumption, individuals are rational beings that process information, and underlying reasons determine their motivation to act on certain behaviours (Montaña & Kasprzyk, 2015). These reasons comprise an individual's behavioural, normative, and control beliefs; that “determine his/her subjective norms, attitudes, and perceived control, regardless of whether those beliefs are logical, rational, or correct from some objective standards” (Montaña & Kasprzyk, 2015, p. 103).

Although the theory has been widely used since its establishment, it has also been the subject of much debate and criticism. Some scientific researchers have rejected the theory based on its assumption of the importance of consciousness as a causal factor in the uptake of a particular behaviour (Campbell et al., 2007). Additionally, some Afrocentric authors have dismissed the theory, questioning its applicability in the African culture (Campbell et al., 2007). However, the critical (meta-analysis) review by Protogerou et al. (2012) cast doubts on arguments against using the TRA/TPB in non-Western settings due to alleged deep-rooted cultural differences between Western and non-Western societies. Protogerou et al. (2012) highlight that despite some weaknesses and variability in the design of the reviewed studies, the TRA/TPB is appropriate and applicable for the studies of sexual risk in sub-Saharan African youth. The reviewed studies showed that TRA/TPB variables successfully predicted condom use, contraception and premarital sex intentions in Ethiopian, Ghanaian, South African, Tanzanian and Zimbabwean youth from urban, rural, and traditional sites (Protogerou et al., 2012). This indicates that arguments that place African decision-making as mainly occurring "in the group" and Western decision-making as mostly "in the individual" can be seen as insensitive to the group and individual differences within cultures. Such assertions may be based on, and perpetuate, stereotypical views of people: African cultures are collective whilst Westerners are individualistic (Protogerou et al., 2012). Therefore, there is room for individualism within collectivity and vice-versa, entailing the need to deeply understand the cognitive processes before an individual behaves in a particular way.

3.2.2 *Critiques of Individual Cognitive Theories*

While interventions based on cognitively focused theoretical perspectives on health behaviours and decision-making have been demonstrated to be relatively successful in reducing risky sexual behaviour, there is a considerable need for further improvement. Researchers have explicitly acknowledged that the cognitive models have failed to account for contextual factors and regulatory processes (Campbell et al., 2007). The Health Belief Model has been criticised for lacking research on alternative belief systems that may affect condom use above and beyond the consequences of actions and the probability that healthy behaviour will be effective (Traube et al., 2011). The Health Belief Model has also been critiqued for predicting adherence in some situations but not clearly explaining risk reduction behaviours linked to socially determined and unconscious motivations (Kaufman et al., 2014; Michielsen et al., 2012). Furthermore, the Theory of Reasoned Action does not entirely explain which outside influences could affect a person's choice to engage in preventative behaviour (Campbell et al., 2007). To add to this, Traube et al. (2011) indicate that the Theory of Reasoned Action does not sufficiently elucidate the relationship and obstacles between decision-making and self-efficacy. This means that these theories can be argued to pay insufficient attention to the social environment in which individuals are embedded. It can be noted that a relative number of scholars have critiqued the behaviour change theories in that they assume that individuals make decisions about health; that the decision-making process is located in individual cognition. Behaviour change theories, therefore, focus on changing individual behaviour through changing the amount of knowledge that individuals have, with the assumption that an increase in knowledge will lead to a change in behaviour. The primary critique and focus on individual behaviour relates more to the epistemological assumptions of the theories, that individual cognitive decision-making needs to be the focus of interventions, and that behaviour is based on this individual decision making, and not that it is about immorality and promiscuity. The theories, and interventions, focus on changing knowledge, so that risks are perceived and acted upon.

3.3 *Social Theories and Models*

These models and theories focus on the interactive relationship between behaviour and its social, economic and cultural context (Michielsen et al., 2012). This entails that they pay attention to the numerous determinants of behaviour in different setups (Traube et al., 2011). Sociological

theories thus differ from individuals' theories because they involve what occurs at the community level that might hinder or promote certain behaviours (Reynolds et al., 2010).

3.3.1 *Social Action Theory*

This is an "integrative systems model of social-motivational, cognitive, and environmental processes" (Reynolds et al., 2010, p. 311). This theory was developed as an extension of individual-level psychological theories to address the complexities of public health issues (Traube, Holloway, Schragger & Kipke, 2012). It acknowledges that the Health Belief Model, the Theory of Reasoned Action, and Social Cognitive Theory have guided behavioural risk prevention efforts. However, these theories focus relatively on factors impacting behavioural change (Traube et al., 2011). For example, the Health Belief Model solely focuses on cognitive factors impacting an individual's assessment and belief in health-promoting behaviour (Traube et al., 2011; Traube et al., 2012). The Social Cognitive Theory pays much attention to how the social environment impacts behaviour. The Theory of Reasoned Action attempts to combine the two previous theories into one perspective, addressing individual attitudes and group norms that influence health behaviour (Traube et al., 2011). Therefore, Traube et al. (2011) argue that given the vast competing theoretical foci (from cognitive to environmental), the HIV/AIDS field may benefit from a well-integrated and comprehensive theory that captures and conceptualises many factors involved in determining risky behaviour among different populations. The Social Action Theory (SAT) was thus developed to discover and manipulate the environment and self-regulatory skills/deficits that can endorse health and/or impede health behaviours and habits (Traube et al., 2012). Social Action Theory puts forward that health-protective behaviours are a result of an interaction among three domains: (1) contextual influences such as life stressors, background/ demographics, and mental health; (2) self-change processes such as self-efficacy, coping skills, and social support; and (3) action states (including health behaviour outcomes), for example, unprotected sex, having multiple sexual intercourse partners, and substance use and abuse (Kaufman et al., 2014; Michielsen et al., 2012; Traube et al., 2011; Traube et al., 2012).

The theory has been widely applied to HIV/AIDS risk reduction and the prevention of HIV risk behaviour in many contexts. Several studies have identified the domains of action theory, including contextual and self-regulatory skills/deficits, to predict youth sexual behaviour (Traube et al., 2012). According to the theory, the choice to engage in risky sexual behaviour is influenced

by the “person’s regulatory resources and social power afforded by the environmental context in combination with the individual’s psychopathology and affect, HIV related and knowledge, and self-regulatory skills/deficits” (Reynolds et al., 2010, p. 313). Therefore, social action theory provides a more holistic approach to viewing health-promoting behaviour. Although the theory was initially developed as a general health promotion model for the adult population, it has now been applied to various health behaviours, for example, HIV/AIDS prevention and interventions (Traube et al., 2012).

A study carried out by Traube et al. (2012) aimed at addressing gaps in research related to young men who have sex with men (YMSM) and unlawful drug use/abuse through the clarification of "interactions between illicit drug use/abuse, impulsivity, and coping strategies that enhance risky behaviours for an at-risk, under-represented population" (p. 2). They concluded that the Social Action Theory helps examine the correlates of illicit drug use among YMSM. Their results indicated that numerous background characteristics, including ethnicity, age, living status, and various decision-making processes, can place YMSM at risk for illicit drug use (Traube et al., 2012). Therefore, they suggested that health interventions for this population would benefit from employing the SAT and a multi-targeted strategy for impacting several risk areas to prevent illicit drug use for YMSM. In a similar study, Reynolds et al. (2010) utilised the social action theory as a guiding framework, whereby a variety of SAT-derived predictors were examined, including environmental influences; forms of psychopathology and affect; HIV-related attitudes and knowledge (condom attitudes and HIV knowledge); and self-regulatory skills/deficits. Findings from the logistic regression of Reynolds et al. (2010) indicated that “regular partner type, higher risk-taking propensity, and negative condom attitudes contributed uniquely to an increased likelihood of condom non-use” (p. 158). This indicates the importance of self-regulatory, cognitive and contextual factors in the usefulness of SAT. Although the studies are different, the findings suggest that engaging in sex with a regular partner, having negative attitudes towards condoms, and being prone to take risks all combined influence individuals to engage in risky sexual behaviour (i.e., condom non-use) (Reynolds et al., 2010; Traube et al., 2012). By recognising personal and environmental self-regulatory resources that unswervingly affect social interactions, problem-solving, and self-efficacy, SAT - applied to risky-sexual behaviours - identifies interventions that can be used to enhance health by altering self-goals, strategies, and environments (Kaufman et al., 2014; Michielsen et al., 2012). From a public health stance, detecting factors

influencing HIV risk behaviours will be critical, mainly as evidence suggests that urban minority substance users are at high risk for HIV infection (Traube et al., 2012).

3.3.2 *Social Network Theory*

This approach assumes that individuals function within social networks that establish norms for behaviour, including safer sexual behaviour, and that these social networks enforce adherence to these norms (Kaufman et al., 2014; Wang, Brown, Shen & Tucker, 2011). According to Social Network Theory, people who can establish and enforce social norms play a crucial role in impacting the HIV/AIDS preventive behaviours (Kaufman et al., 2014; Latkin & Knowlton, 2015). This means that individuals are taught about HIV risk reduction, especially in community setups. These individuals then diffuse the information, skills and behaviours to their network members. International health programs have successfully utilised social network interventions to promote numerous healthy-living lifestyles, including modern family planning methods, weight reduction, smoking cessation, and improving the well-being of people with schizophrenia (Latkin & Knowlton, 2015). In the field of HIV, social network interventions have been successfully used for the past two decades to decrease HIV risk behaviours among hard-to-reach and high-risk populations, including men who have sex with men, people who inject drugs, and other sexual minorities (Latkin & Knowlton, 2015; Michielsen et al., 2012).

Certain network characteristics may likely cue health behaviours, such as substance abuse and social norms that promote risky behaviours. Wang et al. (2011) posit that although most network literature has focused on the potential influence of close ties, there is also evidence to suggest the social influence of individuals who are not closely linked. The social influence of others who are not close may help explain how individuals within a network may influence each other's behaviours (Latkin & Knowlton, 2015). Therefore, it is crucial to examine the social network factors that may moderate, mediate, and maintain social norms that promote healthy living habits, for example, getting tested, partaking in VMMC, educating each other on HIV issues, and structuring norm-based interventions in these networks. Usually and traditionally, the interventions have been delivered face-to-face, but more recently, they have incorporated social media components due to the ever-changing technological advancements (Sorkin et al., 2014). Recently, information has been passed in popular hashtags through social media platforms like Twitter, Facebook, and Instagram. Latkin and Knowlton (2015) argue that network interventions

time and again make use of the existing social exchange, social support, and social influence processes such as verbal persuasion and modelling. This means that behaviour change is circulated through the existing network structures that individuals and societies can easily relate to. The sustainability of behaviour change in individuals thus depends on how the social network members maintain their relationships.

Based on this conceptualisation, HIV/AIDS prevention interventions must address existing social norms regarding safer and risky sexual behaviour to change such behaviour (Michielsen et al., 2012). Researchers have found that if the risk is normative and socially rewarded within a social network, safer sexual behaviour interventions will fail unless the norms propagated by natural opinion leaders and enforced by the social network are modified (Sorkin et al., 2014). If the risk is inconsistent with social network norms and is stigmatised by the social network, the social network may be used to gain behaviour change leverage in HIV/AIDS prevention interventions (Michielsen et al., 2012; Sorkin et al., 2014). Latkin and Knowlton (2015) point out that “some network interventions focus on egocentric, or personal networks, which are defined as focal individuals and their social ties” (p. 91).

Interventionists sometimes focus on risk networks to alter HIV/AIDS risky behaviours like engaging in multiple sexual relationships and sharing drugs (Wang et al., 2011). The focus of an intervention may be the smallest network, a dyad, which entails relations between pairs of actors but not necessarily being mutual or reciprocated (Sorkin et al., 2014). In this case, one end of a pair might be driven into engaging in risky behaviours. Socio-metric networks are another focus of the network interventions: sets of individuals, such as schools and the ties among individuals in these settings (Wang et al., 2011). Often socio-metric network analyses focus on network structures, whereas personal network analyses focus on network function (Latkin & Knowlton, 2015; Wang et al., 2011). Socio-metric network interventions often identify key individuals for training based on network structures to impart behavioural change knowledge in different network structures, for example, community workers (Kaufman et al., 2014; Latkin & Knowlton, 2015; Wang et al., 2011).

Various mechanisms can be used in social network interventions to foster behaviour change. Based on social cognitive theory, network members can model behaviours, which may increase self-efficacy and response efficacy (George et al., 2014; Latkin & Knowlton, 2015;

Strauss et al., 2015). Observational studies have found that social norms are clustered within social networks. These norms influence health and academic behaviours, which means social network interventions can promote social norms (Latkin et al., 2009; Sorkin et al., 2014). Network members can influence social norms by engaging in (descriptive norms) or endorsing behaviour (injunctive norms) (Latkin et al., 2009). In addition, network members may change communication norms to become more socially acceptable to talk about certain health-related topics such as safer sex or HIV testing and counselling and prevention of HIV/AIDS. Therefore, HIV/AIDS interventions aligned to this theory would seek to change social norms that oppose safer sexual behaviour, getting tested and taking their respective medications.

There is inadequate empirical research on Social Network Theory, especially in the sub-Saharan African region, let alone South Africa. From the literature reviewed, few studies have utilised the Social Network Theory, especially on network-level influences on HIV risk behaviours among all populations, including sex workers and men who have sex with men. One significant gap in the literature that may provide direction for future research on the high-risk population is understanding how various HIV risk behaviours and normative beliefs cluster their social networks and how information is passed from one network to another. In most cases, information passed among these high-risk populations is unrealistic and lacks a scientific foundation, making it difficult for the public health sector to address (Kaufman et al., 2014; Michielsen et al., 2012; Traube et al., 2011; Traube et al., 2012).

Research is needed to help understand which HIV-related norms and behaviours have the tremendous potential to be changed through social influence (Mulawa et al., 2016). In discovering inadequate research on the social networks' influence on social norms and HIV/AIDS risk behaviour, Mulawa et al. (2016) conducted a study with young men in Dar-es-Salaam, Tanzania. They examined the means, ranges, and clustering of men's HIV-related normative beliefs and behaviours. Additionally, they used social network analysis and multi-level modelling to describe the dataset and found significant clustering of normative beliefs and risk behaviours within these men's social networks (Mulawa et al., 2016). A similar study was conducted with men having sex with men in Cape Town and Port Elizabeth, South Africa, to explore social network connectivity, an understudied network attribute, examining self-reported connectivity between friends, family and sex partners (de Voux et al., 2016). This was based on the evidence regarding the influence of

social networks on sexual risk-taking among men who have sex with men (de Voux et al., 2016; Mulawa et al., 2016) and the lack of data on the social networks of men in South Africa, concerning sexual risk behaviours.

3.4 Critical Approaches to HIV/AIDS Interventions

Unlike the mainstream and biomedical approaches to preventive interventions that marginalise culture and its context, critical approaches focus on the culturally endorsed customs of conveying preventive measures in various contexts (Adam, 2010; Adam, Husbands, Murray & Maxwell, 2008). These critical theories examine social norms and conditions to identify and expose power, control, and oppression in various contexts (Adam, 2010; Macleod, 2018). The focus of the critical theory is thus to investigate discourses available for making sense of risk. This means exploring, and working on, widespread knowledge, moral reasoning and cultural presumptions that reduce (or enhance risk) and documenting narratives rooted in the cultures of at-risk communities. Adam et al. (2008) argue that this is not done simply to affirm these practices and perceptions but to engage with them, work with them, and develop grounded knowledge. Therefore, critical approaches problematise the biomedical approaches that mainly focus on the individual's responsibility in being exposed to HIV/AIDS risk. The concentration on individual behaviour change (which renders womxn responsible for their situations) has been problematised, with critical scholars worldwide calling for public health efforts that foreground the power relations within which womxn are located (Macleod & Feltham-King, 2019). This means that individuals should be located not within their rational and psychological capabilities but also within an understanding of how unjust societies and gendered relations play a major role in impacting peoples' behaviours. Inequities in sexual and reproductive health persist in South Africa despite a swathe of rights-based sexual and reproductive health legislation being implemented since the fall of Apartheid (Chitamun & Finchilescu, 2003; Kriel et al., 2019; Maxwell et al., 2015). Therefore, it is necessary to assess reproductive health within a reproductive justice perspective as a necessary starting point to strengthen public health responses to HIV/AIDS intervention strategies.

3.4.1 Reproductive Justice Framework

This research considered the reproductive justice framework while exploring womxn's understanding of public health awareness content on the prevention of HIV/AIDS in the South

African context. Ross (2017) notes that reproductive justice implies an intersectional approach that locates analyses of health and reproduction within context. This means that the framework links sexuality, health, and human rights to social justice movements by placing reproductive health matters in the broader context of the welfare and health of womxn, families and communities (Macleod, 2018; Ross, 2006; Ross, 2017). This research examined the topic of interest through a reproductive justice framework to unveil multiple understandings and interpretations on the prevention of HIV/AIDS that womxn may arrive at in response to public health awareness material. The framework acknowledges that individuals or communities may experience the effects of oppression differently but share similar characteristics of interdependence, universality, and intersectionality (Macleod, 2018; Ross, 2017; Stephens, Patil & Thomas, 2012). This means that although each individual is unique and interprets awareness messages differently, certain processes and structures coordinate to affect the reproductive well-being of womxn. Therefore, it becomes crucial to understand womxn's cognitive processes in their entirety in investigating their responses to HIV/AIDS awareness material to appreciate how systemic inequality shapes their choices and decision-making processes in ways that may hinder or promote their reproductive health. Hence, the conceptual frame of reproductive justice interrogated the ongoing gendered and social power relations embedded within the public health sector that may affect reproduction and HIV/AIDS prevention choices by womxn.

3.4.2 Background of the Reproductive Justice Framework

Reproductive Justice expands the theory of intersectionality developed by womxn of colour and the practice of self-help from the Black womxn's health movement to the reproductive rights movement, based on applying a human rights framework (Ross, 2006). The term was coined in 1994 by African-American womxn after the International Conference on Population and Development in Egypt, together with SisterSong Womxn of Colour Reproductive Justice Collective, founded in 1997 by Luz Rodriguez. They debuted the term "Reproductive Justice" at their first national conference in November 2003 at Spelman College (Ross, 2017). The development of Reproductive Justice emerged from the complex and numerous reproductive oppressions that womxn of colour encountered in their communities (Ross, 2006; Ross, 2017). Therefore, it is based on the understanding that the impacts of class, gender, race, and sexual identity oppressions "are not additive but integrative", producing this paradigm of intersectionality (Ross, 2006, p. 6). The term has since been applied in numerous areas and fields of study to

advocate for womxn's reproductive rights. It has provided a political home for a set of ideas, aspirations and visions in language that encompasses various social justice and human rights issues (Stephens et al., 2012). However, because of the popularity and viability of the term Reproductive Justice, SisterSong has been concerned that people who use the term should have a deeper understanding of the terminology because it is not merely a substitute for the terms “pro-choice,” “reproductive rights,” or even “sexual rights” (Ross, 2006). Instead, *reproductive justice* represents a paradigm shift beyond challenging gender inequality or ascribing abortion rights to a broader reproductive health agenda (Macleod, 2018). Although all these concepts are significant in broadening womxn's access to reproductive justice, they are just a portion of the reproductive justice framework.

3.4.3 Principles of the Reproductive Justice Framework

Activists intentionally employ a complex intersectional approach because the theory of reproductive justice is inherently intersectional, based on the indivisibility and universality of its human rights foundation (Ross, 2017). Reproductive justice impeccably assimilates those individual and group human rights issues central to marginalised communities. Macleod and Feltham-King (2019) highlight that the framework forefronts the intertwining of individual and social processes and, secondly, the complex interaction of power relations that cohere around various axes of discrimination. The complex interweaving of material and symbolic issues at an individual and collective level highlights the necessity of moving away from a public health approach that focuses on fostering individual responsibility (Macleod, 2018). Instead, the material and symbolic power relations that pervade young womxn's lives at both individual and collective levels are foregrounded, with those undermining good reproductive outcomes and autonomy being actively targeted for change (Stephens et al., 2012). Therefore, actions, services, and interventions that promote justice and equity around reproduction and health are sought (Ross, 2017).

Reproductive justice is rooted in the belief that systemic inequality has always shaped people's decision-making around childbearing and parenting, particularly for vulnerable womxn (Ross, 2017). Through this framework, womxn's ability to determine their reproductive destinies is directly linked with the community's conditions. For example, womxn are restricted from making individual reproductive decisions if the community at large violates their group's human rights through harmful traditional practices or insufficient quality health care provision (Stephens

et al., 2012). South Africa, for example, faces key reproductive health challenges entrenched in socio-political and cultural factors (Chitamun & Finchilescu, 2003; Kriel et al., 2019; Maxwell et al., 2015). This is because male dominance is reinforced through political and economic mechanisms that limit womxn's access to financial independence and, therefore, their ability to access and use HIV/AIDS interventions and services (Kriel et al., 2019). In the South African context, gender inequality, past political policies, and patriarchal cultural norms drive womxn's disempowerment negatively influencing health-seeking behaviours that may extend their knowledge on HIV/AIDS prevention (Freccero et al., 2011). Cultural restrictions and limitations can significantly influence a womxn's autonomy by dramatically controlling her healthcare access.

Furthermore, it has been noted that globally, womxn often prioritise their children's and partners' health care needs over themselves (Stephens et al., 2012). This has been highly determined by womxn's culturally defined gender relations, their sociocultural understanding of health care, and the role of masculinity in defining who gives the go-ahead when seeking medical attention. For example, Meyer-Weitz, Reddy, Van den Borne, Kok and Pietersen (2000) found that only when the severity of STI symptoms affected their male partner or his attitudes toward them did urban South African womxn feel motivated to seek out health services. Otherwise, womxn routinely suffer silently through STIs and other reproductive-related ill health. This suggests that womxn's access to HIV/AIDS services and their responses to public health interventions aimed at health promotion must be considered within the larger social context.

3.4.4 Reproductive Justice Framework in the South African Context

Although the reproductive justice framework emerged from a racialised American political context, it is particularly suitable for examining the complexity of womxn's experiences worldwide (Braun, 2012). Indeed, its stress on multiple oppressions readily identifies the myriad class, nationality, cultural, racial/ethnic, and other oppressions that shape womxn's diverse reproductive health experiences around the globe (Freccero et al., 2011). In addition, although the framework has been widely applied to abortion, researchers have not been limited to studying this phenomenon only. However, they have covered numerous areas, including female genital mutilation (Braun, 2012) and the reproductive health of young girls and young womxn (MacNamara, Pierson & Bloomer, 2018), among others. In her argument on whether female genital mutilation is a reproductive justice issue, Braun (2012) argues that the issue is a complex

one because womxn who choose to undergo the practice do so in "response to a cluster of cultural logics informed by gendered, culturally located constructions" concerning how womxn should be and how the practice should be valued (p. 43). This demonstrates how the reproductive justice framework can be used to interrogate various complex issues that affect womxn's reproductive health.

Despite progressive laws and policies that uphold womxn's reproductive rights in the South African context, womxn still encounter barriers to acquiring adequate reproductive care (Kriel et al., 2019). Multiple barriers have been found to hinder access to good reproductive services. South Africa is among the countries that have a high rate of gender-based violence and unsafe rates of abortion, regardless of the laws and policies that protect womxn and the liberal abortion law, respectively (Chitamun & Finchilescu, 2003; Kriel et al., 2019; Maxwell et al., 2015). Substantial power differentials in heterosexual relationships and social and structural barriers to educational, economic and political advancement disadvantage womxn (Macleod, 2018). South Africa's interpersonal and gender-based violence rates are exceedingly high, and attitudes about womxn's sexuality are generally disapproving with the dominant discourse presenting womxn to be submissive to the demands of their partners (Kriel et al., 2019; Maxwell et al., 2015). Barriers to womxn's reproductive justice in South Africa consist of complex and interweaving factors that include: gender inequality, poor socio-economic status and poor healthcare services (Macleod, 2018; MacNamara et al., 2018). These factors undoubtedly impact womxn's ability to access services and prioritise their well-being. Hence the reproductive justice framework will be adopted to unmask the social inequalities surrounding the access to different public health services for womxn.

3.5 Conclusion

The increasing need to focus on the multi-dimensional factors leading to the barriers against reproductive justice led to adopting the reproductive justice framework to shape the research study. Exploration of the reproductive justice framework becomes evident and concrete because obstacles to womxn's reproductive justice emanate from an intersectional position. This entails that the central focus is drifting away from the individual-level perspective to a more collective and complex, diversified angle that encompasses numerous role-players in the reproductive justice of womxn. This chapter focused on the numerous theories shaping the study

of HIV/AIDS from a broader perspective and narrowed it down to the reproductive justice framework that guided this study. The framework is vital in providing lenses to assess womxn's responses to and comprehension of public health HIV intervention awareness materials. In the following chapter, I will examine the methodology utilised in this study for data collection and analysis.

Chapter 4: Methodology

4.1 Introduction

This chapter describes the different methods utilised to collect and analyse data. The chapter will commence by explaining the research strategy in detail. In the next section, I will present the cognitive interviewing methodology as a data collection tool and explain its components and the rationale behind choosing the methodology in a logical, intuitive fashion. After that, the chapter will describe the study population, the context in which the study was conducted, and the sampling method(s) utilised, clearly explaining the inclusion and exclusion criteria for the samples. In the last stages of this chapter, I will explain the ethical considerations implemented throughout the study, the measures undertaken to ensure rigour in analysis, and the study's truthfulness. Finally, the chapter will discuss the question of reflexivity and researcher position and how this may have contributed to analysing the collected material in particular ways.

4.2 Research Aim and Objectives

There is inadequate literature on whether the intended population's knowledge and information about HIV/AIDS are correctly disseminated and received appropriately. The overarching drive of this study was to reconnoitre womxn's understanding of public health awareness content on the prevention of HIV/AIDS in the South African context. The research question was thus: What are the themes that emerge from womxn's cognitive understanding of public awareness messages on the prevention of HIV/AIDS that might impact their reproductive health? In order to unpack womxn's interpretation of universal HIV/AIDS awareness messages in their heterogeneous contexts, which might provide obstacles to womxn's reproductive health and well-being, a set of objectives was formulated. The principal objective of this study was to assess how womxn audiences understand public health awareness/intervention messages. As indicated before, South Africa is a diverse nation with multiple ethnicities. Implementing homogenous and uniform HIV/AIDS awareness messages might pose challenges to upholding womxn's reproductive rights (Harrison et al., 2015). Through the utilisation of the social constructionist paradigm that locates meaning and reality in social processes (Silverman, 2016), it can be understood that another objective was to analyse how womxn's understandings of HIV/AIDS awareness materials reflect the realities of their social and cultural contexts. Using the reproductive justice framework, the third objective of this study was to assess how the HIV/AIDS awareness materials might play a contributory role/s to potential barriers to womxn's reproductive justice.

The final objective was to examine the usefulness of cognitive interviewing in assessing womxn's understanding of public awareness messages to curb the spread of HIV/AIDS in Makhanda.

4.3 Research Strategy

According to Bryman (2012), a research strategy simply means a broad-spectrum orientation to the conduct of social research. He further points out that two major research strategies are qualitative and quantitative research (Bryman, 2012; Bryman, 2016). This study adopted a qualitative research strategy to understand the participants' multifaceted interpretations of HIV/AIDS awareness material and how these understandings impact womxn's accounts of their reproductive health. Qualitative information was collected via the cognitive interviewing method, which was interpreted using the thematic network analysis (Attride-Stirling, 2001). A more detailed discussion of data collection and interpretation strategies is included in the following discussion.

4.3.1 Qualitative Research

Qualitative research is centred on the “quality or nature of human experiences and what these phenomena mean to individuals and groups” (Silverman, 2016, p.39). Qualitative research thus tends to start with 'what', 'how' and 'why' type questions rather than 'how much' or 'how many' questions. It is also concerned with examining these questions in the context of everyday life and each participant's meanings and explanations for their experiences (Bryman, 2016). Qualitative research can, as a result, be broadly denoted as naturalistic and interpretative. It seeks to understand and explain individual behaviours and beliefs within the context in which they occur (Creswell & Poth, 2016). When considering utilising a qualitative research strategy, it is essential to distinguish between a “general methodological commitment to qualitative research and the commitment to specific theoretical or disciplinary frameworks” (Creswell & Poth, 2016, p.56). A commitment to the latter frames a research question in a particular way. It uses different data collection, analysis, and interpretation approaches, depending upon (and sometimes determined by) the theoretical orientation of the researcher to the topic under investigation. Various attempts have been made to categorise these approaches and detect key themes or assumptions that tie them. Creswell and Poth (2016) identify the crucial features of qualitative research as a course of understanding centred on distinct methodological conducts of investigation that explore the various human or social problems.

