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A case study on Brothers for Life campaign: demand creation for Oral PrEP among AGYW through exploring the perceptions and acceptability of males on the implementation of Pre-exposure prophylaxis (PrEP) in Vulindlela, KwaZulu-Natal.

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Dissertation submitted to the
Centre for Communication, Media, and Society,
University of KwaZulu-Natal,
in fulfilment of the requirements for the degree of
Master of Social Science

2021

A dissertation submitted in fulfillment of the requirements for the degree of Master of Social Sciences in the Centre for Communication, Media, and Society (CCMS), School of Applied Human Sciences, College of Humanities, University of KwaZulu-Natal (Howard College), Durban, South Africa.

COLLEGE OF HUMANITIES DECLARATION

I, Lungelo Ndlovu, student number: 212537084, hereby declare that:

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Dedication

This is dedicated to the memory of my late great grandmother, Alice Zulu, who planted a seed of perseverance and greatness in me. Memories of you have been my source of inspiration, rest in peace granny. The fruits of your labour are evident for all to see, phakade lami.

To my mother, Nonhlanhla June-Memory Ndimande, for her prayers and for being a strong pillar of support. Thank you for your unconditional love, for instilling in me independence and the love for education. Thank you for allowing me to chase my dreams, many times you have put my needs before your own.

To my dad, Bhekumuzi Ronald Ndimande, for his unwavering support, patience, and the sacrifices you have made towards my studies. Thank you.

To my sister, Mbalenhle Nokwethemba Ndimande, whom I love dearly – thank you for your support and encouraging me to always reach for the skies. May you be inspired to soar on no matter what.

To my brothers, Sbongakonke and Nhlosehle Ndimande - may this inspire you to also reach for the skies.

Acknowledgements

Praise be to the Lord, Jesus Christ for the completion of this dissertation.

My deepest gratitude goes to my supervisor, Prof Eliza Govender, for her unwavering support and encouragement. I cannot begin to describe the depth of my gratitude for all the opportunities that you have granted me since I became your student. It has not been an easy journey but with your patience and love, you became a mother and ensured that my dream manifests despite all the calamities that I have encountered. Thank you for not giving up on me and my dream. I am grateful, for you have instilled in me discipline, strong work ethic and perseverance. You have taught me how to write, thank you!

Thank you to Yonela Vukaphi, Simamkele Bokolo and Nompumelelo Gumede for your support, guidance and for inspiring me to complete my dissertation.

I must acknowledge my spiritual parents as well, Rev SG Ngcobo and Mrs S Ngcobo of Umbumbulu UCCSA for the prayers and words of affirmation and encouragement when I needed them the most.

Appreciation is extended to my friend who became a sister, Jabulile Mseleku. Thank you for advice, support, and comfort when I needed it the most. I am humbled by your unwavering love and support that you showed even when I was preoccupied. Indeed, you are a blessing, a source of love and joy, Jabulile.

And most importantly, this would have not been possible without God, who gave me the strength and courage to accomplish this thesis. Indeed, all things are possible with God.

I will never forget the impact you all made in my life, thank you.

ABSTRACT

HIV prevalence in South Africa remains high among Adolescent girls and young women particularly in male counterparts in rural KwaZulu-Natal. Perpetuation of HIV in rural KZN is due to multiple factors including cultural beliefs, practices, and values. Nevertheless, the introduction of Pre-exposure prophylaxis (PrEP) for HIV prevention has presented an opportunity not only for a decline in general HIV mortality but also a prevention method that is female - centred already existing HIV prevention methods.

Previous case studies have demonstrated the efficacy of Oral PrEP, but it remains ineffective for AGYW because much of it relied on the negotiation with partners. Therefore, this study set out to explore male involvement in Oral PrEP mobilization by understanding the perceptions and support of men in heterosexual relationship and fathers of AGYW in Vulindlela.

Using the Social Cognitive Theory (SCT) within the Social Ecological Model, this study explored the relevance of a B4L poster approach with two specific groupings of males, firstly those who are in heterosexual relationships aged 24- 35 years and secondly male parents (also referred to as fathers in this study) who are aged 35 - 49 years in Vulindlela, South Africa. This study employed the qualitative approach, using focus groups and action media to gain an understanding of males' perceptions and support of Oral PrEP uptake among young women.

Findings reveal that even though Oral PrEP is a female centered prevention method and previous interventions were implemented to encourage women, male involvement is important. The support of male partners and fathers to daughters has the potential to promote acceptance of Oral PrEP. However, trust in heterosexual relationships remains an issue for acceptance of Oral PrEP among young women and fathers believe that promoting Oral PrEP to their daughters is encouraging promiscuous behaviour. Also, encouraging male partners to take Oral PrEP may assist in preventing female partners from contracting HIV because they are in multiple intimate relationships. Findings also presented that a poster can be an effective medium of communication if factors such as language, posters are displayed in relevant spaces to reach a wider audience, role modelling and poster is attractive.

Key Words: Pre-Exposure Prophylaxis, Human Immunodeficiency Virus, Brothers' for Life, Adolescent Girls and Young Women, Male involvement, Participatory Action Research.

LIST OF ACRONYMS AND APPREVIATIONS

AGYW	Adolescent Girls and Young Women
AIDS	Acquired Immunodeficiency Syndrome
ART	Antiretroviral Therapy
B4L	Brothers' for Life
CCMS	Centre for Culture, Communication and Media Studies
DOH	Department of Health
FGD	Focus Group Discussions
GBV	Gender Based Violence
HIV	Human Immunodeficiency Virus
KZN	KwaZulu-Natal
PAR	Participatory Action Research
PrEP	Pre-Exposure Prophylaxis
SCT	Social Cognitive Theory
SEMCHB	Social Ecology Model of Communication and Health Behavior
STI	Sexually Transmitted Infection
UNAIDS	The Joint United Nations Programme on HIV and AIDS
UNFPA	United Nations Population Fund
UTT	Universal Test and Treat
WHO	World Health Organization

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CHAPTER ONE - INTRODUCTION

Introduction

In this introductory chapter, the introduction of Oral PrEP and importance of male involvement in Oral PrEP implementation among their female partners will be discussed. It will begin by explaining the impact that HIV has had in key populations and the contributing influences on the rapid spread of HIV epidemic. It will then introduce Oral PrEP and the socio-cultural factors that limit the implementation of Oral PrEP. Power relations and the role of men in communities will be discussed, including how this study seeks to explore how to create demand for Oral PrEP in ways that mobilize men to support AGYW using the Brothers' for Life (B4L) campaign as a case study.

The Social Cognitive Theory (SCT) within the Social Ecology Model of Communication and Health Behaviour (SEMCHB) will be used to analyse the effectiveness of Brothers for life campaign in encouraging men to participate in HIV prevention. Within the methodology, Participatory Action Research (PAR) will be used to create a demand for Oral PrEP.

Background to the study

HIV (Human Immune Deficiency Syndrome Virus) epidemic has spread rapidly and has had a huge impact on the socio-economic landscape of key populations and their sexual partners worldwide (WHO, 2019:5). In sub-Saharan Africa, 75 % of young people live with HIV (Pilgrim *et al.*, 2016:1). HIV prevalence is high among the general population at 18.9% (Avert, 2018). However, in sub-Saharan Africa, three in four new infections are among AGYW ages 15–19 and 15–24 years (UNAIDS, 2018). This shows that the increase of HIV contraction is not only among young women but young people. This is an indication that both males and females are responsible for their health. However, these adolescent girls and young women (AGYW) are twice more likely to be living with HIV than men (UNAIDS, 2018). AIDS is the leading cause of death for AGYW ages 10–19 in Africa (Pilgrim *et al.*, 2016:1). Furthermore, South Africa has the highest percentage of HIV epidemic in the world, with 7.1 million people infected with HIV (Avert, 2019). In the province of KwaZulu-Natal, particularly in rural areas, AGYW are more vulnerable to HIV. There are multiple factors that contribute to high HIV infection in AGYW, such as cultural (cultural beliefs, practices, and values), behavioural, structural, and biological influences (Khazan, 2018:1).

Moreover, one of the major contributing factors to adolescent girls and young women's vulnerability is the lack of HIV prevention methods that are female centred (Abdool Karim, Baxter and Birx, 2017:18). Prevention methods that will accommodate the socio-cultural barriers such as cultural beliefs, stigma, poverty, and multiple sexual partners need to be considered so that there can be a decline in the high HIV rate among AGYW (Abdool Karim *et al.*, 2017:10).

Thus, in 2015 WHO (World Health Organisation) introduced Oral PrEP as a combination HIV prevention method for young women. Pre-exposure prophylaxis (PrEP) is the use of antiretroviral medications by uninfected persons before sexual exposure to HIV infected partners (Gray *et al.*, 2018). Several African countries have already approved guidelines for Oral PrEP for individuals at high risk of HIV, but key questions remain about how to deliver Oral PrEP to those at greatest risk (Cowan *et al.*, 2016:1). The demand for Oral PrEP has not been satisfactory for AGYW due to various factors such as cultural, behavioural, structural, and biological (Ndizinisa, 2017; Govender *et al.*, 2017; Khazan, 2018).

Furthermore, implementation studies have focused on delivering Oral PrEP to populations at higher risk of HIV, men who have sex with men (MSM) and sex workers, as well as people who inject drugs (PWID) and AGYW to a lesser extent (Eakle *et al.*, 2018: 2). The aim of implementing Oral PrEP to populations at higher risk of HIV was to optimise impact and cost effectiveness. This resulted in limitations in the Oral PrEP implementation and the population that is largely affected by HIV being unaware of the prevention method. Moreover, key populations affected by HIV such as AGYW face legal and social barriers to accessing health services (Abdool Karim, Baxter and Birx, 2017:21).

From a socio-cultural perspective, unequal power relations adversely affect the acceptability and promotion of Oral PrEP among AGYW (Montgomery *et. al*, 2015). Studies reveal that the influence of male partners is essential in contributing to the acceptability and adherence of Oral PrEP among AGYW (Montgomery *et. al*, 2015). Young women are unable to maintain secrecy of product use because of the influence of culture (Bass, 2019:37). This reveals the need for mobilizing men to create a demand for Oral PrEP. Therefore, it is vital to consider the influence of male partners in Oral PrEP acceptance, uptake, and adherence. Hence this study takes the position of utilising potential gatekeepers of Oral PrEP uptake as agents who can lead the promotion of Oral PrEP among adolescent girls and young women.

This study seeks to examine the role of men in promoting Oral PrEP utilising the strategy of the Brothers 4 Life (B4L) campaign- referred to as B4L from this point forward - is a health prevention campaign for young men aged 30 and below to influence and relay knowledge and practices on HIV prevention (Collinge *et al.*, 2013:1). It will utilise Brothers for Life lessons from the B4L campaign successes to develop posters to encourage men to promote the use of Oral PrEP to their female partners. The campaign has had various successful initiatives including B4L mobilization campaign (mass media campaign), Game of Life campaign, treatment campaign and other sub campaigns (Collinge *et al.*, 2013; B4L, 2019; Sonke, 2019).

Health promotion ¹interventions have played a vital role in encouraging health prevention to decrease the rapid spread of HIV epidemic. Health promotion considers that to produce social change, working with people is essential (Cross, Davis and O' Neil, 2017). For instance, Brothers for Life campaigns have promoted men to act and have agency over their lifestyles by circumcising, HIV testing, supporting their female partners and have encouraged men to fight against Gender Based Violence (Collinge *et al.*, 2013).

Thus, this study aims to explore how to create demand for Oral PrEP in ways that mobilize men to promote the use of female prevention strategies to support AGYW, through considering males' perceptions and acceptability for Oral PrEP. This study seeks to examine the role of men in promoting Oral PrEP uptake using the Participatory Action Research (action media). It will identify how male involvement can influence female prevention strategies to be effective. Men who are in heterosexual relationships and parents to females will convey key messages about Oral PrEP by creating posters to promote male participation in HIV prevention strategies. The project aims to utilise Brothers for Life lessons from the B4L campaign successes to develop posters to encourage men to promote the use of Oral PrEP to their female partners.

Aims and Objectives of the study

The primary focus of this study is to create a demand for Oral PrEP among AGYW by exploring the perceptions and support of males on the implementation of Pre-exposure prophylaxis (PrEP) in Vulindlela. This will assist in finding out whether there are limitations to Oral PrEP implementation from the males' perspective and how they can be addressed from a cultural perspective. These are the following main objectives of the study:

- To investigate the effectiveness of Brothers for life campaign and their use of posters as a medium for mobilizing men in HIV prevention.

¹ Health promotion signifies the importance of giving an individual control over their health as well as factors that influence health such as educational system, government, policy and regulations (Lewis and Lewis, 2015).

- To gain an understanding of the males' perceptions and support of Oral PrEP for young women.
- To explore how to create demand for Oral PrEP through key messages in ways that will mobilize men to support AGYW through key messages.

Location of the study

This study will be based in Vulindlela, Pietermaritzburg, KwaZulu-Natal. In South Africa, rural KwaZulu-Natal has a high population rate of adolescent girls and young women (AGYW) living with HIV. The researcher has chosen to use Vulindlela, a rural area near the Eastern coast of South Africa because it has high HIV incidence rates particularly amongst young women (Khazan, 2018:6:1). The high HIV prevalence and incidence rate in Vulindlela, KwaZulu-Natal, shows the importance of new HIV prevention technologies for young women in this setting (Abdool Karim, Baxter and Birx, 2017).

Problem statement

In rural KwaZulu-Natal adolescent girls and young women (AGYW) are particularly vulnerable to HIV. Factors such as social issues, cultural beliefs, power dynamics, practices and values have made this group susceptible to HIV contraction. Moreover, unequal power relations adversely affect the acceptability and promotion of Oral PrEP among AGYW (Montgomery *et. al*, 2015). Studies reveal that the influence of male partners is essential in contributing to the acceptability and adherence of Oral PrEP among AGYW (Montgomery *et. al*, 2015). Sexual partnering between young women and older men is one of the important factors for HIV transmission which has hampered HIV prevention in southern and eastern Africa (de Oliveira, 2016:1). Furthermore, secrecy remains a challenge for prevention interventions because young women are unable to maintain secrecy of product use due to the influence of culture (Bass, 2019:37). This reveals the need for mobilizing men to create a demand for Oral PrEP. Therefore, it is vital to consider the influence of male partners in Oral PrEP acceptance, uptake, and adherence. Their perceptions and support of Oral PrEP uptake is essential in creating a demand for uptake among adolescent girls and young women. The intent of the study is to provide insight on how to create demand for Oral PrEP uptake using the Participatory Action Research (PAR) to explore perceptions and support of Oral PrEP implementation using men to promote the prevention strategy to their female partners and female children. It will identify how male involvement can influence prevention strategies to be effective.

Significance of the study

This study will provide insight on how to create demand for Oral PrEP uptake using Participatory Action Research (PAR) to explore perceptions and support of Oral PrEP implementation using men to promote the prevention strategy to their female partners and female children. The study can be used by Health communication scholars to produce interventions that will effectively reduce the rate of HIV infections among AGYW in South Africa, specifically rural KwaZulu-Natal.

Framing of Research

Theoretical framework

This study will be understood through the theoretical lens of the Social Cognitive Theory (SCT) within the Social Ecology Model of Communication and Health Behaviour (SEMCHB). It will be used to analyse the effectiveness of Brothers for life campaign in encouraging men to participate in HIV prevention. The SCT is relevant for behavioural change at an individual level, but there are elements that need to be considered such as the community-level processes and how they contribute to health outcomes (Storey and Figueroa, 2012). Thus, the SCT is to be viewed within the Social Ecology Model of Communication and Health Behaviour (SEMCHB).

The SEMCHB structure encompasses of various layers as it considers the interrelated influences of family, peers, community, and society on behaviour (Storey and Figueroa, 2012). The SEMCHB is appropriate for the study as it will explore perceptions and the support of Oral PrEP of community members in Vulindlela including heterosexual partners and male parents of young women. In addition, as the SCT explains behavioural change from individual perspective, within the SEMCHB there are different layers included however, the SCT is within the first layer which is the Individual level of the SEMCHB.

The Individual level encompasses of “behaviour and intention, knowledge and skills, beliefs and values, emotion, perceived risk, self-efficacy, self-image and subjective norms” (Storey and Figueroa, 2012:1). The Social Cognitive Theory consists of key concepts such as human agency, self-efficacy, perceived collective efficacy and observational learning which will be explored to assess the effectiveness of Brothers for life campaign in promoting Health prevention among men.

Methodology

A qualitative research approach was adopted for the proposed study, qualitative research is a research process that uses inductive data analysis to learn about the meaning that participants hold about a problem or issue by identifying patterns or themes (Creswell, 2012). Inductive approach is where the research observes empirical evidence and draws theoretical concepts and propositions (Nueman, 2011:70). The qualitative approach uses open-ended questions to gather information, which is grouped into codes, themes, or categories (Creswell, 2012). Thus, the qualitative research design is appropriate for study as aims to explore the perceptions and support of Oral PrEP and how the prevention strategy can be promoted from the perspective of men.

Research Design

The method employed in this study is Participatory Action Research (action media). It will be used to explore the perceptions and support of Oral PrEP from the perspective of men. This study is interested in how males can create a demand for Oral PrEP through considering their perceptions and acceptability. It will be used to explore how posters can be used as a medium for promoting Oral PrEP and some of the key messages that result from this process.

This will be done by having a discussion on B4L successes which will be used to assist develop posters as a medium for men to generate their own messages to encourage other men in heterosexual relationships to encourage their partners to use Oral PrEP. It will also include male parents and the messages that they can generate to their daughters. The researcher will then have a follow up discussion with the participants about the key messages on the posters and what they suggest about males' perceptions and support of Oral PrEP for women. This will allow critical dialogue and discussion that will inform the participants about HIV prevention and Oral PrEP.

Participants will be purposively recruited from the three key sectors in Vulindlela. Aligning with the theoretical framework of SCT and SEMCHB, at an interpersonal level the first workshop will be conducted with a group of 6-8 fathers who are parents to AGYW, exploring their perceptions of Oral PrEP and key messages to advocate Oral PrEP for their daughters. Also, at an interpersonal level, the second workshop will be conducted with 6-8 men who are in relationships either married or co-habiting to explore their willingness to promote Oral PrEP and the key messages that can increase demand for product uptake. The researcher will use this design because it considers culture and involves the community in developing healthcare services.

Participatory communication is an appropriate communication strategy for this study because it is active, interactional and it is about "working with people instead of working on people" (Singhal, 2003:3). Participation is an important element that will ensure that the men are given a platform to engage in all levels of the study using action media.

This study will use purposive sampling technique to select study participants. The study researcher will need a population that consists of the following inclusion criteria: males, community member in Vulindlela, in heterosexual relationships aged 24- 35 years and secondly male parents (also referred to as fathers in this study) who are aged 35 - 49 years. The Comosat local NGO will assist in recruitment of study participants using the discussed inclusion criteria.

A research instrument will be designed to guide the participants when they are creating posters and with follow up focus groups to discuss the various messages. The participants will create posters individually. However, follow up discussions on the different posters will be done in groups. Moreover, during the workshops, the researcher will make recordings and have the recordings transcribed in English once data collection is complete. Transcripts will then be analysed by producing themes. Thematic analysis is relevant for this study as it provides core skills to pinpoint, examine, and record patterns or themes within data (Braun and Clarke, 2006:79). Produced themes will then also be analysed.