Furthermore, qualitative research bodies an intricate, holistic picture, analyses words, reports detailed informants' views and carries the study in a natural setting (Bryman, 2012; Cresswell & Poth, 2016). This explanation can be further supplemented by acknowledging the contextual nature of knowledge, understanding and action. These aspects are determined by culture and, concerning research design, have elasticity or ingenuousness that permits novel or unexpected issues to be discovered rather than utilising a fixed or standardised research protocol (Bryman, 2016). This study adopted qualitative research to make sense of the multiple meanings used by societal members to elucidate how they openly experience everyday life socially constructed realities. In addition, the structure of questions in qualitative research has been found to “influence the richness of data generated and so requires attention” (p.69); empirical research demonstrate that open questions, which are asked in the qualitative interview, tend to yield richer data (O'Dwyer & Bernauer, 2013). Thus, the richness and in-depth information gathered through qualitative research prompted this study to adopt the approach.

4.3.2 Principles of Qualitative Research

The principles of the qualitative approach could be summarised into three views: inductivism, constructionism, and interpretivism, with the potential of having more than these (Draper, 2004). The inductive approach aims to address the relationship between research and theory. According to Bryman (2016), through induction, the new set of knowledge, meanings or theories emerges. This entails that the approach does not have need of testing a certain theory or set of knowledge; instead, the aim is to produce new ones. Additionally, qualitative research adopts an epistemological position often described as interpretivist (Bryman, 2016; Creswell & Poth, 2016; Silverman, 2016). This means that meaning that unlike the quantitative methodology that adopts a natural scientific model, the emphasis is to examine how participants interpret their world in order for researchers to understand the world.

This study utilised constructionism to unravel the various socially constructed meanings contingent on social context. Constructionism recognises that “meanings of things are not objectively discovered; instead, they are subjectively created and imposed by people in given contexts” (Silverman, 2016, p.76). In other words, constructs change as the context changes. However, it has been noted that the health sector utilises 'universal awareness messages' on HIV/AIDS in diverse communities with different languages, contexts and settings (Peltzer et al.,

2012). In this case, social constructionism is justified for this study. It aimed to probe the universally accepted explanations and HIV/AIDS arguments that have become widely accepted. In other words, this study acknowledges that the research participants are humans incapable of absolute objectivity since their reality is constructed by personal and subjective experiences within particular situations.

Moreover, according to Bryman (2016, p.36), *constructionism* is an “ontological position that asserts that social actors are continually accomplishing social phenomena and their meanings”. This means that social phenomena and categories are never stagnant in the same position since they also change from time-to-time and prone to revisions. In recent years, the term has also included the view that investigators' explanations and understanding of the social world are also constructions (Galbin, 2015; Gale, 2010). Specifically, the researcher always presents a particular version of social reality rather than one that can be viewed as conclusive and definitive. In other words, knowledge, understanding and interpretation are viewed as contingent and contextually located (Andrews, 2012; Galbin, 2015). This implies that knowledge, understanding and interpretation are ever-changing, subject to the context and meaning of personal and social experiences. Based on the UNAIDS 2025 targets on HIV prevent, the usage of the social constructionist paradigm is justified because an individual does not live in solitude. One of UNAIDS target is the practical shift and change in focus from biomedical and behavioural interventions aimed at individuals to comprehensive, strategic programming ‘combination prevention’ in which social/structural approaches become a core element (UNAIDS, 2022). As mentioned in the previous chapters, social/structural approaches aim to modify social conditions and arrangements by addressing the key drivers of HIV vulnerability that affect the ability of individuals to protect themselves and others from acquiring or transmitting HIV infection. When implemented, they can help foster individual agency to allow people to act in their own and their community's best interests (including taking up targeted behavioural and biomedical technologies), create and support AIDS-competent communities (Kaufman et al., 2014), and build health-enabling environments, all necessary for mitigating, if not eliminating, HIV epidemics. Regardless of individuals having unique thought processes and interpretations, in most instances these processes emanate from and controlled by their socio-structural factors. Therefore social constructionist paradigm was adopted throughout the research process because the researcher understands that knowledge and interpretation about social reality (in this case, HIV/AIDS) is

embedded in a societal context and cannot be separated from social norms, beliefs and practices (Bryman. 2016).

Furthermore, the contributions of social constructionism are organised around the concepts of 'subjectivity' and 'reflexivity' (Foucault, 2005; Galbin, 2015). Both concepts refer to the idea that reality is constructed inter-subjectively between people through meanings and understandings developed in particular contexts. This means that no real external/entities can be accurately mapped or apprehended; thus, ideas, facts, and assumptions are not fixed but are socially constructed (Foucault, 2005). Through this assumption, the paradigm was adopted for this study, aiming to explore how the numerous themes and topics around HIV/AIDS are socially constructed and understood by womxn. From a social constructionist perspective, the task of this research is principally to pursue the contested and multiple subjectivities by which womxn, in their individual capacities view the HIV/AIDS awareness material as a foundation to understand the reproductive justice/rights of womxn – hence the attentiveness towards the way in which power is implemented and how social problems come to the fore. Therefore, this study aimed to assess the numerous interpretations that womxn employ when responding to HIV/AIDS awareness messages with the understanding that participants' location shapes these interpretations within their particular social settings.

4.4 Cognitive Interviewing as a Methodological Tool for Data Collection

This study employed a cognitive interviewing methodology to collect data from the participants. Cognitive interviewing is a qualitative method that "examines the question-response process, specifically the processes and considerations used by respondents as they form answers to survey questions" (Miller, Chepp, Willson & Padilla, 2014, p. 2). Cognitive interviewing is a "typically semi-structured, in-depth interview that focuses on respondents' thought processes associated with answering survey questions" (Neuert & Lenzner, p. 502). Based on these definitions, the central aim of cognitive interviewing is to acquire information regarding how research participants perceive, grasp, understand and interpret knowledge, and how, in other instances, are able to give certain answers and judgements. In light of Koskey, Karabenick, Woolley, Bonney and Dever's (2010) usage of cognitive interviewing, this is an effective tool in modifying existing surveys and awareness campaigns content for use with people from diverse backgrounds.

4.4.1 *Background and History of Cognitive Interviewing*

The method was traditionally used as a pretest tool to identify question-response problems before fielding the entire survey. Miller et al. (2014) highlight that cognitive interviewing arises from the Cognitive Aspects of Survey Methodology (CASM) movement. The movement brought attention to the issue of measurement error in the 1980s. It established that individual processes, especially participants' thought processes, should be understood to evaluate the validity and prospective sources of error. The underlying assumption, as indicated by Willis (2004), is that "the respondent's cognitive processes drive the survey response, and an understanding of cognition is central to designing questions and to understanding and reducing sources of response error" (p. 23). Therefore, with the advent of CASM, the concentration on question design drifted from the question writer to the cognitive processes of the respondents (Miller et al., 2014).

4.4.2 *The Fundamental Notion of Conducting Cognitive Interviewing*

As indicated by the definition of cognitive interviewing, participants in a cognitive interview are asked to describe how and why they answered the question as they did; this is in line with the traditional purpose of the cognitive interview as a pretest method. Scholars have highlighted that through this interviewing process, numerous kinds of question-response errors and problems that would not have typically been identified in a traditional survey interview, for example, recall accuracy and interpretive errors (Haeger, Lambert, Kinzie & Gieser, 2012; Miller et al., 2014; Neuert & Lenzner, 2016) can be uncovered.

There are consistent findings in many studies on evaluating the quality of various responses and determining if the interview questions produced the information the researcher had in mind, despite the variability of time, contexts, and circumstances (Collins, 2014). The majority of studies showing how to pretest questionnaires have shown that cognitive interviews are helpful in "reducing sample mistakes, raising questionnaire response rates, detecting flaws in the structure and wording of the interview questions, and analyzing the relevance of questions to the populations under investigation" (Miller et al., 2014; Neuert & Lenzner, 2016; Sopromadza & Moorosi, 2017). Cognitive interviews, according to Taylor, Thurman, and Nogela (2016), even help researchers understand how to construe survey questions. Pretesting techniques and approaches include "conventional piloting, expert reviews, split ballot experiments, and desk appraisals," according to Blake (2014, p. 45). Sopromadze and Moorosi (2017) contend that while these strategies provide

valuable feedback for improving questionnaires, they provide incomplete insights into participants' cognitive processing of specific survey topics. Cognitive interviewing is a more appropriate technique to pretest interview questions because these alternative pretesting approaches cannot comprehend participants' thought processes. Because cognitive interviews employ different methods for pretesting interview questions, Gray, Blake, and Campanelli (2014) contend that they should never be recommended as a substitute for piloting as they also use different procedures in pretesting interview questions. A significant finding from various studies is that by analyzing cognitive processes, researchers can create better ways of constructing, structuring, and questioning survey questions (Blake, 2014; DeMaio & Landreth, 2004; Gray et al., 2014).

There are arguments that responses to survey questions involve more than just the individual mind of the participant, especially as they incorporate social and cultural phenomena in a social context (Gray et al., 2014; Haeger et al., 2012). For this reason, one of this study's objectives was to analyse how womxn's understandings of HIV/AIDS awareness materials reflect the realities of their social and cultural contexts. This aimed to explore how socio-cultural factors influence the different understandings and interpretations of the awareness messages from womxn's perspectives. Practitioners of cognitive interviewing and, more broadly, anyone interested in the subtleties of questionnaire design are more focused on how survey questions are developed by designers, answered by respondents, and consumed by data users (Collins, 2014). Therefore, cognitive interviewing practitioners expand the fundamental notion of why researchers conduct cognitive interviews. Rather than viewing cognitive interviewing as an attempt to "patch up" deficiencies through the identification and remediation of flawed survey questions, researchers should conceptualise cognitive interviewing as a chance to attain a more comprehensive view of the items or subject under study (Haeger et al., 2012; Neurt & Lenzner, 2016; Willis, 2004). This viewpoint allows researchers to adjust/modify the underlying research question so that instead of questioning "What is wrong with the survey question?" researchers can conversely ask, "What is right with it?" (Koskey et al., 2010). Researchers can refine that question directly to the point by asking, "How does the question function, and what does this imply about the contexts in which it can profitably be employed?" This extensive standpoint is thus of great interest across many applications involving self-report data collection instruments.

4.4.3 The Applicability, Usage and Justification of Cognitive Interviewing in the Current Study

This interviewing technique's utility could be extended to other forms of inquiry focused on audience reception and comprehension of information - such as studies on the reception of public health awareness materials. It should be noted that this study drew on cognitive interviewing methods, but was an adaptation of this interviewing method beyond the original purposes. This study employed cognitive interviewing to determine how study participants interpret public awareness messages regarding HIV/AIDS and apply those messages to their own experiences, lives, and perceptions. Since cognitive interview researchers examine the experiences or context of the participant's responses, the method is a construct validity study (Miller et al., 2014). The cognitive interviewing methodology "identifies the phenomena or the sets of phenomena that a variable would measure once the survey data is collected" (Miller et al., 2014, p. 6). However, for this study, cognitive interviewing was implemented to unveil whether the recipients received various messages for the HIV/AIDS awareness campaigns as intended by the health sector; thus, it was utilised to assess audience reception. In addition, the cognitive interviewing method is justified for usage in this study to examine the impact of the social location, or context, of the participant on their comprehension of public health messaging, since Willis (2004) articulate that the method explores how different groups of participants process and interpret awareness materials differently. Although only womxn were interviewed for this study, cognitive interviewing was used to assess how womxn in heterogeneous socio-economic environments interpret the same awareness messages. Whilst Willis (2005) establishes the need for cognitive interviewing to address response error issues, especially in self-report surveys; this study employed cognitive interviewing to analyse some major and minor issues in the wording, layout and structuring of the HIV/AIDS awareness materials that might influence the recipients understanding and interpretation of the messages. Just as most cognitive interviewing researchers have argued that participants tend to either under-report or over-report on interview questions (Miller, 2014; Willis, 2005), the methodology was adopted to evaluate how well the participants respond to the interview questions formulated from the awareness materials at hand. The argument that cognitive interview researchers have pinpointed that responding to interview questions takes more than the participant's mind (Neuert & Lenzner, 2016; Sopromadza & Moorosi, 2017; Taylor et al., 2016) is similar to how the methodology was implemented throughout the research process. For this

audience reception study, the focus was oriented toward collecting and analysing patterns of awareness interpretation that emphasise the fluidity of meaning within the context of an interview guide, based on the participant's socio-cultural context (Willis, 2004; Boeije & Willis, 2013; Neuert & Lenzner, 2016).

Similarly, researchers from a constructionist stance understand that thought patterns and meanings do not occur within the ability and boundaries of a participant's mind (Andrews, 2012; Galbin, 2015). However, they are linked to the social world and the contexts, values, cultural meaning systems and social practices that participants are part of or located within (Miller et al., 2014). Participants may interpret questions in different ways related to their social location across the dimensions of gender, education, socio-economic status, cultural group, and age, no matter the similarity or uniformity in questions or information. Therefore, the expanded use of cognitive interviewing for this study, focusing on the reception of public awareness messages as opposed to its traditional usage in pretesting survey questions, was expanded based on the method's assumptions and advantages, not only being restricted to the pretesting of survey items.

4.4.4 Sampling in Cognitive Interviewing

Several authors have agreed that when beginning a cognitive interviewing study, concrete decisions must be made about respondents, precisely, who and how many people should be interviewed (Haeger et al., 2012; Willis, 2004). Miller et al. (2014) highlight that sample characteristics and sizes for cognitive interviewing methodology depend on the questions or the content being analysed and the study's objectives. The typical cognitive interviewing practice comprises small samples that range from 5 to 15 participants (Willis, 2005). However, other studies have employed large samples with over a hundred participants (Davis et al., 2001). Some of the reasons that (Willis, 2005) indicate for employing a small sample are: a cognitive interview's purpose is not a statistical estimation and cognitive interviewing is qualitative, hence the use of a small sample. Miller et al. (2014) highlight that the main objective is to "collect in-depth, thematic understandings of patterns and processes utilised by respondents to answer questions" (p. 16). In addition, cognitive interviewing employs an inductive, qualitative methodology and thus draws upon a relatively small and non-probability sample (Willis, 2004). Most of the cognitive interview studies that have been empirically conducted have employed purposive sampling, which is theoretically driven and intentionally selected for a specific goal (Miller et al., 2014; Willis, 2004).

For example, suppose the study's goal is to evaluate questions on people living with HIV/AIDS; the sample should include individuals directly impacted through purposive sampling, unlike probability sampling, which might include a not directly involved sample.

4.4.5 Study Setting, Population and Sampling Method

The following section will explain and justify the study's context (including the site). Both the general study population and the specific population will be described. In addition, the section will demonstrate and explain the procedures, including the documents put in place to access the population. Lastly, information and justification on the sampling approach, procedures and criteria will be clarified.

4.4.5.1 Research Setting. During the initial phase of this study, the researcher purposively selected five local healthcare facilities in Makhanda: the Grahamstown Municipality (Anglo-African) Clinic, the Joza Clinic, and the Settlers Day Hospital, Settlers Public Hospital and the Raglan Road Clinic. However, the researcher worked with only four of these healthcare institutions due to the bureaucracy encountered at Settlers Public Hospital while seeking permission to conduct the study. The identified clinics offer similar health services and probably to a population with similar low socio-economic status as they are all public health sites. A brief explanation of the recruitment sites:

i. Grahamstown Municipality Clinic

The clinic is situated in the central town area of Makhanda, meaning it is part of Grahamstown West. Anglo-African, or 'town' clinic as it is popularly called, prevalently serves patients and clients from the close radius and surrounding areas, including Rhodes University students. One unverified source disclosed that patients from the 'location' are sometimes turned away if they seek medical assistance during busy times so that they can go to their nearest local clinics. The clinic offers a wide range of health services, including treating minor ailments such as flu, long-term treatment of chronic illnesses, such as hypertension and diabetes and post-operative care. Regarding HIV/AIDS, the clinic offers voluntary HIV testing, including pre-and post-test counselling, family planning advice/pregnancy tests and TB and STI management.

ii. Joza Clinic

Joza clinic is located in Grahamstown East, Joza Township, which is popularly referred to be part of the broader area known as Rhini. The clinic staff approached during the study disclosed that due to the location of the clinic and the social lifestyle of the surrounding residents, they usually receive numerous rape cases and other assault cases, especially after weekends and grant/salary days. They hinted that they used to host some group educational sessions on the prevention and treatment of HIV/AIDS for patients that visit the clinic. However, due to people's disinterest and staff shortage, the sessions were discontinued.

iii. Settlers Day Hospital

The hospital is located a few metres from town and offers a wide range of services compared to the three other research sites. It partnered with the Raphael Centre, a non-profit HIV/AIDS organisation in Makhanda. Some of the programmes that they foster together include Volunteer Counselling and Testing (VCT); Prevention of Mother to Child Transmission (PMTCT); Emergency Food Support; Education and Training; Orphans and Vulnerable Children (OVC); and Advocacy. They usually do community-based projects and programmes around the Makhanda communities in education and training to reach out to everyone on HIV/AIDS services.

iv. Raglan Road Clinic.

This is one of the satellites and community health clinics in Makhanda that offers health services to the people in the Fingo and Joza East areas. Raglan Road clinic treats common health needs, known as 'primary health care. Like any other satellite clinic, it refers patients to hospitals when they need further treatment. Specially trained primary health care nurses run clinics.

4.4.5.1.1 Site selection process and justifications. The researcher first sought permission to advertise the research in the waiting areas and notice boards so potential participants would know about the study. The rationale behind selecting four different healthcare facilities was to have a wide range of interpretations from womxn from different socio-economic and cultural contexts, accessing a mixture of the various healthcare facilities in Makhanda with differing levels of resourcing and equipment. Therefore, the purposive sampling for context was executed for homogeneity (health institutions from Makhanda) and heterogeneity (four clinics serving a socio-economically diverse set of service users with differential levels of health care provision). This study was vital to examine the cognitive understandings of various awareness materials from

contrasting healthcare institutions, with two clinics from the 'locations' and two from the 'town' areas. Therefore, healthcare institutions were sampled because they serve the diverse and high-risk population and offer STI screening and treatment, TB services, reproductive health, and HIV counselling and testing. The information is usually presented in print through flyers and waiting area pamphlets.

However, COVID-19 impacted the primary health care sites and the recruitment process. The pandemic changed operating procedures at these sites significantly for service user experience. Due to the social distancing regulations, few clients were permitted to visit the clinic, except for emergency cases, which created difficulties for participant recruitment and data collection. Moreover, public health messages regarding COVID safety were given immediate priority over HIV/AIDS messages (possibly reducing the impact/efficacy of HIV messaging). In most cases, posters on the entrances, waiting areas and even restrooms were mainly around the precautionary measures to curb the spread of COVID-19. Therefore, although the turnout of willing and available participants was higher than anticipated, one of the disadvantages of posters and flyers as a method of recruitment is that it is difficult to evaluate success of this method (e.g., how do you capture number of people that have read a poster).

4.4.5.2 Target Population and Sampling Procedures. The study's context and the research's theoretical orientation directed the route for selecting this study's target and population. The target population refers to the researcher's entire population of interest, whereas the study population is the subdivision of the target population available for study (Bryman, 2012). HIV/AIDS is a major health concern in the South African context, and the rollout of treatment and prevention initiatives through primary health care facilities like antenatal clinics implies that womxn accessing these services at these facilities are part of the main targets of preventive health care messaging (UNAIDS, 2020). In addition, the reproductive justice framework adopted as a theoretical orientation for this study focused on womxn who are targets of interventions aimed at increasing sexual and reproductive health and reducing gender disparities. The framework also focuses on womxn who may experience particular barriers to accessing sexual and reproductive health care. Therefore, the target population for the study was South African womxn, whilst the study population was womxn aged between 18 and 30 years, staying in Makhanda and having access to the various healthcare sites. The study did not exclude any womxn based on their socio-economic background, education, culture and ethnicity because the core of the study was to assess the various understandings that womxn express about awareness materials on HIV/AIDS.

For this study, purposeful sampling, a type of non-probability sampling, was used. Purposive sampling, according to Bryman (2016), does not seek to sample study participants at random. Purposive sampling is thus a method of strategically selecting participants/cases so that those sampled are relevant to the research questions (Bryman, 2016). For this study, I purposefully sampled to ensure a wide range of sample participants and sites differed in terms of key characteristics relevant to the research question. Twenty-eight (28) womxn aged between 18 and 30 years were purposively sampled for this study. The 18-30 years sample is the age at which HIV/AIDS infection rates are significantly high, and womxn are disproportionately affected by HIV in South Africa (UNAIDS, 2019). The sample was sufficiently small to obtain and deliver finely nuanced data pertinent to the phenomenon under study. The sample size for this study depended on a number of philosophical, methodological, and practical considerations. For example, a social constructionist stance on qualitative cognitive interviewing was adopted for this study because it focuses on the construction of meaning as elemental to the question-response process (Miller et al., 2014). Although cognitive interviewing as a data collection technique still very much assumes a focus on individual cognition, while a social constructionist orientation would see individual

thinking patterns (and their relationship to behaviours) as socially mediated by context, culture, and social practices (i.e. something more than just individual cognitions), the study reconciled the cognitive interviewing method for data collection with a social constructionist orientation. Therefore, it was essential to have a small sample size that was going to aid in emphasising the constructionist value and the fluidity of meaning within the context of an interview guide based on the participant's socio-cultural context. This indicates that the sample size was sufficient to allow the development of a "new and richly textured knowledge of the phenomenon under research, but not too large to prohibit the "depth, case-oriented evaluation" of qualitative data (Bryman, 2016, p.43). Additionally, the sample was quite homogeneous (womxn). Unlike studies with broader scopes and more varied samples, which would probably require a bigger size to reach saturation, this research had specific goals and objectives.

4.4.5.3 Recruitment and Contracting of Participants. Potential participants were recruited from community primary health care clinics in the research site (Makhanda, Eastern Cape Province). I commenced the data collection process by meeting with the gatekeepers at each clinic, in most cases, they were clinic managers, supervisors or person in charge (PIC). All the details about the recruitment process were highlighted to the gatekeepers concerned in the study (*see Ethical Considerations*), including seeking permission to recruit; advertising the research in waiting areas of the clinics; placing recruitment posters on the notice boards; and meeting with interested parties to explain the research. At each clinic, I placed the recruitment flyers in most of the designated areas, for example, gate, front doors, notice boards, waiting areas and consultation rooms. This was implemented to reach a potential large number of womxn. In some cases, I distributed the recruitment flyers to the individuals present in the waiting areas and clearly gave them detailed information concerning the study². If they were showed any interest, and available for interviews, study information was well communicated and interviews would be held on the same day. In cases where potential participants contacted the researcher through the contact information on the flyer, interviews were scheduled according to the availability of both the researcher and the potential participant. Given the very public nature of some HIV/AIDS awareness campaigns and the context of participant recruitment (i.e. public primary health care facilities), participants were assumed to have some exposure to public health awareness campaigns

² Under no circumstance were the potential participants coerced or bribed to engage in the recruitment discussion. They were given time to consider the study as long as they accorded with the selection criteria.

about HIV/AIDS. It was crucial to find and choose cases that were information-rich during the recruitment and sampling phase by finding and choosing potential participants who had a wealth of experience with or understanding of the phenomenon of interest (Creswell & Poth, 2016). Along with education and experience, I also stressed the significance of being open to participating and willing to do so, as well as having the ability to express experiences and opinions in a reflective, expressive, and lucid way. The goal was to identify fundamental understanding and interpretation of public awareness content among a population that interfaces with the health system and has come across such awareness material.

The last step towards the participants recruiting and contracting process involved taking formal consent to participate in the study. Participants were made aware of the requirements of the research process and the details of their participation through the consent forms, availed in English (see Appendix 6) and isiXhosa (see Appendix 7). They were also informed about how their identities would be protected, how information collected would be stored, who would have access to it, and what their responses to the interview questions would be used for. Given the very public nature of some HIV/AIDS awareness campaigns and the context of participant recruitment (i.e. public primary health care facilities), participants were assumed to have some exposure to public health awareness campaigns about HIV/AIDS. It was crucial to find and choose cases that were information-rich during the recruitment and sampling phase by finding and choosing potential participants who had a wealth of experience with or understanding of the phenomenon of interest (Creswell & Poth, 2016). Along with education and experience, I also stressed the significance of being open to participating and willing to do so, as well as having the ability to express experiences and opinions in a reflective, expressive, and lucid way. The goal was to identify fundamental understanding and interpretation of public awareness content among a population that interfaces with the health system and has come across such awareness material.

4.4.5.4 Selection of Stimulus Materials. This study dealt with two sets of constructions which are the construction of HIV/AIDS entailed in the awareness materials; and the constructions of the participants regarding the awareness materials. Although the former partly influenced the selection of stimulus materials, the focus of the study was to examine the latter (even though they may be related). Due to the nature of the study, that is assessing individuals' cognitions which are socially constructed, one of the goals was to obtain materials that were rich in text to gain multiple

interpretations. The stimulus materials were therefore selected based on purpose and convenience, with the latter playing a major role. The researcher selected the stimulus materials by convenience and used HIV awareness materials that were already on display in the participant recruitment sites. This was because the data collection was centred on participant responses to awareness materials available and used *in situ*.

4.4.5.5 Particulars of Participants. Table 1 attached below details the participants' characteristics, based on the selection criteria of this study. The participants detailed demographics utilised for this study had influence on the data collected.

NO	PSEUDONYM	AGE	COMPLETED EDUCATIONAL LEVEL	PARTNERSHIP STATUS	EMPLOYMENT STATUS	HEALTHCARE ACCESS
1	Nomathemba	30	College	Married	Employed	Anglo
2	Lisa	19	Grade 12	Romantic relationship	Unemployed	Joza
3	Grace	29	University	Cohabiting	Employed	Settlers
4	Zoleka	23	Grade 11	Romantic relationship	Unemployed	Raglan
5	Thandeka	26	Matric	Partner/cohabiting	Unemployed	Joza
6	Aneliswa	28	Matric	Divorced	Self-employed	Joza
7	Ntombifuthi	30	College	Partner/cohabiting	Unemployed	Anglo
8	Nokubonga	27	University	Partner/cohabiting	Employed	Joza
9	Aphiwe	20	Matric	Boyfriend/non-cohabiting	Unemployed	Joza
10	Pamela	26	College	Cohabiting	Unemployed	Joza
11	Thembisiwe	29	University	Single	Employed	Joza
12	Yonelisa	30	Grade 8	Partner/cohabiting	Employed	Settlers
13	Laura (Les)	21	Grade 6	Single	Unemployed	Settlers
14	Simphiwe	22	College	Boyfriend/non-cohabiting	Self employed	Raglan
15	Babalwa	24	Grade 6	Divorced	Unemployed	Settlers
16	Michelle	20	Grade 5	Single	Unemployed	Joza
17	Natasha	29	College	Married	Employed	Raglan
18	Lindani	27	Grade 11	Partner/cohabiting	Employed	Joza
19	Siphokazi	28	University	Divorced	Self employed	Anglo
20	Terry Lyn (Les)	25	University	Married	Employed	Anglo
21	Xolile	23	Matric	Married	Unemployed	Joza
22	Katlego	24	College	Single	Self-employed	Anglo
23	Sandra	28	University	Single	Employed	Settlers
24	Nomfundo	29	Matric	Married	Employed	Joza
25	Siphosethu	24	Grade 10	Divorced	Self-employed	Anglo
28	Cara	29	Vocational college	Married	Employed	Joza

All the 28 womxn participants for the study resided in Makhanda and were aged between 18 to 30 years. The justifications for choosing this age group and gender have been thoroughly explained in the previous chapters. As shown from the above table, majority of the participants were in their late 20's with the rest being in the mid-twenties. All the participants had had direct contact or access to the local clinics in Makhanda. Of the 28 interviewed participants, 12 were from Joza clinic, 6 from Anglo-African clinic, 5 from Settlers Day Hospital and 3 from Raglan clinic. Perhaps, participants were higher from Joza clinics because it receives a higher number of patients from its surrounding societies. In addition, there is ample space to put flyers in waiting areas and consultation rooms. Potential participants also referred other potential participants through word of mouth or directing them to the recruitment flyers. Few numbers of participants were single compared to the number of those who were in relationships, living with their partners or married. Although most of the womxn identified themselves as employed, a couple of them were self-employed and the rest were unemployed. In terms of levels of education, a couple of womxn had completed high school and tertiary education with a few only having Grade 5 and Grade 6.

4.4.6 Data Collection Techniques of Cognitive Interviewing

There are several approaches to conduct cognitive interviews. Conducting in-depth interviews with a small, purposeful selection of the participants to uncover their thought processes is a prevalent characteristic (Willis, 2004). The interviewing process involves participants providing textual information revealing how they answered the questions at hand. 'Think-aloud' and 'verbal probing' are two primary operational means and techniques for collecting information and evaluating participants' cognitive processes (Willis, 2004; Neurt & Lenzner, 2016). 'Think-aloud' is a technique whereby participants are tasked with voicing whatever they think during the interview when presented with a question (Baena & Padilla, 2014). This can happen simultaneously, where the researcher reads or asks the subject a question, then monitors and records while the subject "thinks aloud" as they come up with an answer. As an alternative, retrospective think-aloud can be used, in which the subject is asked to express his or her opinions about the questions at the completion of the survey (Neurt & Lenzner, 2016). Interviewers also administer 'verbal probe' questions concurrently (with each question/item) or retrospectively (after participants have answered all questions/items) when interviewing participants to trace problems arising from the interview questions. After the subject has responded, more, targeted questions are used to elicit more information, which is known as concurrent verbal probing (Willis,

2004). To stimulate participants' interest and keep them actively participating in the interviews, these probes can be planned or unscripted. In contrast to concurrent probing, retrospective probing asks individuals to express their opinions about questions that are asked at the end of interviews, which allows for more spontaneous responses (Boeije & Willis, 2013).

Most of the literature reviewed indicates that cognitive interviewers utilise the think-aloud and verbal probing cognitive techniques (Boeije & Willis, 2013; Martin et al., 2017; Miller & Baena, 2014). Most cognitive interviewing researchers combine think-aloud and verbal probing to investigate specific aspects of the question-answering process (Miller et al., 2014; Neurt & Lenzner, 2016; Sopromadze & Moorosi, 2017). By examining understanding, retention, and decisions, verbal probes and think-aloud approaches are used to examine participants' cognitive processes when responding to questions in order to spot issues with questions (Adair et al., 2011; Liani, Martire & Pitrone, 2015; Martin et al., 2017). Throughout the rounds of cognitive interviewing, researchers make sure to improve the verbal probe prompts and think-aloud approaches to make sure the participants comprehend the questions. Martin et al. (2017) conducted two rounds of cognitive interviews with 24 pregnant women in Ethiopia and Kenya as part of their study to determine the propriety, suitability, and ability to comprehend overall and micronutrient supplement adherence-specific social support scales using cognitive interviewing. Traditional cognitive questions, such as those involving paraphrase, thinking aloud, and hypothetical situations, were difficult for the women in Ethiopia and Kenya to answer during the initial interviews. Martin et al. (2017) had to delete all the probes in the first round, and in the second round, they revised all the probes and made the think-aloud prompts more specific. Likewise, Liani et al. (2015) utilised both think-aloud and verbal probing to assess the cognitive interview's potential and limits in pretesting attitude questions. They found out that there is a need for researchers also to apply the non-standardised think-aloud and verbal probing prompts to allow an expansive and open-ended dialogue with the interviewees. These results suggest that verbal and think-aloud probing strategies can be rephrased to allow participants to more fully express their thoughts. Additionally, it should be highlighted that researchers favour using informal questions to reduce participant-researcher tension.

Moreover, cognitive interviewers may use retrospective probing, in which they urge interviewees to express their opinions and perceptions about the questions they were asked during

the the interview and evaluate their responses. These studies argue that retrospective probing is preferable than concurrent probing because it can be used with other interview methods like eye-tracking. Complementing cognitive interviewing with eye tracking in questionnaire pretesting is an innovative and promising method that may offer extra insights into survey respondents' thought processes (Neurt & Lenzner, 2016; Sopromadze & Moorosi, 2017). According to Neurt and Lenzner (2016) and Sopromadze and Moorosi (2017), retrospective probing allows participants to freely respond to the questions, which maximises answering questions accurately and effectively. Conversely, there are occasions where researchers use concurrent probing during the first round of cognitive interviews and later switch to retrospective probing during the second round of cognitive interviews (Haeger et al., 2012; Willis, 2004). Literature also points out that whereas over-probing often makes participants uncomfortable answering various questions, retrospective probes minimise over-probing (Martin et al., 2017). To assess the clarity of questions and identify whether they have been understood as the researcher intended, participants engage in verbal probing and think-aloud processes.

4.4.7 Cognitive Interview Process Used in the Current Study

First, participants were tasked to "think aloud" while responding to the interview questions (i.e., talking about how they interpreted the awareness content and concluded). This is mainly because, as mentioned above, context is not only identified as the context of the displayed awareness content/material; it involves, to a great extent, the socio-cultural context of the participant's life circumstances (Miller et al., 2014). Researchers who use cognitive interviewing techniques know that they cannot know in an absolute sense what transpires in participants' minds as they answer interview questions (Collins, 2014; Miller & Baena, 2014; Willis, 2004). Instead, the cognitive interviewer aims to prompt the interviewees to disclose information that offers clues as to the types of thought processes like comprehension of the question and retrieval of information from memory. Beatty and Willis (2007) suggest that the interviewer must teach the participant/s to perform the think-aloud procedure. According to Willis (2005), the training generally involves cautious exercise at the start of an interview and asking general questions. This study held a brief training on the thinking-out-loud technique before formally asking the interview questions. The process involved asking the participants one-on-one to answer general questions like: "How is today's weather?" followed by tasking them to respond with whatever came to their mind. This

study's interviews only commenced when the researcher observed that the participants were ready and capable of practising the think-aloud technique.

Following the training, every interview question was read out loud, the participants' candid responses were noted, and then follow-up questions for a deeper investigation were asked. This was done based on the notion that participants may interpret questions in different ways and manners, according to their unique subject positioning, no matter how similar the information is (Bryman, 2016; Creswell & Poth, 2016; Silverman, 2016). Participants of this study were guided through a series of semi-structured prompts that encouraged guided contemplation on the concerns raised more by HIV/AIDS awareness messages. As indicated in Table 2, the interview offered participants frequent but focused verbal probes directed towards their knowledge and understanding of the HIV/AIDS content.

Table 2: *Focused verbal probes (Adapted from Willis, 2005).*

Question	Aim
What comes to your mind when you read this awareness message?	Comprehension
Can you repeat the awareness message in your own words?	Paraphrasing
Are you sure that you got the awareness as intended/Are you sure that they culturally scripted the message?	Confidence judgement
Can you remember what a public awareness message entails after seeing it a month from now? / Do you remember the awareness campaign message that prompted you to get tested for HIV/AIDS?"	Recall

Since the researcher is not fluent in isiXhosa, Makhanda's primary local language, there was an isiXhosa translator so that all the details of the interviews were carefully captured. The interview guides were professionally translated before use in the cognitive interviews, and the interviews were conducted in the participant's preferred language(s), either isiXhosa or English. Only the participant, researcher and translators were present during the interviews. All the interviews were audio-recorded using voice recorders, and additional notes for non-verbal cues were captured in written form. All the interviews lasted approximately 30-minutes, with the longest-lasting for an hour and interviewees were informed beforehand of the duration of the

interviews. Willis (2005) argues that although interviews of up to two hours are possible, a common view is that one-hour interviews are optimal; more extended periods make excessive demands on participants. Therefore, the interview process was as flexible as possible while maintaining the proper research procedures.

4.5 Data Interpretation

Given that respondents' thought processes are taken into account, as was stated in the definition of cognitive interviewing, many experts consider the data from cognitive interviews to be qualitative (Willis, 2004). Employing qualitative analysis methods rather than quantitative ones, like standardised coding schemes, appears more appropriate for this study. Which analysis method is better appropriate has been a problem that most academics have struggled with. According to various epistemological presumptions regarding the nature of the qualitative investigation, the researcher's role in it, and the goals and purposes of the tradition, a wide variety of analysis methodologies have been established (Collins, 2007). Regardless of the technique employed, the process of analysing qualitative data is fundamentally same. This is so because the main goal is to explain and summarise the most important findings as we proceed from the particular instance or raw data to greater degrees of abstraction.

The acquired data were analysed using thematic network analysis, as Attride-Stirling (2001) explains. Thematic network analyses strive to facilitate the structure and portrayal themes, while thematic analyses seek to identify the themes significant in a text at various levels (Bryman, 2016; Creswell & Poth, 2016; Silverman, 2016). (Attride-Stirling, 2001). As a result, thematic network analysis is the process of extracting themes from textual data and presenting them using some kind of representational tool (Akinyode & Khan, 2018; Attride-Stirling, 2001). This technique was primarily used to highlight the significance, depth, and scope of the subjective experience of social life, which is profoundly ingrained within a social environment. This approach to data analysis was successful because it allowed the researcher to sort through a large amount of textual information and make sense of other people's sense-making using more than just intuition (Creswell & Poth, 2016). In other words, thematic network analysis uses inductive and deductive interpretation strategies. Themes are developed inductively but are then organised deductively using an existing theoretical lens. The breakdown or reduction of the text, text exploration, and

integration of the exploration are the three main processes that make up thematic network analysis. The following procedures were used in this study's data analysis process:

4.5.1 Data Coding

The data is reduced in this step by applying a coding framework to separate the content into manageable and significant text parts (Akinyode & Khan, 2018; Attride-Stirling, 2001). In this instance, 25 codes were created based on the key themes that emerged from the text and the reproductive justice perspective that informed the research question. The coding framework was used to categorise reoccurring themes in the text according to pre-established criteria, such as systemic inequity that influences how womxn make decisions about HIV/AIDS prevention. In order to break down the textual data into meaningful and manageable text segments, such as quotations, single words, or sections, the extracted codes were applied to the textual data.

4.5.2 Identification of Themes

This stage is distinguished by the abstraction of themes from text passages (Akinyode & Khan, 2018; Attride-Stirling, 2001; Creswell & Poth, 2016). Each code or collection of related codes' text segments were examined by the researcher, who then identified their most important, prevalent, and prominent themes. Over 300 text parts and 25 codes were condensed into 13 themes. The chosen themes were further developed into distinct, non-repetitive themes that were also broad enough to include a collection of ideas found in several text portions. This made it easier to reduce the information into a reasonable group of key themes that thoroughly summarised the content that was gathered.

4.5.3 Construction of Networks

At this point, themes were put together and grouped into logical groups that shared similarities, which constituted thematic networks (Attride-Stirling, 2001). Based on the conceptual content, the 13 themes were classified into three main categories. The 13 themes—now known as Basic Themes—were grouped into three categories based on the conceptual content of each topic. The fundamental themes chosen assisted in conceptually separating themes from networks. The three Basic Theme groups were then translated into Organising Themes. One Global Theme was derived by taking each of the three groupings of topics listed above in turn. This led to the formation of a global theme, or macro theme, which summarises and makes meaning of groups of lower-order themes that are supported by data and abstracted from them (Akinyode & Khan,

2018). Furthermore, once the Basic, Organising, and Global themes were prepared, the Global theme produced a thematic network.

4.5.4 Describing and Exploring Thematic Networks

According to Attride-Stirling (2001), this is the “first part of the analysis Stage B where the further level of abstraction is reached in the analytic process” (p. 393). In this stage, thematic networks that are analysis tools were then utilised to link with the original text. This study's description of networks was done in conjunction with the text segments, and I thoroughly explored them to note the underlying patterns.

4.5.5 Summarising the Thematic Networks

This step comprises the presentation of the main themes and patterns characterising them. This step was completed to make clear patterns emerge in the exploration process.

4.5.6 Interpretation of Patterns

Finally, the goal of this stage was to go back to the original research topic and the theoretical ideas that underpinned it. To do this, it addressed these issues with justifications based on the patterns that were found throughout the examination of the texts.

4.6 Ethical Considerations

Protecting the welfare of participants is one of the fundamental goals of research ethics (Wassenaar, 2006). A thorough ethical protocol was established for this research and submitted to the Rhodes University Ethical Standards Committee (RUESC) for approval to carry out the study, and it was approved on the 11th of March 2021 (see Appendix 1). On 19 May 2021, the Department of Health granted the researcher authorization to begin participant recruitment (see Appendix 2) after the RUESC granted ethical clearance. The regulations that must be followed throughout the study process are strongly emphasised in codes of ethics. According to Mertens (2012), four philosophical principles—autonomy and respect for the person's dignity; non-maleficence; beneficence; and justice—underpin the many ethical rules. By ensuring that participants exercise their freedom to reject to participate in the study voluntarily if it makes them uncomfortable, autonomy was attained. Justice entails fair and equal treatment of research subjects (Bryman, 2016). To help with this, all participants received information on the purpose and outcomes of the study interview before beginning the process, and they all signed consent forms (see Appendix 6); before conducting the study, the consent form detailing the study's purpose, procedures, and

participant's rights and were distributed and signed by prospective participants. Forms also contained the research team's contact information to address any questions regarding the study and were all translated to isiXhosa, Makhanda's dominant local language (see Appendix 7). Only participants who consented to participate were considered eligible for the study. Although this study is classified under the low-risk category, protocols for interviewees exhibiting emotional distress or risk of harm were established. If any risk arose, participants would be referred to social workers and psychologists available at the clinics. No research subject should suffer injury as a result of the non-maleficent principle, which upholds the notion of autonomy (Mertens, 2012). Interviews took place at the local clinic office spaces to protect participants' privacy. Researchers are ethically required to keep study participants' information anonymous; as a result, the information will be reported in a way that prevents it from being linked to a specific person (Wassenaar, 2006; Mertens, 2012). This is distinct from anonymity, when nobody, not even the researcher, is aware of the identity of the respondent. The research staff involved in the research process, especially transcribers and translators, signed a transcription confidentiality form (see Appendix 10) whereby they were instructed of all the confidentiality requirements since had access to participants' data hence acknowledging and agreeing to maintain the participants' privacy. Participants were made aware of the confidentiality issues, including the fact that researchers and evaluators must, by law, notify the proper authorities if they become aware of any actions that could endanger the participants' own safety or give rise to a reasonable suspicion that a child, elder, or dependent adult has been abused.

There are a few steps that were followed and will still be followed to ensure that information was captured, transferred and stored securely. The study is likely to be published and it is the researcher's responsibility to ensure that participants' privacy and confidentiality are upheld. Foremost, participants' records are secured by using password-protected files, encryption when sending information over the internet, and even old-fashioned locked doors and drawers. All electronic data are password-protected and, based on the information's sensitivity, also encrypted. I have not recorded information in a way that links subject responses with identifying information, hence the use of pseudonyms to replace their real names. However, participants may not be identified by names alone but by other identifiers; therefore, this study and future publications will only report the aggregate findings, not individual-level data, to the public. Anonymity is a condition in which the identity of individual participants is not known to researchers (Bryman,

2012). Because most human participants' research requires signed documentation of consent, subject anonymity is often challenging to implement. The report on the project may contain information about participants' personal experiences, attitudes and behaviours, but the report was designed in such a way that it is not possible for the participants to be identified by the general reader. Other research design safeguards measures that I implemented to help protect research participants' privacy include anonymising information, transcribing raw data as soon as possible, storing de-identified data separately from coding lists, and shredding all hard copies with sensitive data as quickly as feasible.

4.7 Rigour and Trustworthiness

Research findings' credibility, applicability, consistency, and truth value are assessed in qualitative investigations using the criteria of trustworthiness and rigour (Connelly, 2016). According to Bless, Higson-Smith and Kagee (2006, p. 22), credibility is "degree to which the results function solely of the informants and conditions of the research and not of other biases, motivations and views". The ability to apply the outcomes and conclusions to different situations, people, and settings is known as applicability. In addition, reliability/dependability relates to whether the outcomes, discoveries, or conclusions would hold true if the investigation were to be repeated with the same subject matter (Babbie & Mouton, 2011). Developing trust in the veracity of the research's findings is referred to as truth value (Babbie & Mouton, 2011).

To ensure that the research was credible, I made sure that I strictly followed the correct operational measures for the concepts that were under investigation. Although there was some form of reflexivity from the researcher's side, all the stipulated procedures for conducting qualitative cognitive research were fully implemented. Participation of informants from various socio-cultural setups (data-sources triangulation) and different healthcare institutions (site triangulation) assisted in attaining credibility for this study. These two examples of triangulation ensured that diverse information and interpretations came from various institutions and participants, thus, not only relying on only one source of information. Instead, the subjectivity and constructionist nature of the research was implemented throughout the study to allow participants from diverse backgrounds to analyse and interpret the awareness content according to their personal and contextual understandings. To ensure consistency and dependability of the research findings to other contexts, I provided sufficient thick descriptions of the concepts under study,

contextual information, a clear description of the methodology and all the processes involved in collecting and analysing field data.

4.8 Reflexivity

Haynes (2012) defines reflexivity as both a concept and a process that involves "an awareness that the researcher and the object of study affect each other mutually and continually in the research process" (p. 73). In other words, the researcher's reflexivity involves thinking about how their thinking came to be, how pre-existing understandings are continuously revised in the light of new understandings and how this affects the research. Therefore, as a researcher, I acknowledge the changes I brought about due to the research process and how these changes affect the research process. Throughout the research process, I always questioned my assumptions and generally accepted that I am an active part of the research process, thus may unintentionally impact the research outcome. Therefore, reflexivity assisted the researcher in minimising researcher bias and upholding the truthfulness and rigour of the research study. This was fulfilled by giving adequate information and justifications for all the steps I took throughout the research process, for example, the rationale of the study sample (inclusion and exclusion criteria).

Two common elements in qualitative research are rooted in the reflexivity process: interpretation and reflection (Alvesson & Skoldberg, 2000). Interpretation is the analysis of data or facts prejudiced by the researcher, values held, socio-political positions and language use (Haynes, 2012). Alvesson and Skoldberg (2000) highlight that interpretation requests the ultimate attentiveness of the theoretical assumptions, the prominence of language, and pre-understandings brought to the research. Reflection, the second element, is where the researcher "brings the attention unto themselves, their research community and their intellectual and cultural conditions and traditions informing the research" (Haynes, 2012, p.73). Throughout the research process, I reflected on how my ideological, perceptual, intellectual, theoretical, socio-cultural and cognitive values and assumptions informed the interpretation process. I used the reproductive justice framework as a theoretical lens to help make sense of the data, which is why the thematic networks analysis for this study is framed in terms of barriers experienced by womxn to health-seeking behaviours in terms of HIV/AIDS. In other words, the theoretical framework assisted in unearthing how the awareness materials do not always effectively address some of the contextual barriers womxn experience and, in some cases, could even constitute some of these barriers. Although my

personal experience and subjectivity might have impacted the interpretation and analysis process, I aimed to be objective and research-oriented by using an existing theoretical framework (reproductive justice) to interpret the collected data.

The reflexivity process for this study drew on the social constructionist paradigm and assumptions to pinpoint the subjective and multiple constructed realities compared to the objective reality. However, collaboration was implemented throughout the research process, especially during coding. In the reflexive process, collaboration in coding is not focused on inter-reliability but on how various/different perspectives on the same data help reflect on codes and develop themes (Creswell & Poth, 2010; Haynes, 2012). For instance, this study used the coding framework informed by the reproductive justice framework (see Data Interpretation above); hence the coding was partly deductive. On the part of the inductive coding phase, I also engaged with the initial coding process in an open-ended and inclusive way. The dataset informed the decisions I made to code the data the way I did. However, themes did not purely emerge from the data (Braun & Clarke, 2019). The theoretical lens-shaped the grouping and organising of the basic themes into the thematic network. Themes were conceptualised based on the data, research question and theoretical assumptions. Themes, therefore, express the meanings and representations participants hold as interpreted by the researcher and guided by the proper qualitative research process.

Besides being driven by the numerous literature gaps in evaluating the reception of HIV/AIDS awareness materials, this research study was partly driven by personal motivations. As a young black womxn who grew up in rural areas and later moved to an informal and dormitory settlement in Zimbabwe, there are numerous misconceptions and myths about HIV/AIDS that I usually came across from the people I interacted with, especially young teenagers and womxn. My question has always been, "What is the health sector (government) doing to address these issues and to what extent are the community awareness campaigns being received in an anticipated manner?"

4.9 Conclusion

This chapter focused on the methodology used in this study, and the goal was to outline the research method that was implemented for the study to answer the research question. The backbone of the chapter was aligned with the qualitative cognitive interviewing methodology that directed the research procedure, including the study population, study settings, sampling method,

data collection and data analysis. A social constructionist stance adopted for the study also shaped the collection and interpretation of the study since it assumes that social reality is created and developed through social interactions in social contexts. This assumption shaped how the researcher interpreted the numerous interpretations presented and shared by participants on their understanding of the awareness content on the prevention and treatment of HIV/AIDS. The goal of Chapter 5 is to provide a discussion of the study results and establish that the methodology discussed in this chapter was followed.

Chapter 5: Results and Discussion

5.1 Introduction

This chapter aims to summarise and analyse the collected data to explore womxn's understanding of public health awareness content on the prevention of HIV/AIDS. The paradigm for reproductive justice used in this study places a strong emphasis on an intersectional strategy that contextualises investigations of health and reproduction. By utilising this framework, the study aimed to unveil multiple understandings and interpretations of the prevention of HIV/AIDS that womxn come across through public health awareness material. In order to accomplish this, cognitive interviewing was used to gather data regarding how womxn understand and perceive knowledge of HIV/AIDS as well as how they come to particular conclusions or answers when asked to elaborate. The study employed a thematic network analysis (Attride-Stirling, 2001) to examine womxn's interpretation and understanding of universal HIV/AIDS awareness messages in their heterogeneous contexts, which might provide obstacles to womxn's reproductive health and well-being. I compared the key themes and patterns that emerged from the analysis to the original questions, and I suggested some explanations of the questions based on the analysis of the texts' content, key themes, and patterns, as well as the conceptual framework that underpinned the research (Attride-Stirling, 2001; Braun & Clarke, 2006).

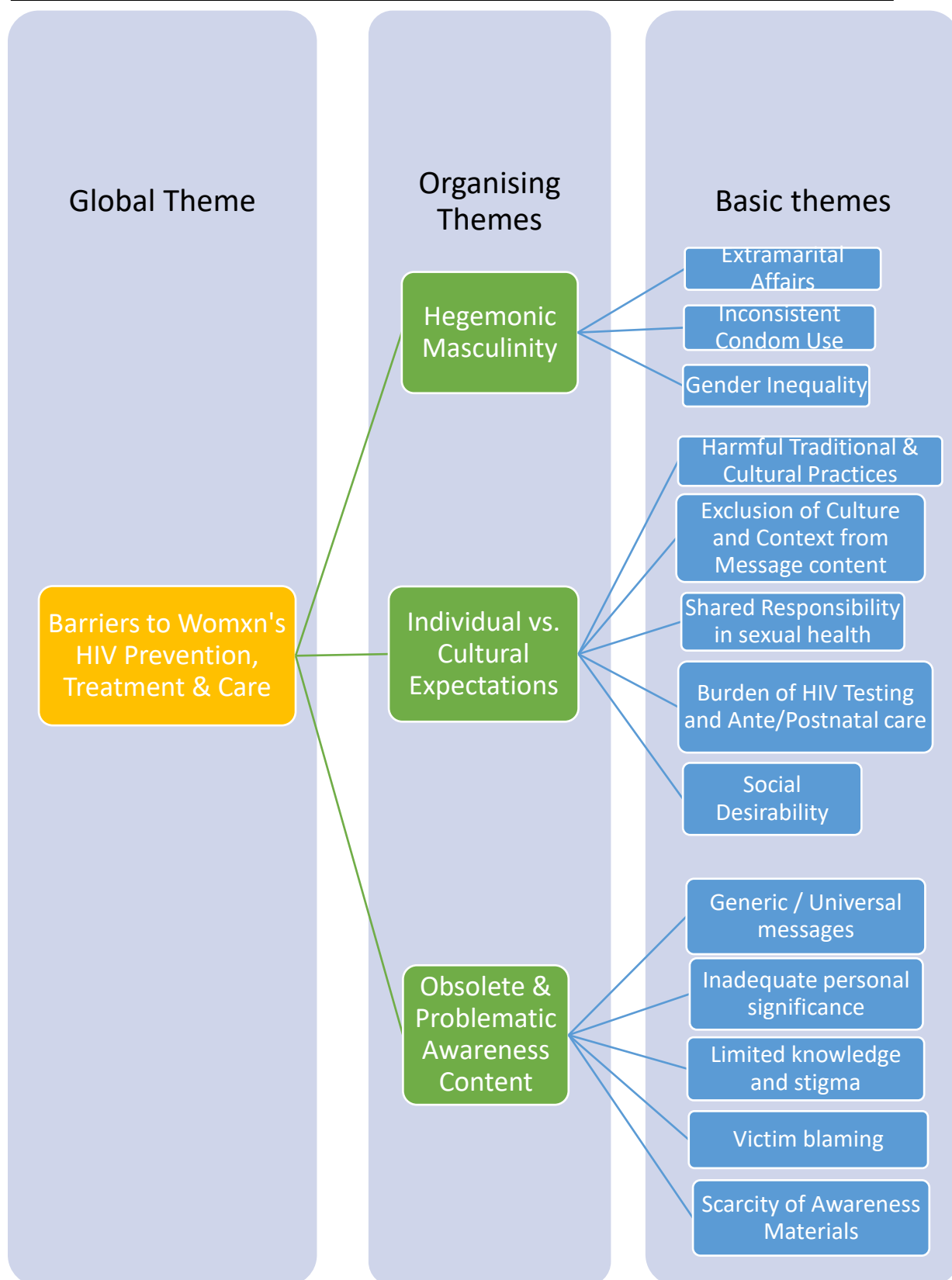
This study's thematic network analysis is divided into phases: the first one explores the numerous thematic networks that emerged from the womxn's cognitive processes through the lenses of a reproductive justice framework. The thematic network for this study was developed starting from the Basic Themes and working toward a Global Theme (Attride-Stirling, 2001). A group of Basic Themes were grouped together according to their underlying narrative using Attride-(2001) Stirling's data analysis approach, and these constituted the Organising Themes. In light of their Basic Themes, the Organising Themes were then reinterpreted, and they were combined to represent a single conclusion or superordinate topic that became the Global Theme. The second phase analyses the use of cognitive interviewing in assessing the womxn's understanding of HIV/AIDS awareness material. The second phase's main aim was to determine how helpful the cognitive interviewing process was in identifying, understanding and clarifying the emerging thematic network. Therefore, the phase was a possible way to evaluate the efficacy of awareness campaigns.

The analyst/researcher used the entirety of the information gathered during the data analysis and interpretation process to assess whether each interviewee, based on their verbal report, consistently responded to the question(s) at hand and, therefore, achieved a successful interpretation of the researcher's objectives. All interviews were recorded, transcribed verbatim, and translated from isiXhosa into English (where necessary). Data included voice recordings, interview transcripts and field notes. We created matrices to summarise participants' responses, item comprehension, and interviewees' perceptions of each question and awareness message.

5.2 Global Theme 1: Barriers to Womxn's HIV Prevention, Treatment and Care

The cognitive processes conducted for the study highlighted a variety of injustices and barriers to HIV/AIDS prevention, care and treatment among womxn. The thematic network in *Figure 1* illustrates the key themes on which the global theme of Barriers to HIV prevention, care and treatment was anchored. This generated an engaging and thought-provoking discussion in which the barriers were identified mainly as a consequence of social constructions of hegemonic masculinity; individual vs cultural expectations; and the outdated awareness content. In this sense, the barriers to womxn's HIV prevention emerged as fundamentally intertwined among all levels, from the individual to the organisational levels.

Figure 1: Thematic Network of Barriers to Womxn's HIV Prevention, Treatment and Care.



5.2.1 *Hegemonic Masculinity*

This Organising Theme pertains to aspects of gender inequality as experienced and explained by participants. The ability of the concept of "hegemonic masculinity" to extend awareness of issues of gender inequality is one of the reasons it has gained widespread use in gender research in South Africa. According to Morrell, Jewkes, Lindegger, and Hamlall (2013), the notion of hegemonic masculinity is multidimensional and allows for analysis of men's power over womxn, the multiple and unequal locations of males, the fluidity of power relations, and the persistence of patriarchal patterns. In this context, hegemonic masculinity was conceptualised as a social pattern in which traditional male characteristics are idealised as the masculine cultural ideal, explaining how and why men maintain dominant social roles over womxn and other groups considered feminine. According to this Organising Theme, hegemonic masculinity is characterised by male dominance over sexual practices that increase womxn's vulnerability to HIV/AIDS, for instance, extramarital affairs and inconsistent condom use.

5.2.1.1 Extramarital Affairs from Partners. According to the interviews held for the study, womxn acknowledged that although a biologically increased HIV vulnerability among womxn exists, socio-cultural constraints, including extramarital affairs, potentially subject womxn to a high risk of contracting HIV infections. Based on the responses recorded during the sessions, all the womxn knew that HIV is mainly spread through contact with specific bodily fluids of someone living with the virus, for example, blood, semen and breast milk. However, it did not sit well with many that they have to bear the burden of fear of contracting HIV infections because of their partners.