Research questions

1. How is the Brothers for life campaign and their posters effective as a medium for mobilizing men in HIV prevention?
2. What kind of perceptions and support do men have on Oral PrEP uptake for AGYW?
3. What are key messages that men will utilise to promote Oral PrEP and do these messages support Oral PrEP uptake for young women?

It is envisaged that answers to these research questions will be an addition to existing literature on male involvement on Oral PrEP uptake among AGYW in the South African context. Further insight will be provided on how to mobilize men in promoting Oral PrEP uptake. And will provide insight into whether male parents and male partners in heterosexual relationships would promote Oral PrEP to AGYW.

Structure of the Dissertation

Chapter One introduces HIV epidemic South Africa, giving a brief overview of the statistical prevalence of HIV among adolescent girls. This chapter introduces the reader to the research aims and objectives, articulating the significance of the study. It contextualizes the need for further research on understanding the perceptions, knowledge, and attitudes of males towards Oral PrEP, to mobilize men to create a demand for Oral PrEP to other men in the community in heterosexual relationships and fathers of daughters.

Chapter Two explores literature related to the research areas. Firstly, the chapter provides an overview of the HIV landscape globally and in the South African context. The contributing factors of the rapid spread of the HIV epidemic are explored, considering the cultural, biological, and social factors. Oral PrEP in South Africa is also established, focusing on the limitations of its implementation. Finally, this chapter suggests the need to understand the acceptability and perceptions of males on Oral PrEP for them to influence young women to use Oral PrEP in heterosexual relationships and in families.

Chapter Three outlines the theoretical framework which underpins this study. The theoretical framework assists in making sense of the data collected, and theories employed to analyse the data. Theories include the Social Ecology Model of Communication and Health Behaviour (SEMCHB) (Kincaid *et al.*, 2007), and the Social cognitive theory.

Chapter Four explains the methodological approach which guided the research design. The chapter explains the critical theory paradigm and the participatory action research design, which were the theoretical foundations for data collection. The process of data collection and data analysis is outlined, with the ethical considerations explained in terms of how they impacted on the research process. As this study was conducted with fathers and males with a female researcher. the ethical considerations were vital to ensure the study was beneficial rather than harmful.

Chapter Five presents the data collected and analysed through the thematic analysis. This chapter presents the data that was collected through focus group, action media (poster creation) and debriefing. It further provides an analysis of the data which elucidates on the acceptability and perceptions of male parents and male partners Oral PrEP uptake among young women. The discussion of findings is organised in a way that it presented differences and similarities in perceptions between male parents and male partners of the young women. Additionally, data is analysed taking into consideration the theoretical framework and research questions for the study.

Chapter Six concludes the in-depth findings of this study, stating the study's strengths and limitations. This chapter highlights the significance of this study, suggesting recommendations for health communication campaigns in South Africa. Finally, suggestions for further research areas are proposed. It also provides a conclusion to the study.

CHAPTER TWO - LITERATURE REVIEW

Introduction

Literature reveals that there is a rapid increase of young women infected with HIV worldwide (WHO, 2020). In 2019, an estimate of 38.0 million people was living with HIV globally (Avert, 2019). In rural KwaZulu-Natal AGYW are particularly vulnerable to HIV (Khazan, 2018). Factors such as social issues, cultural beliefs, gender inequities, practices and values have made this group susceptible to HIV infection (Fleischman and Peck, 2015; Montgomery *et al.*, 2015; Pilgrim *et al.*, 2016; de Oliveira, 2016; Colvin, 2017; Khazan, 2018). The introduction of Oral Pre-exposure prophylaxis (PrEP) for HIV prevention has presented an opportunity not only to change the HIV landscape in South Africa but more specifically for key population groups at highest risk of HIV infection (UNAIDS, 2016).

Although Oral PrEP is an additional tool for males and females at high HIV risk, AGYW are encouraged to use it because they are a key population susceptible to HIV. Several studies suggest the importance of understanding the role and influence of men in the promotion of Oral PrEP for women (Nota and Govender, 2020; Mbewe and Govender, 2020). Men can often be gatekeepers to effective HIV prevention through Oral PrEP promotion. Consequently, the objective of this study is to understand males' perceptions, attitudes, and acceptability of Oral PrEP through messages. This study explores how to create demand for Oral PrEP in ways that mobilize men to promote HIV prevention strategies to support AGYW, and therefore investigating the perceptions and support of Oral PrEP becomes the first point of departure in this study.

This chapter begins by exploring the current landscape of HIV among Adolescent Girls and Young Women (AGYW) in South Africa, focusing on contributing factors to AGYW's vulnerability to HIV, specifically in Vulindlela. Oral PrEP will be defined, including the landscape and factors that affect the implementation of Oral PrEP uptake among AGYW. The socio-cultural role of men who are in heterosexual relationships and fathers to daughters in communities and their perceptions on the new health prevention strategies will be discussed.

The chapter will provide an overview of the health communication landscape and behaviour change communication, an outline of the Brothers for Life campaign which is an example of men mobilised to support HIV prevention objectives. The chapter will specifically explore the effectiveness of the use of the Brothers for Life campaign posters as a medium for mobilizing men for HIV prevention and conclude with specifying the relevance of using the campaign in the study.

HIV epidemic landscape

HIV across the Globe and Sub-Saharan Africa

The health of people is a complex and pivotal issue, especially as HIV remains a public health challenge with key populations and their sexual partners affected, accounting for 47% of new HIV infections globally (UNAIDS, 2018). These key populations are defined as people who are at high risk of HIV contraction in all countries and regions (WHO, 2020). Key populations include AGYW, men who have sex with men (MSM), people in prisons, sex workers and their clients; and transgender persons (Bekker *et al.*, 2016; WHO, 2020). In sub-Saharan Africa, AGYW between ages 15–24 years are twice as likely to be living with HIV as men, with four in five new HIV infections among AGYW (Avert, 2020). HIV is six times higher among AGYW as compared to men in southern Africa and three times higher in eastern Africa (Karim and Baxter, 2019).

Although HIV remains a global public health issue, global HIV statistics among AGYW between 15–24 years have decreased by 25% between 2010 and 2018 through the promotion of HIV testing, male circumcision, and the availability of antiretroviral treatment (Avert, 2020). The South African National Strategic Plan (NSP) reveals that in the previous five years there has been progress in responding to the epidemics of sexually transmitted diseases (STDs) and HIV (SANAC, 2018). Structural and social needs were developed which included advocacy campaigns for health promotion, students' HIV testing programs in higher institutions and employment opportunities. The structural and social needs resulted in a “decline from 410 000 per annum in 2011 to an estimated 270 000” in 2016 of sexual transmission of HIV among people aged 15–49 (SANAC, 2018:4).

HIV National landscape

The 2016 United Nations Political Declaration on Ending AIDS target was to decrease new HIV infections to less than 500 000 by 2020, from more than 1.8 million in 2016 (UNAIDS, 2019). However, despite access to HIV treatment and availability of effective HIV prevention strategies over the years, the rate of new infections among young women as compared to men has not decreased as anticipated (Avert, 2020). HIV incidence remains unchanged in South Africa with 7,7 million people HIV infected with 19% adults ages 15 – 49 HIV prevalence in 2019 (Karim and Baxter, 2019; Avert, 2020).

South Africa has a leading antiretroviral treatment (ART) programme (Avert, 2020) but young women remain more susceptible to HIV as compared to men because there are socio-cultural, economic, and biological barriers for HIV prevention that need to be considered (WHO, 2020:5). The socio-cultural, economic, and biological barriers affect the implementation of HIV testing and treatment services which increases the HIV infection rate (UNAIDS, 2018), resulting in the epidemic remaining a major social issue in South Africa.

Provincial

In rural KwaZulu-Natal, the HIV population rate remains high (Govender *et al.*, 2017:1268). Statistics in 2019 revealed that HIV prevalence remains high (20.4%) among the general population, but it varies between regions with 12.6% in Western Cape compared with 27% in KwaZulu-Natal, respectively (Avert, 2020). Subsequently, a study based in rural KwaZulu-Natal high schools demonstrated that HIV infection in young men less than 20 years of age is rare and remains under 2% (Abdool Karim *et al.*, 2017). In KwaZulu-Natal people living in “informal settlements, sex workers, AGYW and their male sex partners and older men” have high HIV contraction rate because of substance abuse, gender-based violence and stigma (PIP KZN, 2019). KwaZulu-Natal remains a province with high HIV population with Vulindlela having a high prevalence of HIV among young women (Khazan, 2018).

Vulindlela

Vulindlela is a rural area near the eastern coast of South Africa in Pietermaritzburg with high HIV incidence rates (Khazan, 2018). Statistics in Vulindlela reveal a high prevalence of HIV particularly among adolescent girls and young women are at high risk (Abdool Karim *et al.*, 2017). The high rate of HIV contraction among AGYW in Vulindlela suggest the lack of appropriate health interventions which consider the factors that limit the uptake of new prevention methods (Kharsany and Karim, 2016; Khazan, 2018). For instance, Vulindlela is an underdeveloped area that is embedded with “unemployment, poor levels of education and limited access to income generating opportunities” (Davis, de Lange and Povall, 2016). There are various influences that have perpetuated HIV risks in the rural area among AGYW which also include cultural, behavioural, structural, and biological (Fleischman and Peck, 2015; Selhorst *et al.*, 2017; Govender *et al.*, 2017; Ranganathan, 2017). Therefore, it is imperative that contributing factors which influence an increase in HIV vulnerability among key populations are considered when implementing social change interventions in the community (Govender *et al.*, 2017).

Contributing factors to AGYW's vulnerability to HIV

Socio-cultural factors

In the socio-cultural landscape, adolescent girls and young women are more vulnerable to HIV and have faced high HIV risks that include poverty, transactional sex, sexual violence, loss of a family members and lack of education (Fleischman and Peck, 2015; Dellar *et al.*, 2015). AGYW often faced challenges such as legal and socio-cultural issues related to societal attitudes about sexuality and behaviour stigmatization. An example is transactional sex, alcohol and drug use and teenage pregnancy (WHO, 2020). Culture is central in understanding individual behaviour, including their values, beliefs, and practices (Dutta, 2008). In the Zulu culture men's attitudes towards HIV risks are not considered as it is accepted for a man to be *isoka*. *Isoka* is a cultural practice which allows a man to have multiple sexual partners known as his girlfriends and promotes unequal power relationships (Ndizinisa, 2017). These relationships are usually for sexual pleasure and short term.

Moreover, the effects of masculinity and power relationships are evident in the vulnerability of women to gender-based violence (GBV), HIV and the ineffectiveness of programs designed to help women in sexual relationships through negotiation with their male partners (UNAIDS, 2001; Men's foundation, 2020). It has become evident that women cannot protect their sexual health without male support from their male partners and that gender relations affect the health outcomes. Also, initiatives made among women to raise awareness and promote HIV prevention remain ineffective because men determine whether the women, they are sexually active with can protect themselves (UNAIDS, 2001). This has resulted to direct impact on the increased AGYW vulnerability to HIV infection and barriers that need to be considered including HIV testing and treatment services (WHO, 2020). It reveals the relevance of male support in the implementation of HIV prevention strategies among young women.

For instance, a study took place from April 2018 to December 2018, 2020, HIV-negative AGYW aged 16-24 years were enrolled into an HIV prevention intervention which involved distribution of self-tests to male partners and Oral PrEP for AGYW (Holmes *et al.*, 2020). Out of these women, 91 participants or male partners were sampled for in-depth interviews based on their degree of completion of the two HIV prevention cascades (Holmes *et al.*, 2020). In cases where AGYW had a male partner with multiple partners, AGYW perceived both interventions as sources that cause distrust in the relationship and insinuating non-monogamy (Holmes *et al.*, 2020). This revealed that although the interventions promoted HIV prevention, barriers such as distrust in the relationships played a role in the implementation process.

The participants chose not to accept either intervention, while others accepted and attempted to deliver the self-test kit but received a negative reaction from their male partner (Holmes *et al.*, 2020). In the few cases where AGYW held multiple partnerships, both interventions were viewed as strategies for protecting one's health, and these AGYW exhibited confidence in accepting and delivering the self-test kits and initiating Oral PrEP (Holmes *et al.*, 2020). Women who indicated intimate partner violence experiences chose not to accept either intervention because they feared it would elicit a violent reaction from their male partner (Holmes *et al.*, 2020). This highlighted the impact that intimate partner violence has on the implementation of HIV prevention methods.

Furthermore, AGYW in relationships described as committed and emotionally open, self-test kit delivery was completed with ease, but Oral PrEP was viewed as unnecessary (Holmes *et al.*, 2020). Male partners experience with the cascade corroborated AGYW perspectives and demonstrated how men can perceive female-initiated HIV prevention options as beneficial for AGYW and a threat to male partners' masculinity (Holmes *et al.*, 2020). Thus, it is important to take into consideration relationship driven barriers and facilitators when promoting HIV prevention interventions to ensure social change.

Moreover, SASA conducted a study which took place at Kampala, Uganda between men and women, at the age of 27 years (Sharma *et al.*, 2017). Community mobilization was implemented to reduce IPV (Intimate partner violence) and address power imbalances between men and women (Sharma *et al.*, 2017). Men in the intervention communities reported HIV testing, condom use, and fewer concurrent partners (Sharma *et al.*, 2017). They were also reported increased joint decision making, greater male participation in household tasks, and more open communication and greater appreciation of their partner's work inside the home (Sharma *et al.*, 2017). This highlighted how there is a need for male involvement interventions to reduce HIV and deal with relationship driven barriers.

The role of behavioural and structural factors in HIV transmission

The HIV and AIDS epidemic is influenced by complex behaviours including individual's knowledge, attitudes, emotions, and risk perception, gender, power dynamics between partners, accessibility of services, economic inequalities, that make HIV a priority health issue (Peacock and Levack, 2004; Kaufman *et al.*, 2014; Kharsany and Karim, 2016). Furthermore, behavioural practices by AGYW are influenced by poverty, lack of job opportunities whereas others want to live luxurious lives (Ranganathan, 2017).

The sexual network structure and dynamics suggest that women are more susceptible to HIV contraction at a much earlier age than their male peers due to sexual partnering with older men who are HIV infected (Dellar *et al.*, 2015; de Oliveira *et al.*, 2016). AGYW in Vulindlela have engaged in HIV risk behaviours such as transactional sex with older men also called *sugar daddies* because they believed that older men are meant to provide for them (Masango, 2014; Ndzinisa, 2017; Khazan, 2018:6), putting them at risk of HIV infection. This is illustrated in figure 1.1 below which depicts that sexual engagement between AGYW and older men, who may have contracted HIV from women within similar age group as themselves, is a key factor that drives the transmission of HIV.

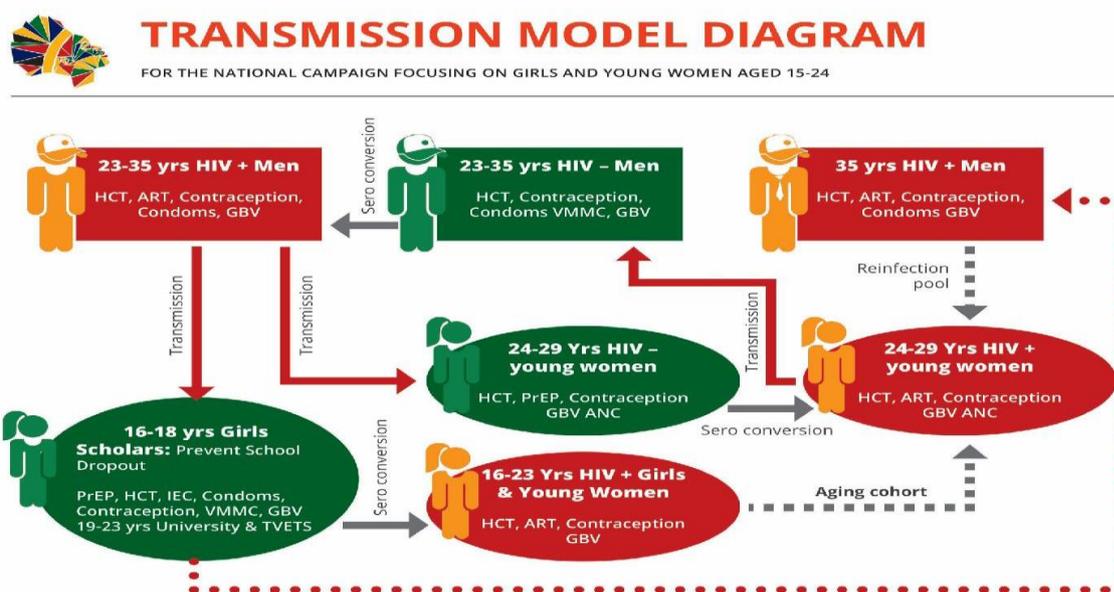


Figure 2.1 Diagram representing the transmission network of HIV between HIV-positive men and adolescent girls and young women (de Oliveira *et al.*, 2016: 7).

Studies suggest that sexual partnering between young women and older men who might have acquired HIV from women of the same age group is one of the important social factors for HIV transmission which has hampered HIV prevention in Southern and eastern Africa (de Oliveira *et al.*, 2016; Kharsany and Karim, 2016). While one may assume that sexual partnering and transactional sex takes place due to poverty, AGYW use the money for luxury and purchase fashionable hair and expensive clothes to publicize it on social media (Onoya *et al.*, 2011; Ranganathan, 2017; Khazan, 2018). This is a behavioural issue that has perpetuated the spread of the HIV epidemic, and which results in AGYW being unable to take precautions to protect themselves from sexually transmitted diseases because their male partners refuse to use condoms (Montgomery *et al.*, 2015; Khazan, 2018). Moreover, when AGYW are older and settle with men of their age group, their partners are at high risk of being infected with HIV, and their partners also get multiple sexual partners who are younger women which perpetuates the HIV transmission cycle (de Oliveira *et al.*, 2016).

In addition, one of the major contributing factors to adolescent girls and young women's vulnerability is the lack of HIV prevention methods that are female centred (Abdool Karim *et al.*, 2017). Prevention methods that will accommodate the socio-cultural barriers such as cultural beliefs, stigma, poverty, and multiple sexual partners need to be considered to achieve a decline in the high HIV rate among AGYW (Abdool Karim *et al.*, 2017). HIV transmission has demanded the urgent development of new prevention strategies as well as the utilization of all existing strategies, including the use of condoms, male circumcision, abstinence, and the treatment of HIV-infected partners (Myron, 2012; Dellar *et al.*, 2015).

Young women face different challenges that influence their non-usage of existing HIV prevention strategies such as condoms and avoid disclosing their status to avoid conflict with their partners (Khazan, 2018). Prevention efforts have not had the maximum impact on AGYW's risk of acquiring HIV (Pilgrim *et al.*, 2016). For instance, masculinity has had a negative impact in heterosexual relationships because women experience sexual violence due to negotiation for contraceptive use and they are one and a half times more likely to become infected with HIV (UNAIDS, 2018; Kharsany and Karim, 2016; Men's foundation, 2020).

Another example is how the influence of men on the increase of HIV contraction among young women was evident in a study that took place where data was drawn from a qualitative study that was part of a social science research agenda within the ANRS12249 TasP trial (Chikovorea *et al.*, 2016). The trial was conducted in Hlabisa, a sub-district in KwaZulu-Natal Province, South Africa (Chikovorea *et al.*, 2016). The aim of the study was to examine how *"masculinity influences engagement with HIV care in the context of an on-going TasP trial"* (Chikovorea *et al.*, 2016:75). Younger people, and old men and women were part of the focus groups discussions during the data collection process.