Extract 1 (Siphokazi):

According to this poster, HIV can be transmitted during unprotected sex, through sharing injecting equipment, from mother to child during pregnancy, delivery, and breastfeeding, as well as through contaminated blood transfusions, whether a person is married or single. I do not understand, though, why is that [poster] portraying a message that appears to be the responsibility of womxn to ensure fidelity is upheld in marriages?

The quote in extract 1 of 'womxn upholding fidelity' suggests a cry for help from all sectors to equalise all partners' responsibility in preventing and treating HIV/AIDS. Participants' responses further highlighted that womxn understand that extramarital sexual relations and having multiple

sexual partners increase the risk of contracting HIV. The participants were also aware that either partner might engage in extramarital sex. However, the majority of womxn claimed that, based on their own experiences, males were more likely to engage in extramarital affairs than womxn.

Extract 2 (Cara):

Men often do this—they go out and have affairs with other womxn before returning to have sex with me as their wife. Womxn rarely do this. They can easily spread the infection to me if they get it. I do not know why men find committing to a relationship or marriage hard.

Fourteen womxn confidently mentioned and disclosed that they maintained fidelity in their marriages or relationships, and their partners make it difficult to stay safe and protected from being infected. They mentioned that men's extramarital affairs were linked to religious faith, societal norms and masculinity. One participant shared these sentiments:

Extract 3 (Natasha):

It is challenging to protect oneself from the virus if their partners are not responsible and hide behind religion and societal norms that justify men's extramarital affairs. Some aspects should be covered in these awareness messages on HIV/AIDS. Look around here and see if any message addresses the challenges we face here in Makhanda that put womxn at more risk of contracting the virus than men. *Dololo*, nothing, everything is all about please breastfeed properly, know your status *blablabla*....how about addressing the harmful norms in our communities like *isithembu* (polygamous marriages).

Contrastingly, womxn's extramarital behaviour tends to be unjustifiable based on cultural norms, whereas men's extramarital encounters may be excused based on religious belief and cultural norms (Ramjee & Daniels, 2013). The practise of males having extramarital affairs may be culturally based and accepted; certain cultural views excuse men with several womxn as evidence of their manliness and as a justification for the alleged religious ideal that "a man should dominate a womxn" (Dellar et al., 2015; Keikelame et al., 2010; Krishnan et al., 2008). In addition, Dellar et al. (2015) contend that the patriarchal system, which views womxn as inferior and men as superior as a result of the payment of the bride price/dowry/lobola, may be related to society's expectation that men have the right to own numerous womxn. Womxn explained how men get

away with so many risky sexual behaviours in the name of being the family head at the expense of their partner's and children's health.

Extract 4 (Lindani):

Where I come from, womxn are expected to be reserved and show ultimate *ukuhlonipha* (respect) to their husbands. You will never hear of men being called prostitutes in my society; only us womxn who get all those derogatory names if we are [involved] somewhere. What still surprises me is that these issues are not exclusively addressed in these awareness messages.

5.2.1.2 Inconsistent Condom Use in Long-Term Relationships. Even though there was evidence of a steady supply of condoms and awareness materials in all the clinics, the responses of the womxn indicated a worrying state of condom use in long-term relationships and marriages. Madiba and Ngwenya (2017) and UNAIDS (2019) have highlighted that the number of HIV cases among womxn in long-term relationships like marriages and cohabitation is worrisome and poses a substantial public health threat and challenge due to the high-frequency sex and limited condom use. During the interpretation process of awareness messages, participants indicated a cultural stigma against condoms in society, with the use of protection associated with promiscuity and prostitution. This was predominant within heterosexual marriages, where womxn disclosed that in most cases, their partners and husbands would deny the consistent use of condoms. Condoms were mentioned as not being used by married couples and those in long-term relationships because that would be an inappropriate statement of mistrust of one's spouse/partner. These findings were directly linked to the contemporary study of Madiba and Ngwenya (2017). They found that even though womxn reported negotiating safe sex in their relationships or marriages, they dreaded the potential costs of proposing condom use with their partners. Through research, these factors have been prevalently found to make safe sex negotiations among womxn to be complex: staying in patriarchal societies where womxn's subordination is legitimatised and cultural and traditional practices like bride price that either silence or push womxn's inferiority in the society (Jewkes & Morrell, 2010; Krishnan et al., 2008; Madiba & Ngwenya, 2017).

Extract 5 (Nokubonga):

Talking from [my] experience, I would say that married womxn and those in long-term relationships are more at risk than the casual sex workers [out there]. You know, a casual sex worker is in the business of getting different partners; they are bound to protect themselves ... However, there is me, who waits for my partner to return home, not knowing what has happened. I often lack the guts to confront him about his sexual whereabouts. When you need protection, [you] cannot ask to use the condom every day for no reason, so in the home, you are more at risk because you are just blind; you do not know what is happening.

Extract 6 (Ntombifuthi):

I understand that the poster educates us to correctly use condoms and get tested even if we are married. This is, however, difficult to implement in our traditional marriages because our husbands quickly start suspecting that maybe [I] am doing something out there.

Another womxn shared how aggressive and violent her partner gets when she suggests the correct and consistent use of condoms:

Extract 7 (Yonelisa):

One day, I almost died from being beaten by my husband because I told him we needed to continue using protection even if we were married. [Our] husbands usually lie to themselves about an association between condom use and decreased sexual gratification. You will hear [them] make comments like "one does not take a shower in a coat" or "one does not eat a sweet with the wrapper on". I mean [eeem], how are we supposed to implement awareness like these in our households?

The above extracts illustrate how womxn's subordination in their households tends to expose them to being infected with HIV/AIDS. Although some womxn in this study knew that their husbands or partners had other sexual partners, which put them at risk of contracting HIV and STIs, many of them highlighted that they would rather keep quiet than confront them. Some participants' reasons for adopting this non-confrontational stance included giving their partners second/numerous chances hoping for change, fear of societal judgment, and playing happy couples. In a study by Madiba and Ngwenya (2017), womxn would rather not confront their partners because suggesting condom use in a marriage or long-term relationship resulted in verbal abuse, physical violence and forced sexual intercourse. This is evident from Extract 7,

which illustrates that womxn are exposed to contracting the virus and are victims of all kinds of womxn abuse. As evidenced from an example in Extract 5, most participants said they are more at risk in their well-established family setups than casual sex workers. For this study, many womxn revealed that the negative associations of condoms with casual and multi-partner sex are not easily dislodged from people's perceptions; hence couples tend to stop using condoms. These perceptions suggest that societies perceive the use of condoms to be reserved for those who sleep around. One womxn mentioned that these negative perceptions might be even more resistant to change than the traditional objections based on the perceived diminution of sexual sensation when using a condom.

5.2.1.3 Prevalence of Gender Inequality. Informed by their home-based experiences, womxn interpreted posters and perceived increased HIV risk among womxn as directly tied to gender inequalities in their households and communities. The majority of womxn disclosed the challenges of having proper and adequate communication on the prevention of HIV/AIDS with their male counterparts. The findings revealed a societal trend in which traditional male characteristics are idealised as the masculine cultural ideal, explaining how and why men maintain dominant social roles over womxn and other groups viewed as feminine (Jewkes & Morrell, 2010). One womxn explained that her partner once said there was no need to discuss the issue of HIV/AIDS since they got information from the radio, newspapers and television. For the womxn staying with their partners in heterosexual relationships, they explained that womxn usually initiate communication on HIV prevention and are likely to receive attitudinal behaviours from their partners. The participants explained that they frequently initiated the communication by asking their husbands or partners to protect themselves from HIV/AIDS.

Nevertheless, their requests are mostly received negatively and violently. Most womxn explained how their societies are characterised by a system whereby men patronise and dominate womxn. One participant narrated:

Extract 8 (Thembisiwe):

All the men I have been with in my life want to exhibit their virility through the number of sexual partners and want all the control over all the sexual activities. I have had men who want to exercise power to determine the conditions of our sexual activities. These male-dominated sexual practices [even if] I read an awareness campaign on open communication about STIs or HIV/AIDS, it will not be applicable in my situation because of how our male counterparts treat us. Yes, as the poster says, we should freely access prevention and treatment services, but are we not supposed to address these gender inequalities in our society?

Other womxn remarked that societal norms and values of giving men the upper hand in all decision-making processes put womxn at a disadvantage. In similar findings, Coombes (2019) indicates that some societal norms, like the practice of making males the head of the families, give them all the powers to be superior and dictators in their homesteads. Participants pointed out that womxn who are dependent on their husbands, no matter how much they get educated on HIV/AIDS, will possibly be unable to stand up for themselves. One womxn shared these views:

Extract 9 (Nomathemba):

I can be considered an independent and self-empowered womxn in my community because I work and provide for my family just like my husband does. There are some womxn from my community that rely on their partners for almost everything. Seeing this awareness message advocating for shared responsibilities in protecting each other from HIV/AIDS reminds me how impractical my society is. One of my friends always complains that since her husband is the head of the family and provides for the family, she does not have a say in whatever decisions he makes. She says that even if the man cheats, she does not confront him and ask him to use protection.

5.2.2 Individual Behaviours and/vs Cultural Expectations

This Organising Theme describes how cultural norms reflect the moral and ethical beliefs and standards that speak to how people are expected to behave and interact with others. In this context, the theme comprises the tensions between how individuals behave against how they are expected to behave in their societies. The theme is also comprised of how the cultural norms tend to affect individuals' behaviours in a way that exposes womxn to the risk of HIV infections.

5.2.2.1 Harmful Traditional and Cultural Practices. The issues and codes that emerged in this Basic Theme suggested that the awareness messages in clinics are turning a blind eye to the various constraints and barriers to heterosexual relationships that come with the traditional and cultural practices related to isiXhosa culture. Some of the harmful practices that stood out during the interviews that womxn deemed to impact gender equality include ‘cleansing’ after traditional male circumcision (*ulwaluko*), virginity testing, widows rituals, levirate unions, female genital mutilation, bride price/dowry (*lobola*), breast sweeping and forced marriages (*ukuthwala*). Concerning the study, *ulwaluko* rituals and *ukuthwala* stood out to be having an enormous impact on womxn's access to adequate HIV/AIDS prevention, care and treatment services. The payment of dowry in the Xhosa culture was also pointed to be one of the cultural acts that expose womxn to HIV/AIDS within their marriages. Womxn in heterosexual marriages stressed that the payment of *lobola* by the groom to the bride’s family as a form of appreciation is directly and indirectly used as a weapon of silencing womxn in major decision-making processes. Likewise, Ramjee and Daniels (2013) argue that *lobola* is one cultural practice that perpetuates the impression that a womxn is her spouse’s property. Therefore, womxn end up having limited input in what their husbands decide, including sexual decisions that pave the way for womxn’s exposure to HIV/AIDS.

Furthermore, participants indicated how young girls and womxn fall victim to some cleansing rituals after *ulwaluko* that encourage newly-initiated men (*amakrwala*) to indulge in sex with their choice of womxn, who is not their girlfriend. Some of the womxn shared these thoughts:

Extract 10 (Michelle):

As womxn and especially young girls, we are highly vulnerable to a practice called *ukukhupha ifutha* or *ukosula* in our Xhosa culture. Amakrwala are believed to cleanse themselves of any bad luck they may have picked up during the initiation by sleeping with young girls. What is painful is that these rituals or arrangements are coercive or non-consensual sex. Imagine living with the fear that you might be a target of these barbaric traditional practices.

Extract 11 (Pamela):

What frustrates me the most is that the healthcare services are focused on enforcing laws to minimise the number of botched circumcisions and leave behind some other negative aspects

resulting from *ulwaluko*. As you can see in this clinic, they encourage individuals to go for medical circumcision and not *ulwaluko* for safety purposes. However, other hidden harmful practices are not advocated for in this country.

Furthermore, most participants indicated that male circumcision, whether traditional or medical, gives men an upper hand in sexually-related matters in their marriages or relationships. Many participants indicated that once men are circumcised, they have this uncontrolled confidence to engage in unprotected sex due to the perceived low risk of infection. Clinical research shows that voluntary medical male circumcision (VMMC), a one-time preventive intervention, reduces the risk of heterosexual HIV transmission from womxn to men by 60%; nonetheless, it does not provide 100% protection from HIV (Kalichman et al., 2018; UNAIDS, 2019). Most of the time, VMMC services come in the form of a bundle of prevention interventions, such as safer sex education, condom instruction and distribution, HIV testing and connections to care and treatment, sexually transmitted infections management, and providing information on and access to care for condoms. On the other hand, less is being done to address the discourses on men's attitudes and behaviours relating to condom use. As evidenced from the extracts below, both medical and traditional male circumcision promotion and awareness campaigns propel the message that circumcised men are at less risk for HIV and, by extension, are less likely to place womxn at risk. Due to the partial protection provided by male circumcision, there are worries that condom use reductions with some circumcised partners could raise the risk of other STIs in womxn (Kalichman et al., 2018).

Extract 12 (Laura):

You know what? I have been with both circumcised and uncircumcised men, and you will be shocked by what they think about contracting or spreading HIV infections. The circumcised men do not like using condoms because they perceive themselves as having a low risk of contracting and spreading the virus. You can find yourself arguing with them to wear a condom and get tested, and they would think that maybe you are crazy.

Another aspect of the traditional male circumcision that stood out in the study was that of men claiming control over womxn, especially after 'coming from the mountains', a colloquial expression for completing the initiation ritual. As indicated in Extracts 13 and 14, many womxn questioned whether it is because of the teachings they receive in the mountains or whether it is

just self-assurance and an egoistic belief that they are now 'real men' and can do anything they want in society. They pinpointed that even if some of them do not have first-hand experience of the outrageous behaviours of the newly initiated men, they observe some of the behaviours in their society.

Extract 13 (Sandra):

When they return from the mountains, these young men cause too many societal problems. As a womxn, there is no room to negotiate for sex when they are back. Some of them engage in alcohol and substance abuse...these not only cause damage to themselves but the society at large. Once they are high on something, womxn become powerless; they cannot even say that they are not in the mood to have sex. Another thing.....when they are drunk, they tend to engage in risky behaviours like sleeping around.

Extract 14 (Thembisiwe):

Newly-initiated men feel like they can control everything and everyone when they are initiated. The funny part is that they say that during the initiation, they are taught how to become responsible men...And you wonder if being abusive is part of being a responsible man. These things I do not see them being addressed here, all I can see are awareness posters to make sure that one takes medication on time etc.; how about these matters embedded in our cultural practices?

5.2.2.2 Exclusion of Messages Embedded in Cultural and Societal Structures. Many participants reflected that many HIV/AIDS awareness campaign messages fall on deaf ears because they focus on individual factors and health behaviours. Instead, participants suggested that the prevention efforts be channelled towards the cultural norms in which many behavioural patterns are embedded. They pointed out that the awareness messages delivered in, for example, Port Elizabeth (Gqeberha) should differ from the ones in Makhanda because these two have different societal norms even if they are in the same province. These thoughts were shared during the cognitive interview process:

Extract 15 (Nomathemba):

It is not like I am complaining or being irrational. However, I think the conscientisation process is negatively and highly affected by the health care facilitators who draft awareness

for specific geographical locations and try to implement them in all the societies. Nevertheless, they have inadequate knowledge of the socio-cultural norms of the targeted societies.

One womxn angrily exclaimed, "I do not see the point of changing my sexual behavioural patterns because of this poster". Upon being probed on the reasons, many womxn specified that they were never consulted or involved before designing these awareness messages. Critics believe that when practitioners design health communication programmes that affront the cultural sensibilities of their target audience or disregard the involvement of the local people, there is every single chance that they will achieve zero success in their quest to change the behaviour of such target audience (Flowers et al., 2017; Harrison et al., 2015).

Other womxn felt that the input used to formulate these awareness campaign messages usually comes from middle-class individuals and university students, as indicated in Extracts 16 and 17:

Extract 16 (Zoleka):

I wonder when we, the people from *elokshini*, will be respected and consulted for matters concerning our health, especially womxn sexual health. Why are many developmental or health projects initiated without us, the target population? I have noticed that most HIV/AIDS campaigns' initiatives usually come from the middle class, including university students.

Extract 17 (Thandeka):

.....I am not sure if they think they are illiterate if someone stays in an informal settlement or high-density area. They do not know that elokshini is where you find all the information about HIV/AIDS.

When faced with verbal probes on whether they were personally and culturally resonating with the awareness messages, several womxn disagreed. They kept on revealing that all the awareness campaigns, including educational talks, community-based theatre plays, posters and many more, are usually delivered in a universal language. They mentioned that the universal language dictates what safe sexual behaviour is without due diligence to the numerous societal

norms that may hinder or promote safe sexual behaviours. For instance, in a poster showcasing a womxn turning down the sexual advances of her husband whilst she is not in the mood, many womxn pointed to the notion that people behind these posters have no idea of what goes on in the community. They kept mentioning that as much as the posters raise awareness, formulators have no touch with the daily societal realities. Some participants shared the following understandings:

Extract 18 (Aneliswa):

These awareness-raising materials' authors are unable to grasp the realities of poverty in a place like Makhanda, where the decision-making authority over sexual affairs is held by a more affluent male supporter. Now that is the reality of what takes place in our society. Of course, sometimes womxn will want to voice their sexual health concerns, but one will be controlled by how she will survive with the children. Even if we are abused, we do not report all those matters.

Extract 19 (Grace):

Honestly, I recommend that for prevention strategies to be sustainable and understood by the intended populations, they should involve indigenous and local knowledge systems and not only rely on biomedical interventions. Local people have a deeper understanding of all the issues here; they might not have all the solutions to the challenges, but I am sure that consulting them will benefit society and the health sector.

5.2.2.3 Shared Responsibilities in Sexual Health Matters are But a Wish. This basic theme focuses on the ability of individuals to take responsibility in fighting against the spread of HIV/AIDS, especially in sexual relationships. Posters in the clinics showed the importance of open communication with sexual partners, be it short or long-term relationships. Additionally, according to the texts and images of HIV/AIDS awareness content in the clinics, shared responsibility is not only applicable to sexual partners but also to telling friends about HIV/AIDS (not sharing status unless comfortable); contributing to the decrease in stigma towards those groups most affected by AIDS, or being concerned for the well-being of others, be they known or unknown. However, many participants pointed out that shared responsibilities and open communication are things they wish could happen in their different types of relationships and communities. The following verbal probes were directed to the participants before being tasked to analyse a poster on HIV/AIDS communication in relationships:

In your frank opinion, whose responsibility is it to prevent HIV/AIDS in a relationship?

Is it the HIV-positive partner's responsibility to disclose and ensure they do not infect the other partner?

Whose responsibility is it to consult a healthcare practitioner or visit the hospital for any sexually-related illness?

A young heterosexual couple disclosed their status in one clinic pamphlet and headed toward the clinic. One participant wished this applied to her relationship in response to the cognitive interview probes. Even when she goes for check-ups at the clinic, her husband always remains in the car in the parking lot. Another womxn echoed that she only discovered that her partner was HIV-positive when she started feeling sick. Many other participants resonated with her experience in that, in many instances, one would find out about their 'positive' status during the antenatal visits where all the expecting mothers must get tested.

Extract 20 (Yonelisa):

Imagine being shocked when you think you have been faithful to one partner and *jikijiki une-HIV* (suddenly, you are HIV-positive). *Ndandisoyikela abantwana bam bangomso* (I was scared for my future children). What was so painful for me was that he never opened up to

me. We never survived that marriage because I was scared of [further ruining] my life by staying with him.

Extract 21 (Ntombifuthi):

I used to get tested regularly before I got involved with my partner. When I got pregnant with my firstborn, I got that mandatory HIV test for *abafazi abakhulelweyo* (pregnant womxn). At first, I did not want to believe it because my partner was my first, and he was the only man I had slept with my entire life. After confronting him, he first denied it and confessed later that he knew about his status but was scared to disclose it to me as I would leave him soon after knowing his status.

Extract 22 (Grace):

What frustrates me is that [these] men do not want to even come to the hospital with us during the pregnancy term. We need their full support in all aspects; I mean, this baby belongs to both of us (giggles).

Some womxn inquired their husbands if they were having extramarital sexual affairs, with disheartening responses coming from their partners. One of the womxn explained that her husband accused her of having extramarital affairs when she initiated communication on HIV prevention. This kind of incident was prevalent in many womxn's explanations of how they communicate about HIV/AIDS in their relationships. Extract 23 and 24 might mean that speaking openly about HIV/AIDS seems to be a massive responsibility for womxn, whilst Extract 25 points out that there is limited or no open communication among couples regarding HIV/AIDS discussions. This is further shown in Extract 25, where womxn are pushed to prefer speaking about HIV/AIDS when sporadically advising their husbands against extramarital sexual relations.

Extract 23 (Xolile):

Ndim ndedwa othetha nge-HIV emtshatweni wam (I am the only one who speaks about HIV/AIDS in my marriage). I am hesitant to tell him that he should never sleep around. Why do we even have to fear [men] them while wanting to be safe from HIV/AIDS?

Extract 24 (Terry Lyn):

I used to be scared to confront my partner when I noticed fishy things, like lipstick on his shirt and different deodorant smells, but the moment I realised that he was taking advantage of my silence, I stood up for myself and my children.

One womxn laughingly described how she usually initiates communication against engaging in risky sexual behaviours in relationships:

Extract 25 (Nomfundo):

When watching TV or listening to the radio, and a scene relating to HIV/AIDS comes up, I get some courage to caution my partner about HIV/AIDS. One of the reasons I am always willing to have these conversations is for the sake of my children; I need them to grow healthy with both parents, too.

Moreover, several womxn disclosed that their husbands view sexual relationships as adversarial so that they can have more negative attitudes toward condoms and use condoms less consistently. Others complained that their partners put them in danger by getting tested for HIV/AIDS and accessing antiretroviral therapy at a very late stage compared to womxn. Several studies have found social-demographic and clinical variations between womxn and men when it comes to getting HIV tests and being enrolled in the ART programme (Orr et al., 2017; Shisana et al., 2014). Males have been reported to seek care for a more advanced disease than womxn, and most authors have assumed this to be attributed, in part, because womxn have additional access points to HIV services, for example, through PMTCT services (Shisana et al., 2014). However, this was not the only case in this study, where the majority of womxn pointed out the several structural and behavioural factors that drive men to commence ART. One participant who identified herself as working in the private sector shared these views:

Extract 26 (Nokubonga):

These gender differences in the use of antiretroviral medication and HIV testing are a result of structural and psychological variables. With a high prevalence of HIV and nothing being done to engage men, public health systems in our nation are generally inadequate structurally. If the health sector is making an effort to get males to take responsibility, just take a look around you. All posters I see here are only talking and talking [addressing]

womxn. South African men need to be constantly reminded that it is not the responsibility of womxn to make sure that we are all protected.

Other participants vehemently shared these views, describing how the public health system and cultural norms enable the burden on womxn. Public sector clinics have had a general perception of being womxn's spaces throughout survey sites (Myburgh, 2011). Because of the "facilities' focus on family planning and pregnancy, preponderance of female patients, nurses, and counsellors" men frequently seek public health care facilities for HCT or ART at a lesser rate than womxn (Orr et al., 2017, p. 71). Findings from other studies show that men's concerns about accessing public health services for HCT and ART are both directly and indirectly related to societal notions and standards of masculine egotism and strength as well as concerns about upholding the reputation of the "real man" by acting immorally (Abrahams et al., 2017; Myburgh, 2011; Orr et al., 2017; Shisana et al., 2014). However, participants for this study emphasised the need to push the shared responsibility aspect by the public health sector, regardless that womxn usually get priority when it comes to HIV/AIDS. They also indicated that men should not only be compelled to take responsibility due to persistent health problems.

Extract 27 (Thembisiwe):

At least we, womxn, access health systems through prenatal services and are mandated to be tested as part of the prevention of mother-to-child transmission programs. During those stages [processes], testing and involving men should be a helpful entry point. I feel like they always get away with so many things; it is time to get men seriously involved.

Extract 28 (Thandeka):

You know, my husband and his friends openly told me that seeking medical services is a sign of being weak. These [partners] are putting us at risk, and something should be thoughtfully done. Men are unwilling to cooperate in sexual health matters, which is worrisome. These cultural beliefs that men are strong and should limit seeking medical assistance put womxn at heightened risk.

Under this basic theme, it has been noted that shared responsibility is something mentioned in the awareness materials, something that womxn want but is not forthcoming. Womxn indicated that they expect their partners to be positive contributors to the holistic

prevention of HIV/AIDS, not their partial ownership and responsibility in sexual health matters. The consequence of this lack of shared responsibility is that the burden falls on womxn.

5.2.2.4 The Burden of HIV Testing and Ante/Postnatal Care on Womxn. This basic theme is intertwined with the basic themes that emerged under the Hegemonic Masculinity organising theme and the basic theme of “Shared responsibilities in sexual health matters just, but a wish”. On the other hand, the codes that emerged from this basic theme speak to how individuals behave against how they are supposed to behave culturally. Since 2005, HIV testing has been compulsory for pregnant womxn in South Africa as part of the government's prevention of mother-to-child transmission (UNAIDS, 2019). Although these prevention strategies are tailored toward improving the health and well-being of mothers and their children, many womxn felt disheartened by the lack of support from their partners and their families. Many participants disclosed that they only discovered they were HIV-positive when they had gone for antenatal visits. Upon disclosing their HIV status, mainly if found positive, participants complained of a lack of support from their partners, with others even accusing them of infidelity. On the other hand, some had visited the clinic sick, and upon taking a pregnancy test and coming out positive, they had to be tested for HIV to avoid mother-to-child transmission. In all these 'ordeals', participants wished they had full support from their partners.

From the *Figure 2* posters attached below, many womxn interpreted them as health organisations emphasising womxn's responsibility for HIV testing and placing the burden of antenatal/postnatal health care on womxn. This finding is directly related to the current literature on the structural factors that increase and expose womxn to HIV/AIDS. In this instance, the social, policy, and organisational/health environments structure the context in which risk production occurs (UNAIDS, 2019) by perpetuating the process of overburdening womxn with the sole responsibility of preventing the spread of HIV/AIDS. One womxn called out the health organisations for acting as if it is only the womxn's responsibility to take proper medication and procedures to prevent the spread of HIV/AIDS to children.

Extract 29 (Ntombifuthi):

As much as the poster says that we, as womxn, are at the heart of the HIV response for children, where are their fathers' roles in all these? Of course, I am the one who carries this

child for the whole nine months, but we should never be given 100% sole responsibility for making sure that my child is safe.

Many womxn were mainly disappointed with the level and amount of support they got from their partners during the postpartum period. This disappointment and frustration elevated significantly if they discovered their HIV status during the antenatal visits and their partners abandoned their responsibilities. The study findings indicate that disappointment in partner support was more commonly expressed in the postpartum period than during pregnancy.

Extract 30 (Simphiwe):

When I gave birth, I expected to get full emotional and social support from my partner. To me, support entails making sure that I take my medication, go for check-ups, and look after the family. You can notice when your partner is distancing himself from all that will happen.

Extract 31 (Babalwa):

It is painful to see a man who infected you with the virus turning his back on you when you give birth. My baby daddy seems to be more attached to his child than me. I think that is why many womxn end up having postpartum depression. I sometimes feel like I am now too ugly to be loved; hence my partner is withdrawing from me.

While all the womxn were claiming to be financially independent, many expected to depend wholly on their partners for emotional support. They expected this support, especially if they were HIV positive and taking measures to prevent mother-to-child transmission during breastfeeding. Therefore, participants felt offended by some posters channelling all the responsibilities to mothers. Those womxn who were offended were the ones that assumed that they got the virus from their partners.

Extract 32 (Siphokazi):

It upsets me to know that the father of my baby will impregnate me and then desert the baby and me...I do not need his money or whatever has to do with money. All I want is for him

to be there for me and our child [mostly] that now I have to abide by all the precautionary measures to avoid [my child] getting infected. I am constantly worried and stressed that I am doing this alone, yet he is the one who infected me with this virus.

Figure 2

Posters on women's involvement in the eradication of HIV/AIDS



5.2.2.5 Social Desirability Response Tendencies. Findings highlighted the impact of social desirability bias on participants' responses to almost every question from the interview guide. The majority of womxn consciously and convincingly positively portrayed the self rather than unconscious cognitive biases. During the study, awareness messages that addressed healthy sexual behaviours like the correct and consistent use of condoms and discontinued multiple partner sexual relationships received the most social desirability bias responses. Similarly, researchers have indicated that inaccuracies that occur in self-reported data are often accredited to social desirability bias, which is over-reporting socially desirable behaviours and underreporting socially undesirable ones, stemming from a need for social approval and the need to escape mortification (Krumpal, 2013; Mooney et al., 2018). In similar studies, HIV pre-exposure prophylaxis (PrEP) trial investigators conducted qualitative research signifying that when participants were presented with proof of non-adherence after the trials, most of them expounded that they had over-reported use of the product out of fear that their participation would be terminated (Mooney et al., 2018; van der Straten et al., 2014). Participants often agreed with the posters that carried messages of practising healthy sexual behaviours in these instances. All the womxn compellingly responded that they were using condoms, being faithful to their partners, adhering to their treatment and not involved in any drug or alcohol misuse. Their responses identified two significant social desirability bias components: impression management and self-deception (Krumpal, 2013). While self-deception was hypothesised not to be a result of conscious behaviour, impression management was conceptualised as a conscious effort to portray oneself as having particular characteristics, usually per social norms of positive health behaviours. The findings of cognitive psychologists suggest that misreporting on sensitive inquiries is a planned, controlled, and motivated activity that is somewhat within the participant's voluntary control rather than an automatic mental process that is completely independent of the interviewee's cognizance (Grimm, 2010; Krumpal, 2013). I noticed that participants had to modify and revise their comments in a way that was socially acceptable, either because they were prone to self-deception or impression management (Mooney et al., 2018). In the case of the impression management mechanism, I noticed that participants tried to gain social acceptance by providing answers to particular questions that would maximise the interviewer's positive evaluations.

In contrast, the concept of self-deception assumes that "interviewees want to maintain a positive self-image, to maximise self-worth and to reduce cognitive dissonance resulting from the

divergence between social norms, self-perception and self-demands on the one hand, and reality on the other hand" (Krumpal, 2013, p. 2028). This viewpoint holds that the primary targets of socially motivated misreporting are participants. Although there were instances where participants unconsciously maintained their self-image, participants were more inclined to the impression management aspect of social desirability bias for this study. The following sensitive questions received the most social desirable responses:

Have you ever been tested for HIV or AIDS for any of the following reasons? (Sensitive reasons like having multiple sex partners were asked)

How many different partners have you had sexual intercourse with within the last 12 months?

Were any of these casual partners? In other words, were they someone whom you are not in a regular or long-term relationship with?

By interacting with the participants for an hour-long interview, some specific cues suggested some social desirability tendencies.³ In their answering process, some of these cues included, but were not limited to: shift of blame towards partners, societal problems and the health sector; providing only vague or partial answers (paltering); excessive and repeated personal behaviour praise; nervous facial expression and other body language cues; and inconsistent use of advanced vocabulary related to the study topic. In a pursuit to characterise social desirability tendencies among participants and develop/implement methods to curtail the bias, Bergen & Labonté (2020) observed the similar cues whereby participants overpraised the government officials in question; they were also fidgety when answering some sensitive questions and answering questions in a rehearsed manner. These observed verbal and non-verbal cues align with Krumpal (2013, p. 2041), who argues that "respondent's need for social approval, self-presentation concerns and impression management strategies yield socially desirable responses on the individual level". If participants find some questions sensitive, they will shift and twist their socially unacceptable answers to socially desirable ones, backed up with some cues that may impress the interviewer (Grimm, 2010; Krumpal, 2013). For instance, I observed some participants

³ It should be noted that not all participants demonstrated social desirability tendencies or responded to questions in ways that suggested social desirability bias.

over-praised themselves when interpreting awareness messages and answering interview questions on safer sex behaviours. They also shifted the blame for being promiscuous to their partners. The following thoughts and responses shared during the interview sessions indicated some social desirability tendencies:

Extract 33 (Nomathemba):

I never have and will never imagine or fantasise about being with another person in my bed beside my husband. Of course, I have male work colleagues and friends, but they will never get into my bed. It is taboo to sleep around where I come from, especially if you are a married womxn with children.

However, this kind of response was inconsistent with the follow-up probes and responses during the later stages of the interview process. For example, later on, during the interview, I asked some participants to explain their thoughts on 'one-night stand' incidences and how they perceive the use of condoms, PrEP and PEP; they sporadically explained how they 'dodged' the virus after drunken incidences with strangers. They mentioned how these preventative measures helped them not get infected with the virus. This contradiction flagged the possibility of incongruence between their expressed self-behaviours and actual sexual practices. Correspondingly, Bergen and Labonté (2020) pinpoint that the data collectors for their study suggested that they sometimes based their suspicion of social desirability bias on inconsistencies and contradictions in participants' answers. However, they interpreted this outcome with caution, given that participants in research studies may "change their answers, may misinterpret questions, and/or may genuinely have conflicting or complex views" (Bergen & Labonté, 2020, p. 788).

In order to reduce the amount of social desirability, the researcher implemented some questioning techniques that aligned with or were based on cognitive interviewing. Some of the recommended and utilised techniques included: asking indirect questions, giving assurance to hesitant participants when interpreting the awareness messages and answering interview questions (Bergen & Labonté, 2020; Grimm, 2010; Mooney et al., 2018). Assuring participants helped when participants felt like they were illiterate on some HIV/AIDS aspects. In instances where participants were likely to give socially desirable responses because of the sensitivity of the question, the researcher consistently assured participants of anonymity and confidentiality and permitted them to speak freely. Probing for more contextual information was one of the strategies

that allowed participants to explain more during the entire interview process and minimise the chances of giving social desirability responses. An example of a context follow-up question for further clarification was: "You had mentioned how you found out about your HIV status when you discovered that you were pregnant. What do you think are the reasons why couples or partners do not engage in voluntary testing?"

5.2.3 Use of Obsolete and Problematic Awareness Content

Utilising outdated and complicated-to-understand HIV/AIDS awareness materials emerged as the third Organising Theme in the collected information from participants. It was perceived as a considerable contribution to the barriers to accessing HIV/AIDS-related services. Many participants found it offensive that some clinics had awareness materials that they deemed outdated and not user-friendly. They highlighted that in as much as HIV/AIDS is one of the major challenges in South Africa, it should never be taken as a death sentence upon contraction.

5.2.3.1 Problematic, Generic Awareness Messages. As discussed under the "use of obsolete and problematic awareness content" organising theme, this basic theme focuses on the role that universal and complicated awareness content plays in contributing toward barriers to the prevention of HIV/AIDS among womxn. Most of the participants in the study disclosed that they failed to comprehend some of the pictorial and visual information on the awareness materials because of the use of unspecific words. Although most of them attained a certain level of basic education, they found it difficult to understand the messages behind the different awareness materials properly.

Concerning the mode of the awareness materials, most participants indicated that they preferred the non-media awareness campaigns over the traditional campaigns channels. LaCroix, Snyder, Huedo-Medina and Johnson (2014) elucidate that channel selection refers to the choice of the medium through which mass media and non-media awareness messages are distributed. According to Peltzer et al. (2012), traditional awareness campaigns frequently employ one or more media outlets, like television, radio, and print media (e.g., newspapers, magazines, leaflets, brochures, billboards, and newsletters). However, many campaigns have employed non-media channels, including advocacy for policy change, community mobilisation, peer education, and school-based components (LaCroix et al., 2014; Peltzer et al., 2012).

Extract 34 (Zoleka):

I prefer getting knowledge and education from the local clinics, not just learning from the billboards. This is because, at clinics, I can consult the health providers on any arising misunderstanding. These billboards are hard to understand because there is not much space to give detailed information; that is why I would instead be taught like a school child.

Extract 35 (Babalwa):

I prefer getting the message from the small community clinics rather than the vast roadside billboards that do not usually tally with the local socio-cultural norms. At least I know that when these health workers explain the awareness material to us, they can give relatable examples and explanations.

Another participant commented that:

Extract 36 (Siphokazi):

These community health workers and volunteers provide us with clear information by using cultural representational codes that the target population is familiar with. They likely convey the message more effectively than large billboards with generic messaging (typically created by international advertising companies) or extremely complex appeals that physically and symbolically go over people's heads. These health workers belong to this community; we stay with them, and they know all our risky behaviours; that is why we usually and quickly get the messages into our thick heads.

From the above extracts, one can notice why the majority of womxn failed to comprehend the awareness messages, especially from the media. The flow of their comments shows the need for interactive awareness campaigns, in which the recipients are afforded back-to-back conversations with the message conveyers. Researchers have advocated that to minimise difficulties in comprehending awareness messages and avoiding generic messages; resourceful health promotion posters must meet a mass of criteria which are: they must offer clear information; speak to different levels of concerns like personal, social and cultural, heighten message retention; express an apt level of realism; avoid offending the target audience or other audiences and viewers (Pauwels, 2005).

Other participants claimed that most of the poster campaigns are displayed in the 'not so right places' where most target audiences do not have access. They suggested that all the awareness campaigns' materials be displayed to reach the target populations easily. Targeted groups should also be able to have adequate time to absorb the message, for example, in clinics, taverns, waiting rooms and other public spaces:

Extract 37 (Pamela):

If only these officials who put health promotion posters could consult us on where they should put their billboards, we could probably evidence the drop in HIV/AIDS transmission and death rates. Why can't they put them in places like Mandisa and the popular shisanyama areas *apha eRhini* (here in Makhanda)?

Another challenge to the generic messages was the language and dialect variations used in relaying the awareness messages. As indicated before, most of the study populations spoke isiXhosa; older womxn tended to use the original and 'pure' language and forms of expression, while younger participants used colloquial versions. Therefore, awareness messages carrying generic and universal language posed a challenge in interpreting their understanding of the awareness messages. Womxn put forward the need to have intensive, focused and sustained intervention materials designed in the style and language of the designated and targeted communities. LaCroix et al. (2014) recommend the importance of choosing the veracious kind of appeal and of "nurturing" the target audience with carefully well-thought-out message components to foster the right kinds of attitude and perception.

In addition, participants raised concerns about the over-reliance on particular awareness messages compared to others; for instance, the proximal cause of HIV infection is sexual behaviour. Upon being queried to give their opinions on the overall awareness messages in the respective waiting areas of the clinics, participants highlighted that the numerous HIV/AIDS prevention messages are now monotonous. They further indicated that there are more potentially effective awareness contents that policymakers and healthcare providers do not emphasise.

Extract 38 (Natasha):

We are in 2021, and the health sector still emphasises behavioural and biomedical awareness campaign materials to address HIV/AIDS. We all know that the infection is spread mainly through sexual encounters, but what can one do if they want to support their families and the only choice is to be a sex worker. There is so much poverty in this country, even here in Makhanda, we have individuals that choose to sell their bodies for survival.

Extract 39 (Yonelisa):

I fully support the available risk reduction messages in this clinic and our communities. The only disadvantage is that the health sector still relies on the scientific nature of HIV/AIDS. We hear condoms use, medication, and getting tested for HIV/AIDS every time. Let me speak for myself as a womxn; not everyone is promiscuous and gets HIV/AIDS out of their own choice. Look at the levels of sexual assaults towards womxn alone in South Africa. Not everyone dares to seek medical assistance when sexually assaulted, and how is the health sector addressing this?

Extract 40 (Katlego):

I have a married friend who is always telling me that most of the time, as much as she wants to protect herself and her children, all the sexual decisions rely more on her husband, who has the upper hand in these matters. I suggest that the health sector start putting much effort into providing awareness messages addressing socio-cultural risk-enabling factors.

The above extracts speak to the socio-structural factors that mediate the risk of exposure to HIV infection, sexual violence, and gender inequality in relationships and sexual decision-making also mentioned under the hegemonic masculinity theme. However, a slight difference exists in the nature and structure of the awareness messages from the public health sector. Under this theme, participants expressed their deep concerns about how the public health sector tends to overemphasise some aspects of the HIV/AIDS risk factors like biological while turning a blind eye to other causal factors embedded with the societies.

5.2.3.2 Inadequate Significance of Awareness Materials to Some Populations. This basic theme elaborates how some womxn indicated that most of the visual awareness campaign messages (mainly photographic images) foster a sense of exclusion for specific groups of people. Participants reflected that although visuals provide good illustrations concerning the awareness type, they are also bound to exclude some specific or general populations. Most participants who identified as part of the LGBTQI+ community questioned awareness campaign materials like those illustrated in *Figure 3*. They questioned why most of the posters and awareness materials focus on spreading HIV/AIDS within heterosexual relationships.

Extract 41 (Laura):

I wonder when our government will realise that *nathi siyawadinga ama* Awareness messages (we also need awareness messages). Why do they have to place posters publicly that only depict a particular sexual orientation, predominantly heterosexual relationships? The LGBTQI community is one of the at-risk populations, yet they are isolated in important matters like these.

Extract 42 (Terry Lyn):

I honestly do not resonate with these posters as I have never slept with someone of the opposite sex. I do not support that the spread of HIV/AIDS is mostly among people in heterosexual relationships. It is also still a shock that there is some stigma-related information that HIV/AIDS came through gays and lesbians.....you see, these are some of the issues that these posters should address widely.

Extract 43 (Nomathemba):

It is pretty surprising that South Africa legalises same-sex relationships/marriages but still does not provide as much information about HIV/AIDS prevention in this community. As a lesbian, I have first-hand information about how [some] my community members and healthcare providers like nurses are homophobic. Imagine if one is afraid of 'coming out; how are they even going to get the guts to come into contact with the healthcare services? Something needs to be thoughtfully done to have access to adequate awareness content.

Figure 3*Clustered HIV/AIDS clinic awareness posters*

The extracts above indicate an abandoned gap in health services for some populations in the South African context, especially the LGBTIQ. Coetzee et al. (2017) pinpoint that HIV services for key populations in South Africa remain inadequate, yet it is one of the population sectors hugely at high-risk exposure to HIV/AIDS. Just as the findings from this study, Mprah (2016) believes there is inadequate HIV/AIDS information for the key populations, even in the public health facilities. This has forced non-profit organisations to advocate for key populations like lesbians and gays by providing adequate services and information, for example, Triangle Project in Cape Town.

In addition, participants claimed that there were still traces of racism and exclusion in terms of the visual awareness materials in public spaces like hospitals and clinics. One participant expressed these views:

Extract 44 (Thembisiwe):

I do not know if, in this 21st century, we still need to remind our leaders of inclusivity. Look around here [at this clinic's waiting areas and service rooms] to see if you can find any poster that also speaks to the LGBTQI community.

Other participants also shared similar sentiments regarding the number of posters that they deemed meant that HIV/AIDS is still regarded as a disease for the poor and the black community. When interpreting the available posters and pamphlets, they constantly asked why almost all the posters had black families and individuals. There is adequate evidence that suggests a close association between poverty and HIV/AIDS, with the poor instituting the absolute majority of those living with HIV/AIDS (UNAIDS, 2019). Participants countered that while the majority of those living with HIV/AIDS are from lower socioeconomic classes, not all impoverished people are HIV positive, and a significant portion of those from the middle class are HIV positive. Therefore, it is important to consider poverty as a co-factor together with other aspects. According to several experts, poverty's root causes of inequality should be recognised as a key component in the spread of HIV/AIDS.

Extract 45 (Natasha):

These posters are put in inaccessible public spaces like clinics, hospitals, halls, etc. Does it mean that we black people are the only ones who visit these places? Again, HIV/AIDS is not for poor people, as portrayed in that poster. I believe Makhanda cannot be said to be an all-black community; we have other races here. It would be helpful to see other races put on these posters whether to use condoms or cooperate in fighting HIV/AIDS correctly; whatever it is, all races should be accommodated.

5.2.3.3 Limited Knowledge and Avoidance of Prevention Public Information and Testing. Findings from the study indicated some stigma associated with accessing public awareness information, including getting tested for HIV/AIDS during public campaigns. This was mainly linked to limited knowledge and understanding of HIV/AIDS in most populations in the community. Participants were generally comfortable answering questions about their knowledge and understanding of HIV/AIDS, and none of the questions was perceived as too intrusive. However, some of the womxn interviewed failed to explain what they know thoroughly and

understand about the transmission, prevention and treatment of HIV/AIDS. Consequently, when participants did not know specific details about a particular item or fact about HIV/AIDS, the feeling of being 'illiterate' was observed from their non-verbal cues. Posters encouraging attending community public awareness campaigns to get accurate and verified information on HIV/AIDS received mixed reactions from participants. The code 'stigma' popularly emerged from the text segments in almost all the themes of the study:

Extract 46 (Siphokazi):

In my community, people are not only highly stigmatised because of their HIV status only, but also if they want to seek public knowledge on HIV/AIDS. People start raising eyebrows when someone shows interest in attending community awareness campaigns on HIV/AIDS. This is not only affecting the stigmatised individuals but also leading to limited and inaccurate information on HIV/AIDS.

Extract 47 (Nomfundo):

(laughs) You do not know my people. Attending community awareness campaigns indicates that one is at a high risk of contracting HIV. You know..... people who think they might be at risk of HIV also experience stigma. You will discover that a lot of people avoid getting tested, getting knowledge about prevention, or using condoms since doing so implies that they are acting in a risky or unhealthy way sexually.

In addition, participants complained about posters and other information-based awareness materials potentially misleading individuals about the health care services available to the general population. They mainly raised the point that what is shown in the materials is very different from what happens on the ground, especially concerning treating and caring for people living with HIV. Some participants mentioned that they have never received pre- and post-counselling sessions when tested in public clinics. Similar to these findings, Coombes (2019) found a wide gap between theoretical HIV/AIDS policy and practice. This means that much work has been done on the theoretical aspect of HIV prevention policy. However, little work has been done to transform the theories into the practicality of addressing HIV/AIDS in South Africa. Some of the reasons and difficulties encountered in executing theory to practice include the complexity of the policies to a dynamic South African population; the existence of multiple stakeholders; political, social, and

ethical considerations; misuse of the limited funding (Coombes, 2019; Flowers et al., 2017). Participants expressed the following thoughts:

Extract 48 (Sandra):

People living with HIV/AIDS are the most neglected population in this country. These posters say that an HIV/AIDS package covers acceptance of status, disclosure, partner counselling and testing, psychosocial support, nutrition counselling, treatment adherence counselling, and outreach services. In my experience, as a person living with HIV, this is just in theory and not in practice. If you are tested, just know that you will only engage with HIV/AIDS services when you return for check-ups. I do not know whether they have too much workload or do not care, *Abana ndaba nathi* (they do not care about us).

Extract 49 (Babalwa):

Getting tested, treatment and support in public health facilities is not as glorious as the pamphlets and other awareness materials you have shown me here. I think that is one of the reasons why [we] would instead seek information from other alternatives like the media, talk shows and many other activities.

Extract 50 (Yonelisa):

As for me, I got tested in a public clinic, and I think [those] nurses were just testing for the sake of doing it. I was like, I would not do a self-test and instead consult a professional nurse. I was shocked because I did not receive sufficient follow-up information and support, as shown in these clinic displays.

Many disputed that the health care system follows up with clients who have defaulted from the treatment program as indicated on the HIV/AIDS displays. Participants mentioned that the linkages that are supposed to be present between the community and health facilities are non-existent. This was pointed out as one of the reasons there is no continuous care for people living with HIV. Furthermore, individuals do not show up at the different support groups in the community because of the stigma around people living with HIV/AIDS. They indicated that instead of the community serving as a hub to reduce the stigmatisation of HIV-positive individuals, it is perpetrating and increasing the amount of stigma.

Regardless of the misconceptions and stigma in their communities, most participants knew that HIV could be transmitted by sexual intercourse, from mother to child, by sharing contaminated needles or syringes and blood transfusion. Overall, all participants mentioned that HIV is transmitted by exchanging sharp objects like razor blades, needles, safety pins, and toothbrushes. One womxn narrated how HIV could be transmitted through the use of safety pins, "Supposing you use an HIV-infected needle to remove a thorn and the infected blood on the needle touches yours, you will contract AIDS."

Although many womxn had inaccurate perceptions of HIV/AIDS, some revealed that having in-depth knowledge would encourage individuals to test for HIV. As a result of inaccurate perceptions, many participants also seemed unaware of the treatment options for people with HIV in South Africa. Participant responses also noted that a lack of clarity on how the HIV testing process happens could contribute to how people cognitively process the act of testing. Although awareness messages were encouraging frequent HIV testing, some participants disclosed that deciding whether to get tested is daunting. These insights were shared during the interview:

Extract 51 (Simphiwe):

I think if you ask many people, "Do you want to be tested?" those who have not been tested will say ah, "No, it is better for me not to know". Because of the stigma, many people avoid getting tested because they think they are finished. So we need much education about HIV/AIDS.

In general, what the researcher perceived as general knowledge and well-understood concepts, with the implicit assumption that participants usually know, or at some previous point knew, the information necessary to respond was proved wrong. The study found that although information requested in a question may not seem sensitive, a lack of adequate knowledge about the topic was sensitive.

5.2.3.4 Individual Responsibility - Victim-Blaming. Several participants complained about some of the awareness messages that still carry the message of blaming an individual for getting infected with the virus. They highlighted the negative impact of AIDS prevention messages that simplify the transmission of the virus into a matter of personal choice. Research has indicated that prevention messages that are inclined towards 'victim-blaming' keep people from seeking to

know their HIV status, openly discussing the prevention of HIV/AIDS, changing unsafe sexual behaviours, and impact the supportive care for people living with HIV (Coombes, 2019; Harrison et al., 2015; Sabi & Rieker, 2017). Victim blaming, therefore, impends the utilisation and effectiveness of HIV/AIDS prevention and care efforts.

Extract 52 (Michelle):

Of course, I understand that the popular awareness campaign messages point out that if one 'merely' avoids the risk behaviours associated with transmission of the virus, including unprotected sexual intercourse and sharing needles for intravenous drug use....one can avoid getting infected with AIDS. I beg to differ; those infected with HIV/AIDS are not responsible for their plight in many or some cases.

Extract 53 (Aneliswa):

Not everyone infected is to blame, and take responsibility for that. I always tested negative my entire life when I visited the hospital/clinic for check-ups. I got the shock of my life when I tested positive when I went for the antenatal visits. [I] was faithful to my husband and never got involved with anyone. Being a [loyal] housewife ended in tears for me (faintly giggles).

Extract 54 (Zoleka):

I do not understand why HIV-positive people have to carry the burden imposed by community members on their status. Labelling HIV-positive individuals should stop in our communities because certain positive individuals were born with the virus.

The above extracts illuminate how infected individuals are judged, labelled and discriminated against based on their status. They not only receive these discriminatory labels from the society, but the messages portrayed in the awareness materials still push the individualistic HIV/AIDS risk factors over the other factors like structural ones (Harrison et al., 2015). Participants demonstrated that some infected individuals are in those situations for reasons beyond their control, for instance, the failed health services and mother-to-child transmission. Other participants also supported how they interpreted some awareness messages as perpetrating isolation and stigma against PLWHA. They also highlighted how some awareness materials fail

to acknowledge the other numerous factors embedded in the society that play major roles in the vulnerability to HIV/AIDS, especially for womxn.

Extract 55 (Ntombifuthi):

All approaches that employ individual responsibility lead to isolation and stigmatisation of infected persons, especially from where I come from. People still believe that AIDS kills, and it is primarily found in promiscuous individuals. So, ...imagine if the awareness messages still dwell on those approaches.

Extract 56 (Grace):

Okay, truth be told here, in University, we say that financially excluded students are likely to be left behind academically, which may lead to other challenges socially, mentally etc. In this aspect, socially excluded individuals are more likely to be vulnerable to HIV/AIDS. These public health interventions are failing [one thing] to address the societal issues that increase vulnerability to infection, like gender imbalances.

Extract 55 might imply that there is a "fine line between addressing the need for behaviour change in health education and the danger of such efforts lapsing into or being understood as "victim-blaming" (Mall et al., 2013, p. 197). The point of this argument is that, in some instances, HIV/AIDS education has the potential to push the already existing stigma and isolation of people living with HIV/AIDS. As discussed under the 'problematic, generic awareness messages' basic theme, while individuals must implement behavioural changes, some risk factors that aggravate exposure to HIV/AIDS are embedded within the structural realm. Although most participants expressed their disappointment with some content of the awareness messages, they also did not paint them with the same brush. This means that not all awareness materials put forward victim-blaming. Other materials have undoubtedly worked to contextualise HIV/AIDS in its social and political setting rather than simply blaming isolated individuals.

5.2.3.5 Scarcity of Awareness and Prevention Campaigns in Communities. This basic theme indicates how all the participants indicated inadequate public awareness campaigns in their local communities. They highlighted that the common ways awareness and education are spread are through the local clinics on posters and pamphlets. The HIV/AIDS information sources for all the participants were through the radio, television and hospitals, and a small number of community meetings held by different organisations. Some non-governmental organisations, the church, civil society, and drama groups visited the community for the community meetings. They held assemblies where the messages about the spread and prevention of HIV were delivered. Many womxn pinpointed that it is challenging to grasp the multiple outdoor and roadside billboards because these carry multiple meanings. "I wish we could get frequent visits from health professionals and community lay counsellors to teach us about this disease", exclaimed Sandra. All participants confirmed that while there are commitments from national and provincial officials and existing national strategies to address HIV and related diseases, the health and education systems are not providing the necessary information and services for womxn.

In addition, womxn stated that insufficient investment is being made to empower communities and civil society organisations to launch more effective and sustainable responses. This finding resonates with the past research and findings that communities continue to be left behind in ending the epidemic because there is a lack of grassroots HIV/AIDS policies (McNeil, 2015; Nicholas et al., 2010). Furthermore, there is an absence of targeted outreach, media campaigns, and high-profile champions in communities. Many authors have expressed disappointment in how the health sector puts much effort into enforcing national HIV/AIDS policies, forgetting that in order for policies to be successful, community members should be actively involved and empowered with resources (Nicholas et al., 2010; Nunn et al., 2012; Peltzer et al., 2012). In a small community like Makhanda, womxn expressed how disheartening it is that posters and awareness campaign messages are primarily found in clinics only. Participants repeatedly alluded that they wanted more leadership and information on HIV and to see role models of healthy living that make HIV prevention and staying negative admirable and demonstrate how to live positively with HIV. Some participants indicated that they notice some changes during the elections season when politicians will campaign and promise the community better health facilities. However, this is discontinued the moment they all get in office. These views were shared by one of the participants:

Extract 57 (Nokubonga):

What womxn in my community need are not empty promises; we need to be heard for all our grievances. Did you see any significant posters or HIV/AIDS awareness messages besides the ones in this clinic? What you find most are those campaign posters, vote for so and so. As womxn, we have tried to support each other, but we have inadequate resources.

Extract 57 possibly implies that the local municipality and the local sector are not doing enough with pertinent and urgent matters addressing the continued rise in HIV infections. The issue raised here by participants is not that there are no materials available. However, it is more about not being enough different kinds of awareness, intervention and support strategies for people living with HIV/AIDS. HIV transmission and testing information are insufficient; support for managing HIV, reducing stigma, and ensuring adherence to ARV treatment is required.

5.3 Integrative Discussion of the Thematic Network Analysis

This study analysed womxn's understanding of the numerous South African public health awareness campaigns' messages on HIV/AIDS. The study focused on three significant aspects: the process/es of understanding HIV/AIDS awareness materials; contributions of the awareness content to potential barriers to womxn's reproductive justice; and the usefulness of cognitive interviewing in assessing womxn's understanding of the HIV/AIDS public awareness materials. As evidenced by the above analysis and discussion of the results from the study, various basic themes were directly linked and supported each other.

The study links the themes that emerged under the organising themes of "Hegemonic masculinity" and "Individual behaviours and/vs cultural expectations". Womxn's understandings of the HIV/AIDS awareness materials reflected the realities of their social and cultural contexts, as indicated from the themes that emerged under these two organising themes. Womxn's interpretations of the awareness materials indicated the power imbalances between womxn and their male counterparts. As evident from the extracts under these themes, societal and cultural norms hugely impact womxn's reproductive justice. This analysis supports the reproductive justice framework that implies that systemic inequality and institutional forces such as gender inequality, culture, and societal norms shape individuals' decision-making processes, especially vulnerable womxn around their reproductive justice (Ross, 2017). Similar to the reproductive justice framework, the ability of womxn in this study to determine their

sexual reproductive destinies, especially related to HIV/AIDS, was directly linked with the community's conditions. For example, under the "hegemonic masculinity", womxn's independent decisions to adhere to HIV prevention interventions are impeded by inconsistent use of condoms, the prevalence of gender inequality and extramarital affairs from their partners. Likewise, having to take full responsibility for HIV/AIDS prevention by mostly womxn and some other harmful traditional practices in the society make it difficult to adhere to the HIV/AIDS prevention measures like the uptake of ARVs.

Furthermore, the results show close support between the basic themes: "gender inequality" and "harmful traditional and cultural practices". Both themes speak to the structural vulnerabilities, described as "the economic, social, policy, and organisational environments that 'structure' the context in which risk production occurs" (UNAIDS, 2019, p. 19). Most participants from the study interpreted the awareness materials as perpetrators and enablers of gender inequality and harmful traditional practices against womxn. They argued that the public health sector has the power and resources to positively impact the cultural and societal norms that lead to womxn's barriers to HIV prevention, treatment and care; however, they are turning a blind eye to these structural factors. Similarly, the literature reviewed is of the notion that gender inequality is shaped and propagated partly by social norms that mandate culturally appropriate roles and conduct for womxn and men (Sabi & Rieker, 2017). This entails that gender inequality and harmful traditional practices are embedded within societal and gender norms that impede womxn's exposure to good reproductive health services.