When the data was analysed themes that emerged were barriers to *"HIV testing, acceptability of early ART for treatment and prevention, and partner influence on beliefs and practices"* (Chikovorea *et al.*, 2016:75). Results showed that men poorly engaged with healthcare, they were reluctant to test for HIV because they feared that they might test positive and some of the young men and older men who were married refused to use protection during sexual intercourse (Chikovorea *et al.*, 2016). This increased HIV incidence and contested to earlier findings that showed that young women were in heterosexual relationships with HIV infected older men, and this increased the HIV infection risk among young women. One of the findings also showed how an older man did not test because he believed that he was "healthy" and a result putting their partner at risk of being HIV infected (Chikovorea *et al.*, 2016:75).

Furthermore, findings revealed that the young men were also reluctant to access healthcare services such as clinics because they were ashamed that they would be seen by women (Chikovorea *et al.*, 2016). Men were also uncomfortable about disclosing their status to their partners, a participant highlighted that he would not share his status because his partner might tell people in the community (Chikovorea *et al.*, 2016).

These findings suggested that men in heterosexual relationships were not aware of their status and that their partners were not aware of their partners' status as men didn't disclose their HIV status. They further revealed the role that men played in relationships in relation to HIV testing and prevention. They also showed the limitations that men have caused on the implementation of health prevention strategies such as universal test and treat (UTT) strategies which promoted antiretroviral therapy (ART) to reduce incidence of HIV in a key population. Also, the findings showed the possible limitations that men may cause for the implementation of new HIV prevention strategies that require HIV testing, increasing the HIV incidence among young women.

Further, lack of access to education has also increased AGYW risk of contracting HIV (Fleischman and Peck, 2015). Research reveals that AGYW who are educated delay childbearing and have access to employment opportunities compared with their non-educated counterparts (Ranganthan, 2017). This indicates that young educated and employed women would not live-in poverty and rely on their partners for financial assistance. They would not be at a position of having to be sexually active in relationships with people who have multiple partners and be at a high risk of being HIV infected (Khazan, 2018). Also, education is a vital factor of health promotion, uneducated AGYW are unaware of how to improve their health because they do not understand what is being said in health talks and what is written on the pamphlets or posters (Mntlangula *et al.*, 2017).

Biological factors that contribute to women's vulnerability to HIV

AGYW are at a high risk of being affected by bacterial and viral sexually transmitted infections (STI) which increase the risk of HIV infection and the cervix has genital mucosa which is exposed to HIV that is susceptible to infection (Dellar *et al.*, 2015). Consequently, a case study was conducted and included participants that were sexually experienced youth (15–24 years-old) enrolled in the Rakai Community Cohort Study, 1999–2008 (Santell *et al.*, 2013). Results showed that HIV incidence was greater among young women than young men; this gender disparity was greater among teens (Santell *et al.*, 2013).

Moreover, genital inflammation also increases the risk of HIV contraction (Selhorst *et al.*, 2017). Considering this, the WHO introduced Oral PrEP in 2015 as a combination prevention, and several African countries have already approved guidelines for Oral PrEP for individuals at high risk of HIV, but key questions remain about how to deliver Oral PrEP to those at greatest risk (Cowan *et al.*, 2016:1). The demand for Oral PrEP has not been satisfactory for AGYW due to various factors such as cultural, behavioural, and structural. It is imperative to take into cognisance that barriers of health prevention strategies are interrelated, this includes the individual, interpersonal and community features. Therefore, this study seeks to understand the perceptions and support of males on Oral PrEP uptake among young women through messages that will be developed by exploring the use of the Brothers for Life campaign as a medium for mobilizing men for HIV prevention.

Oral Pre-exposure prophylaxis (PrEP)

The identification of safe and effective HIV prevention options for adolescent girls and young women (AGYW) has been an ongoing challenge in the public health sector, however the introduction of Oral PrEP has provided an opportunity to decrease the HIV rate in key populations (Van der Straten, 2014; myPrEP, 2021). Pre-exposure prophylaxis (PrEP) is the use of antiretroviral medications by uninfected persons before sexual exposure to HIV infected partners (Gray *et al.*, 2018). It is a new approach to HIV prevention that can be used by key populations identified to be at a high risk of HIV contraction including, men who have sex with men (MSM), transgender persons, heterosexual men, and women (Bekker *et al.*, 2016; Hosek *et al.*, 2016; myPrEP, 2021). However, for this study, the introduction of Oral PrEP is understood to be an opportunity particularly for young women to prevent themselves from being infected with HIV as research findings reveal that they are at a high risk of contracting the infection. (Ramjee and Daniels, 2013; Eakle *et al.*, 2018).

Oral PrEP is a new biomedical intervention that has the potential to change the HIV landscape in South Africa, but various socio-cultural factors need to be considered for Oral PrEP acceptability and adherence (Dellar *et al.*, 2015; UNAIDS, 2016). It was introduced for individuals at high risk of HIV infection, who are unwilling or unable to consistently use male or female condoms and ABC approach (Brekker *et al.*, 2016; UNAIDS, 2016). In South Africa Oral PrEP has the potential for significant impact as a prevention strategy for the key population level of HIV incidence. In June 2016 a program was implemented for the promotion of Oral PrEP to sex workers (Hosek *et al.*, 2016).

However, there is a need for demand creation strategies for acceptability of Oral PrEP among AGYW (Govender *et al.*, 2017; Khazan, 2018:8; Jjuuko, 2019). Oral PrEP has been provided free of charge as a product for HIV prevention to sex workers and some university students (Khazan, 2018; Chimbindi *et al.*, 2021). For instance, in a study that was conducted by Africa Health Research Institute (AHRI), located in Hlabisa sub-district in uMkhanyakude district Oral PrEP was introduced in July 2016 as an intervention targeting YWSS through the DREAMS partnership (Chimbindi *et al.*, 2021). The implementer conducted a situational analysis of the area to identify “hot-spots” and started enrolling clients for Oral PrEP in August 2016 from these sites; actual Oral PrEP roll-out began in November 2016 (Chimbindi *et al.*, 2021).

Further, Oral PrEP is a component of the HIV prevention package which includes HIV testing because individuals must know their HIV status before they use the prevention strategy and test every three months while taking Oral PrEP (Brekker *et al.*, 2016; UNAIDS, 2016). HIV testing is important in decreasing the rate of HIV infected people worldwide (Masango, 2014; Ndizinisa, 2017; WHO, 2020). HIV testing uptake is influenced by multiple factors or social determinants, such as knowledge and attitudes about testing, perceived risk of HIV infection and self-efficacy to protect oneself from HIV ((Masango, 2014; Strauss *et al.*, 2015; Ndizinisa, 2017; Vermund *et al.*, 2017; USAID, 2020).

The uptake of HIV testing promotes the reduction of HIV incidence rate but there has been limited progress in reducing the HIV rate among young women (Masango, 2014; Brekker *et al.*, 2016; Karim and Baxter, 2019; Chimbindi *et al.*, 2021). One may argue that if health promotion prevention strategies targeted the key underlying influencers of HIV transmission, health prevention programs would have a major impact (de Oliveira *et al.*, 2016). For instance, male involvement has the potential for promoting acceptance of Oral PrEP uptake among young women (Mbewe, 2017; Govender and Abdool Karim, 2018).

For example, male participants were not supportive of the uptake of Oral PrEP among young women and required justification from partners about HIV exposure before product acceptance (Govender and Abdool Karim, 2018). Thus, for Oral PrEP to be effective and reduce HIV acquisition specifically among AGYW in the future, demand must be created for Oral PrEP through influencing men to accept and advocate for Oral PrEP uptake among AGYW (Kharsany and Karim, 2016; Nota, 2015; Ndizinisa, 2017).

Initiatives for Oral PrEP uptake

Initiatives such as DREAMS and EMPOWER have been created to promote an awareness of Oral PrEP (Cowan *et al.*, 2016). The initiatives were created to not only create demand for Oral PrEP uptake but for product adherence so that when Oral PrEP is rolled out AGYW will be well informed about the usage of Oral PrEP (Cowan *et al.*, 2016). Therefore, initiatives were created for product adherence because AGYW found it more difficult to use treatment consistently and accordingly than adults (Cowan *et al.*, 2016).

AGYW could not use Oral PrEP adherently because studies reveal that male partners are not supportive with the use prevention methods including boyfriends, co-habiting partners and husbands as compared to transactional partners (Montgomery *et al.*, 2015 and Pilgrim *et al.*, 2016). Oral PrEP has the potential of being effective in high-risk populations, however there must be a demand created for Oral PrEP uptake among AGYW through male involvement (Montgomery *et al.*, 2015; Kharsany and Karim, 2016; Pilgrim *et al.*, 2016).

Although information from “national programs, smaller scale pilots, demonstration projects and clinical trials” are available, this information has not been designed for promoting the effectiveness of Oral PrEP in real world setting making the demand for Oral PrEP uptake an issue in health prevention (Bass, 2019:28). Oral PrEP is understood as a women-centred HIV prevention technology; however, this intervention has not benefited women because there are various influences on whether they use Oral PrEP or not and their decision on the uptake of it is not directly under their control (Celum *et al.*, 2015; Nota, 2015; Ndizinisa, 2017). Male partners, peers and family have an influence on women’s decision-making processes regarding their sexual and reproductive health (Pilgrim *et al.*, 2016). For instance, gender inequities, through norms and unequal gender power relations, has played a vital role in determining the uptake of Oral PrEP as AGYW are at risk of intimate partner violence and at risk of being HIV infected (Celum *et al.*, 2015).

Young women are unable to maintain secrecy of product use because of the influence of culture norms (Bass, 2019). For example, a participant who took part in clinical trials explained that their partner insisted that he is faithful, and she must not take Oral PrEP. This resulted in the young woman having to educate and negotiate with her partner for her to use Oral PrEP (Montgomery *et al.*, 2015). This reveals that although Oral PrEP is understood as a female centered prevention method, informing male partners of Oral PrEP is vital to understand the acceptance of Oral acceptance and uptake by AGYW (Pilgrim *et al.*, 2016). Therefore, this study seeks to understand the attitudes, knowledge, and concerns of men in heterosexual relationships and fathers of AGYW on Oral PrEP uptake. It will also explore how men can be involved to create a demand for Oral PrEP, using Brothers for Life as a case study.

HIV communication landscape in South Africa

Communication is important in the process of promoting people to have agency over their health as well as the factors that influence their health (Lewis and Lewis, 2015). It is vital in every area of health promotion and health prevention. Previously, the field of health communication has been influenced by psychology, social marketing, and early theories of mass communication, with the aim of providing knowledge, health messages to influence people's attitudes, beliefs, and behaviours (Lewis and Lewis, 2015). However, health communication has evolved from tackling health issues from an individual aspect to the socio-ecological approach, which encourages social engagement (Lewis and Lewis, 2015; Govender *et al.*, 2017). Mass media has played a role in HIV communication, mass media includes television, radio, and newspapers (Peltzer *et al.*, 2012).

HIV testing rates (or intention to test) were reported for five studies that were investigating HIV testing and HIV status disclosure (French *et al.*, 2014). Two studies reported that testing rates were higher among men who had seen the campaigns compared to men who had not, but findings were less consistent regarding reductions in sexual risk behaviours (4 studies) (French *et al.*, 2014). This revealed that the HIV communication tools were effective in encouraging men to test for HIV testing but there is also a need for behaviour change interventions that will play a role in the reduction of sexual risk behaviours.

Behaviour Change Communication

In health communication, there has been a paradigm shift from behaviour change to social change communication. Behaviour Change Communication (BCC) had a strategic response to promote health outcomes by using systematic processes that included "formative research, behaviour analysis, communication planning, implementation and monitoring and evaluation" (Govender, 2011:62). However, BCC promoted behaviour change using logical flow methods, it was linear, rational which resulted to not having effective prevention approaches (Govender, 2011). BCC was based on the understanding that HIV pandemic requires a high focus on individual behaviour with the use of specific messages to reduce risk taking and promote health (Wilkins, Tufte and Obregon, 2014). However, although the BCC approaches understood that individual has agency over their health and can choose how they behave, they are limited by conceptual and contextual factors (Govender, 2011).

For instance, to create a demand for Oral PrEP and for the prevention strategy to be effective it is imperative for the social cultural factors to be considered (Dellar *et al.*, 2015; Govender *et al.*, 2017; Khazan, 2018). If the case of Oral PrEP were taken as an example, the choice of the AGYW to use Oral PrEP is not based on the individual level only but there are other factors in the community that may result to AGYW not taking Oral PrEP. Factors such as lack of knowledge about Oral PrEP, relationships and power dynamics, culture, negative attitudes, and perceptions of Oral PrEP by peers influence the behaviour of AGYW (Kharsany and Karim, 2016; Ranganathan, 2017). While there has been various health campaigns and programs for health prevention provided, they have been ineffective because it is important to work with the community and understand the environmental factors that result to social issues when implementing a new prevention method.

Health communication approaches need to change from using the repetitive top-down communication messages which is where they convey key messages to the community without consulting with the community on the relevant key messages that can be transmitted (Govender *et al.*, 2017). Top-down interventions and communication messages were not effective for social change because they did not initiate programs that were based on the needs of the community members (Govender *et al.*, 2017). For instance, in transactional relationships among AGYW in various cultures, it is common practice to exchange gifts as a way of showing romantic love to one another as partners (Ranganathan, 2017). This has played an important role in AGYW's ability to accept and adopt sexual and reproductive health interventions, including contraceptive use and condom use (WHO, 2018). Thus, there is a shift from behaviour change communication to social change, arguing that communication responses to HIV must consider the various factors that contribute to HIV communication (Govender, 2011).

Social and behaviour change communication

The introduction of Oral PrEP gives South Africa the potential to decrease the HIV epidemic statistics amongst key populations. However, the social drivers of the epidemic and the dynamics with it must be understood to achieve social change (Govender, 2011). These key social drivers are consistently including stigmatization, multiple sex partners, alcohol, and drug abuse, teenage pregnancy, and gender inequality (WHO, 2018). Social and behaviour change communication (SBCC) connotes that "people and communities are agents of their own change" putting emphasis on community empowerment and participation in social change (Govender, 2011: 65). Social change communication is interrelated, including media, interpersonal communication, and advocacy (Govender, 2011).

Social change and behaviour change is promoted through health communication which is positioned at multiple levels to encourage positive behavioural change and affect HIV treatment outcomes (Vermund *et al.*, 2017). Social change is important and has been implemented through health communication campaigns which have been effective because they have promoted condom use, interpersonal communication and knowledge about HIV and antiretroviral medicine (Peltzer *et al.*, 2012; Avert, 2020). In the context of this study, one of the strategies for social change is the reduction of HIV incident rates among young women through Oral PrEP uptake by including men when mobilising Oral PrEP uptake.

Furthermore, the ecological approach provides a framework for social change and understanding the different factors that result to an individual's behaviour, which encourages health practitioners to "work with communities instead of working on them" (Lewis and Lewis, 2015:19). For instance, interpersonal communication in clinical settings and in homes and communities encourage social change instead of behaviour change (Vermund *et al.*, 2017). This encourages an understanding of the impact and dynamics of interpersonal relationships in promoting health prevention strategies such as Oral PrEP among young women in heterosexual relationships. It encourages participation in decision making and allows the community to be active by participating in social change initiatives.

Health interventions for men

Health communication consists of various health prevention interventions that have been created for different audiences, including biomedical interventions, behavioural interventions, and structural interventions (Avert, 2019). There are various male interventions that have been established which promote health prevention from the male perspective, these interventions include *Men as partners*, *Men's Foundation*, *One Man Can*, which are interventions that focused on health-related interventions for men (UNAIDS, 2001; Peacock and Levack, 2004; Men's foundation, 2020; USAID, 2020; What Works, 2020). *Men as partners* was previously established with the objective of challenging the attitudes and values of men to achieve behavioural change by men towards women and children, and for males to participate in gender-based violence projects and support HIV prevention related community activities and workshops (Peacock and Levack, 2004).

Their medium for communication was based on physical contact as they hosted workshops and activities in the community to reach out to men, resulting to a limitation on the number of audiences that could be reached. Thus, this study aims to develop posters with messages of men on the promotion of Oral PrEP uptake as a medium for communication to reach a wider audience and to explore how to create demand for Oral PrEP in ways that will mobilize men to support AGYW. It will also ensure that the medium for communication resonates with the target audience.

Moreover, *Men's Foundation* is a movement for men's health: A South African charity raising funds and awareness on health-related issues such as Men's cancer, mental health, GBV and prostate cancer (Men's foundation, 2020). Gillette conducted a survey to raise awareness of Men's Health Week which ran from 11th June up until Father's Day on 17th June. The survey included 1,000 men with an aim to identify key issues men face concerning their physical health found that nearly a third admit they do not take care of their health and that they avoid visiting the doctor as they don't see it as important (Men's foundation, 2020). The research showed that there is a need for interventions that will encourage men to have agency over their health to ensure that they are also involved in promoting healthy sexual relationships by taking measures to protect themselves and their female partners from contracting HIV.

One Man Can is a programme that was established by Sonke Gender Justice with various levels of intervention with an objective of achieving gender equality (What Works, 2020). It aimed to approach and manage harmful aspects of masculinity and continue addressing gender-based violence and HIV and AIDS through community mobilization and advocacy to create an enabling environment for health prevention not only for men but in heterosexual relationships (What Works, 2020). This program illustrated the relevance of male involvement in health prevention interventions in support of women.

Brothers for Life (B4L)

Although there are many health interventions that have been developed to address the high rates of HIV infection, the epidemic still requires only health interventions to promote behaviour change. Brothers for Life (B4L) was a campaign launched in August 2009 which promoted agency over health choices among men in South Africa (Collinge *et al.*, 2013). B4L was funded by the US President's Emergency Plan for AIDS Relief (PEPFAR) and the United States Agency for International Development (USAID) (B4L, 2019). The Brothers for Life (B4L) campaign partnered with *Johns Hopkins Health and Education South Africa (JHHESA)*, *the National Department of Health (NDoH)*, *the South African National AIDS Council (SANAC)* and *Sonke Gender Justice (Sonke)* (Gender justice, 2020).

It was a national mass media and community mobilisation campaign targeting men over the age of 30 years and younger men to influence and relay knowledge and practices on HIV prevention (Gender justice, 2020; Collinge *et al.*, 2013). It was a campaign that was developed to inspire men to know their potential as individuals, to take ownership of their lifestyles and health choices they make through obtained knowledge (B4L, 2019). The campaign focused on social issues that have caused rapid spread of HIV and AIDS such as gender-based violence (GBV), alcohol, and multiple sexual partners (Gender justice, 2020).

It was not only a campaign but a social movement that specifically dealt with the individual and their self-efficacy to promote behavioural and social change (Collinge *et al.*, 2013). IT specifically addressed topical issues such as intergenerational relationships between B4L uses various mediums of communication including national radio and TV, community media, and print materials. These communication strategies were designed to impart on individual and social experiences involving family interactions, community structures, and specially convened community dialogues (Collinge *et al.*, 2013). In addition, mobilizing men in health strategies is essential because males' attitudes and perceptions affect the use of prevention strategies such as Oral PrEP based on cultural stances in various communities (Pilgrim *et al.*, 2016; Montgomery *et al.*, 2015).