In addition, the data suggest that womxn take the majority of the burden and responsibility for the prevention, treatment and care of HIV. From the interpretations collected during the study, womxn identified that the public health sector, through the awareness messages, puts womxn at the forefront of the fight against HIV/AIDS. Perhaps, this is a call to the health sector to be more inclusive of everyone in their respective roles in the fight against HIV/AIDS. The analysis supports the notion that men are 'back-benchers' in preventing HIV/AIDS (Madiba & Ngwenya, 2017).

Finally, another outstanding barrier to emerge from the data analysis was blaming an individual for being HIV-positive and making the matters of HIV/AIDS a womxn's issue, like getting tested on behalf of the partner. Seeking HIV/AIDS medical assistance is still stigmatised

in contemporary societies, yet womxn are pushed to endure this stigma and societal judgements by regularly visiting the clinics for HIV treatment. This study's analysis supports the reproductive framework principles that propose the intersectional approach to social issues (Ross, 2017). Macleod and Feltham-King (2019) highlight the intertwining of individual and social processes, evidenced by the data analysis. This means that individuals do not exist in isolation; instead, a complex interaction of power relations cohere around various axes. Moving away from a public health strategy that emphasises promoting individual responsibility is necessary because of the complicated intertwining of material and symbolic difficulties at the individual and community levels (Macleod, 2018). Instead, the material and symbolic power relations that affect young womxn's lives both personally and collectively are highlighted, with a focus on changing those that undermine autonomy and healthy reproductive outcomes (Stephens et al., 2012). This entails that, instead of handling matters of HIV prevention, treatment and care in isolation or at an individual level, collective action should be enforced at all the levels of interaction to address the barriers to womxn's reproductive justice.

5.4 The Usefulness of Cognitive Interviewing

The themes emerging from this data analysis section were introduced through the interview questions throughout the interview process; therefore, they should not be regarded as emergent from the data. For this study, the thoughts/understandings/knowledge about HIV that the participants expressed in relation to the awareness materials was explicitly a social constructionist one (i.e. individual cognitions are socially located and mediated) and therefore part of the focus of probing in the interviews was to explore participants responses against the context of their social environments and practices and to use this as a lens through which to talk back to awareness materials.

Cognitive interviewing uses cognitive theory to understand human information processing. These processes include memory, language processing, attention span, action, word recognition, problem-solving and reasoning (Neuert & Lenzner, 2016). Cognitive interviewing is typically used to test and refine measurement scale items like questionnaires and interview guides (Miller et al., 2014). This is a valuable purpose for cognitive interviewing because it assists in assessing participants' levels of comprehension, identifying difficulties in questionnaire completion and helping refine it (Liani et al., 2015). As a result, cognitive interviewing is a useful technique to

decrease measurement error brought on by incorrect interpretation of specific questions and raise the validity of the questionnaire (Collins, 2014). However, the use of the cognitive interviewing technique in this study evaluated the reception, processing and comprehension of public awareness. Also, the purpose of using cognitive interviewing in this project was to focus on participants' responses on how they understood the HIV awareness material. Therefore, this section of the results is geared toward evaluating how effective the cognitive interviewing technique was as a tool for evaluating the effectiveness of public health awareness campaigns, specifically in terms of comprehension, remembering information and social desirability. In order to assist the data analysis process, I explored how participants organised HIV/AIDS knowledge in their memory and how they retrieved memory concerning completing interview questions.

5.4.1 Problem Identification in the Structure and Wording of Awareness Material

The study reviewed that cognitive interviewing was helpful in the identification of problems that emanate from the wording and structure of the awareness materials' messages. Besides the language barriers hindering the adequate understanding of the public awareness message, the study identified that levels and extent of understanding are related to the population and age of the participants. A substantial number of young womxn were swift in grasping and understanding the different awareness messages they were tasked to interpret. Regardless of feeling comfortable and opening up whilst answering the numerous probes, participants complained a lot about certain words from the awareness messages that they found vague and hard to understand. I observed that some would answer the interview questions, unsure if their interpretation aligned with the awareness message or the question. Upon noticing this, I quickly probed the womxn for further clarification of incidences like these. One of the participants freely commented:

Extract 58 (Pamela):

By the time I finish this session, I will probably be annoyed by how unclear these awareness messages are in my case. The thing is, I want awareness messages to address me directly. I want it to speak to me.... I know it is challenging to make awareness messages that address every person in Mzansi, but I will never be able to recall and apply it in my life with one.

Many participants found it extremely difficult to interpret some awareness materials and understand some follow-up probes on the awareness content. Several changes were made to the

questioning strategies due to the unclear wording in the numerous awareness materials. Although there was unclear wording in some awareness messages, certain participants had the vocabulary necessary to answer the interview questions and interpret the messages. I observed that awareness messages that were difficult to interpret were phrased in a way that did not accurately reflect participants' experiences. For instance, some awareness messages about PEP and PrEP lacked adequate understanding and interpretation from the participants because most of the womxn claimed to have neither used them nor come across the information.

In order to address some challenges that the participants were facing in terms of understanding some words from the awareness materials and interview questions, I implemented the verbal probing techniques. Verbal probing is a cognitive interviewing technique used to trace question-answer problems during the interview by asking further questions for clarification (Miller et al., 2014; Neurt & Lenzner, 2016). From the study findings, stigmatisation is one of the popular terms in several participants' answers. Although some participants did not mention 'stigma' directly, their answers and explanations pointed to stigma, for example, when they mentioned the cultural stigma against condoms in their society and the stigma-related information from the awareness materials. Using concurrent and reactive verbal probes to follow up on participant responses, I challenged participants who had mentioned stigma-related material to explain the extent of stigma around HIV/AIDS health services, treatment, condoms and many other services. When I probed, "Did you ever feel stigmatised because you were using (this product/service)?" some participants struggled to understand the word "stigmatised" in both English and isiXhosa translations, whilst others attempted to answer but gave insufficient information. To make the question understandable for the participants, I rephrased it to: "Did you ever feel that people looked at you differently because you were using (this product/service)?" Rephrasing the question was proposed to convey the question's meaning in a more easily understood phrasing. Subsequent testing with participants indicated that their definitions of "looked at you differently" fell closely in line with our definition of "stigmatised". In a study conducted by Liani et al. (2015), they recommend that researchers need to apply the non-standardised verbal probing prompts to allow an expansive and open-ended dialogue with the interviewees. This indicates that probes can be rephrased to clarify participants' thoughts further when answering questions.

5.4.2 *Recalling the Awareness Messages*

Recalling the numerous awareness campaigns was influenced by several factors, ranging from personal to medical ones. The study findings indicated that the ability to recall the awareness messages (if any) that prompted the participants to, for instance, get tested depended on the recency and salience of the encounter with the message among participants of all ages. All the womxn in this study were highly adept at reporting how much information they recalled about what messages led them to be tested or further enquire about HIV/AIDS from health professionals. Nearly all participants could recollect or calculate with certainty when they were examined as well as the motivating factors. This came as a bit of a surprise because I had hypothesised that participants' ideas of time could be skewed because of the many factors surrounding HIV/AIDS, including stigma, sociocultural norms, and accessibility to quality medical care. Unsurprisingly, the HIV test result influenced many participants to recall how the messages looked.

Participants were questioned about whatever slogans or messages from HIV/AIDS campaigns they could recall. The unprompted, multiple responses were analysed and grouped into codes and themes. The coding and categorisation process provided an in-depth insight into the general recall of HIV/AIDS campaign orientation and the internalisation of messages (Willis, 2004). The participants remembered the slogans "Practice safe sex/condom use," "No cure for HIV/AIDS," "AIDS kills," "abstain," and "Have one sexual partner" as being the most prevalent. Less popular slogans included "We must care and support PLWAs" and "The infected people can live a longer life if they follow precautions of their treatment." The words "HIV testing," "HIV is living," "You can get HIV through blood contact," "Do not have sex before marriage," "having multiple partners leads to AIDS," and "HIV is a virus that causes AIDS" received just a limited amount of attention. Many participants mentioned that they managed to recall these awareness messages because they believed and thought these messages could guide many people, especially womxn, into making the right decisions about their sexual health. However, a few womxn mentioned that they had had problems with some of the awareness messages like 'AIDS kills'. They suggested that the health sector must ensure that the awareness messages conveyed to people are correct and updated.

Recall strategies used by most participants included thinking about the season and other life events during the period they got tested. Questions about HIV/AIDS test results required a

reference point; therefore, it was necessary to narrow the participant's focus to particular events and incidences when they got tested. In an effort to engage participants to consider the degree of importance of their memory and word recognition, I explored with the idea of asking respondents to name "the awareness message that prompted them to get tested". Many responses were associated with how they had felt deviant and unwell after engaging in unprotected sex during 'one-night stand' incidents and other life events. One participant shared the following recall viewpoints:

Extract 59 (Siphokazi):

You bring me back to when I first started dating and felt like I was now an adult. that stage in life where you start spending the nights out, drinking, and being naughty and irresponsible. We went out with my friends....one thing led to another; the next thing I found myself in bed with this guy. Knowing that it was [unprotected] sex, my mind rushed to HIV and pregnancy. All the awareness messages I saw suggested using condoms, getting tested, and sticking to one partner. It was a huge and [scary] decision to go to the clinic to know where I [stand].

5.4.3 Lexical vs Pictorial Issues with the Interpretation of Awareness Messages

Nearly every element of the cognitive interview process was impacted by language issues. Due to isiXhosa being the majority home/first language of the research participants, the interview guide was translated into this language. However, the awareness messages used for this study were mainly in English; hence, some participants failed to grasp the content if not in their mother tongue. The study found a scarcity of awareness messages of relatable or common geographical language in Makhanda, leading to misinterpretations and misunderstandings. Therefore, the interpretation and understanding of the preventative awareness messages seemed to be a challenge due to the levels of English language proficiency. Although there was an interpreter during the entire interview process, some womxn still found it very difficult to answer the questions or explain what they knew about the awareness messages.

Participants found posters easier to understand and interpret if they had images and pictures. The written and graphic awareness messages, according to more than half of the participants, were complementary. Participants who had less literacy indicated that the pictorial instructions helped them understand the written instructions better, which was helpful for the

study. Participants admitted that they used the text-based instructions instead of the images when they were too difficult to grasp, as in the case of the erroneous condom usage shown in the illustration(s). However, participants did not apprehend the meaning of some pictures unfamiliar to their local context. Martin et al. (2017) note that "participants' responses are influenced by culturally normative communication styles" (p. 318), which may be inconsistent with the questions being asked or the tasks at hand. Over half of the participants at all the clinics incorrectly interpreted the condom held by a young womxn (see *Figure 4*) because I initially closed the written words on the poster. The reason that more than half of the participants misunderstood this poster's message and other awareness messages suggests that word and graphic messages worked well together and that common sense won out. These opinions were expressed by one of the participants:

Extract 60 (Xolile):

... the picture does not make sense about what we are discussing now. What does it mean? It looks like she is ready and prepared for a fistfight. Is she holding something to defend herself.....yeah, it looks like it? Maybe I need a more precise version of this picture to interpret it correctly.

Figure 4

A poster of a young womxn holding a condom



Using complex phrases, new symbols and visuals, and the order in which the text and pictures describing the actions were presented were other factors that hindered participants' comprehension and performance of some instructions. Many participants stated that vital components of their indigenous isiXhosa language, such as metaphors, idioms

and proverbs should be utilised to maximise the effectiveness of any prevention program for sexual behaviour change.

Extract 61 (Simphiwe):

I wish for the health sector to at least use language that ordinary people can understand. Even better than simple language, they should use real stories to illustrate their awareness. They should conduct a situational analysis to see if they should modify their language and choice of words.

Extract 62 (Laura):

Makhanda is one of the poorest semi-urban towns, highly populated with older people who cannot grasp these fancy HIV/AIDS awareness messages. The elderly need to hear everything being said and presented in their local language. Besides being old or young, we should learn to appreciate our language and culture.

The majority of the womxn, although they indicated some extent of literacy, still failed to comprehensively interpret the numerous HIV/AIDS awareness messages written in English. Participants were generally and uniquely able to critically describe and explain the messages behind all the posters for all the questions. As shown in the following example, the researcher probed the participant to explain to what extent they were having challenges interpreting worded messages against the pictorial ones:

Interviewer: How is an image poster different from the other written awareness messages?

Participant: With an image, you can see that thing and picture it; with the written messages in English, you have to understand the message fully; otherwise, you will not interpret it correctly. The young generation says *ishungu* is complicated.

5.4.4 Failure to Verbalise Their Thoughts on the First Question Encounter

Of all the participants for this study, only a few answered the different interview questions and probes at the first prompt. The majority had difficulties thinking aloud, which is one of the cognitive interviewing techniques. Think-aloud is a one-on-one interaction between a study participant and a researcher that aims to record the participant's problem-solving process by asking the participant to speak their thoughts aloud (Miller & Baena, 2014). To think aloud, one must

express their thoughts aloud while engaged in a task or activity. Most essential, the researcher wants the subject to concentrate on what they are thinking, not why they are thinking it (Collins, 2014; Silverman, 2016; Willis, 2004). In order to teach participants how to think aloud at the beginning of the interview, the researcher gave an example before letting them practise on a task that was analogous. After then, the participants were free to do the tasks while speaking openly, with the researcher only interjecting if there was an extended period of silence. When asked interview questions, even in response to a prompt, the majority of participants found it challenging to articulate and think aloud their cognitive processes. However, a few seemed to become more fluent as the interview went on. The purpose of employing both verbal probes and think-aloud approaches in this study was to examine participants' knowledge, recall, and choices of answers/responses when responding to questions about HIV/AIDS public awareness content. Both scripted and unscripted probes were used to capture participants' interest and encourage active participation in the interviews and conversations. In instances where there were misunderstandings and challenges with answering questions, I made sure that during the rounds of cognitive interviewing, suggestions for both verbal probing and think-aloud procedures were improved to make sure that the participants understood the questions. Participants were able to clarify their responses to the questions through rephrasing both the verbal and think-aloud probing strategies (Boeije & Willis, 2013).

Furthermore, this study preferred implementing unstructured probes that eased the researcher-participant tension. For this study, retrospective probing was also used, and participants were urged to express their perspectives and ideas regarding the questions they responded to in the interviews (Boeije & Willis, 2013). The results of this study, which are consistent with those of Neurt and Lenzner (2016) and Sopromadze and Moorosi (2017), show that retrospective probing encourages participants to answer questions freely, which maximises the likelihood that questions will be answered accurately and effectively. One of the advantages of retrospective probing that was evidenced during this study is that it does not interfere with the flow of answering all the questions, therefore creating a more realistic interview session (Neurt & Lenzner, 2016). The following claims support these findings:

Extract 63 (Sandra):

Oh, this is what you meant when you asked me about the aspects of my community/context that might stop me and others from doing what the awareness campaigns suggest (*giggles*)?.... You know what? I like it when I am given a chance to express and explain myself freely. When you first asked me this question, I was hesitant because it felt like you just wanted a concise and precise answer. Now that I know that I can openly explain the question, surely I can elaborate on what I meant when you first asked.

Additionally, I used concurrent probing for the majority of the first round of questions in the cognitive interview and afterwards switched to retrospective probing for the second round of questions. While over-probing often makes participants uncomfortable answering various questions (Miller & Baena, 2014), this study found that retrospective probes minimise over-probing. The researcher improved comprehension and shortened interviews by switching out the concurrent queries for retrospective questions at the end of the questioning (Willis, 2004). This proves that participants in this study engaged in verbal probing and think-aloud procedures to assess the clarity of questions and awareness messages and determine whether they had understood them as the researcher intended.

5.5 Integrative Discussion of the Cognitive Interviewing Themes

Cognitive interviewing, a technique that seeks to learn more about how participants acquire and perceive knowledge and how they arrive at specific answers or judgments, was used to evaluate womxn's comprehension of the HIV/AIDS awareness materials (Miller & Baena, 2014).

According to the study's findings and analysis, cognitive interviews can reduce measurement mistakes by highlighting problems that already exist and potential improvement areas (Boeije & Willis, 2013). This was evidenced when participants identified some problems in the wording and structuring of the awareness messages that had led them to face challenges in understanding them. According to the literature reviewed, participants use the verbal probing and think-aloud techniques to assess the clarity of the questions or information being used and to judge whether they have understood it as intended (Miller et al., 2014). Additionally, the utilisation of cognitive interviewing for this study proves the prominence of cultural adaptation in the wording and structuring of the HIV/AIDS awareness materials. This was unravelled through the verbal

probing and think-aloud techniques that helped identify the culturally insensitive awareness materials.

Chapter Six: Conclusion and Recommendations

6.1 Introduction

This research was intended to explore womxn's understanding of public health awareness content on the prevention of HIV/AIDS using a cognitive interviewing methodology informed by a constructionist research paradigm and a reproductive justice theoretical orientation. In this chapter, I shall summarise the findings from the preceding chapter and examine the study's strengths and weaknesses. In addition, I will comment on this study's implications by reflecting on the impact that this research might have on future research or policy decision-making. In other words, I will answer this question: "How will the research affect the targeted community or subject field?" Finally, the chapter will discuss the study's suggestions based on the research findings and point out the precise actions or directions that can be done. As a result, the research's implications reflect its impact, and the research's suggestions are examined in more detail.

6.2 Summary of the Findings

The findings from the study suggest that almost all the challenges that womxn faced in terms of understanding and interpreting the awareness materials stemmed from structural factors in the South African context. Although other factors emanated from the behavioural and biological perspective, what was found was that elements that inhibit womxn from attaining their reproductive rights and justice are frequently beyond their individual control. These structural factors include the economic, social, policy, and organisational environments that "structure" the context in which HIV/AIDS knowledge and understanding occurs. As indicated from participants' cognitive understandings of the HIV/AIDS awareness materials, barriers to womxn's HIV prevention, treatment and care were identified as mainly existing due to social constructions of hegemonic masculinity, individual vs cultural expectations, and the outdated content of universal HIV/AIDS awareness messaging. Hence structural factors were increasingly recognised as crucial determinants in the acquisition, transmission, and prevalence of HIV per the participants' understandings of the awareness materials.

The findings also suggest that cognitive interviewing methodology can be reconceptualised as an endeavour that cuts across a wide range of fields. From the results and the process of the research, it can be concluded that this specific methodology does not only give emphasis to the personal cognitive processing of issues at hand but can also enable a focus on the background

social context that may influence how well HIV/AIDS awareness materials meaningfully capture or address the life-contexts of the participants. Additionally, HIV/AIDS awareness and prevention messages are increasingly aimed at addressing a range of environments and cultures that may differ widely, hence the important requirement of focusing on the individual or local social surroundings and how these circumstances might influence individuals and their interpretation and understanding of public health messaging.

6.3 Strengths and Limitations of the Study

The major strength of this study is that it is among the first cognitive interview study I am aware of to explore in detail womxn's understanding and reception of the various HIV/AIDS awareness content in the South African context. The focus of the study was on the cognitive/mental processes that occur when individuals answer questions, for example, memory, language, reasoning, attention, and learning. This does not imply that the study only explored participants' cognitions concerning HIV/AIDS awareness messages. It was also focused on exploring how participants' understanding (and response behaviour) was shaped by local contextual factors and their social environment. Understanding audience comprehension of and response to HIV/AIDS public health messages produced by this focus may allow researchers and policy formulators to rethink the nature and content of the various awareness/prevention strategies. One way of refocusing the HIV prevention strategies is that there is a need for combined interventions that aim to address the complex nature of HIV/AIDS. In other words, many factors impact an individual's choice and decision to conform to or reject the awareness messages. Therefore, the study findings also speak to the use and adaptability of cognitive interviewing methodology outside the practice of questionnaire testing.

Since the study did not aim to produce a statistically representative sample or draw statistical inferences, the site and sample selection process could be a limitation. While the literature review carefully guided the sample selection for this study, the phenomenon of interest and research question, it should be noted that although literature indicated that womxn aged between 18-30 years are at significant risk of HIV/AIDS, it does not imply that the other age groups are not at risk. Using local clinics as a point of contact to recruit womxn for this study posed some restrictions and required gatekeeper clearances from the Department of Health. These considerations might have, in some way, impeded access to a more diverse research sample.

Although all the procedures followed complied with ethical requirements, the recruitment strategy may have excluded some womxn who do not have access to the local clinics, thus omitting them from the research process. This means that the results from this study may not be generalisable to the broader population of womxn in the Makhanda community and South African womxn at large.

6.4 Implications for Theory, Research and Practice

This study offers cumulative evidence of the multi-level barriers that impede the reproductive justice of womxn, especially in the prevention of HIV/AIDS. This means that the study potentially aids in advancing public health awareness policies to address the symbolic power relations that pervade womxn's lives at both individual and collective levels, especially those that undermine good reproductive outcomes and autonomy of womxn. The study also appears to support the argument for a change in the formulation process of the HIV/AIDS awareness materials like pamphlets, wall posters, and billboard advertisements in public areas. In most cases, when recipients of the messages or the targeted population encounter these messages, they usually interpret or misinterpret them according to their understandings. From the study findings, there are inadequate awareness posters and other forms of awareness materials in public spaces besides the clinics and hospitals, publicly displayed awareness messaging does not usually contain enough content, and there is usually an absence of professional health workers to provide further explanation. These findings may be important for community leaders, policymakers, the health sector and other role players to work together in ensuring that the awareness messages reach the designated areas and target populations. Furthermore, the study potentially accumulates the need to readdress the several theoretical frameworks that underpin awareness materials, for example, the Theory of Reasoned Action and Health Belief Models, which to some degree rely heavily on assumptions of individual agency and decision-making concerning health-seeking behaviours. This suggests more structural-level interventions and theories that promote health and reproductive justice.

6.5 Recommendations for Further Research and Action/Policy

One avenue for further study would be research into evaluating various HIV/AIDS awareness materials currently being used in the South African context. Research into the content of the awareness materials might assist the policy formulators in addressing the barriers being faced by womxn concerning HIV prevention, care and treatment. Research findings indicated that

there is a gap between HIV/AIDS theory/policy and practice in terms of addressing the pandemic. The study recommends that the theories of HIV/AIDS and policies be positioned within a constellation of HIV risk factors at the local level rather than at an individual stance. Literature also pointed out that the ineffectiveness of HIV prevention programs has been attributed to a lack of proper theoretical grounding and evaluation of the theory-based HIV interventions. This study recommends that researchers, policy formulators and health care professionals collaborate with citizens at grassroots levels to develop effective and efficient interventions. This process will help develop targeted, cost-effective HIV interventions that can be effectively implemented and evaluated.

Future research might also need to focus on the utility of cognitive interviewing in a South African context. The literature reviewed showed that cognitive interviews have been inadequately used in the South African context, especially about social issues like gender inequality. Therefore, this study recommends that cognitive interviews be adopted, implemented and appraised in qualitative research across diverse cultural contexts in South Africa. Historically, cognitive interviewing has been utilised to test and refine survey items like questionnaires to address the errors in the questions (Willis, 2005). For this study, the method was used to assess the reception of the HIV/AIDS awareness content, an approach different from the original purposes of the methodology. Although a justification for the utilisation of cognitive interviewing in this study was argued, there is still a considerable need to conduct research studies using the method in other fields of study, not only for questionnaire refinement.

As commended by the Social Constructionist stance, researchers and policymakers need to attend to the traditions, communities, situated practices and local understandings of the recipients of public health messaging or those affected by the policies and interventions that are developed in order to identify what practices that effectively work towards the public good. To attend to traditions, communities, and situated practices requires constant flexibility on the part of those involved. This means that parties involved in formulating, implementing and evaluating HIV/AIDS awareness materials should actively engage with the different contexts where these materials are disseminated from the grassroots level to address the implementation of universal messages to a diverse population. The multi-sectorial (i.e. not just health) policies should target interventions at the most vulnerable and include the most affected groups in planning and

implementing the HIV/AIDS policies and measures of prevention. In other words, policymakers need to adapt HIV/AIDS intervention strategies that are culturally sensitive to current social practices, language and traditions.

Furthermore, to ensure better access to reproductive justice for South African womxn, it is crucial to address socio-cultural factors such as current constructions of hegemonic masculinity and gender inequality. The study also recommends that interventions to address the barriers against access to reproductive rights must involve reviewing and reforming the laws and regulations that regulate the protection of womxn. Listed below are some avenues for potential and ongoing future interventions:

- Active and engaging awareness-raising programmes with womxn and men to reduce gender inequality and offer access to empowerment programmes. Programmes need to address relationship dynamics that are problematic and which reduce sexual and reproductive health. The focus should be on safer sex practices, better communication/collaborative decision-making regarding sexual health matters in relationships, and issues on multiple sexual partners.
- The study findings highlighted that while cognitive behavioural models can assist in explaining the links between intention and behaviour, particularly at an intra-personal level, they are less able to account for interpersonal and contextual factors related to the complexity of sex, the experience of womxn and disparities in social, cultural and economic realities of womxn in South Africa. Hence the study recommends more policies and interventions that pay attention to the interpersonal and diversified factors that increase HIV/AIDS risk.
- The study recommends drafting and using HIV/AIDS awareness messages that are inclusive in all aspects of individuals' associations. This includes messages that address all genders instead of mostly womxn, advocating for non-discriminatory messages for populations like queer people and translating English materials to each population's vernacular language. This implies a considerable need to design culturally appropriate HIV-prevention messages and minimise generic messages.

- Implementation of weekly oral and demonstrative sessions provided by professional health workers in local clinics on social and health issues, including the prevention and treatment of HIV. This should be done to minimise over-reliance on print and display HIV/AIDS awareness materials for targeted populations prone to misunderstanding and misinterpretation.
- Make provision for free and non-judgemental counselling services to womxn when the need arises.
- Development of conversations, awareness-raising, and sensitization campaigns with community members, traditional leaders, and religious leaders regarding harmful behaviours that violate womxn's rights to development and health. According to the study's findings, HIV/AIDS misconceptions may hinder womxn from getting tested for the virus. It is therefore critical to dispel these myths during these community conversations. This includes transforming men's HIV/AIDS myths that might encourage men's pro-condom attitudes and beliefs as well as transforming womxn's views that might enable them to forgo relationships with partners who insist on dangerous sexual activities.

In conclusion, HIV/AIDS remains an ongoing concern in South Africa, especially with how it negatively impacts womxn's reproductive rights. The research highlighted the socio-cultural and structural factors as potential barriers to the uptake of public health messages on HIV/AIDS (and the desired behaviour change associated with such messaging). Addressing the socio-cultural factors that cause barriers to womxn/s reproductive rights seems to build the 'HIV literacy' and create an enabling environment where HIV-related knowledge could be shared and encourage engagement with HIV services. It is essential to engage with these aspects of the phenomenon to address issues of womxn's access to sexual and reproductive health and justice as recommended above. The often poor fit between HIV care and treatment services (including the HIV/AIDS awareness materials) and the lived realities of people living with HIV/AIDS call for a broader practice-oriented HIV response. This could encompass a mix of structural inventiveness and more patient-centred and distinguished HIV care and treatment services, which, when combined, can tweak and address the components of practice that form understanding and knowledge of HIV/AIDS.

References

- Abolfotouh, M. A., Ala'a, A. B., Mahfouz, A. A., Al-Assiri, M. H., Al-Juhani, A. F., & Alaskar, A. S. (2015). Using the health belief model to predict breast self-examination among Saudi women. *BMC Public Health*, 15(1), 1163-1173.
- Abrahams, N., Mathews, S., Lombard, C., Martin, L. J., & Jewkes, R. (2017). Sexual homicides in South Africa: A national cross-sectional epidemiological study of adult women and children. *PLoS One*, 12(10).
- Achmat, Z. (2004). HIV-AIDS and human rights: A new South African struggle. *John Foster lecture—10 November*.
- Adair, C. E., Holland, A. C., Patterson, M. L., Mason, K. S., Goering, P. N., Hwang, S. W., & Home, A. (2012). Cognitive interviewing methods for questionnaire pretesting in homeless persons with mental disorders. *Journal of Urban Health*, 89(1), 36-52.
- Adam, B. D. (2011). Epistemic fault lines in biomedical and social approaches to HIV prevention. *Journal of the International AIDS Society*, 14(S2), S2.
- Adam, B. D., Husbands, W., Murray, J., & Maxwell, J. (2008). Circuits, networks, and HIV risk management. *AIDS Education & Prevention*, 20(5), 420-434.
- Allan, E. J. (2010). Feminist poststructuralism meets policy analysis: An overview. In E. J. Allan, S. Iverson, & R. Ropers-Huilman (Eds.), *Reconstructing policy in higher education: Feminist poststructural perspectives* (pp. 11–36). New York: Routledge.
- Andrews, T. (2012). What is social constructionism? *Grounded theory review*, 11(1), 39-46.

- Avert. (2019). HIV and AIDS in East and Southern Africa regional overview. Retrieved 18 February 2020, from www.avert.org/professionals/hiv-around-world/sub-Saharan-africa/overview#footnoteref57_csbnaau
- Avert. (2022). At a glance: HIV in South Africa: The biggest HIV epidemic in the world. Retrieved 22 March 2022. <https://www.beintheknow.org/understanding-hiv-epidemic/data/glance-hiv-south-africa>
- Babbie, E., & Mouton, J. (2011). *The Practice of Social Research*. Southern Africa: Oxford University Press.
- Baena, I. B., & Padilla, J. L. (2014). Cognitive interviewing in mixed research. *Cognitive interviewing methodology*, 133-152.
- Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioural change. *Psychological Review*, 84(2), 191-215. <https://doi.org/10.1037/0033-295X.84.2.191>.
- Bateman, C. (2007). Paying the price for AIDS denialism. *South African Medical Journal*, 97(10), 912.
- Beatty, P. C., & Willis, G. B. (2007). Research synthesis: The practise of cognitive interviewing. *Public opinion quarterly*, 71(2), 287-311.
- Bekker, L. G., Johnson, L., Cowan, F., Overs, C., Besada, D., Hillier, S., & Cates Jr, W. (2015). HIV and sex workers 2 Combination HIV prevention for female sex workers: what is the evidence?. *Lancet*, 385, 72-87.
- Bergen, N., & Labonté, R. (2020). “Everything is perfect, and we have no problems”: detecting and limiting social desirability bias in qualitative research. *Qualitative health research*, 30(5), 783-792.

- Blake, M. (2014). Other Pretesting Methods. In D. Collins (Ed.), *Cognitive interviewing practice* (pp. 28–56). London: Sage.
- Bleakley, A., & Hennessy, M. (2012). The quantitative analysis of reasoned action theory. *The annals of the American academy of political and social science*, 640(1), 28-41.
- Boeije, H., & Willis, G. (2013). The cognitive interviewing reporting framework (CIRF): Towards the harmonisation of cognitive testing reports. *European Journal of Research Methods for the Behavioral and Social Sciences*, 9(3), 87-95.
- Braun, V. (2012). Female genital cutting around the globe: A matter of reproductive justice. In J. C. Chrisler (Ed.), *Reproductive justice: A global concern* (pp. 29-55). California: Praeger.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101.
- Braun, V., & Clarke, V. (2019). In P. Liamputtong. (Ed.), *Handbook of research methods in health social sciences* (pp. 843-860). Singapore: Springer.
- Brown, B., Duby, Z., & Van Dyk, D. (2013). *Health care provision for men who have sex with men, sex workers, and people who use drugs: An Introductory Manual for Health Care Workers in South Africa*. Cape Town: The Desmond Tutu HIV Foundation.
- Bryman, A. (2016). *Social research methods*. England: Oxford University Press.
- Buers, C., Triemstra, M., Bloemendal, E., Zwijnenberg, N. C., Hendriks, M., & Delnoij, D. M. (2014). The value of cognitive interviewing for optimizing a patient experience survey. *International Journal of Social Research Methodology*, 17(4), 325-340.
- Butler, A. (2005). South Africa's HIV/AIDS policy, 1994–2004: How can it be explained?. *African Affairs*, 104(417), 591-614. <https://0-doi.org.wam.seals.ac.za/10.1093/afraf/adi036>

- Campbell, C., Nair, Y., & Maimane, S. (2007). Building contexts that support effective community responses to HIV/AIDS: A South African case study. *American journal of community psychology*, 39(3-4), 347-363.
- Chigwedere, P., & Essex, M. (2010). AIDS denialism and public health practice. *AIDS and Behavior*, 14(2), 237-247.
- Chigwedere, P., Seage III, G. R., Gruskin, S., Lee, T. H., & Essex, M. (2008). Estimating the lost benefits of antiretroviral drug use in South Africa. *JAIDS Journal of Acquired Immune Deficiency Syndromes*, 49(4), 410-415.
- Chitamun, S., & Finchilescu, G. (2003). Predicting the intention of South African female students to engage in premarital sexual relations: An application of the theory of reasoned action. *South African Journal of Psychology*, 33(3), 154-161.
- Coates, T. J., Richter, L., & Caceres, C. (2008). Behavioural strategies to reduce HIV transmission: how to make them work better. *The Lancet*, 372(9639), 669-684.
- Coetzee, J., Jewkes, R., & Gray, G. E. (2017). Cross-sectional study of female sex workers in Soweto, South Africa: factors associated with HIV infection. *PloS one*, 12(10), e0184775.
- Cojocar, S., Bragaru, C., & Ciuchi, O. M. (2012). The role of language in constructing social realities. The appreciative inquiry and the reconstruction of organisational ideology. *Revista de cercetare si interventie sociala*, 36, 31.
- Collins, D. (2007). Analysing and interpreting cognitive interview data: A qualitative approach. In *Proceedings of the 6th Questionnaire Evaluation Standard for Testing Conference* (pp. 64-73). Ottawa: Statistics Canada.
- Collins, D. (2014). *Cognitive interviewing practice*. London: Sage.

- Colvin, C. J. (2011). HIV/AIDS, chronic diseases and globalisation. *Globalisation and health*, 7(1), 31. <https://0-doi.org.wam.seals.ac.za/10.1186/1744-8603-7-31>
- Connelly, L. M. (2016). Trustworthiness in qualitative research. *Medsurg Nursing*, 25(6), 435-437.
- Coombes, A. E. (2019). Positive living: visual activism and art in HIV/AIDS rights campaigns. *Journal of Southern African Studies*, 45(1), 143-174. <https://0-doi.org.wam.seals.ac.za/10.1080/03057070.2019.1567161>
- Creswell, J. W., & Poth, C. N. (2016). *Qualitative inquiry and research design: Choosing among five approaches*. Thousand Oaks: Sage publications.
- de Voux, A., Baral, S. D., Bekker, L. G., Beyrer, C., Phaswana-Mafuya, N., Siegler, A. J., ... & Stephenson, R. (2016). A social network typology and sexual risk-taking among men who have sex with men in Cape Town and Port Elizabeth, South Africa. *Culture, health & sexuality*, 18(5), 509-523.
- Dellar, R. C., Dlamini, S., & Karim, Q. A. (2015). Adolescent girls and young women: key populations for HIV epidemic control. *Journal of the International AIDS Society*, 18(2 Suppl 1), 19408. <https://doi.org/10.7448/IAS.18.2.19408>
- DeMaio, T. J., & Landreth, A. (2004). Do different cognitive interview techniques produce different results? *Methods for testing and evaluating survey questionnaires*, 546, 89-108.
- Department of Health. (2016). Health sector HIV prevention. Retrieved 18 March, 2020, from <http://www.health.gov.za/index.php/component/phocadownload/category/324-hiv-prevention-strategy?download=1823:hiv-prevention-strategy>

- Dorward, J., Khubone, T., Gate, K., Ngobese, H., Sookrajh, Y., Mkhize, S., ... & Garrett, N. (2021). The impact of the COVID-19 lockdown on HIV care in 65 South African primary care clinics: an interrupted time series analysis. *The Lancet HIV*, 8(3), e158-e165. [https://0-doi.org.wam.seals.ac.za/10.1016/S2352-3018\(20\)30359-3](https://0-doi.org.wam.seals.ac.za/10.1016/S2352-3018(20)30359-3)
- Draper, A. K. (2004). The principles and application of qualitative research. *Proceedings of the nutrition society*, 63(4), 641-646.
- Eike, D., Hoglebe, M., Kifle, D., Tregilgas, M., Uppal, A., & Calmy, A. (2022). How the COVID-19 Pandemic Alters the Landscapes of the HIV and Tuberculosis Epidemics in South Africa: A Case Study and Future Directions. *Epidemiologia*, 3(2), 297-313. <https://doi.org/10.3390/epidemiologia3020023>
- Fishbein, M., & Ajzen, I. (2011). *Predicting and changing behaviour: The reasoned action approach*. Taylor & Francis.
- Flowers, P., Wu, O., Lorimer, K., Ahmed, B., Hesselgreaves, H., MacDonald, J., ... & Clutterbuck, D. (2017). The clinical effectiveness of individual behaviour change interventions to reduce risky sexual behaviour after a negative human immunodeficiency virus test in men who have sex with men: Systematic and realist reviews and intervention development. *Health Technology Assessment*, 21(5).
- Fox, J. (2002). *Nkosi's Story*. Claremont: New Africa Books.
- Freccero, J., Harris, L., Carnay, M., & Taylor, C. (2011). Responding to sexual violence: Community approaches. *Sexual Violence & Accountability Project*.

- Galbin, A. (2015). Social constructionism: A postmodern approach to knowledge. *Scientific Annals of the 'Al.I.Cuza' University, Iasi. Sociology & Social Work / Analele Stiintifice Ale Universitatii 'Al.I.Cuza' Iasi Sociologie Si Asistentia Sociala*, 8(1), 47-53.
- Gale, J. (2010). Discursive analysis: A research approach for studying the moment-to-moment construction of meaning in systemic practice. *Human Systems: The Journal of Therapy, Consultation & Training*, 21(2), 7-37.
- García-Moreno, C., Pallitto, C., Devries, K., Stöckl, H., Watts, C., & Abrahams, N. (2013). *Global and regional estimates of violence against women: Prevalence and health effects of intimate partner violence and non-partner sexual violence*. World Health Organization.
- George, G., Strauss, M., Chirawu, P., Rhodes, B., Frohlich, J., Montague, C., & Govender, K. (2014). Barriers and facilitators to the uptake of voluntary medical male circumcision (VMMC) among adolescent boys in KwaZulu–Natal, South Africa. *African Journal of AIDS Research*, 13(2), 179-187.
- Gobind, J., & Ukpere, W. I. (2014). Evaluating HIV/AIDS programme within South African universities. *Mediterranean Journal of Social Sciences*, 5(3), 346-357.
- Gomes, A. I. C. D. S., & Nunes, M. C. S. (2017). Predicting condom use: A comparison of the theory of reasoned action, the theory of planned behavior and an extended model of TPB. *Psicologia: Teoria e Pesquisa*, 33.
- Gray, M., Blake, M., & Campanelli, P. (2014). The use of cognitive interviewing methods to evaluate mode effects in survey questions. *Field Methods*, 26(2), 156-171.
- Griessel, D. J., Van der Vyver, A. E., Joubert, G., Ludada, G., Mogorosi, J., Tau, M., & Thibile, S. (2010). The knowledge and acceptance of the HIV prevention program in pregnant

- women in the Free State Province of South Africa. *Journal of tropical paediatrics*, 56(4), 263-264.
- Grimm, P. (2010). Social desirability bias. *Wiley international encyclopedia of marketing*.
- Haeger, H., Lambert, A. D., Kinzie, J., & Gieser, J. (2012). Using cognitive interviews to improve survey instruments. New Orleans: Association for Institutional Research Annual Forum.
- Hampanda, K., Ybarra, M., & Bull, S. (2014). Perceptions of health care services and HIV-related health-seeking behavior among Uganda adolescents. *AIDS care*, 26(10), 1209-1217.
- Hankins, C. A., & de Zaluondo, B. O. (2010). Combination prevention: A deeper understanding of effective HIV prevention. *AIDS*, 24(4), S70-S80. [https://doi.org: 10.1097/01.aids.0000390709.04255.fd](https://doi.org/10.1097/01.aids.0000390709.04255.fd)
- Harrison, A., Colvin, C. J., Kuo, C., Swartz, A., & Lurie, M. (2015). Sustained high HIV incidence in young women in Southern Africa: Social, behavioural, and structural factors and emerging intervention approaches. *Current HIV/AIDS Reports*, 12(2), 207-215. <https://doi.org.wam.seals.ac.za/10.1007/s11904-015-0261-0>
- Hatzold, K., Mavhu, W., Jasi, P., Chatora, K., Cowan, F. M., Taruberekera, N., ... & Njeuhmeli, E. (2014). Barriers and motivators to voluntary medical male circumcision uptake among different age groups of men in Zimbabwe: results from a mixed-methods study. *PloS one*, 9(5), e85051.
- Haynes, K. (2012). Reflexivity in qualitative research. In G. Symon & C. Cassell (Eds.), *Qualitative organisational research: Core methods and current challenges* (pp. 72-89). London: Sage Publications.

- Heeren, G. A., Jemmott III, J. B., Sidloyi, L., Ngwane, Z., & Tyler, J. C. (2012). Disclosure of HIV diagnosis to HIV-infected children in South Africa: Focus groups for intervention development. *Vulnerable children and youth studies*, 7(1), 47-54.
- International Organization for Migration. (2010). *Regional assessment on HIV-prevention needs of migrants and mobile populations in Southern Africa*. Pretoria: International Organization for Migration.
- Jemmott III, J. B., Heeren, G. A., Sidloyi, L., Marange, C. S., Tyler, J. C., & Ngwane, Z. (2014). Caregivers' intentions to disclose HIV diagnosis to children living with HIV in South Africa: A theory-based approach. *AIDS and Behavior*, 18(6), 1027-1036.
- Jemmott, L. S., Jemmott III, J. B., Ngwane, Z., Icard, L., O'leary, A., Gueits, L., & Brawner, B. (2014). 'Let Us Protect Our Future': A culturally congruent evidenced-based HIV/STD risk-reduction intervention for young South African adolescents. *Health Education Research*, 29(1), 166-181.
- Jewkes, R., & Morrell, R. (2010). Gender and sexuality: emerging perspectives from the heterosexual epidemic in South Africa and implications for HIV risk and prevention. *Journal of the International AIDS Society*, 13(1), 6. <https://doi.org/10.1186/1758-2652-13-6>
- Joint United Nations Programme on HIV/AIDS (UNAIDS). (2016). *Prevention gap report*. Geneva: UNAIDS.
- Kalichman, S. C. (2014). The Psychology of AIDS Denialism. *European Psychologist* 19 (1). <https://doi.org/10.1027/1016-9040/a000175>

- Kalichman, S. C. (2017). Pence, Putin, Mbeki and their HIV/AIDS-related crimes against humanity: Call for social justice and behavioral science advocacy. *AIDS Behav*, 21, 963-967. <https://doi.org.wam.seals.ac.za/10.1007/s10461-017-1695-8>
- Kalichman, S., Mathews, C., Kalichman, M., Eaton, L. A., & Nkoko, K. (2018). Male circumcision for HIV prevention: Awareness, risk compensation, and risk perceptions among South African women. *Global public health*, 13(11), 1682–1690. <https://doi.org/10.1080/17441692.2018>
- Karim, A.Q., & Karim, S. S. (2020). COVID-19 affects HIV and tuberculosis care. *Science*, 369(6502), 366-368. <https://doi.org/10.1126/science.abd1072>
- Kaufman, M. R., Cornish, F., Zimmerman, R. S., & Johnson, B. T. (2014). Health behaviour change models for HIV prevention and AIDS care: Practical recommendations for a multi-level approach. *Journal of acquired immune deficiency syndromes (1999)*, 66 (Suppl 3), S250.
- Keikelame, M. J., Murphy, C. K., Ringheim, K. E., & Woldehanna, S. (2010). Perceptions of HIV/AIDS leaders about faith-based organisations' influence on HIV/AIDS stigma in South Africa. *African Journal of AIDS research*, 9(1), 63-70.
- Kim, D. K., Chikombero, M., & Modie-Moroka, T. (2013). Innate health threat among a visibly hidden immigrant group: A formative field data analysis for HIV/AIDS prevention among Zimbabwean workers in Botswana. *Journal of health communication*, 18(2), 146-159.
- Kim, Y. (2011). The pilot study in qualitative inquiry: Identifying issues and learning lessons for culturally competent research. *Qualitative Social Work*, 10(2), 190-206.

- Kirtley, S., & Chien, P. (2013). Women out loud: How women living with HIV will help the world end AIDS. *BJOG: an international journal of obstetrics and gynaecology*, 120(5), 652.
- Koskey, K. L., Karabenick, S. A., Woolley, M. E., Bonney, C. R., & Dever, B. V. (2010). Cognitive validity of students' self-reports of classroom mastery goal structure: What students are thinking and why it matters. *Contemporary Educational Psychology*, 35(4), 254-263.
- Kriel, Y., Milford, C., Cordero, J., Suleman, F., Beksinska, M., Steyn, P., & Smit, J. A. (2019). Male partner influence on family planning and contraceptive use: Perspectives from community members and healthcare providers in KwaZulu-Natal, South Africa. *Reproductive health*, 16(1), 89.
- Krishnan, S., Dunbar, M. S., Minnis, A. M., Medlin, C. A., Gerds, C. E., & Padian, N. S. (2008). Poverty, gender inequities, and women's risk of Human Immunodeficiency Virus/AIDS. *Annals of the New York Academy of Sciences*, 1136, 101.
- Krumpal, I. (2013). Determinants of social desirability bias in sensitive surveys: A literature review. *Quality & quantity*, 47(4), 2025-2047.
- Kurth, A. E., Celum, C., Baeten, J. M., Vermund, S. H., & Wasserheit, J. N. (2011). Combination HIV prevention: significance, challenges, and opportunities. *Current Hiv/aids Reports*, 8(1), 62-72.
- LaCroix, J. M., Snyder, L. B., Huedo-Medina, T. B., & Johnson, B. T. (2014). Effectiveness of mass media interventions for HIV prevention, 1986–2013: A meta-analysis. *JAIDS Journal of Acquired Immune Deficiency Syndromes*, 66, S329-S340.

- Latkin, C. A., & Knowlton, A. R. (2015). Social network assessments and interventions for health behaviour change: A critical review. *Behavioural Medicine*, 41(3), 90-97.
- Latkin, C., Donnell, D., Celentano, D. D., Aramrattna, A., Liu, T. Y., Vongchak, T., ... & Metzger, D. (2009). Relationships between social norms, social network characteristics, and HIV risk behaviours in Thailand and the United States. *Health Psychology*, 28(3), 323-329.
- Le Roux, C. (2013). *Politics and HIV and AIDS in South Africa: An analysis of the media reporting during the presidency of Thabo Mbeki (1999-2008)*. (Master's thesis, Stellenbosch University, Stellenbosch, South Africa). Retrieved from: <http://hdl.handle.net/10019.1/80298>
- Liani, S., Martire, F., & Pitrone, M. C. (2015). Cognitive interviewing to pretest attitude questions. *Italian Sociological Review*, 5(2), 237.
- Lock, A., & Strong, T. (2010). *Social Constructionism: Sources and stirrings in theory and practice*. New York: Cambridge University Press.
- Low, N., Chersich, M. F., Schmidlin, K., Egger, M., Francis, S. C., HHM van de Wijgert, J., ... & Martin Hilber, A. (2011). Intravaginal practices, bacterial vaginosis, and HIV infection in women: individual participant data meta-analysis. *PLoS medicine*, 8(2), e1000416.
- Machisa, M., Jewkes, R., Morna, C., & Rama, K. (2011). The war at home: Gender-based violence indicators project. In *Gauteng research report*. Gender Links & South African Medical Research Council.
- Macleod, C. I. (2018). Expanding reproductive justice through a supportability reparative justice framework: The case of abortion in South Africa. *Culture, Health & Sexuality*. <https://0-doi.org.wam.seals.ac.za/10.1080/13691058.2018.1447687>

- Macleod, C. I., & Feltham-King, T. (2019). Young pregnant women and public health: Introducing a critical reparative justice/care approach using South African case studies. *Critical Public Health*, 1-11.
- MacNamara, N., Pierson, C., & Bloomer, F. K. (2018). Tackling Girls and Young Women's Reproductive Health through a Reproductive Justice Framework. *GCRF Public report*. Coleraine: Ulster University.
- Madiba, S., & Ngwenya, N. (2017). Cultural practices, gender inequality and inconsistent condom use increase vulnerability to HIV infection: narratives from married and cohabiting women in rural communities in Mpumalanga province, South Africa. *Global health action*, 10(sup2), 1341597. DOI: <https://doi.org.wam.seals.ac.za/10.1080/16549716.2017.1341597>
- Maguire, M., & Delahunt, B. (2017). Doing a thematic analysis: A practical, step-by-step guide for learning and teaching scholars. *AISHE-J: The All Ireland Journal of Teaching and Learning in Higher Education*, 9(3).
- Mall, S., Middelkoop, K., Mark, D., Wood, R., & Bekker, L. G. (2013). Changing patterns in HIV/AIDS stigma and uptake of voluntary counselling and testing services: The results of two consecutive community surveys conducted in the Western Cape, South Africa. *AIDS care*, 25(2), 194-201.
- Martin, S. L., Birhanu, Z., Omotayo, M. O., Kebede, Y., Pelto, G. H., Stoltzfus, R. J., & Dickin, K. L. (2017). "I can't answer what you're asking me. Let Me Go, Please." Cognitive Interviewing to Assess Social Support Measures in Ethiopia and Kenya. *Field Methods*, 29(4), 317-332.

- Maxwell, L., Devries, K., Zions, D., Alhusen, J. L., & Campbell, J. (2015). Estimating the effect of intimate partner violence on women's use of contraception: A systematic review and meta-analysis. *PloS one*, *10*(2), e0118234.
- McClelland, R. S., Lingappa, J. R., Srinivasan, S., Kinuthia, J., John-Stewart, G. C., Jaoko, W., ... & Fredricks, D. N. (2018). Evaluation of the association between the concentrations of key vaginal bacteria and the increased risk of HIV acquisition in African women from five cohorts: a nested case-control study. *The Lancet infectious diseases*, *18*(5), 554-564.
- McNeil, J. (2015). A history of official government HIV/AIDS policy in South Africa. *South African History Online*. Retrieved 18 February, 2020, from <http://www.sahistory.org.za/topic/history-official-government-hiv-aids-policy-south-africa>
- Mertens, D. M. (2012). Ethics in qualitative research in education and the social sciences. *Qualitative research: An introduction to methods and designs*, 19-39.
- Meyer-Weitz, A., Reddy, P., Van den Borne, H. W., Kok, G., & Pietersen, J. (2000). Health care-seeking behaviour of patients with sexually transmitted diseases: determinants of delay behaviour. *Patient education and counseling*, *41*(3), 263-274.
- Michielsen, K., Chersich, M., Temmerman, M., Dooms, T., & Van Rossem, R. (2012). Nothing as practical as a good theory? The theoretical basis of HIV prevention interventions for young people in Sub-Saharan Africa: A systematic review. *AIDS research and treatment*, 2012.
- Miller, K., & Baena, I. B. (2014). *Cognitive interviewing methodology*. New Jersey: John Wiley & Sons.

- Miller, K., Chepp, V., Willson, S., & Padilla, J. L. (Eds.). (2014). *Cognitive interviewing methodology*. New Jersey: John Wiley & Sons.
- Montaño, D. E., & Kasprzyk, D. (2015). Theory of reasoned action, theory of planned behavior, and the integrated behavioral model. In K. Glanz., B.K. Rimer & K. Viswanath (Eds), *Health behavior: Theory, research and practice* (pp. 101-231). San Francisco: Jossey-Bass.
- Mooney, A. C., Campbell, C. K., Ratlhagana, M. J., Grignon, J. S., Mazibuko, S., Agnew, E., ... & Lippman, S. A. (2018). Beyond social desirability bias: Investigating inconsistencies in self-reported HIV testing and treatment behaviors among HIV-positive adults in North West Province, South Africa. *AIDS and Behavior*, 22(7), 2368-2379.
- Moreno, R., Nababan, H. Y., Ota, E., Wariki, W. M., Ezoe, S., Gilmour, S., & Shibuya, K. (2014). Structural and community-level interventions for increasing condom use to prevent the transmission of HIV and other sexually transmitted infections. *Cochrane Database of Systematic Reviews*, (7). Doi: [10.1002/14651858.CD003363.pub3](https://doi.org/10.1002/14651858.CD003363.pub3)
- Morrell, R., Jewkes, R., Lindegger, G., & Hamlall, V. (2013). Hegemonic masculinity: reviewing the gendered analysis of men's power in South Africa. *South African Review of Sociology*, 44(1), 3-21.
- Mprah, A. (2016). Sexual and reproductive health needs Of LGBT. *African Journal of Reproductive Health*, 20(1), 16-20.
- Mulawa, M., Yamanis, T. J., Hill, L. M., Balvanz, P., Kajula, L. J., & Maman, S. (2016). Evidence of social network influence on multiple HIV risk behaviors and normative beliefs among young Tanzanian men. *Social Science & Medicine*, 153, 35-43.

- Myburgh, H. (2011). The clinic as a gendered space: Masculinities, health-seeking behavior and HIV & AIDS. *Consultancy Africa Intelligence HIV and AIDS Unit*, 1-5.
- Naicker, N., Kharsany, A., Werner, L., van Loggerenberg, F., Mlisana, K., Garrett, N., & Abdool Karim, S. S. (2015). Risk factors for HIV acquisition in high risk women in a generalised epidemic setting. *AIDS and Behavior*, 19(7), 1305-1316.
- Neuert, C. E., & Lenzner, T. (2016). Incorporating eye tracking into cognitive interviewing to pretest survey questions. *International Journal of Social Research Methodology*, 19(5), 501-519.
- Nicholas, L., Rautenbach, J., & Maistry, M. (Eds.). (2010). *Introduction to social work*. Cape Town: Juta and Company Ltd.
- Nunn, A., Dickman, S., Nattrass, N., Cornwall, A., & Gruskin, S. (2012). The impacts of AIDS movements on the policy responses to HIV/AIDS in Brazil and South Africa: A comparative analysis. *Global public health*, 7(10), 1031-1044. DOI: [10.1080/17441692.2012.736681](https://doi.org/10.1080/17441692.2012.736681)
- Nyabadza, F., Chiyaka, C., Mukandavire, Z., & Hove-Musekwa, S. D. (2010). Analysis of an HIV/AIDS model with public-health information campaigns and individual withdrawal. *Journal of Biological Systems*, 18(2), 357-375.
- O'Dwyer, L. M., & Bernauer, J. A. (2013). *Quantitative research for the qualitative researcher*. SAGE publications.
- Orr, N., Hajiyanis, H., Myers, L., Makhubele, M. B., Matekane, T., Delate, R., Mahlasela, L., & Goldblatt, B. (2017). Development of a National Campaign Addressing South African Men's Fears About HIV Counseling and Testing and Antiretroviral Treatment. *Journal of*

acquired immune deficiency syndromes (1999), 74 Suppl 1(Suppl 1), S69–S73.
<https://doi.org/10.1097/QAI.0000000000001204>

Padian, N. S., Buvé, A., Balkus, J., Serwadda, D., & Cates Jr, W. (2008). Biomedical interventions to prevent HIV infection: evidence, challenges, and way forward. *The Lancet*, 372(9638), 585-599. Doi: [10.1016/S0140-6736\(08\)60885-5](https://doi.org/10.1016/S0140-6736(08)60885-5)

Papworth, E., Grosso, A., Ketende, S., Wirtz, A., Cange, C., Kennedy, C., ... & Baral, S. (2014). Examining risk factors for HIV and access to services among female sex workers (FSW) and men who have sex with men (MSM) in Burkina Faso, Togo and Cameroon. *Baltimore: USAID & Johns Hopkins University Center for Communication Programs: Project Search: Research to Prevention*.

Passmore, J. A. S., Jaspan, H. B., & Masson, L. (2016). Genital inflammation, immune activation and risk of sexual HIV acquisition. *Current opinion in HIV and AIDS*, 11(2), 156.

Peltzer, K., Parker, W., Mabaso, M., Makonko, E., Zuma, K., & Ramlagan, S. (2012). Impact of national HIV and AIDS communication campaigns in South Africa to reduce HIV risk behaviour. *The Scientific World Journal*, 2012.

Phaahla, J. (2022, December 1). *2022 World AIDS Day commemoration* [Speech Transcript]. South African Government. <https://www.gov.za/speeches/minister-joe-phaahla-2022-world-aids-day-commemoration-1-dec-2022-0000>

Protogerou, C., Flisher, A. J., Aarø, L. E., & Mathews, C. (2012). The theory of planned behaviour as a framework for predicting sexual risk behaviour in sub-Saharan African youth: A critical review. *Journal of Child & Adolescent Mental Health*, 24(1), 15-35.