The campaign focused on men because they were influential in behavioural decisions made including *concurrent partnerships, condom use and HIV testing* (gender justice, 2020). Culturally, men are influencers of traditional norms and values based on manhood. They also have an impact in their families with the role of fatherhood and not being involved in family health issues (gender justice, 2020). Therefore, this campaign is relevant for this study because it has used different methods to reach out to the community when conducting campaigns such as posters, billboards, television adverts, peer education, sports, and pamphlets with information about health relayed to men (Collinge *et al.*, 2013; B4L, 2019).

Moreover, Brothers for life campaign used the National Strategic Plan (NSP) on HIV and AIDS and STIs 2007-2011 as a guide to develop key messages and interventions for the community (B4L, 2019). These interventions include: *the development of a comprehensive package that promotes male sexual health, and which addresses gender and GBV, support national efforts to strengthen social cohesion in communities and to support the institution of the family and accelerate programmes to empower women and educate men and women on women and human rights* (B4L, 2019). Thus, B4L is relevant for the study because the overall interest of the campaign *is to contribute to the prevention of new HIV infections and GBV in South Africa, by addressing men's limited involvement in fatherhood and encouraging men to reduce risky behaviours* (B4L, 2019). Brothers for Life campaign was a catalysed to allow communities to engage with topical issues, therefore this study seeks to explore the merit of this approach for Oral PrEP. It will investigate the effectiveness of B4L and their use of posters in promoting health interventions. Figure 1.2 illustrates the health prevention message on the poster for Brothers for Life health campaign.

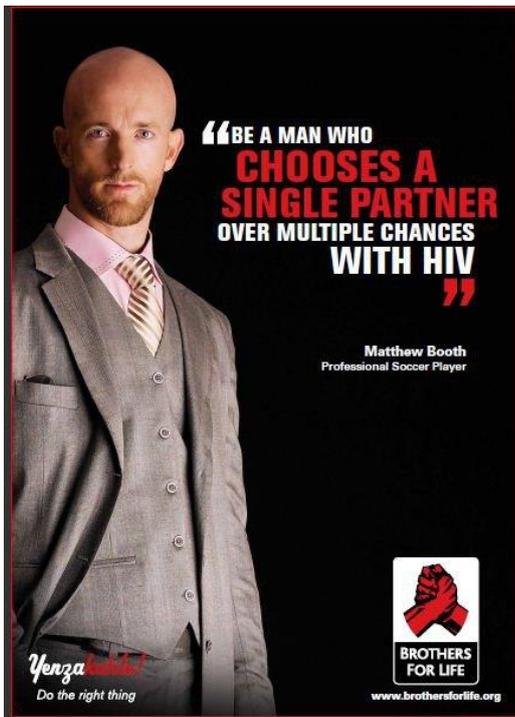


Figure 2. 2: Brothers for life (B4L, 2019)

Masculinity and culture promote men to control sexual interaction and to show their manhood through experimenting sexually and having multiple partners. Thus, B4L developed campaigns that encouraged men to take ownership of their health through male circumcision, HIV testing, promoting the fight against gender-based violence (GBV), “brothers as parents” and “brothers as lovers” (B4L, 2019). Brothers for Life has been found to be effective and has reached an extensive audience. For example, between October 2009 to September 2010, adverts reached more than 30 million TV viewers and nearly 25 million radio listeners (Collinge *et al.*, 2013). Figure 1.2 illustrated the health prevention message, “be a man who chooses a single partner over multiple chances with HIV”, suggesting that men need to take ownership of their health by remaining faithful to their partners and protect them from HIV contraction. It also showed that adverts included celebrities advocating for testing for HIV, using condoms without fail, or choosing a single partner over multiple sexual relationships, the medium for communication included a message “Yenza kahle!” (“Do the right thing!”) (Collinge *et al.*, 2013; B4L, 2019).

Messages were reinforced by hundreds of community dialogues and capacity-building sessions using the B4L toolkit, which reached into communities across the country Brothers for life motivated men to remain faithful to their partners by creating a poster with a message “Be a man who chooses a single partner, over multiple chances with HIV, do the right thing” (B4L, 2019). This message encouraged other men to live a healthy lifestyle, to protect themselves and their partners, and to not have multiple sexual partners to decrease the chances of spreading HIV and other sexually transmitted infections (STIs).

Although television and radio were effective and extensive as medium for communication, an evaluation was conducted to assess the exposure of the campaign and the results showed that billboards and posters reached 35% of the audience and 65% of the audience was not exposed to the Testa Boy advert (Fineberg *et al.*, 2017). However, tv and online platforms reached 77% of the audience and 23% was not exposed to the Testa Boy advert and 79% did not reach the audience and 21% of the audience was exposed (Fineberg *et al.*, 2017). This revealed that posters were ineffective as a communication tool for HIV prevention and therefore this study aims to explore how posters be presented to the community to ensure that they promote Oral PrEP uptake. Figure 1.3 illustrates the health prevention message on the poster for Brothers for Life health campaign.



Figure 2.3 Brothers for Life (B4L, 2019)

This is an iconic image with a message “I choose to protect my child from HIV, I am a brother for life, do the right thing”. This message promoted men to protect their families and ensure that during the pregnancy of their partners they are supportive and take the right precautions to ensure that the child is not HIV infected if the parents are HIV positive or one of them is aware of their HIV status. It also encouraged men to be hands on and part take in the child’s life as the father by promoting a healthy lifestyle.

This chapter discussed literature relevant to understand the HIV risk among AGYW and men as well understanding awareness, perceptions, and acceptability of Oral PrEP among these key populations. It provided an overview of HIV and AIDS globally, regionally, and locally (South Africa), emphasizing factors that perpetuate women’s vulnerability to HIV infection. Secondly, the chapter highlighted multiple factors which include economic, biological, and cultural factors contributing to women being more vulnerable to HIV infection when compared to their male partners.

This chapter further discussed the relevance of Oral PrEP as a possible new HIV prevention method that has potential to reduce HIV prevalence among young women in the 15-24 years age group and the limitations of its usage among young women. To conclude, the chapter discussed the relevance of male involvement, it is vital to understand and address barriers that could affect the adoption of Oral PrEP as a woman-centred HIV prevention method.

Conclusion

The next chapter presents the theoretical framework on which this study rests. It will use the Social Cognitive Theory (SCT) within the Social Ecology Model of Communication and Health Behaviour (SEMCHB) to analyze the effectiveness of Brothers for life campaign in encouraging men to partake in HIV prevention. The SCT consists of key concepts that will be explored such as human agency, self-efficacy, perceived collective efficacy and observational learning to assess the effectiveness of Brothers for life campaign. Although the SCT is relevant for behavioural change at an individual level, there are elements that need to be considered such as the community-level processes and how they contribute to health outcomes for social change (Storey and Figueroa 2012).

CHAPTER THREE - THEORETICAL FRAMEWORK

Introduction

Health behaviour is a complex component to understand as people are diverse and evolving, therefore this study will be understood through more than one theoretical lens: The Social Cognitive Theory (SCT) and the Social Ecology Model for Communication and Health Behaviour (SEMCHB). These two theories will be used to understand male's support and perceptions for Oral Pre-Exposure Prophylaxis (PrEP). The Social Ecology Model for Communication and Health Behaviour (SEMCHB) will consider culture, socio-economic factors and social norms that influence social change. The Social Cognitive Theory (SCT) within the Social Ecology Model of Communication and Health Behaviour (SEMCHB) will also be used to analyse the effectiveness of Brothers for Life campaign and its use of posters as a medium to encourage HIV prevention strategies such as Oral PrEP. This study will explore the relevance of a B4L poster approach with two specific groupings of males, firstly those who are in heterosexual relationships aged 24- 35 years and secondly male parents (also referred to as fathers in this study) who are aged 35 - 49 years in Vulindlela, South Africa.

Background of the Social Cognitive Theory (SCT) and the Social Ecology Model for Communication and Health Behaviour (SEMCHB)

Understanding an individual's behaviour plays an important role for assessing the effectiveness of the HIV prevention campaigns (Pilgrim *et al.*, 2016). Therefore, this study seeks to understand the factors that influence the men attitudes, beliefs, behaviours, and perceptions about Oral PrEP uptake amongst young women in Vulindlela through SCT. The main concepts that will be explored through SCT are as follows; human agency, self-efficacy, perceived collective efficacy and observational learning which will be explored to assess the effectiveness of Brothers for Life campaign posters (Bandura, 1998; Bandura, 2001). Although the SCT is relevant for interpreting behavioural change at an individual level, there are elements that need to be considered. These elements are the community-level processes and how they contribute to health outcomes (Storey and Figueroa, 2012). Thus, the SCT is to be viewed within the Social Ecological Model of Communication and Health Behaviour (SEMCHB) which offers a multi layered approach to understand health communication and behaviour change.

Relevance of The Social Ecology Model for Communication and Health Behaviour (SEMCHB)

The SEMCHB structure comprises of various layers as it considers the macro and micro level which includes the interrelatedness of family, peers, social support, community, and society on behaviour (Storey and Figueroa, 2012; Cramer and Kapusta, 2017). The SEMCHB moves beyond the individual level which is emphasized in the SCT to consider other levels of influence outside the individual. The SEMCHB framework is important in understanding the multi-layered approach to health communication and influencing behaviour for Oral PrEP uptake in this study. This framework that has been applied in health prevention programs includes four tiers that suggest negative and positive elements that need to be considered when implementing a health prevention strategy (Kapusta, 2017). Also, “with the SEMCHB being a multi-disciplinary meta-theory creates room for practitioners to establish which methods of communication may function within a particular group of people and the culture from which they come” (Storey and Figueroa, 2012:75; Vukaphi, 2015). Also, it is important to tailor the communication of health messaging with the correct media for that group (Mitchell and Smith, 2001). This attests to the significance of research on the interest and level of literacy of that group which will determine the success of the messaging (Mitchell and Smith, 2001). Figure 3.1 illustrates a diagram of the Social Ecology Model of Communication and Health Behaviour framework (SEMCHB).

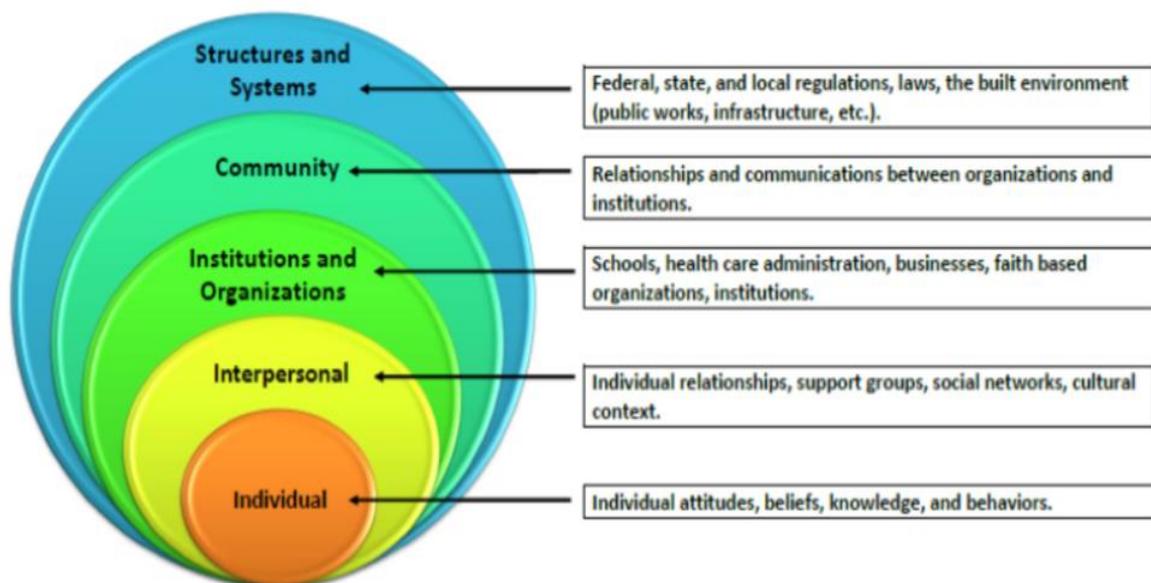


Figure 3.1 Social Ecology Model of Communication and Health Behaviour framework (SEMCHB) Source: Adapted from the Centers for Disease Control and Prevention (CDC) (2017). Accessed from <https://karna.com/how-the-social-ecological-model-influences-health-outcomes/>

The first level of influence into behavioural change, is the individual level. The individual level comprises of the (intrapersonal) focuses on “behaviour change and encompasses demographics, behaviour and intention, knowledge and skills, beliefs and values, emotions, health condition, self-efficacy, self-image and cultural norms” (Storey and Figueroa, 2012; Kapusta, 2017). Further, these layers consist of the individual, relationship, community, and society (Kincaid, 2018). Although in the individual level knowledge does not guarantee behaviour change, it influences key attitudes and decisions that individuals make (Cramer and Kapusta, 2017).

Therefore, for an individual to be influenced, there are different levels of sources that contribute to their behaviour. These levels can be interpreted through SEMCHB. In this light, scholars say that social and cultural norms have the potential to create a community that does not accept health prevention strategies which increases the number of people who are at risk of being HIV infected (DoH, 2016). As cultural values are socially constructed, research indicates that it is one of the main factors that has influenced on the males’ attitudes and perceptions towards Oral PrEP (Fleischman and Peck, 2015; Montgomery *et al.*, 2015; Pilgrim *et al.*, 2016; de Oliveira, 2016; Colvin, 2017; Khazan, 2018) in South Africa.

The interpersonal level

The second level of the influence is the interpersonal level that influence an individual’s behaviour. Here, the individual relationships, support groups, social networks and cultural context comes into play to influence behaviour (McLeroy *et al.*, 1988; Storey and Figueroa, 2012). In the context of this study, the interpersonal level informs the understanding of how social networks, either with family, parenting or intimate partners influence perceptions of Oral PrEP among men in Vulindlela (McLeroy *et al.*, 1988). HIV prevention interventions that focused on an individual’s behaviour had little effect on behaviour change because their sexual behaviour was not supported by social networks, yet they have a great influence in an individual’s life (Latkin and Knowlton, 2005). The SEMCHB framework has been effective and encouraged social change in health communication because there was an intertwined between the four tiers. For instance, findings of a study where the SEMCHB was applied for a suicide prevention program suggested that the SEMCHB provided knowledge on risk and protective factors, and potential strategies on individual (e.g., parent-child relationships) to societal (e.g., financial liability for those violating gun safety norms) approaches (Rubens and Shehadeh, 2014; Cramer and Kapusta, 2017).

With the afore mentioned, it is said by scholars that HIV interventions that have been implemented at a community level were not successful at reaching to the vulnerable populations due to various reasons (Dellar *et al.*, 2015; Moran *et al.*, 2016). These barriers are embedded in different levels of influences consisting of culture, social networks, individual and community level (Cramer and Kapusta, 2017). Therefore, for the social change interventions to reach the targeted populations, it is important that they not only consider the individual level but also ensure that they consider the interpersonal and community contexts that an individual lives within (Moran *et al.*, 2016). For example, a quasi-experimental prospective cohort study was conducted in four public-sector clinics Lilongwe, Malawi from February 2016-August 2017 (Gichane *et al.*, 2021) with a baseline behavioural survey also conducted to examine cross-sectional relationships between individual and relationship-level characteristics and transactional sex engagement (Gichane *et al.*, 2021).

To examine these relationships, a relationship dataset was created with each individual line representing a different partner from the partner grid (Gichane *et al.*, 2021). Each participant could contribute information on up to three of their most recent relationships (Gichane *et al.*, 2021). Among one thousand participants who were interviewed at baseline, 65 (7%) reported not having any sexual relationships within the past 6 months and 15 (2%) did not respond to key questions assessing transactional sex (Gichane *et al.*, 2021). AGYW were more likely to receive gifts from non-transactional versus transactional partners (61% vs. 55%, $p = 0.042$) (Gichane *et al.*, 2021).

The study established that transactional sex was more common in relationships in which they had not received couple's HIV testing, and in those they feared physical violence or abandonment if they were to test together (Gichane *et al.*, 2021). This study provided an in-depth analysis of transactional sexual relationships among AGYW in Malawi and revealed the relevance of considering the interpersonal level when promoting social change as HIV testing remains a health prevention issue. Therefore, human health is affected by an individuals' lifestyle habits and environmental conditions that surrounds the individual (Bandura, 2001:11). This means that people have control over their health however, after taking into considering the internal and external factors.

The SEMCHB is a holistic approach that has been effective for Social and Behaviour Change Communication (SBCC) within health communication as it considers that there is a wide range of factors that affect the health of an individual such as the social, structural, and cultural² components (DoH, 2016; Cramer and Kapusta, 2017). From the perspective of the biological sciences, ecology refers to the multifaceted relations of organisms to one another and the environment in which they live (Storey and Figueroa, 2012). In the human sciences, social

² Culture refers to generational fixed set of shared values, attitudes, beliefs, and practices within a society (Dutta, 2008:40)

ecology refers to the “study of the influence of the social context on behaviour, including institutional and cultural variables” (Storey and Figueroa, 2012; FYSB, 2015).

For an effective social change intervention, it is important to assess societal, community, interpersonal and individual levels. In context of this study, the study is interested in the individual and interpersonal level which in the above diagram demonstrates an understanding of how interpersonal relationships (through the relationship of father/daughter) and an individual’s personal (through heterosexual relationships) perceptions, beliefs, and values of men on Oral PrEP may influence the acceptability and uptake of prevention methods among AGYW.

In another study, Oral PrEP was seen as a female centred intervention, which promoted secrecy and was supposed to give AGYW a sense of agency over their health by giving them a choice whether to use Oral PrEP (Montgomery *et al.*, 2015). However, Oral PrEP has failed to be effective for AGYW because they must negotiate with their partners or fathers for Oral PrEP usage (Montgomery *et al.*, 2015; Mbewa, 2017; Nota *et al.*, 2020). Therefore, male involvement is important to create demand for Oral PrEP (Mbewa, 2017; Nota *et al.*, 2020). In the SEMCHB an individual has the potential to produce positive behaviour outcome, however, the maintenance of the health behaviour is also dependent on the social environment (Govender, 2011; Storey and Figueroa, 2012; McKee *et al.*, 2014).

For instance, a case study that used quantitative data gathered with over 3000 AGYW from three country contexts considered the individual and household-level factors to identify distinct profiles of HIV vulnerability among AGYW (Mathur *et al.*, 2020). The study highlighted that HIV vulnerability could decrease by ensuring comprehensive knowledge about HIV transmission and condoms among AGYW and addressing gender roles and norms at individual and community level (Mathur *et al.*, 2020). This case study outlined that there are multiple factors that cause an increase in HIV contraction, the individual level is prominent when promoting social change.

In addition, a qualitative study used the social ecological model approach with an aim to explore the perceptions and views of contraception services among AGYW who recipients of the combination HIV prevention intervention were, living in five of the 10 intervention districts in South Africa. (Jonas *et al.*, 2020). The model was applied in the study to understand health behaviours of the participants by taking into consideration the dynamic interrelationship between an individual and their environment (Jonas *et al.*, 2020). The literature review of the study highlighted that AGYW’s intrapersonal (individual) factors such as knowledge of contraceptives can influence her behaviour to access, or not access contraception services (Jonas *et al.*, 2020).