- Ramjee, G., & Daniels, B. (2013). Women and HIV in sub-Saharan Africa. *AIDS research and therapy*, 10(1), 1-9.
- Reynolds, E. K., Magidson, J. F., Bornoalova, M. A., Gwadz, M., Ewart, C. K., Daughters, S. B., & Lejuez, C. W. (2010). Application of the social action theory to understand factors associated with risky sexual behavior among individuals in residential substance abuse treatment. *Psychology of addictive behaviors*, 24(2), 311-321.
- Rohleder, P., Swartz, L., Kalichman, S. C., & Simbayi, L. C. (2009). *HIV/AIDS in South Africa 25 Years On*. New York: Springer.
- Rolfe, G. (2006). Validity, trustworthiness, and rigour: Quality and the idea of qualitative research. *Journal of Advanced Nursing*, 53(3), 304-310.
- Ross, L. J. (2017). Reproductive justice as intersectional feminist activism. *Souls*, 19(3), 286-314.
DOI: 10.1080/10999949.2017.1389634
- Ross, L.J. (2006). Understanding Reproductive Justice: Transforming the Pro-Choice Movement. *Off Our Backs*, 36, 14-19. DOI: [10.1080/10999949.2017.1389634](https://doi.org/10.1080/10999949.2017.1389634)
- Rubincam, C. (2014). *Peer educators' responses to mistrust and confusion about HIV and AIDS science in Khayelitsha, South Africa*. University of Cape Town.
- Sabi, S. C., & Rieker, M. (2017). The role of civil society in health policymaking in South Africa: a review of the strategies adopted by the Treatment Action Campaign. *African Journal of AIDS Research*, 16(1), 57-64. Doi: [10.2989/16085906.2017.1296874](https://doi.org/10.2989/16085906.2017.1296874)

- Schnall, R., Rojas, M., & Travers, J. (2015). Understanding HIV testing behaviors of minority adolescents: A health behavior model analysis. *The Journal of the Association of Nurses in AIDS Care: JANAC*, 26(3), 246–258. <https://doi.org/10.1016/j.jana.2014.08.005>
- Segre, S. (2016). Social constructionism is a sociological approach. *Human studies*, 39(1), 93-99.
- Shisana, O., Rehle, T., Simbayi, L. C., Zuma, K., Jooste, S., Zungu, N., ... & Onoya, D. (2015). South African national HIV prevalence, incidence and behaviour survey, 2012. Cape Town: HSRC Press.
- Shisana, O., Rehle, T., Simbayi, L. C., Zuma, K., Jooste, S., Zungu, N., ... & Onoya, D. (2014). South African national HIV prevalence, incidence and behaviour survey, 2012. Cape Town: HSRC Press.
- Sia, D., Onadja, Y., Hajizadeh, M., Heymann, S. J., Brewer, T. F., & Nandi, A. (2016). What explains gender inequalities in HIV/AIDS prevalence in sub-Saharan Africa? Evidence from the demographic and health surveys. *BMC public health*, 16(1), 1136.
- Silverman, D. (2013). *Doing qualitative research: A practical handbook*. London: SAGE.
- Silverman, D. (2016). *Qualitative Research*. (3rd Ed). London: Sage.
- Silvestre, E., Weiner, R., & Hutchinson, P. (2016). Behavior change communication and mobile populations: The evaluation of a cross-border HIV/AIDS communication strategy amongst migrants from Swaziland. *AIDS care*, 28(2), 214-220. Doi: [10.1080/09540121.2015.1081668](https://doi.org/10.1080/09540121.2015.1081668)
- Smith, A. (2012). Massacre of the Innocents. In D. Fassin (Ed), *Humanitarian reason: A moral history of the present*. (pp. 161-179). London: University of California Press.

- Sopromadze, N., & Moorosi, P. (2017). Do we see through their eyes? Testing a bilingual questionnaire in education research using cognitive interviews. *International Journal of Research & Method in Education*, 40(5), 524-540.
- Sorkin, D. H., Mavandadi, S., Rook, K. S., Biegler, K. A., Kilgore, D., Dow, E., & Ngo-Metzger, Q. (2014). Dyadic collaboration in shared health behavior change: the effects of a randomised trial to test a lifestyle intervention for high-risk Latinas. *Health Psychology*, 33(6), 566-575.
- South African National AIDS Council (SANAC) (2017). Let our actions count: South Africa's National Strategic Plan for HIV, TB and STIs 2017-2022. Pretoria: SANAC
- South African National AIDS Council. *National Strategic Plan on HIV, STIs, and TB 2012–2016*. (2012). Retrieved 20 February, 2020, from <https://www.gov.za/documents/national-strategic-plan-hiv-stis-and-tb-2012-2016>
- Statistics South Africa. (2019). *Statistical release: Mid-year population estimates 2019*. Retrieved 20 February, 2020, from <https://www.statssa.gov.za/publications/P0302/P03022019.pdf>
- Stephens, D. P., Patil, V., & Thomas, T. L. (2012). STI prevention and control for women: A reproductive justice approach to understanding global women's experiences. In J. C. Chrisler (Ed.), *Reproductive justice: A global concern* (pp. 117-143) California: Praeger.
- Strauss, M., Rhodes, B., & George, G. (2015). A qualitative analysis of the barriers and facilitators of HIV counselling and testing perceived by adolescents in South Africa. *BMC health services research*, 15(1), 250.

- Temin, M., Milford, C., Beksinska, M., Van Zyl, D., & Cockburn, J. (2021). Inclusive HIV Prevention in South Africa: Reaching Foreign Migrant Adolescent Girls. *Frontiers in Reproductive Health*, 3, 11.
- Traube, D. E., Holloway, I. W., & Smith, L. (2011). Theory development for HIV behavioral health: Empirical validation of behavior health models specific to HIV risk. *AIDS care*, 23(6), 663-670. DOI: [10.1080/09540121.2010.532532](https://doi.org/10.1080/09540121.2010.532532)
- Traube, D. E., Holloway, I. W., Schragar, S. M., & Kipke, M. D. (2012). Utilising Social Action Theory as a framework to determine correlates of illicit drug use among young men who have sex with men. *Psychology of Addictive Behaviors*, 26(1), 78-88.
- Treatment Action Campaign. (n.d.). *Our History-Timeline Horizontal*. Retrieved 20 July, 2020, from <https://www.tac.org.za/our-history2/>
- UNAIDS. (2009). *Combination Prevention: Strategic HIV prevention programmes founded on good practice*. Geneva: UNAIDS.
- UNAIDS. (2017). *Women lead change happens: Women advancing the end of AIDS*. Geneva: Joint United Nations Programme on HIV/AIDS.
- UNAIDS. (2019). UNAIDS data 2019. Retrieved 19 February, 2020, from https://www.unaids.org/sites/default/files/media_asset/2019-UNAIDS-data_en.pdf
- UNAIDS. (2021). Global HIV & AIDS statistics - Fact sheet. Retrieved 16 March, 2022, from <https://www.unaids.org/en/resources/fact-sheet>

- UNAIDS. (2022). In Danger: UNAIDS Global AIDS Update 2022. Geneva: Joint United Nations Programme on HIV/AIDS. Retrieved 18 November, 2022, from <https://indanger.undiaids.org/>
- van der Straten, A., Stadler, J., Montgomery, E., Hartmann, M., Magazi, B., Mathebula, F., ... & Soto-Torres, L. (2014). Women's experiences with oral and vaginal pre-exposure prophylaxis: The VOICE-C qualitative study in Johannesburg, South Africa. *PloS one*, 9(2), e89118.
- van Staden, Q., Laurenzi, C. A., & Toska, E. (2022). Two years after lockdown: reviewing the effects of COVID-19 on health services and support for adolescents living with HIV in South Africa. *Journal of the International AIDS Society*, 25(4), e25904. <https://0-doi.org.wam.seals.ac.za/10.1002/jia2.25904>
- Vaz, L. M., Maman, S., Eng, E., Barbarin, O. A., Tshikandu, T., & Behets, F. (2011). Patterns of disclosure of HIV status to infected children in a sub-Saharan African setting. *Journal of developmental and behavioral pediatrics: JDBP*, 32(4), 307-315.
- Wang, K., Brown, K., Shen, S. Y., & Tucker, J. (2011). Social network-based interventions to promote condom use: a systematic review. *AIDS and Behavior*, 15(7), 1298.
- Wassenaar, D. R. (2006). Ethical issues in social science research. *Research in Practice: Applied Methods for the Social Sciences*, 2, 60-79.
- Willis, G. B. (2004). *Cognitive interviewing: A tool for improving questionnaire design*. Thousand Oaks: Sage Publications.

- World Health Organization. (2017). *Policy brief: Consolidated guidelines on HIV prevention, diagnosis, treatment and care for key populations* (No. WHO/HIV/2017.05). Retrieved 23 July, 2020, from <https://www.who.int/hiv/pub/guidelines/keypopulations/en/>
- Wouabe, E. D., & Brown, A. N. (2013). *International Initiative for Impact Evaluation: Scoping report on interventions for increasing the demand for voluntary medical male circumcision*. Washington DC.

Appendices

Appendix 1: Ethical Clearance



Dean of Humanities
Cnr Somerset Street and Prince Alfred Road, Grahamstown, 6139, South Africa
PO Box 94, Grahamstown, 6140,
South Africa
t: +27 (0) 46 603 8362
f: +27 (0) 46 603 8929
e: dean.humanities@ru.ac.za
www.ru.ac.za

26 August 2021

To Whom It May Concern

Re: Ms H Simpo (619S3020) Master of Social Science candidate in the Department of Psychology

Please find below the minute, which has been extracted, from the Humanities Higher Degrees Committee Meeting held on Thursday 11 March 2021, confirming that Ms Simpo's Masters of Social Science proposal was approved.

**HUMANITIES HIGHER DEGREES COMMITTEE
MINUTES OF A MEETING HELD ON THURSDAY, 11 MARCH JUNE 2020 AT
14:15 VIA A ZOOM MEETING, RHODES UNIVERSITY**

Department of Psychology

- Ms H Simpo** (619S3020) **MSS Candidate in the Department of Psychology**
1. Research proposal submitted in fulfilment of the requirements of the degree of Master of Arts in Psychology, in the Department of Psychology
 2. **Thesis Title:** An Analysis of Womxn's Understanding of South African Public Health Awareness Campaigns' Message on HIV/AIDS Using Cognitive Interviewing.
 3. Confirmation of admission as a MSS candidate in Psychology, in the Department of Psychology, full-time, in attendance, by research thesis.
 4. Appointment of Mr W Bohmke as supervisor
- Approved.*

Should you require any further information please do not hesitate to contact me.

Yours sincerely

Professor E Msindo
Dean of Humanities



Appendix 2: Eastern Cape Department of Health Approval



Enquiries: Yvonne Gixela

Tel no: 079 074 0859

Email: Yvonne.Gixela@echealth.gov.za / yvonne.gixela@gmail.com

Date: 19 May 2021

RE: An analysis of womxn's understanding of South African public health awareness campaigns' message on HIV/AIDS using cognitive interviewing. (EC_202105_006)

Dear Ms H. Simpo

The department would like to inform you that your application for the abovementioned research topic has been approved based on the following conditions:

1. During your study, you will follow the submitted protocol with ethical approval and can only deviate from it after having a written approval from the Department of Health in writing.
2. You are advised to ensure, observe and respect the rights and culture of your research participants and maintain confidentiality of their identities and shall remove or not collect any information which can be used to link the participants.
3. The Department of Health expects you to provide a progress update on your study every 3 months (from date you received this letter) in writing.
4. At the end of your study, you will be expected to send a full written report with your findings and implementable recommendations to the Eastern Cape Health Research Committee secretariat. You may also be invited to the department to come and present your research findings with your implementable recommendations.
5. Your results on the Eastern Cape will not be presented anywhere unless you have shared them with the Department of Health as indicated above.

Your compliance in this regard will be highly appreciated.

SECRETARIAT: EASTERN CAPE HEALTH RESEARCH COMMITTEE

TOGETHER, MOVING THE HEALTH SYSTEM FORWARD



Appendix 3: Access Letter to the Eastern Cape Department of Health

Rhodes University
Drostdy Road,
Makhanda,
6139

Eastern Cape Department of Health (Office of the District Manager)
Makana Local Municipality
49 Beaufort Street
Makhanda, 6139

2 May 2021

Dear Sir/Madam

REQUEST FOR PERMISSION TO CONDUCT RESEARCH

I am a registered Master's student in the Department of Psychology at the Rhodes University. My supervisor is Mr Werner Böhmke, an academic staff member in the Rhodes University department of Psychology.

The proposed topic of my research is: *An analysis of womxn's understanding of South African public health awareness campaigns' message on HIV/AIDS using cognitive interviewing.*

The objectives of the study are:

- (a) To assess how public health awareness/intervention messages are understood by womxn audiences.
- (b) To analyse how womxn's understandings of HIV/AIDS awareness materials reflect the realities of their social and cultural contexts.
- (c) To assess in what ways HIV/AIDS awareness materials might be contributing to potential barriers to womxn's reproductive justice?
- (d) To examine the usefulness of cognitive interviewing in assessing womxn's understanding of public awareness messages to curb the spread of HIV/AIDS in Makhanda?

I am hereby seeking your consent to conduct a study with potential participants from community primary health care clinics in Makhanda. I will recruit potential participants through displaying adverts for the research on the clinics' notice boards in the waiting areas. I will possibly meet with potential participants to explain the research further for clarification purposes. I probably do not

wish for facility staff to assist in the participant recruitment process to avoid potential participants from feeling mandated to engage with the research process where they otherwise may have chosen not to. The aim of the study is to focus on participant responses to the public awareness material and is not about their experiences of service delivery or quality of care at the facility. To assist you in reaching a decision, I have attached to this letter:

- (a) A copy of an ethical clearance certificate issued by the University
- (b) A copy the research instruments which I intend using in my research

Should you require any further information, please do not hesitate to contact me or my supervisor. Our contact details are as follows:

- Hazel Simpo (Researcher): 073 261 8659 or hazel.simpso@gmail.com
- Werner Böhmke (Supervisor): 046 603 8508 or w.r.bohmke@ru.ac.za

Upon completion of the study, I undertake to provide you with a feedback in writing.

Your permission to conduct this study will be greatly appreciated.

Yours sincerely,

Hazel Simpo

Appendix 4: Access Letter to Clinic Managers

Rhodes University
Drostdy Road,
Makhanda,
6139

(Name of the clinic) Manager
Makana Local Municipality
Makhanda, 6139

2 May 2021

Dear Sir/Madam

REQUEST FOR PERMISSION TO CONDUCT RESEARCH

I am a registered Master's student in the Department of Psychology at the Rhodes University. My supervisor is Mr Werner Böhmke, an academic staff member in the Rhodes University department of Psychology.

The proposed topic of my research is: *An analysis of womxn's understanding of South African public health awareness campaigns' message on HIV/AIDS using cognitive interviewing.*

The objectives of the study are:

- (e) To assess how public health awareness/intervention messages are understood by womxn audiences.
- (f) To analyse how womxn's understandings of HIV/AIDS awareness materials reflect the realities of their social and cultural contexts.
- (g) To assess in what ways HIV/AIDS awareness materials might be contributing to potential barriers to womxn's reproductive justice?
- (h) To examine the usefulness of cognitive interviewing in assessing womxn's understanding of public awareness messages to curb the spread of HIV/AIDS in Makhanda?

I am hereby seeking your consent to conduct a study with potential participants from (name of the clinic). I will recruit potential participants through displaying adverts for the research on the clinics' notice boards in the waiting areas. I will possibly meet with potential participants to explain the research further for clarification purposes. I probably do not wish for facility staff to assist in the participant recruitment process to avoid potential participants from feeling mandated to engage

with the research process where they otherwise may have chosen not to. The aim of the study is to focus on participant responses to the public awareness material and is not about their experiences of service delivery or quality of care at the facility. To assist you in reaching a decision, I have attached to this letter:

- (c) A copy of an ethical clearance certificate issued by the University
- (d) A copy of the permission from local Department of Health
- (e) A copy the research instruments which I intend using in my research

Should you require any further information, please do not hesitate to contact me or my supervisor. Our contact details are as follows:

- Hazel Simpo (Researcher): 073 261 8659 or hazel.simpso@gmail.com
- Werner Böhmke (Supervisor): 046 603 8508 or w.r.bohmke@ru.ac.za

Upon completion of the study, I undertake to provide you with a feedback in writing.

Your permission to conduct this study will be greatly appreciated.

Yours sincerely,

Hazel Simpo

Appendix 5: Participants Recruitment Flyer

RHODES UNIVERSITY PSYCHOLOGY DEPARTMENT

HIV/AIDS AWARENESS MESSAGES RESEARCH STUDY

- **Are you a woman between the ages of 18 and 30?**
- **Have you ever seen an awareness campaign about HIV/AIDS?**

If you answered yes to both of these questions, you may be eligible to participate in a study approved by the Psychology Department's Research Project and Ethics Review Committee (RPERC), and the Rhodes University Ethical Standards Committee.

The study is titled: **An analysis of womxn's understanding of South African public health awareness campaigns' message on HIV/AIDS using cognitive interviewing.** It is being conducted by Hazel Simpo, a Master's Degree candidate in the Department of Psychology at Rhodes University, under the supervision of Mr Werner Böhmke, an academic staff member in the same Department. The focus of the study is on examining womxn's interpretation of HIV/AIDS awareness messages in their contexts, Participants should be aware of or have seen public health awareness campaign content on HIV/AIDS. I am looking for participants who make use of services at community primary health care clinics because these are often places where awareness campaign materials relating to HIV/AIDS are available to the public. Please know that participation has no impact on your access to health care at this facility. If you do not want to participate in the research, you will not be disadvantaged in your access to medical treatment.

If you do want to participate, you will be asked to meet me for a once-off, open-ended, individual interview lasting approximately an hour. All the interviews will be audiotaped using voice recorders and additional notes for non-verbal cues will be noted.

If you would like to learn more, please contact

Hazel Simpo (researcher): 073 261 8659 or hazel.simp@gmail.com

If you have any concerns about the research process, please contact

Werner Böhmke (supervisor): 046 603 8508 or w.r.bohmke@ru.ac.za

Appendix 6: Participant Informed Consent (English)

RHODES UNIVERSITY - DEPARTMENT OF PSYCHOLOGY
AGREEMENT BETWEEN STUDENT RESEARCHER AND RESEARCH
PARTICIPANT

I..... (participant's name) agree to participate in the research project of Hazel Simpo on: An analysis of women's understanding of South African public health awareness campaigns' messages on HIV/AIDS.

I understand that:

1. The researcher is a student conducting the research as part of the requirements for a Master's degree at Rhodes University. The researcher may be contacted on 073 261 8659 or hazel.simpo@gmail.com. The research project has been approved by the relevant ethics committee(s), and is under the supervision of Mr Werner Bohmke in the Psychology Department at Rhodes University, who may be contacted on 046 603 8508 or w.r.bohmke@ru.ac.za. Please contact the Rhodes University Ethical Standards Committee (RUESC) coordinator, for more information or queries about the ethics concerning your participation on 046 603 7727 or s.manqe@ru.ac.za.
2. The researcher is interested in examining women's interpretation of HIV/AIDS awareness messages.
3. My participation will involve partaking in a once-off and open-ended individual interview with the researcher that should last approximately an hour. I agree/disagree to the researcher's use of voice recording of my comments and opinions during interviews.
4. I may be asked to answer questions of a personal nature, but I can choose not to answer any questions about aspects of my life which I am not willing to disclose.
5. I am invited to voice to the researcher any concerns I have about my participation in the study, or consequences I may experience as a result of my participation, and to have these addressed to my satisfaction.
6. I am free to withdraw from the study at any time, however, I commit myself to full participation unless some unusual circumstances occur, or I have concerns about my participation which I did not originally anticipate.
7. The report on the project may contain information about my personal experiences, attitudes and behaviours, but that the report will be designed in such a way that it will not be possible to be identified by the general reader.

I confirm that the above information has been explained to me in a language that I understand and I am aware of this document's contents. I have asked all questions that I wished to ask and these have been answered to my satisfaction. I fully understand what is expected of me during the research. I have not been pressurised in any way and I voluntarily agree to participate in the above-mentioned project.

Signed on (Date):

Participant:

Researcher:

Appendix 7: Participant Informed Consent (isiXhosa)

Mna..... (igama lomthathi-nxaxheba) ndiyavuma ukuthatha inxaxheba kwi projekthi yophando ka Hazel Simpo ku : Uhlalutyo lolwazi lwamanina ngemikhankaso yaseMzantsi Afrika emalunga nemiyalezo ngentsholongwane kaGawulayo.

Ndiyayiqonda into yokuba:

1. Umphandi ngumfundi oqhuba uphando njengexalenye yeemfundo kwisidanga se-Mastazi kwi Dyunivesithi yase Rhodes. Umphandi angaqhagamshaleka ku 073 261 8659 okanye ku hazel.simp@gmail.com. Le projekthi yophando yamkelwe yikomiti yokuzaphatha efanelekiyo, kwaye iphantsi kweliso lika Mnumzana uWerner Bohmke kwisebe lezo nzululwazi ngengqodo kwi Dyunivesithi yase Rhodes, ongaqhagamshaleka ku 046 603 8508 okanye w.r.bohmke@ru.ac.za. Uyacelwa uqhagamshale umlungelanelani we Rhodes University Ethical Standards Committee (RUESC), xa kanye ufuna ukwazi okanye unemibuzo ngemiqathango malunga nokuthatha kwakho inxaxheba ku 046 603 7727 okanye s.mangele@ru.ac.za.
2. Umphandi unomdla wokuvavanya indlela abayibona ngayo abasetyhini imiyalezo yokwazisa ngoGawulayo.
3. Inxaxheba yam izobandakanya udliwano-ndlebe olunye nolubanzi emalunga nento engange yure. Ndiyavuma / Andivumi kumphandi ukuba asebenzise izimvo neembono zam ezi rikhodiweyo ngexesha lodliwano-ndlebe.
4. Ndingabuzwa ukuba ndiphendule imiba engam, kodwa noko ndinakho ukungayiphenduli imiba engam endingenako ukuyiphendula.
5. Ndimenywe ukuzovakalisa naziphi na iinkxalabo endingazo kumphandi malunga nenxaxheba yam kwisifundo, okanye iziphumo endingahlangabezana nazo ngokubunjwa yinxaxheba yam, kwaye nezizinto zixelwe ngokwalwaneliseko lwam.
6. Ndilungele ukurhoxa ngalo naliphi na ixesha kwesisifundo, nangona kunjalo nje, ndiyazinikela ngokupheleleyo kule nxaxheba ngaphandle kokuba kubekho iimeko ezingaqhelekanga ukwehla ezinothi zehle, okanye ndinenxalabo kwinxaxheba yam ebendingayilindelanga kwasekuqaleni.
7. Ingxelo kule projekthi ingaqulatha ulwazi malunga namava am ubuqu, isimo sengqondo, kwakunye nendlela yokuziphatha, kodwa ke, le ngxelo iyokwenziwa ngendlela enothi ingaqapheleki nanga nangowuphi na umfundi oqhelekileyo.

Ndiyaqinisekisa ukuba olu lwazi lulapha ngentla lucaciswe ngolwimi endilaziyo, kwaye ndiyazi ngomxholo okweluxwebhu. Ndiyibuze yonke imibuzo ebendingqwenela ukuyibuza, kwaye yonke iphendulwe ngokwalwaneliseko lwam. Ndiya kuqonda konke okulindelekileyo kum kulophando. Akhange ndixinzelelwe nanga yiphi na indlela, kwaye ndiyithathe le nxaxheba kule projekthi ngokuzithandela.

Ityikitywe(Umhla) : Umthathi Nxaxheba :

Umphandi :

Appendix 8: Permission and Release Form

Rhodes University — Department of Psychology

USE OF TAPE RECORDINGS FOR RESEARCH PURPOSES PERMISSION AND RELEASE FORM

Name of participant	(pseudonym)
Participant's contact details	Email address: Phone number:
Name of researcher	Hazel Simpo
Level of research	Masters
Brief title of the project	An analysis of women's understanding of South African public health awareness campaigns' messages on HIV/AIDS.
Name of supervisor	Mr Werner Bohmke

DECLARATION

(Please initial/tick blocks next to the relevant statements)

1.	The nature of the research and the nature of my participation have been explained to me.	Verbally	
		In writing	
2.	I agree to be interviewed and to allow recordings to be made of the interview.	Audiotape	
		Videotape	
3.	The tape recordings may be transcribed.	Without conditions	
		Only by the researcher	
		By one or more nominated third parties	
5.	I have been informed by the researcher that the tape recordings will be erased once the study is complete and the report has been written.		
	OR		
	I give permission for the tape recordings to be retained after the study and for them to be utilised for the following purposes and under the following conditions.		

Signature of participant: _____ Date: _____

Witnessed by researcher: _____ Date: _____

Appendix 9: Transcription Confidentiality

RHODES UNIVERSITY-PSYCHOLOGY DEPARTMENT

CONFIDENTIALITY AGREEMENT:

Transcription Services

I, _____, (name of transcriber) agree to maintain full confidentiality in regards to any and all audio recordings and documentation received from Hazel Simpo related to her research study on: **An analysis of womxn's understanding of South African public health awareness campaigns' message on HIV/AIDS using cognitive interviewing.**

Furthermore, I agree:

1. To hold in strictest confidence the identification of any individual that may be inadvertently revealed during the transcription of audio-taped interviews, or in any associated documents;
2. To not make copies of any audiotapes or computerized files of the transcribed interview texts, unless specifically requested to do so by Hazel Simpo.
3. To store all study-related audio recordings and materials in a safe, secure location as long as they are in my possession;
4. To return all audio recordings and study-related documents to Hazel Simpo in a complete and timely manner.
5. To delete all electronic files containing study-related documents from my computer hard drive and any backup devices.

I am aware that I can be held legally liable for any breach of this confidentiality agreement, and for any harm incurred by individuals if I disclose identifiable information contained in the audio recordings and/or files to which I will have access.

Transcriber's name (printed)

Transcriber's signature

Date

Appendix 10: Interpretation-Translation Confidentiality

RHODES UNIVERSITY-PSYCHOLOGY DEPARTMENT

CONFIDENTIALITY AGREEMENT:

Interpretation/translation Services

I, _____, (name of translator/interpreter) have been contracted to translate or interpret interviews as part of a research study being conducted by Hazel Simpo related to her research study on: **An analysis of womxn's understanding of South African public health awareness campaigns' message on HIV/AIDS using cognitive interviewing.**

During the course of interpreting, I will refrain from expressing any personal opinions, or doing anything else that might be considered an activity other than interpreting.

Confidentiality

I agree to respect the confidentiality of any conversation I interpret. I will not communicate, publish, or share any information from the research study with any individual or organization other than the researcher named above.

Accuracy and Completeness

To the best of my ability, I will execute a complete and accurate translation/interpretation, not omitting or changing anything discussed in the course of the interview. I will not provide any explanation without a specific request from the interviewee or **Hazel Simpo**.

Impartiality

At no time will my personal opinions be allowed to interfere with any communication, and any unsolicited comments or suggestions will be made strictly to improve the quality of communication.

I am aware that I can be held legally liable for any breach of this confidentiality agreement, and for any harm incurred by individuals if I disclose identifiable information from the interview process.

Translator/Interpreter's Printed Name

Date

Translator/Interpreter's Signature

Appendix 11: Semi-structured Interview Schedule

NB: All information gathered will be kept confidential.

Biographical data

1.1.Age

1.2.Educational level

Never attended school	
Grade R – Grade 6	
Grade 7 – Grade 12	
College	
University	
Other, specify	

1.3.Marital status

Single	
Married	
Never married	
Divorced	
Widowed	
Other, specify	

- Describe how awareness and prevention of HIV/AIDS happens in your community. What are the most common ways in which you see information about HIV/AIDS?
- Have you ever been tested for HIV/AIDS? Did you get tested as a result of an awareness campaign message? Do you remember the awareness campaign message that prompted you to get tested for HIV/AIDS? Explain how you felt about that message.
- [Show awareness campaign materials] Briefly explain what comes to your mind when you read this awareness message.
- Briefly repeat the awareness message in your own words. What do you think it is trying to communicate?
- What do you think is the story about HIV/AIDS that this awareness poster / campaign is trying to tell?
- Is there anything about this message that you do not understand, or that confuses you?

8. Do you think that the message is appropriate or proper? Please explain your thoughts.
9. Would you remember / recall this message after seeing it a month from now? What about it is memorable?
10. In your context, how easy is it for you to do what the awareness campaign is asking you to do?
11. Would you want to try to follow the behaviours that this awareness campaign is suggesting? Please explain why or why not?
12. Are there any aspects of your community / context that might stop you, or make it difficult for you to do what this awareness campaign is suggesting? Could you explain some of these?
13. Would you suggest that other women in your community should follow the behaviours that this awareness campaign is promoting? Please explain why or why not?