The results of the study highlighted that at an individual level component the lack of knowledge about contraception services was one of the barriers preventing AGYW from accessing the services. The participants were not well informed about the contraceptives and how to use them, which affected the use of the prevention method among young women. This revealed that although there are public facilities that are designated to share knowledge about prevention strategies, there is still a need for interventions that will relay the information to the young women in a safe space allowing them to share their attitudes and perceptions. This shows the relevance of the individual level as it considers the knowledge, beliefs, and perceptions for social change. Thus, for this study male involvement encourages one to consider not only the larger social system, including relationship, community, and societal layer but also the individual level in SEMCHB for the uptake of Oral PrEP among AGYW.

Furthermore, a study was conducted with AGYW and their parents who participated in focus group discussions (FGDs) in Durban and Johannesburg, South Africa from December 2017 to December 2018 and found that parents and children do not trust each other in their relationship (Temin *et al.*, 2021). At the time of the FGDs, all AGYW had participated in or were currently participating in Girls' Clubs (Temin *et al.*, 2021). The aim of the FGDs was to explore participant perspectives and experiences with the Girls' Club program and activities (Temin *et al.*, 2021). As part of this, foreign migrant girls' experiences of HIV risk as well as mitigating influences including the Girls' Clubs were investigated (Temin *et al.*, 2021).

Findings of the study highlighted that many AGYW characterized parent–child relationships as mistrustful, describing their parents' suspicions about their behaviour (Temin *et al.*, 2021). The following quote reflects how gender norms can shape their relationship with their parents and how parents don't trust their children (Temin *et al.*, 2021). Every time the child goes out, they have that mentality that person is going out and being mischievous (Temin *et al.*, 2021). A participant highlighted that "My mother, [Anonymous] she always has that thing "she's a girl and girls get naughty sometimes so she will do something bad" (Temin *et al.*, 2021). Direct influences included barriers to health services and inequitable relationships anchored in material exchange, which play important roles in sustaining South Africa's HIV epidemic (Temin *et al.*, 2021).

This study does not only recognize the perceptions of males towards Oral PrEP uptake, but it will also explore how relational factors, social issues, and cultural practices influence individuals at an interpersonal level. The relationship level will also assist in finding out how perceptions of partners (males) in heterosexual relationships and fathers of the AGYW influence the acceptability and uptake of Oral PrEP among AGYW. Behavioural HIV prevention interventions limit their programs for a specific group which restrains progress of an intervention to a wider population in the community (Storey and Figueroa, 2012). This study seeks to understand how various factors including individual's perceptions and societal relationships influence the uptake of Oral PrEP. In the

interpersonal level relationships can either create social support or create barriers in behavioural and social change (Ndzinisa, 2017; Nota *et al.*, 2020). This suggests that health decisions are not solely adopted at the individual level, meaning AGYW rely on other social factors to influence their behaviour, and this is where male social influences are relevant in this research and in the health decision-making of AGYW.

The institutional level

The third level of influence is the institutions and organizations. Here, there is a role played by the schools, health care administration, businesses, faith-based organization, and other recognised institutions. These institutions and organisations often collaborate with other organised groups to promote health care messages. For example, the department of health and universities collaborated and implemented an intervention which targeted people that were in universities (guided by age) (B4L, 2019). They were mobilized for health prevention messages and, activations and promotions. The health messages were seen on Television for the Brothers for Life Campaign in South Africa (B4L,2019). This illustrated the impact of the partnership of the SABC and the department of health.

The community level

The fourth level is the community. Within this layer, it is important to first define what makes a community. A community is defined as a group of people living in the same place, who have common characteristics, values, interests, attitudes, and beliefs (Rifkin *et al.*, 1988). The community level consists of collective efficacy, social relationships, identity, access to resources, schools, healthcare providers, workplaces, neighbourhoods, community centres, and leadership (Jo McCloskey, 2011; Storey and Figueroa, 2012; Cramer & Kapusta, 2017; Golden *et al.*, 2021). A community needs to interconnect and have interdependent sectors that share common goals to solve problems and promote a holistic wellbeing of individuals within that community (Jo McCloskey, 2011). The community level can have a large impact in behaviour change, having the power to reach a larger audience as it extends to both the individual, physical environment, and social environment within a community (Storey and Figueroa, 2012; Kincaid, 2018).

Relevance of the various levels of SEMCHB for health communication

It is therefore important to evaluate the SCT within the SEMCHB for health communication campaigns to consider all different factors that lead to HIV infection including the individual level. For example, although community leaders work the community at large with regards to decision making, the community leader's perceptions, beliefs, attitudes, and values have an impact on how any intervention is mobilized. It is important to consider how the community and the individual interconnect. For instance, a study was conducted where literature was collected for analysis and was designed to capture *Health Education & Behaviour* articles that

included in-depth descriptions of interventions, so that the targets and activities of those interventions could be analysed using a social ecological model (Golden, 2012). The study used Medline database to identify all articles that included the search string “intervention” in any search field, the Medline search identified 236 articles (Golden, 2012). 157 articles were reviewed and described 132 unique interventions, addressing 21 behaviours, in eight different settings (Golden, 2012).

Primary among these were nutrition initiatives, found in more than one third of all articles, and physical activity programs, described in more than one quarter. School and communities were the most common intervention setting, each included in more than one third of all articles reviewed. Additionally, interventions in certain settings had higher prevalence rates for particular social ecological intervention levels (Golden, 2012). For example, more than half of the interventions set in schools or workplaces included institutional-level activities, as compared with only 22% of health care-based interventions and 26% of community-based interventions (Golden, 2012). Family-based interventions included interpersonal level activities at rates higher than other settings (93%), and community-based interventions were most likely to include community-level (44%) and policy-level (15%) activities (Golden, 2012). Therefore, this study is interested in the individual level and relationship level of the SEMCHB because the SEMCHB encourages collaboration to promote health prevention and health promotion outcomes (FYSB, 2015).

Furthermore, for Oral PrEP to reduce new HIV infections, promoting Oral PrEP implementation should not only be based on AGYW but also on men. Health campaigns that are for health promotion directed to males that form part of the community structures, must also be engaged to sustain intervention for AGYW. This study does not assume that the individual and the interpersonal levels are enough when deciding on health behaviours to be adopted, but it seeks to understand the role of health interventions such as Brothers’ for Life in preparing males and AGYW for Oral PrEP uptake. The multi-layered approach of the SEMCHB is more effective and sustainable to understanding individual behaviour (Harper *et al.*, 2018).

The AGYW study employed SEMCHB because it regards health behaviour as an outcome of the interaction between people and the environment they are exposed to. Therefore, the Brothers’ for Life campaign which is a case study for this project, was developed to inspire men to know their potential as individuals, through knowledge to take ownership of the choices they make (B4L, 2019). It is not only a campaign but a social movement and specifically dealt with the individual and their self-efficacy to promote behavioural and social change as men in the community (Collinge *et al.*, 2013:1). It is a campaign that aims to cater for different individuals who come from different societies. For instance, Brothers for Life has had community dialogues that were conducted within communities where men had talks with other men about social issues and health prevention strategies such as condom use and male circumcision (Collinge *et al.*, 2013).

The dialogues created a more personal understanding of the issues that men are faced with. The aim was to allow the campaign to be in some ways relevant to the context of the people. Therefore, this study proposes to use the individual and relationship (interpersonal) level in the SEMCHB model to review the aspects of communication and health visible in the Brothers' for life campaign. By using the SEMCHB model this could reveal that this interconnectedness of the levels of influence has an impact in the way individuals behave and make decisions, again reinforcing the importance of understanding context. Individual behaviour change, without the company of social change, is not enough (Govender, 2011 and Nota *et al.*, 2020). Therefore, to ensure health intervention success it is important to consider the community needs and background, people's lifestyle, and the environment to ensure any permanent individual behavioural change. Structures and systems are the fifth layer of the SEMCHB.

This layer consists of the state, local regulations, laws, and the built environment, which has direct impact on the individual behaviour (CDC, 2020). Although the above-mentioned layer has direct impact on the individual, the individual has little control over their impact because the layer consists of stakeholders who set up policies that guide the health interventions. The influence from this level is external to an individual behaviour. In the context of this study, although external factors influence an individuals' behaviour, it is important to also consider the individual's behaviour for behaviour change in the community. Therefore, the social cognitive theory will be discussed as it is a construct that is embedded in the SEMCHB which considers the individual level in health prevention.

Social cognitive theory

This study draws on the concepts of the social cognitive theory to understand the attitudes and beliefs of men for Oral Pre-Exposure Prophylaxis (PrEP) among high- risk adolescent girls and young women (AGYW) aged 15 -25 years and men who are likely to benefit from the use of Oral PrEP. The Social Cognitive Theory is an explanatory model of human behaviour which consists of the following constructs that intertwined: Environmental factors, personal factors, and behaviour (Bandura, 1986; Nabavi, 2014). The environmental factors consider behaviour observation and social behaviour such as people's culture, beliefs, and norms and how they influence social change in health prevention (Nabavi, 2014). Personal factors and behaviour address the relevance of considering the individual's behaviour through considering their self-efficacy and human agency which influence the interpersonal level (Bandura, 1986).

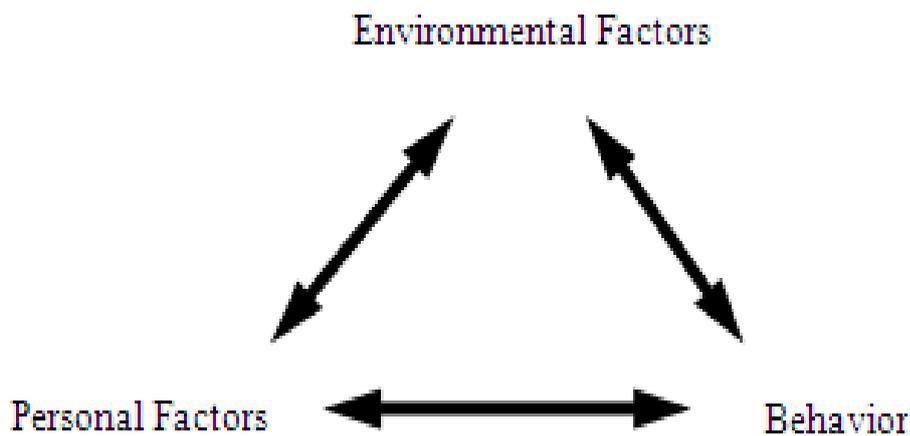


Figure 3.2 Social Cognitive Theory constructs (Bandura, 1986)

Social cognitive theory (Individual level)

Over the years, there has been an on-going development of models to explain and understand individual's behaviour. Bandura named the Social Learning Theory to Social Cognitive Theory in 1986, in the 1960s the SLT reflected that individual behaviour is determined by expectancies, incentives and suggested that observation, imitation, and modelling play a primary role in this process (Bandura, 1986; Rosenstock, Strecher and Becker, 1988; Carruth, 2008; Nabavi, 2014). The SLT also includes attention, memory, and motivation when attempting to understand individual behaviour (Muro & Jeffrey, 2008).

The SCT is a psychosocial theory that was used 20 years ago in health communication interventions programs focusing on AIDS public education to encourage behaviour change as they explained that individuals were responsible for their behaviour (Bandura, 2001; Wood, 2006). The theory was also used for interventions such as alcohol and drug abuse, sex education and birth control, anti-smoking initiatives to achieve desired outcomes (Wood, 2006). Figure 2 illustrates how the SCT focuses on the interpersonal level and how in the SCT the individual (personal factors), the environment intertwined and explores how behaviour observation, understanding behaviour and predicting may encourage behaviour change (Nabavi, 2014; Vukaphi, 2015).

An example is how health education communication campaigns use mass and interpersonal communication tools to encourage direct behaviour change in an individual's life and in communities (Wood, 2006). Brothers for Life is an example of a campaign that has applied the SCT because their campaigns rely on learning through observation and modelling celebrities on television and posters to encourage healthy lifestyles (B4L, 2019). They also encourage self-efficacy and human agency through relaying knowledge to men that will help them to make improved decisions as individuals from a health perspective (gender justice, 2020).

Through SCT, the environment is identified as a major contributing component for learning and development (Nabavi, 2014), allowing peoples culture, beliefs and norms are taken into context when designing health related interventions. However, one may argue that it is a limitation because the environment and learning may or may not lead to behaviour change (Bandura, 2006; Nabavi, 2014), there are other factors that cause behaviour change including the cultural, biological factors, it is not only learning and the environment that encourage behaviour change (Fleischman and Peck, 2015; Govender *at al.*, 2017; Ranganathan, 2017). As a result, this study will view the SCT within the Social Ecological Model of Communication and Health Behavior (SEMCHB) to take into consideration holistic factors that influence individual and social change. In the SCT, the core components of the SCT relevant for this study will be discussed including human agency, self-efficacy, collective efficacy, and observational learning.

Human agency

Human agency is a concept that explains how individuals produce actions for a specific purpose, it may be to invest in learning and enact behaviour change (Bandura, 2001). Agents are self-regulators ³as they examine their behaviour and regulate their actions through their personal influence (Bandura, 2015:10). Therefore, agency can be described through SCT construct that is relevant for health communication as it gives an individual the ability to exercise power over other factors that affect their lives. Agency also be described as a proactive action and not behaviour that is practiced with no intentions. Within SCT, there are different types of agencies, they are personal agency, proxy agency and collective agency which will be discussed below.

Firstly, if a person has a sense of personal agency, they can plan and be consistent with their behaviour which results in desired outcomes (Glanz and Rimer, 1995:20). This means that, the individual self, has autonomy towards decision making and has the capacity individually to choose without external factors forcing the hand of the individual. Secondly, it is proxy agency, an individual relies on another person to act on their behalf to secure desired outcomes⁴; and collective agency is where behaviour was exercised through group activities (Bandura, 2002:270). This study uses the Brothers' for Life campaign as a case study. The campaign, Brothers for Life is a social movement that considers the individual and self-efficacy to promote individual behaviour and ultimately achieve social change. The study will explore how Brothers for Life campaign can give men who are fathers to AGYW and men in heterosexual relationships agency over their sexual health by influencing other men to relay knowledge about Oral PrEP in the community. This will assist their partners to negotiate the use of Oral PrEP

³ Self-regulation refers to “self-generated thoughts, feelings, and actions that are planned and cyclically adapted to the attainment of personal goals” (Boekaerts, 2005)

⁴ “Outcomes are not the characteristics of agentive acts; they are the consequences of them” (Bandura, 2001:6).

and young women to use the prevention method without experiencing stigma or discouragement from their fathers and the community.

Further, self-efficacy is another component of the SCT, Bandura suggests that self-efficacy is the key element of the social cognitive theory. In this light, self-efficacy beliefs are important for personal change, and it is when one has confidence in the ability to perform a given behaviour by being able to control their actions, thoughts, and feelings (Bandura, 1998; Bandura, 2004; Carruth, 2008). Beliefs are assumptions that individuals make about themselves which shape the outcomes of their efforts (Bandura, 2004). Self-efficacy plays an essential role in self-regulation (cognitive, motivational, emotional, and decisional process) and behavioural change (Bandura, 1998).

Self-efficacy relates to an individual's belief in their capabilities to successfully control actions or events in their lives by taking into consideration environmental factors (barriers and facilitators). Belief in an individual's capabilities affect whether they make good or poor use of skills that they possess (Bandura, 1998). An example to the above, a study was conducted where the purpose of the study was to explore and describe the process of counsellor development during a counsellor training program in an academic setting (Carruth, 2008). The development of a counsellor was described during a training in a descriptive case study, and data was analysed through both the lens of the Social Cognitive Theory and through the lens of Perry's Scheme (Carruth, 2008). During the process of organizing and analysing the data, majority of the data strongly reflected the concept of self-efficacy (Carruth, 2008). Scholars interested in training counsellors examined the concept of self-efficacy and have found that Bandura's notion of self-efficacy is useful for understanding the ways in which counsellors in training acquire and perform counselling behaviours (Carruth, 2008).

Another case study was conducted and consisted of a detailed review of the SCT constructs used in the selected papers revealed insightful considerations. The study selected 62 articles, all of them integrated the construct of self-efficacy in their research model emphasizing the relevance of the construct in IS research in the case of software, computer, internet, and electronic commerce learning processes (Carillo, 2010). The study highlighted that the SCT affirmed that self-efficacy and cognitive simulation, are the perception of potential outcomes which affects each other bi-directionally (Carillo, 2010). In other words, the feeling that one can perform a given task will only motivate oneself to perform it solely in case one perceives any kind of gain from the task outcome (Carillo, 2010). For example, an online customer may feel capable of conducting an online transaction but may not do so if there is no price or availability advantage in purchasing online (Carillo, 2010).

Thus, in the context of this study it is vital to consider the men's attitudes beliefs because it may influence their perceptions about Oral PrEP implementation and the behaviour of young women. Furthermore, an individual may have a high or low self-efficacy which influences their performance individually and as a group (Bandura, 1998).

Collective efficacy

Collective efficacy is a concept where members of an organization or structure believe that they can arrange and implement actions required to generate required outcomes (Thompson, Parrott, and Nussbaum, 2011:222). The main difference concerning self-efficacy and collective self-efficacy was that the former depended on the individual's perceptions to accomplish the required results whereas the latter depended on the perceptions of a collection of people to produce required results (Thompson, Parrott and Nussbaum, 2011:222). An example is how B4L encourages men to play soccer to keep them busy from committing crime or doing mischief, and to remain physically healthy or fit. It is collective efficacy because the men have common goals or outcomes they want to achieve as a collective which will result to behaviour change and social change (Collinge *et al.*, 2013; B4L, 2019). Although this study focuses on the individual behaviour, collective efficacy is important from an interpersonal perspective. The collective efficacy will be used to assess how men in the community of Vulindlela can be mobilized as a collective to promote the use of Oral PrEP through posters.

Observational learning (Modeling)

Within the Social Cognitive Theory (SCT) observational learning is an essential construct. Here, it is where people learn through the encounters of other credible people rather than their own experiences (Glanz and Rimer, 1995:21; Wood, 2006; Nabavi, 2014). The process where one studies behaviour through direct incidents and observation of another person's behaviour is called modelling and the person being observed is a model (Newman B.M. and P.R, 2007; Thompson, Parrott and Nussbaum, 2011). Observational learning is made up of four key aspects, including attention, retention, reproduction, and motivation (iSALT, 2014). Attention is a process where people choose what they want to observe and extract information from the demonstrated activities (Wood and Bandura, 1989; iSALT, 2014). Learning results to various forms such as, including new behaviour patterns, intellectual abilities, and reproductive rules for creating new forms of behaviour (Bandura, 1989:23). Observational learning is relevant for demand creation because it uses celebrities and posters to demonstrate and promote prevention practices. Thus, the above mentioned SCT constructs will be explored to assess the effectiveness of Brothers for Life campaign in promoting Health prevention among men and observing the public figures that are men who were also involved.

This study is informed by the Social cognitive theory embedded in the Social Ecology Model for Health Behaviour. Using the Social cognitive theory helps the researcher to understand the influences of barriers and opportunities for the promotion of Oral PrEP uptake, including the environment, knowledge, attitudes, and personal beliefs of men on Oral PrEP mobilization. This includes the reasons as to why men may accept or reject Oral PrEP for their female partners and daughters. For the purposes of this study, the Social Cognitive Theory is imbedded in the Social Ecology Model for Health Behaviour (SEMCHB). This allows the researcher to take into consideration how demand can be created for Oral PrEP among young women through mobilizing men by considering the individual and the influence of interpersonal relationships in informing perceptions of Oral PrEP among AGYW. Furthermore, the SCT in the SEMCHB is relevant because it will assist the researcher when collecting data through a workshop by taking into consideration knowledge shared by the participants collectively on Oral PrEP while assisting and promoting sense of agency over their health by informing them in detail on Oral PrEP and B4L. It will also allow the researcher to assist participants to create posters using constructs such as observational learning while also promoting self-efficacy among young women through encouraging Oral PrEP uptake.

Conclusion

The SEMCHB and SCT reviewed in this chapter enable the researcher to identify the different ways health campaigns are promoted and received by the participants. The use of the SEMCHB explores men can be used to mobilize Oral PrEP at an interpersonal level, focusing on the father and daughter relationship and the heterosexual relationship. It also enabled one to explore how culture, perceptions, attitudes, and beliefs influence opportunities and barriers for the uptake of Oral PrEP. The SCT allows the understanding that an individual's behaviour is influenced by the environment in which they live and therefore their culture, beliefs and norms should be considered. Also, observation, understanding behaviour and modelling promote behaviour change.

CHAPTER FOUR - RESEARCH METHODOLOGY

Introduction

This chapter outlines the methodological approach to this study and begins by offering the research approach and then the research design. The purpose is to highlight the foundation in which this study is premised. Furthermore, a clear outline of the sampling technique, recruitment process for participants and how the data was collected for the study is provided. A highlight of how data was analysed, and rigour and validity of the study will be included. The chapter also explained ethical considerations and possible limitations in methodology.

Positioning the Research

Qualitative research approach

Human behaviour is complex and diverse, therefore quantitative, and qualitative research methods were used to explore human behaviour (Golafshani, 2003; Nueman, 2011; Hammarberg *et al.*, 2015). Quantitative research approach is based on investigations and things that can be measured, observed objectively, including statistics, polls, surveys, and questionnaires (Golafshani, 2003; Tuli, 2010; Nueman, 2011). However, the qualitative research is a research process that uses inductive data analysis to learn about the meaning that participants hold about a problem or issue by identifying patterns or themes (Creswell, 2012; Hammarberg *et al.*, 2015). Qualitative research is a realist ontology (beliefs of truth) and a natural approach where the researcher observes empirical evidence and draws theoretical concepts and propositions (Golafshani, 2003; Nueman, 2011; FitzPatrick, 2019). It is an approach that focused on understanding and gathering people's views and opinions through analysing the words of participants (Vossler *et al.*, 2015). The qualitative approach was adopted for the proposed study as it seeks to understand human behaviour and the social world (Tuli, 2010), and is a relevant approach to explore how AGYW in Vulindlela communicate about Oral PrEP to their male partners and fathers and how they involve them in decisions.

Moreover, the qualitative approach uses open-ended questions to gather information, which is grouped into codes, themes, or categories (Creswell, 2012). This assisted in exploring the effectiveness of the use of B4L posters as a medium for mobilizing men for HIV/AIDS prevention. Qualitative research is based on personal beliefs, biography, or current issues to generate a topic, and this approach was relevant as this study explored how demand can be created for Oral PrEP among young women through mobilizing men (Nueman, 2011). It generated knowledge on human experience, underlying detailed reasons and motivations of the issue, thus gaining detailed insights on the support and perceptions that male partners and fathers have towards Oral PrEP implementation for young women in Vulindlela. Therefore, the qualitative approach was an appropriate approach for this study as the aim of the study was to explore the perceptions and support of Oral PrEP from the perspective of men.

Interpretivist paradigm

A paradigm signifies the “*world view*”, a person’s place in the society including their beliefs, philosophical assumptions, and perceptions (Rocco *et al.*, 2003:19; Mafuwane, 2011:77) used to guide the researcher’s inquiry for the study. There are four types of paradigms; functionalist, radical humanist, radical structuralist and interpretive (Burrell and Morgan,1979:23; Rocco *et al.*, 2003:21; Mafuwane, 2011:79). However, the interpretivist paradigm was be adopted in the study. Interpretivist paradigm is in qualitative approaches and seeks to understand behaviour and its stability through observation of an individual’s behaviour (Burrell and Morgan,1979; 2005; Karnevio, 2007). Interpretive paradigm is a subjective approach and socially constructed (Pham, 2018).

In this study, interpretive paradigm is well suited as it assisted the researcher in understanding the impact of culture and how the lifestyle of men influences their behavioural practices and young women’s behavioural practices. Furthermore, this paradigm concerns how people interact, cultural settings of participants and how they get along with each other allowing the researcher to understand how AGYW communicate about Oral PrEP uptake to their partners and fathers and how they involve them in decisions (Neuman, 2011). The interpretive paradigm believes that there are multiple subjective meanings for experiences and resulting to complex views (Creswell, 2013). Subjective meanings are formed through social constructs, interaction with each other as a community and not only based on an individual level which is why the SEMCHB is applied in this study to understand the impact of interpersonal relationships and how men can be mobilized in promoting the uptake of Oral PrEP among young women.

Although this study has adopted concepts in the SCT to understand behavioural change at the individual level, concepts from the SEMCHB recognize that there are social and cultural factors that influence behaviour change. Therefore, the interpersonal level of the SEMCHB recognizes that interpersonal relationships are influenced by the community, cultural norms, and societal norms in which the AGYW and men live in. This is important because it shows that behaviour and social change is influenced not only by internal factors but by various other external factors (Flick, 2014). For instance, a woman’s ability to use Oral PrEP is not only dependent on an individual but other factors such as their relationships with their male partners and parents need to be considered. Hence, the effectiveness of the use of posters of B4L campaign as a medium for mobilizing men in HIV/AIDS prevention was investigated in this study.

Moreover, it was significant for the researcher to understand how the AGYW and men of Vulindlela perceived their risk of HIV infection and the uptake of Oral PrEP through understanding cultural, biological, economic, and social factors. This study adopted the interpretive paradigm, which is an advantage for the study because it is a descriptive research design, information gathered will be in-depth and based on issues around Oral PrEP

implementation. Descriptive design is appropriate for the objective of the study because the researcher is interested in understanding the participants' perceptions and support of Oral PrEP uptake. Also, the above-mentioned theoretical framework concepts are better understood from a descriptive design.

Participatory communication

Participatory communication is an appropriate communication strategy for this study because it is active, interactional and it is about “working with people instead of working on people” (Singhal, 2003:3), and is used to involve the community in the process of decision making. Participation is an important element that has ensured empowerment of participants and that the participants are given a platform to collaborate and engage in all levels of the study using action media. It allowed the male participants to share their beliefs, values, and perceptions on Oral PrEP uptake for young women allowing the researcher to gain new knowledge on the context of the study. Also, action taken by the participants to create posters on Oral PrEP for AGYW may result to social or behaviour change in the community.

Consequently, this study was interested in how males can create a demand for Oral PrEP through considering their perceptions and support of Oral PrEP and by exploring the opportunity to promote PrEP utilising the similar avenues of posters as applied for the B4L campaign. When participants are actively involved, they can identify issues that they can relate to, provide solutions on how issues can be solved and have control in acting and designing the appropriate tool that will help them solve problems that they can relate to. Therefore, the PAR was relevant for this study as the participants demonstrated how posters can be used as a medium for promoting Oral PrEP and some of the key messages that result from this process.

Participatory Action Research Design

Action media methodology is a complex concept that has been refined in the past two decades (Parker and Becker-Benton, 2016). It is a methodology that is embedded in various social theories, including social change, semiotics, culture, ideology, and participatory research (Parker, 1997). Action media is a framework that is relevant for health communication and promotion, critical awareness, and action (Parker, 1997). For instance, action media can identify health challenges such as prevention of HIV diseases, teenage pregnancy, gender-based violence (Parker and Becker-Benton, 2016).

Below in figure 4.1 is the illustration of the Participatory Action Research (PAR) which includes participatory, action and research which encourages participation of the participants in collaboration with the researcher to gain new knowledge throughout the research process (Coetzee, 2017:14). PAR encourages inter-active sessions involving the researcher and participants from the community that face health issues and social issues (Parker and Becker-Benton, 2016).

Moreover, PAR was appropriate for the study because it was used to gain participant's attitudes and perceptions not only at an individual level but by creating posters to convey their messages on Oral PrEP while considering the interrelated influences of family, peers, community, and society on behavior to bring change in the community (Storey and Figueroa, 2012). PAR promotes shared learning when addressing health and social issues. Participatory research processes engage potential product users to understand how they make sense of new innovations and can influence increased product acceptability (Govender, 2013). Therefore, this study will apply PAR to promote Oral uptake among young women through mobilizing men. Figure 4.1 is a diagram of the Participatory Action Research key constructs.

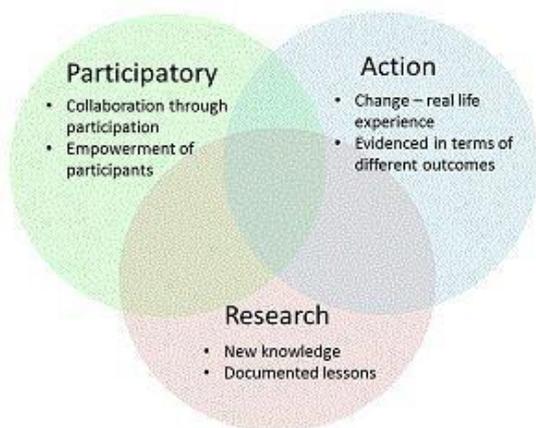


Figure 4.1 Participatory Action Research (Will Allen, 2016)

Location of the study site

Vulindlela is a rural area near the eastern coast of South Africa in Pietermaritzburg with approximately 90,000 people located on the edge of the Mooi River about 150kms from Durban in the uMgungundlovu district of KwaZulu-Natal (Ndizinisa, 2017; Khazan, 2018). Statistics in Vulindlela reveal that it is one of the 5 districts with a high prevalence of HIV in South Africa particularly among adolescent girls and young women (Abdool Karim *et al.*, 2017; Ndizinisa, 2017). The high rate of HIV contraction among AGYW in Vulindlela suggests the lack of appropriate health interventions which consider the factors that limit the uptake of new prevention methods (Kharsany and Karim, 2016:35; Khazan, 2018:6:1). This study was conducted in a community hall based at Vulindlela.

Sampling technique

For one to consult a population for research, the most effective technique is sampling (Struwig and Stead, 2013:114). This study used purposive sampling technique to select study participants. Purposive sampling

identifies participants who have valuable information for the research project (Struwig and Stead, 2013:127). Purposive sampling is where the researcher identifies the characteristics of participants needed for the main sample of the research (Struwig and Stead, 2013:127). Purposive sampling consists of various types such as: convenience sampling, theory-based sampling, extreme sampling, typical case sampling, however one will use purposive random sampling (Struwig and Stead, 2013:130). Purposive random sampling is when there is a random selection of a small sample (Struwig and Stead, 2013:130). This type of sampling was advantageous for the study as it avoided any criticisms of bias when selecting the sample.

Sample population

For this study the sampling population included the following characteristics: Males in heterosexual relationships between 24-35 years of age, male parents (also referred to as fathers in this study) who are aged 35 - 49 years and community member of Vulindlela. The ideal sample size of the population was not easy to state as one must consider the purpose and goals of the study (Struwig and Stead, 2013:130). However, the researcher was interested in a population that is rich in data and descriptive therefore a sample size of 6-8 participants in each group was appropriate.

Inclusion and exclusion criteria

For the study, twelve participants were recruited in Vulindlela by the assistance of the Comosat local NGO using an inclusion and exclusion criterion. However, participants were chosen randomly if they meet the criteria or have the characteristics mentioned.

Table 4.1 below presents a diagrammatic representation of the inclusion and exclusion criteria that was followed.

Inclusion	Exclusion
Fathers to AGYW between the ages 35-49 years of age.	Mothers to AGYW between the ages 35-49 years of age.
Male partners in heterosexual relationships between the ages 24-35 years of age.	Female partners in heterosexual relationships or male partners in homosexual relationships between the ages 24-35 years of age.
Participant based in Vulindlela.	Participant based out of Vulindlela area.

Data collection process

For this study, data collection tools that were used were focus groups (workshops), action media (poster creation) and debriefing. Focus groups were used to collect data because they are different from normal conversations that occur in groups as there is an interviewer who gives direction to the group discussion (Morgan, 1996:130). Therefore, the researcher was able to give direction when exploring the effectiveness of B4L and perceptions on Oral PrEP based on the participants' background knowledge. Furthermore, focus groups allowed the interviewer to use open ended questions which allowed the participants to go into depth and share their knowledge and perceptions (Creswell, 2012). Action was also relevant for the because it is a methodology that was appropriate for mobilization and participants presented their attitudes and perceptions while allowing for the integration of language and cultural perspectives into communication concepts (Parker and Becker-Benton, 2016).

Moreover, there were two separate groups with one including male partners between the ages of 24 – 35 years and the other including male parents between the ages of 35-49 years based in Vulindlela. Each group held a workshop and a debriefing focus group session on the same day. Aligning with the theoretical framework of SCT and SEMCHB, at an interpersonal level the first workshop was conducted face to face with a group of 6-8 fathers who are parents to AGYW, exploring their perceptions of Oral PrEP. In addition, the effectiveness of B4L posters for HIV prevention interventions were accessed to use the approach of mobilizing men and the medium of posters to promote Oral PrEP.

This session took 1 hour 30 minutes' maximum. Consequently, the participants were given 30 mins to create their posters individually after the workshop. The 2nd session took place on the same day were there was a debriefing focus group assessing the key messages to advocate Oral PrEP for their daughters. Participants together with the researcher were part of the debriefing focus group to discuss what the key messages of the posters suggest about males' perceptions and support of Oral PrEP for women. The debriefing session took place for 45 minutes. In total the sessions for the first group of fathers to AGYW was conducted for 2 hours 45 minutes.

Also, at an interpersonal level, the second group first had a workshop which was conducted with 6-8 men who are in relationships either married or co-habiting to explore their perceptions and support of Oral PrEP and whether B4L posters are effective for HIV prevention. This session was conducted for 1 hour 30 minutes' maximum. Consequently, the participants were given 30 minutes to create their posters individually after the workshop. The second session was a debriefing focus group assessing their key messages posters and their willingness to promote Oral PrEP through the key messages that can increase demand for product uptake. Participants together with the researcher were part of the debriefing focus group.

Furthermore, this allowed for critical dialogue and discussion that will inform the participants about HIV prevention and Oral PrEP. A research instrument was designed to guide the participants when they are creating posters. A workshop was conducted using action media, assessing, and making posters. Action media made it easier for participants to express themselves during the workshop. The debriefing session was conducted for 45 minutes. There was a total number of 2 workshops and 2 focus groups for the study. In total sessions for the second group of male partners to AGYW were conducted for 2 hours 45 minutes.

The study was interested in the perceptions of males on Oral PrEP and how they can be used to promote Oral PrEP to other men in the community to encourage their female partners and daughters to use Oral PrEP. This is significant for the study because literature revealed that male support is important, men play a large role on the acceptability of Oral PrEP although it is a woman centred prevention method. Therefore, only males were recruited even though the study aims to create a demand for Oral PrEP among young women. Furthermore, this age group was chosen because statistics reveal that young women engage in sexual activities with older men, mainly with sugar daddies as they can provide them with luxury and money for status purposes (Khazan, 2018). Participants for this study could be potential sugar daddies and with gender inequities the HIV rates have increased among young women because males don't allow females to negotiate sexual practices (Colvin, 2017).

Moreover, in qualitative research, data collection consists of various methods including telephone interviews, semi-structured face-to-face interviews in a free format, non-directive face-face interviewing in a free format and face-to-face focus groups/group interviews (Deacon *et al.*, 2007). However, for this study, the data was collected using workshops and focus group discussions.

Defining focus group discussions

Focus groups are important when collecting data because they allow for the participants to exchange ideas and the interaction in the focus group discussion is a source of data (Morgan, 1996:130). Focus group discussions not only use a multiple number of participants, but it also allows the participants to have discussions beyond the prompting questions; participants can go into critical dynamics without being prompted by the researcher. Therefore, one explored the effectiveness of B4L posters using focus groups to assess what the messages suggest on the posters about HIV prevention.

The understanding of males' perceptions on Oral PrEP also came out more clearly as participants interacted and discussed them in a focus group discussion (Morgan, 1996). Therefore, focus groups allowed for an exchange of in-depth perceptions on the implementation of Oral PrEP among AGYW in Vulindlela. Focus group discussions is when questions are delivered on a group instead of an individual basis (Deacon *et al.*, 2007:67). Thus, focus group discussions were effective in this study as one gained data that assisted the researcher to

understand the perceptions and support of Oral PrEP uptake from the perspective of men, to create a demand for Oral PrEP among adolescent girls and young women (AGYW). The researcher attained this by assessing what the messages suggest on the posters about males' perceptions and support of Oral PrEP for women.

Furthermore, the use of focus group discussions in this study was effective because the platforms were conducive for mobilizing Oral PrEP uptake among heterosexual men who are in relationships for them to encourage their partners and to allow the researcher to gain their perceptions at an individual level. For example, the researcher discussed posters created by the participants with participants which conveyed key messages that showed the perceptions of males towards Oral PrEP. The interviewer also informed the participants about the importance of using Oral PrEP through giving direction to the dialogue. This was done through the use of open ended questions which will allow the participants to go into depth and share their perceptions when answering research questions (Deacon *et al.*, 2007:).

Focus groups did not only influence an individual's personal efficacy but will also influence the community level because once the men have gained knowledge from the focus group, they will be able to inform their community members about Oral PrEP resulting to potential social change. The participants will specifically inform other male community members who are in heterosexual relationships to promote Oral PrEP to their partners. This will create a demand for Oral PrEP uptake, young women will be encouraged to live a healthy lifestyle by using Oral PrEP to prevent themselves from contracting HIV. Potential themes for the research were also formed as the sessions progressed and after transcriptions were done which produced codes that were potential themes.

This allowed the researcher to be flexible and open minded and add a new theme to the research. Once the researcher has conducted the focus group, data will be analysed using thematic analysis. Moreover, during the workshops and focus groups, the researcher made recordings and had the recordings transcribed from isiZulu to English once data collection was complete. Transcripts were then being analysed by producing codes which were potential themes. Thematic analysis is relevant for this study as it provided core skills to pinpoint, examine, and record patterns or themes within data (Braun and Clarke, 2006:79).

Data analysis

Data analysis is an important method in qualitative research which identifies and analyses patterns (Braun and Clarke, 2006). "Analysis of data in a research project involves summarising the mass of data collected and presenting the results in a way that communicates the most important features" (Hancock *et al.*, 2009: 24). This study adopted the thematic analysis to analyse data. Below in table 4.2 is a method that was introduced with six steps used to conduct TA which continues to be complex, with limitations and confusions on how the approach can be implemented (Braun and Clarke, 2012; Braun and Clarke, 2019; Byrne, 2021). A method is "a technique for collecting or analysing data" (Vossler *et al.*, 2015).

Table 4.2 Steps of thematic analysis

Step	Description of process
1. Familiarising yourself with your data.	Transcribing interview data (if necessary); engaging with data, reading and re-reading the data; noting down important and relevant ideas.
2. Generating initial codes	Coding interesting features of the data in a systematic fashion across the entire data set; collating data relevant to each code.
3. Searching for themes	Generating codes into potential themes; gathering all data relevant to each potential theme.
4. Reviewing themes	Checking if the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2), generating a thematic 'map' of the analysis.
5. Defining and naming themes	Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells, generating clear definitions and names of each theme.
6. Producing the report	The final opportunity for analysis: selection of vivid, compelling extract examples; final analysis of selected extracts; relating back to the analysis of the research question and literature; producing a scholarly report of analysis.

(Braun and Clarke, 2012; Vossler *et al.*, 2015; Govender, 2013: 69; adapted from Braun and Clarke, 2006:87)

TA was a useful qualitative analytic method that allowed the researcher to examine a particular phenomenon in depth and TA an advantage of being accessible and flexibility (Braun and Clarke, 2012; Vossler *et al.*, 2015). This means that TA does not have a pre-existing theoretical framework, it does not offer theoretically informed frameworks, but it can be used in various frameworks that are relevant for the method to answer different research questions (Braun and Clarke, 2006; Vossler *et al.*, 2015). It also means that are various ways that TA can be approached but what is important is that the analysis is theoretically consistent and logical (Vossler *et al.*, 2015). Although TA is flexible, it is constrained by “paradigmatic and epistemological assumptions around meaningful knowledge production” (Braun and Clarke, 2006; Nowell *et al.*, 2017:1; Braun and Clarke, 2019:593).

Reflexive Thematic Analysis

Moreover, TA is a qualitative analytic method in psychology that has been elaborated over the years with a contemporary approach which is reflexive thematic analysis (Braun and Clarke, 2006; Vossler *et al.*, 2015; Braun and Clarke, 2019; Byrne, 2021). TA allowed an individual to select the themes that are relevant for the study, requiring one to be reflective during the research process (Vossler *et al.*, 2015). Reflexive TA focuses on procedures that reflect the values of a qualitative paradigm, “centring researcher subjectivity, organic and recursive coding processes, and the importance of deep reflection on, and engagement with, data” (Braun and Clarke, 2019:593).

Consequently, data was thematically analysed guided by the SEMCHB and SCT. Over the years there is no clear guidance that gives directive on the process for the use of the thematic analysis but there is a coding reliability approach which are key themes that emerge in the starting point when data is analysed (Braun and Clarke, 2006; Braun and Clarke, 2019; Braun and Clarke, 2021). A theme captures relevant data that speaks to the research question and objective of the study (Braun and Clarke, 2006; Vossler *et al.*, 2015). There are one in two ways to identify themes or patterns within data: an inductive or bottom-up way and in a theoretical or deductive or top-down way (Braun and Clarke, 2006; Braun and Clarke, 2012).

An inductive approach is data driven; reflective of data and it is when the theme is directly linked to data (Braun and Clarke, 2012; Vossler *et al.*, 2015). However, if the researcher uses interviews and focus groups during the data collection process themes identified may not be linked to the specific questions that were asked of the participants (Braun and Clarke, 2006; Vossler *et al.*, 2015). In contrast, a deductive approach is based on pre-existing theoretical concepts or analytic ideas that are different from data (Braun and Clarke, 2012; Vossler *et al.*, 2015). There is also a theoretical approach which is theoretical, and analyst driven because it is a form of thematic analysis that provides less description of the data overall, and a more detailed analysis of some aspect of the data (Braun and Clarke, 2006; Vossler *et al.*, 2015). The choice on the relevant data analysis approach was dependent on how and why the researcher was coding the data. The researcher may code a specific research question (theoretical approach), or the research question can evolve through the coding process (inductive approach) (Braun and Clarke, 2006).

Focus group data analysis

For example, in this study the data collection was three-fold; the researcher was interested in conducting a workshop on Oral PrEP and the effectiveness of the use of the posters of B4L campaign. Participants were requested to create posters to understand their perceptions on Oral PrEP and a debriefing focus group was conducted where data was collected. The six steps for TA and inductive approach were implemented as the researcher transcribed the recordings, read, and re-read the data collected to familiarize themselves. The

researcher further generated codes, searched for any themes related to the objectives mentioned above using codes, reviewed potential themes, defined, and named themes, and a report was produced on the findings. Unlike the workshop which involved exchanging ideas and perceptions through dialogue, during the debriefing focus group codes were extracted by observing the linguistic messages on the posters. When the researcher was searching for themes, codes generated themes once the researcher read through the data that was transcribed in detail.

The themes were coded differently, without considering the themes that previous research on the topic might have identified. Potential themes were reviewed by creating a thematic map of analysis and they were refined to obtain clear names definitions and names for the themes. Furthermore, extracted themes assisted the researcher to explore the perceptions of the male partners and fathers towards the uptake of Oral PrEP. TA addressed the research questions of the study through the process of themes identified, coded, and analysed (Braun and Clarke, 2006; Braun and Clarke, 2012; Vossler *et al.*, 2015).

Thematic analysis encouraged the researcher to not only acknowledge the individuals' views but the socio-cultural context (Braun and Clarke, 2006). Relevant themes were created during the focus groups and were analysed once the researcher is done with the workshops and focus groups. This made the process efficient and easier when the researcher made transcriptions of the recordings. The researcher gained an understanding about the topic, describe, and interpret experiences and perceptions. It gave an insightful and a description of the important concepts or themes found in the study while answering research questions.

Ethical considerations

Ethics are essential in research methodology as they take into consideration principles of conduct that are known to be correct (Kumar, 2011:242). Ethical codes oversee the way a service is to be delivered and ensure that the information is gained without harming participants (Kumar, 2011:242). Furthermore, the researcher ensured that they do not practice unethical codes such as breaching confidentiality, privacy and gathering data based on implicit theories and assumptions (Neuman, 2011:380). Therefore, consent from participants to collect information from them was important and the researcher ensured that they obtained consent.

For this study, a gatekeeper permission letter was requested from COMOSAT, they assisted one to access the community and the participants. The gatekeeper permission letter was in two versions, English, and isiZulu. This was to ensure that the gatekeeper understands the permission letter. The gatekeeper permission letter allowed the researcher to access the community. The researcher applied for an ethical clearance form from UKZN Humanities and Social Science Research Ethics Committee (BE500/17). The researcher also provided each

participant a consent form that they had to sign to state if they agree to participate in the study and if they were comfortable with having the discussion recorded.

The consent forms for the participants were in English and isiZulu so that participants who do not understand English will get consent forms written in isiZulu. The researcher explained the content of the study prior to the focus group. The participants remained anonymous; confidentiality is important. Personal information remained private during the data transcription and analysis. Instead of using their names, participants were named as participant 1, participant 2 etc. Furthermore, the participants were given consent forms that stated that they will be given counselling sessions as the researcher may seek information that is sensitive to the participants.

Rigor and validity

The participants were recruited using a reliable sampling technique mentioned above, purposive random sampling. Participants were recruited based on the criteria constructed by the researcher. Purposive random sampling is not biased and will be reliable.

Limitations of the study

A critical view of the analytical methodology applied in the study is important. This study anticipated that convincing male participants to take part in a workshop conducted by a woman will be a great challenge. The researcher will be female and collecting data from male participants, the participants might not be willing to share their attitudes and perceptions openly with her because of her gender. This was dealt with by having a male assistant to help during the workshop. The assistant helped with gathering data that is rich, as it was someone who has a better understanding of males' culture. This put the men at ease and enabled them to speak about sensitive issues. Also, a male assistant could understand the cultural terms that they use as men to express sensitive or personal issues. It is important for participants to feel comfortable by speaking in either English or isiZulu, which ever they choose therefore the male assistant was fluent in isiZulu and English. The assistant was available during the workshops.

CHAPTER FIVE: DATA PRESENTATION AND ANALYSIS

Introduction

This study aims to understand the perceptions of male partners and fathers towards Oral PrEP uptake among adolescent girls and young women and how this impacts the mobilization and intake of Oral PrEP. Literature on young women and social, cultural, and biological factors that contribute to young women's vulnerability to HIV have been reviewed, providing an understanding of Oral PrEP barriers apparent in South Africa. The Social Cognitive Theory (SCT) within the Social Ecology Model of Communication and Health Behaviour (SEMCHB), as a theoretical guiding framework, have been outlined, and the methodological approach adopted in this study has been described. To understand males' acceptability of Oral PrEP among their young daughters and female partners an inductive approach was used to generate themes. Key themes are outlined in this chapter as they guide the data presentation: 1. Awareness of Brothers for Life Campaign and HIV prevention between fathers and male partners is influenced by communication methods used. 2. Limited Oral PrEP knowledge influences parent and partner support for Oral PrEP use. 3. Varying Oral PrEP acceptability between male partners and fathers influences Oral PrEP mobilization and use among young women.

This chapter presented data and analysed data collected during the study in relation to the literature reviewed to answer the research questions that guided the study. An approach that was used to present data was a twofold process: the thematic analysis of the data collected through workshops and a presentation of the posters with thematic analysis of data collected during debriefing of the posters. This chapter began by presenting a thematic analysis of the data collected through workshops and followed with a presentation of the posters. Furthermore, although data presentation was a twofold process, data was gathered in a threefold process. Data was collected in 2 workshops, 12 posters created (action media) and 2 debriefing focus groups of the messages relayed by fathers and male partners of AGYW on posters. Two workshops and focus group discussions were conducted with male parents; male parents were between the ages of 35 to 45 (*identified as **male parents***). Two workshops and focus group discussions were conducted with male partners between the ages of 24 – 35 (*identified as **male partners***). Both male parents and male partners were from Vulindlela, which is a rural area situated in Pietermaritzburg, KwaZulu-Natal. The males were selected to assist the researcher to explore whether there were differences with their perceptions on Oral PrEP uptake among young women as male parents and male partners.

Additionally, this chapter used the thematic analysis to analyse data including working with data, organizing it, breaking it into adaptable components, synthesizing it, finding patterns, discovering what is important and what is to be learned, and deciding what will be told to others (Bogdan and Biklen, 2003; Merriam and Tisdell, 2015). Thus, this chapter analysed data presented using a thematic analysis (TA) on the perceptions of male partners and fathers of Oral PrEP use among young women. TA is an essential method during the data analysis process because it allowed identifying themes that emerged during the data collection process and analysing and reporting themes (Clarke and Braun, 2013: 6). The themes were further analysed according to relationships (father and male partner). Furthermore, a thematic analysis was designed to organize and explain data in rich detail. TA also often goes further than this and interprets various aspects of the research topic (Clarke and Braun, 2013).

The study used the qualitative research approach. Qualitative research is an interactive and descriptive approach that aims to understand how people view the world (Holloway and Galvin, 2016). Described in chapter four, the focus of this study is within the Brothers for Life campaign and how it can be used an approach to help mobilize men to promote the use of Oral PrEP amongst young women. Thus, the participants' perceptions Oral PrEP, as well as their posters, are presented throughout the chapter including the presentation of key themes from focus groups discussions and messages that were developed through posters by men. These messages were developed with the intention to gain an understanding of the perceptions about Oral PrEP and how men can promote the demand for Oral PrEP usage among young women. The methods employed in this study was the participatory action research design (action media), and as a result data collection process was threefold: data is presented from the focus group discussions on Brothers for Life and Oral PrEP, action media (poster creation) (D) and debriefing group discussion on the posters created (F).

In keeping with the social cognitive theory embedded in the Social Ecology Model, which underlines the importance of the individual level and the interpersonal level for behaviour change, this chapter presented an analysis of the data that were collected through workshops, action media and debriefing focus group discussions conducted with two groups of participants. The data presented revealed four main themes and sub themes as follows:

1. Awareness of Brothers for Life Campaign and HIV prevention between fathers and male partners is influenced by communication methods used.
 - a) Successful and unsuccessful B4L campaigns for HIV prevention and key messages on B4L.
 - b) Accessibility and effectiveness of the B4L posters for health communication.
 - c) Factors that make posters effective as communication tools.
 - d) Role modelling promotes advocacy for behaviour change.

- e) Language barrier influences behaviour change.
2. Limited Oral PrEP knowledge influences parent and partner support for Oral PrEP use.
 - a) Background knowledge about Oral PrEP influences Oral PrEP uptake.
 - b) Sources for information about Oral PrEP.
 - c) Perceptions on demand creation and acceptability of Oral PrEP.
 3. Varying Oral PrEP acceptability between male partners and fathers influences Oral PrEP mobilization and use among young women.
 - a) Acceptability of Oral PrEP among young women.
 - b) Health and mobilization.
 - c) Communication and secrecy.

Each theme outlined consists of various sub-themes that emerged from fathers and male partners' description during the workshop and debriefing focus group discussions (FGDs). The subthemes will be discussed in detail under each main theme in the analysis that follows.

Theme 1: Awareness of Brothers for Life Campaign and HIV prevention between fathers and male partners are influenced by communication methods used.

Fundamental to decreasing HIV infection and creating demand for Oral PrEP use among young women is greater understanding of Brothers for Life as an HIV prevention Campaign. A workshop was conducted with the participants on relevance of Brothers' for Life as a health prevention campaign and Oral PrEP to gain an understating of the amount of knowledge that the participants have on these important concepts in the study. All male parents and male partners in the study communicated about the topics freely and share their perceptions on the B4L campaign as a health prevention intervention. The researcher closely analysed their general understanding of the campaign and how effective it has been with regards to contraceptive use and promoting HIV prevention.

Although B4L campaign has not initiated Oral PrEP uptake interventions among young women, the male partners and male parents that were part of the study expressed the amount of knowledge that they have acquired about B4L previously and various B4L campaigns that they had been exposed to. The workshop also ensured that mobilization of Oral PrEP took place once the opinions of the participants were taken into

consideration. This theme discusses the effectiveness of B4L campaign and HIV prevention through gaining an understanding of the participants' perceptions. Sub themes will be discussed below.

Successful and unsuccessful B4L campaigns for HIV prevention and key messages on B4L

In this study, participants expressed their knowledge on Brothers for Life Campaign and how it promoted HIV prevention, however their knowledge was limited and some of the participants were not aware of the B4L campaign. Participants also expressed that communication tools used affected the success of Brothers for Life campaigns for HIV prevention. Posters were included to promote HIV prevention; this is evident in the comments below.

There were various communication methods used by B4L that were mentioned by the participants.

“Even though I don’t remember well but another message that they had said “do well”, encouraging men to protect themselves by using condoms, yeah. I heard about it on radio and TV” (Male parent, 2019).

“I have seen it on the boards that are displayed on the road, by a big board in Northdale” (Male parent, 2019).

“I used to see it on the adverts shown on the television” (Male partner, 2019).

“I heard them speak about it on radio” (Male parent, 2019).

Posters were one of the main effective HIV prevention communication tools that were highlighted by participants.

“Sometimes the things that are written on the posters are there to warn us or give us a specific message to make us change our behaviour” (Male partner, 2019).

“It worked a lot for me to see a B4L poster that encouraged us to get circumcised. That decreases your chances of being HIV infected. So, I went and got circumcised” (Male partner, 2019).

The participants' knowledge on previous B4L campaigns established that B4L was not only an HIV prevention intervention for men as individuals but it also focused on interpersonal relationships while taking into consideration the male partners and fathers' culture, beliefs, and attitudes.

"It made a difference in my life because if a person was not a virgin and they get pregnant you take care of her. But if they were a virgin and you take their virginity, you know that you will leave that person. That's why I decided to read the poster that spoke about respecting the woman and the child. Respecting women and respecting especially children, that is what the message it explained" (Male parent, 2019).

The key messages that encouraged participants to have agency over their health and promoted HIV prevention were highlighted.

"It worked a lot for me to see a B4L poster that encouraged us to get circumcised. That decreases your chances of being HIV infected. So, I went and got circumcised" (Male partner, 2019).

"It encouraged men to get circumcised and abstain" (Male partner, 2019).

"The posters that encourage people to go and get circumcised didn't make us happy at first because we had already heard of the Xhosa pupil who went to get circumcised and died. First, we ask other people who came from there and then went back to the poster and see that they have explained it well because you can see that the ones that come from there got helped" (Male partner, 2019).

Overall, the issue of limited knowledge was highlighted among the participants.

"I have little knowledge of it. I saw it on the adverts on TV" (Male partner, 2019).

"I have no knowledge of it" (Male partner, 2019).

This section highlighted male involvement in the understanding of how B4L can mobilize a prevention method that is for the HIV infected key population, young women. It contested to findings from other findings from studies that showed that B4L is a campaign that was developed to inspire men above the age of 30 years and younger to take ownership of their lifestyles and health choices they make through obtained knowledge (Collinge *et al.*,

2013; B4L, 2019; Gender justice, 2020). Both male partners and fathers highlighted the key messages that they recognized from B4L and the relevance of them in promoting HIV prevention. Knowledge on B4L campaign varied as some male parents were aware of the campaign, and some of the male partners were not aware of the campaign.

Also, one of the key findings is that the male parents' knowledge on B4L life revealed that B4 encouraged fathers to take care of their children and their mothers as compared to male partners where B4L promoted the use of HIV prevention strategies in heterosexual relationships. This finding contests to other findings from other studies, where B4L developed campaigns that promoted male circumcision, HIV testing, promoting the fight against gender-based violence (GBV), "brothers as parents" and "brothers as lovers" (B4L, 2019). This justifies the relevance of the campaign for mobilizing men for HIV prevention among young women, showing the effectiveness of the campaign.

Consequently, the participants' knowledge on B4L showed that it is imperative to understand that key messages on the posters influenced how the participants received the posters and influenced behaviour change. This finding contests findings from other studies where B4L had a HCT Campaign – Testa Boy: The campaign included a TV ad and 9 documentary style videos featuring real people (brand ambassadors) (Fineberg *et al.*, 2017). Both the TV ad and the documentary videos shared a message to the audience which said, "you are still the same person whether you test positive or negative for HIV" and it resonated with the audience (Fineberg *et al.*, 2017). However, it was communicated well in the documentary videos, but was not clear in the TV ad because of how it was executed on the TV ad. The audience had different interpretations of the message and the TV ad. Also, the study showed that B4L is a multi-faceted campaign targeting men in heterosexual relationships and fathers in promoting HIV prevention (Collinge *et al.*, 2013).

Moreover, one of the key findings on B4L is that the success of the campaign was based on understanding the audience by ensuring that the messages directed to males and the medium of communication used to relay the messages is relevant for the key audience. Key messages on the B4L posters influenced how the participants received the posters and influenced behaviour change. Also, participants' interpretations of the relayed messages were different. This was found to be consistent for both male partners and male parents.

Accessibility and effectiveness of the B4L posters for health communication

Although the male partners and male parents suggested that B4L campaign was a successful campaign, accessibility of the B4L posters was a key component on whether the campaign was successful or not. Limitations on the accessibility of the B4L posters for health communication was the issue.

Posters were highlighted as an effective communication tool and can be displayed in multiple spaces. They were easily accessible for male partners.

“I think I once saw it in one of the facilities around town that I have once went to, inside a clinic there was B4L poster” (Male partner, 2019).

“When we find posters that talk to us, we as men quickly try to deal with what we have been warned about” (Male partner, 2019).

“Posters make a difference to me as long as if I see a poster and it is visible and I understand the message, it makes a difference. The posters that are shared on smart phones via WhatsApp and all other social networks, I think those posters reach out too many people. Also, you can keep the poster on the phone, and check it on your photos when you have forgotten” (Male partner, 2019).

While on one hand majority of male partners participants reported that posters were relevant as a health communication tool, some of the male parents' participants argued that posters were ineffective communication tools.

“Posters are not effective to everyone, because there are people who can't read. It hard to read, you just look at the photos and move on. Uhm, yeah, they are not effective enough, but they are helpful to many people” (Male parent, 2019).

“I have little knowledge of Brothers for Life. I saw it on the adverts on TV” (Male partner, 2019).

“I have no knowledge of it and have not seen their posters” (Male parent, 2019).

A participant further argued that the effectiveness of the poster is based on where it is displayed.

“From my perspective, I think it depends on where the poster is, the person who has a poster on their phone gets helped but the person who sees the poster in the community also gets helped when they see the poster” (Male parent, 2019).

The posters were understood as relevant tools for communication for male partners because they could easily access the spaces where the posters were displayed as compared to male parents who did not have access to those spaces. B4L was able to reach a wider audience as they have seen B4L posters not only in the community, but they also saw adverts on television and on social media platforms. Although B4L campaign was accessible in different social platforms, the accessibility and effectiveness of posters was an issue for male parents. This supported the findings of previous studies which highlighted limitations of communication tools in reaching the audience.

Results of an exposure of a B4L campaign showed that billboards and posters reached 35% of the audience and 65% of the audience was not exposed to the Testa Boy advert (Fineberg *et al.*, 2017). However, tv and online platforms reached 77% of the audience and 23% was not exposed to the Testa Boy advert and 79% did not reach the audience and 21% of the audience was exposed (Fineberg *et al.*, 2017). Although this highlighted how ineffective and not easily accessible posters were, one may argue that posters may be easily accessible and effective if explored displaying them on social media platforms and television to reach a wider audience, including male parents.

Furthermore, the male parents further highlighted that “*Posters are not effective to everyone, because there are people who can’t read...*” (Male parent, 2019). This participant highlighted that there are limitations on posters that are not only embedded on attitudes and perceptions of the individuals but rather due to the psychosocial factors such as reading and writing.

Factors that make posters effective as communication tools

Participants highlighted that although some posters are not attractive and concise, but they preferred using them for communication because they can be easily accessible if displayed appropriately.

Both male partners and fathers highlighted that the messages on posters need to be attractive, clear, and concise for the posters to be effective.

“Posters are helpful a lot, but they must have a short and clear message in our language for us to understand” (Male parent, 2019).

“What is also important is for the poster to be attractive so that you can come closer to the poster so you can see what the message is” (Male partner, 2019).

The main factors that promoted the use of posters were highlighted by participants, suggesting that is how they were made accessible to the people.

“Posters are visible because if you are waiting for transport, everyone standing by the stop can see it. Everyone who is buying from the shops can see it, it becomes easier for people to see it” (Male parent, 2019).

“Flyers are okay, but they won’t be able to reach out to everyone in the community, some people might end up not getting the flyers. When people give us flyers, we don’t all take the flyers. But everyone can see the posters” (Male partner, 2019).

Male partners and fathers of the young women stated that posters are effective, however there are factors that need to be considered when developing posters. They highlighted that the posters need to be concise, easily accessible, and visible to understand the message on the poster. Other participants reported that although there are other forms of health communication strategies such as flyers, but they are not effective because some people don’t accept flyers when they are handed out. Furthermore, a father also stated that to ensure that posters are effective and for the relevant people to gain detailed information on the health issue, they must be further elaborated in a community dialogue or through door-to-door intervention once displayed in the community.

Role modelling influences advocacy for behaviour change

Both male parents and male partners talked about the relevance of role modelling when creating posters, suggesting that celebrities on the posters make an individual attracted to the poster but does not necessarily mean that the message on the poster is understood.

Both male partners and male parents’ participants highlighted the issue of the celebrities on the posters drawing the attention of the audience to the poster and gaining interest on the celebrity and what is being said about the celebrity, rather than focusing the message on the poster promoting HIV prevention.

“You become interested in reading what they are saying about the celebrity” (Male partner, 2019).

“If it is a celebrity, we want to know who that person is and what they want from us” (Male partner, 2019).

“When it comes to celebrities it helps sometimes but I would say it is not important per say but if there is a picture of a person people want to know who is that person”
(Male parent, 2019).

However, a male parent participant highlighted the inclusion of a picture of the celebrity is not important, the message on the poster is what is of relevance.

“The picture is not important, if the message is clear then it okay”
(Male parent, 2019).

This is a finding that suggested that celebrities on posters are important for attracting the attention of the audience for male partners. However, for the male parents the message on the poster is what attracted them to the poster and promoted behaviour change. This indicated that it is the message on the poster that is key to behaviour change. Previous findings suggested that B4L adverts reached more than 30 million TV viewers and nearly 25 million radio listeners (Collinge *et al.*, 2013). The adverts included celebrities advocating for testing for HIV prevention and other behaviour change interventions (Collinge *et al.*, 2013). These adverts were successful in reaching the target audience because they included celebrities, however one can argue that this does not indicate that the adverts reach resulted to behaviour and social change.

Moreover, although the celebrity is not of relevance and key message on the poster is what is important, the celebrity must be someone who has morals and values and advocates for the message that is being relayed on the poster. This is crucial to ensure that there is behaviour change, and the audience will closely observe if the celebrity’s behaviour is promoting what they have advocated for. Thus, the celebrity’s behaviour and lifestyle should be in line with what they are promoting in health communication.

Language barrier influences behaviour change

The issue of language barrier was highlighted by both male partners and male parents, language barrier being one of the main limitations for behaviour change and the success of the use of posters.

Language used for posters needs to be accommodative of the audience in that community.

“The first thing I can say is that the poster must be written in a language that everyone in that community will understand, because let me make an example, here in Mafaketini we all speak

isiZulu". "I once saw a B4L and it was written in isiZulu and in English at the bottom, "Yenza kahle" (**Male partner**, 2019).

*"There must be a person who will explain what the posters means for people to understand and change their behaviour, we don't understand English" (**Male parent**, 2019).*

Both male partners and father emphasized that language barrier remains an issue that needs to be taken to consideration and messages must be bilingual to accommodate the targeted population. This finding was confirmed in previous studies, where B4L had created posters that were bilingual to advocate for men to do the right thing by taking care of their health and their loved ones "Yenza kahle!"("Do the right thing!") (Collinge *et al.*, 2013).

They further stated that some of them are illiterate, therefore they don't understand the message which results to them not being well informed about a health issue. This showed that the cultural background of the community needs to be taken into consideration when developing health communication message because language barriers and illiteracy result to posters being insignificant and as a result the intervention doesn't bring behaviour and social change in the community.

Consequently, this finding of posters being an effective tool for health communication for B4L campaigns was reported by male parents and male partners in both workshops that were conducted to establish background knowledge of the participants had on B4L campaign and whether previous campaigns were effective or not. Findings showed that some of the participants had knowledge about B4L and the role it plays in promoting HIV prevention. In the context of this study, the findings answered the research question of whether Brothers for life campaign and their posters are effective as a medium for mobilizing men in HIV prevention. Although there were some influences that caused limitations to use of posters for health communication, the posters were found to be effective.

Theme 2: Limited Oral PrEP knowledge influences parent and partner support for Oral PrEP use.

To establish the key influences on HIV contraction, and how these influences have impacted the uptake of Oral PrEP for young women, it was vital to gain an understanding on what male partners and fathers understand about Oral PrEP. A workshop was conducted with the participants on Oral PrEP to gain an understanding on the background knowledge that the participants have on this important concept of the study.

This study defined Oral PrEP as an HIV prevention method that can be used HIV negative individuals who are at risk of been HIV infected. The understanding of Oral PrEP is embedded within one's understanding of HIV and relevant interventions that promote HIV prevention. This investigation of the background knowledge about Oral PrEP revealed the sub themes following themes: (a) background knowledge about Oral PrEP, (b) Sources for information on Oral PrEP (c) Perceptions on demand creation and acceptability of Oral PrEP.

Background knowledge about Oral PrEP influences Oral PrEP uptake

There was contrast between male partners and male parents on the background knowledge of Oral PrEP. There were limitations on Oral PrEP uptake due to influences of background knowledge on the context.

Male parents had limited knowledge on Oral PrEP as compared to male partners and some of them were not informed about Oral PrEP and how it functions.

"I heard about it, but I didn't get a clear explanation of what it is about"

(Male parent, 2019).

"I have also heard about it, but I am confused about the word "Oral"

(Male partner, 2019).

"Ay no, I have never heard of Oral PrEP"

(Male parent, 2019).

Male partners were informed about Oral PrEP and the benefits of using the prevention strategy.

"PrEP is a pill that you take if you are HIV negative. It is to prevent you from being HIV infected if you are at risk or exposed to HIV, it protects you from being HIV infected. But it doesn't prevent you from STIs and your partner from getting pregnant and all those things. It prevents you from getting HIV infected only"

(Male partner, 2019).

"It a pill that prevents you from being HIV infected if one of you are HIV infected and know about your status"

(Male partner, 2019).

The findings of this study revealed that even though both male parents and male partners were aware of Oral PrEP but male parents were not well informed about the prevention method and how it functions compared to male partners. Some of the male parents were also not aware of Oral PrEP which influenced their perceptions about the prevention strategy and promoting the use of it to their daughters.

Sources for information about Oral PrEP

Communication tools and platforms that were used to inform participants about Oral PrEP varied but there were limitations caused by the type of tool used to obtain information about Oral PrEP. This also influenced the reach of the number of participants who were informed about Oral PrEP.

Male partner participants highlighted that they had heard of Oral PrEP in various settings and forms of communication.

"I heard about it at Caprisa, they were doing an awareness"

(Male partner, 2019).

"I heard about it at Caprisa, I was part of study"

(Male partner, 2019).

"I heard about it from people I talk to, they said as men we sometimes cheat and when there's an emergency and no condom, the pill can help you"

(Male partner, 2019).

However, male parents were not able to state where they heard about the prevention strategy because they were not informed about it. Instead, a male parent participant suggested that they only got informed about Oral PrEP at the workshop that was during the data collection process.

"I heard about it here, during the workshop"

(Male parent, 2019).

Findings showed that the settings in which the male partners participants were informed about Oral PrEP suggested that there were limitations on the awareness of Oral PrEP in the community and there is still a need demand creation for Oral PrEP use in the Vulindlela. This finding is informed in previous studies which indicated that *"national programs, smaller scale pilots, demonstration projects and clinical trials"* were implemented to inform the key population about Oral PrEP (Bass, 2019:28). These initiatives did not only have a limit on the reach of the audience, but it focused on the key population, there were less clinical trials or studies conducted

which included male partners. This resulted to a limited number of male partners informed about Oral PrEP use and to male parents not being informed about the prevention strategy. One may argue that the male parents were not informed about Oral because young women didn't not inform them, instead they informed their partners about Oral PrEP.

Consequently, above one of the male partners highlighted that they heard about Oral PrEP from other men in the community, but the information about how it functions was inadequate and complete. The participant stated, *"they said as men we sometimes cheat and when there's an emergency and no condom, the pill can help you"*. The participant was not informed about the individual's HIV status that is required for one to take Oral PrEP and adherence. Also, some of the male partners and male parents' participants were not informed about Oral PrEP, the workshop was a platform for the participants to be informed about Oral PrEP. The workshop was an awareness intervention about Oral PrEP for the participants.

Perceptions on demand creation and acceptability of Oral PrEP

There was contrast between fathers and male partners, the fathers had different perceptions about Oral PrEP uptake as compared to male partners. There were differences in who to promote Oral PrEP use to and the reasons behind promoting Oral PrEP or not promoting it.

Male parents' participants promoted Oral PrEP use to their daughters to prevent them from HIV risk and to protect them from being HIV infected by older men who are in multiple relationships with young women. Previous findings confirmed that when AGYW are older and settle with men of their age group, their partners are at high risk of being infected with HIV, and their partners also get multiple sexual partners who are younger women which perpetuates the HIV transmission cycle (de Oliveira *et al.*, 2016).

"You see by how they fall pregnant because they don't use protection; I must tell mine because they are no different from the rest so that's why I will promote it"
(Male parent, 2019).

"15- and 16-year-old nowadays date people that are older than them and if we encourage Oral PrEP then it will prevent them from getting HIV"
(Male parent, 2019).

A male partner participant and father had similar perceptions and highlighted that since they don't know their children's and partner's whereabouts, they would promote Oral PrEP uptake among young women.

“I would promote it; I wouldn’t have a problem because I don’t know where she goes and with who” (Male parent, 2019).

“I would also promote it especially because my girlfriend and I don’t live together. I would promote it so that she and I know that we must protect ourselves” (Male partner, 2019).

A male parent not only promoted Oral PrEP but suggested that he would give his daughter an opportunity to have efficacy over their health.

“it’s important not to hide things from your children, especially information would tell them about the pill then the onus would be on them to take it” (Male parent, 2019).

Another participant highlighted that the importance of communicating with young women about sex and the risks that they may encounter if they are sexually active prior to promoting Oral PrEP. This encourages male parents to communicate with their daughters about sex and their health.

“As a parent it’s important to inform them before the damage hasn’t occurred. It is important to tell them about the dangers of having sex and to tell them about the right way to live. They need to know the consequences of having sex before you tell them about the pill” (Male parent, 2019).

Although the other participants stated that they would promote the use of Oral PrEP among their daughters, a male parent participant argued and suggested that they would be promoting promiscuous behaviour if they promoted Oral PrEP.

“I have nothing against PrEP, but I would not allow my children because this means that I’m encouraging my children to go sleeping around, I disagree. As a parent I would never allow my child to take PrEP in front of me because it is like a am condoning the behaviour” (Male parent, 2019).

Contrast to the perception of the male parent participant, a male partner highlighted that communicating about Oral PrEP to his female partner will be hard because of trust issues. It may seem as though the participant is unfaithful, hence the use of Oral PrEP or they are using Oral PrEP because of distrust towards his female partner.

Yes. Promoting PrEP would a problem because in the times that we live in there is no trust between each other. So, if I were to tell you it would seem as if I don't trust you. Or maybe there is something wrong that I want to do in the side (Male partner, 2019).

Another male parent participant argued that they are aware that their daughters are sexually active, but they would find it difficult to promote Oral PrEP use. The participant encouraged that their daughters could take Oral PrEP without their consent as compared to male parents who encouraged communicating with their daughters about Oral PrEP use.

"We encourage the use of prep but it's difficult as a man to accept that your child is taking a pill every day at 6. I won't dispute that are children are sexually active but if they show you that they take the pill then that will be a problem. It is better is I don't know" (Male parent, 2019).

Another participant highlighted that Oral PrEP can be a secondary prevention strategy in case other contraceptive strategies don't work or they don't have access to them. This finding is informed by previous studies that highlighted that Oral PrEP is for individuals at high risk of HIV infection, who are unwilling or unable to consistently use existing HIV prevention strategies such as male or female condoms and ABC approach (Brekker *et al.*, 2016; UNAIDS, 2016).

"I would also promote it, because sometimes you can't have condoms in your pocket. Sometimes you might think you have a condom but it's an expired condom but with prep, it can protect me the whole day if I drink it" (Male partner, 2019).

Oral PrEP will allow the male partner participants to practice their culture and be safe from being HIV infected.

"In our Zulu culture you need to have many girlfriends), Oral PrEP could help prevent me from infecting others. Let's say that I have 5 girlfriends and one of them has HIV then the rest are at risk of getting HIV. "So, it could be very helpful, especially for people in a polygamous relationship. If you're married, you won't know everyone, you can't be sure whether they are all negative. So, it would really help" (Male partner, 2019).

Contrary to the perception of a male participant above, Oral PrEP will be used by the male partner and not promoted to the young women because it would promote promiscuous behaviour if the male partner encouraged Oral PrEP use to his female partner.

“It would be good and bad for our culture. If you promote it to your partner, it will be as if you’re giving your partner permission to cheat, it’s better if I promote to myself. I would also advise him not to promote it to his girlfriend” (Male partner, 2019).

Although Oral PrEP was produced to help prevent the increase of HIV contraction, acceptability of the prevention method is an important factor in the limitations of Oral PrEP uptake. The fathers had different perceptions about Oral PrEP uptake as compared to male partners. Findings point promoting Oral PrEP to their sons would be easier than encouraging their daughters to take Oral PrEP. However, some male partners suggested that they would promote Oral PrEP uptake to their female partners because other contraceptives such as condoms cannot be trusted, and they cannot be certain about their partner’s whereabouts.

In contrast, some male partners and male parents would not promote Oral PrEP to their partners or daughters because they believe they would be promoting promiscuous behaviour to their partners or daughters. This is an indication of distrust in relationships, previous studies revealed that distrust has resulted to females negotiating the use of HIV prevention strategies and is one of the main barriers in relationships when prevention strategies are being implemented (Holmes *et al.*, 2020). This finding is informed by previous studies highlighting that partner communication influences contraceptive decisions (Davies *et al.*, 2006), young women result to using HIV prevention methods in secret because their male partners may not allow them to use the prevention strategy.

In addition, this finding it contests to previous findings that highlighted that masculinity has had a negative impact in heterosexual relationships because women have to negotiation for contraceptive use that is provided for them as the key population infected with HIV (UNAIDS, 2018; Kharsany and Karim, 2016; Men’s foundation, 2020). Also, male partners highlighted that if they use the prevention strategy their female partners will be protected from HIV contraction. One may also argue and highlight that some male partners may not be aware of their HIV status and might not be able to use Oral PrEP because if they are not HIV negative, preventing them from protecting their partners.

Moreover, a male parent promoted the use of Oral PrEP because they highlighted that Oral PrEP use would protect their daughters who are in heterosexual relationships with older men from HIV contraction. This finding is confirmed from previous studies that showed that women are more susceptible to HIV contraction at a much earlier age than their male peers due to sexual partnering with older men who are HIV infected (Dellar *et al.*, 2015; de Oliveira *et al.*, 2016). Consequently, the findings on the amount of insight that male partners and male parents had on Oral PrEP use among young women revealed their support and perceptions about Oral PrEP which spoke to the second research question of the study.

Theme 3: Male parents and male partners' key messages influence acceptability of Oral PrEP

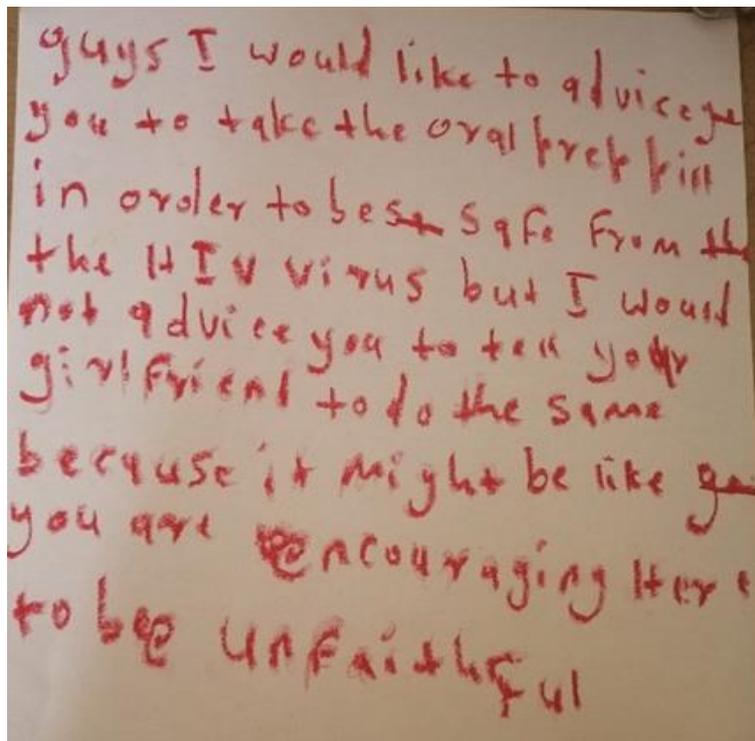
This part of the data presentation will outline the attitudes, beliefs, and knowledge of male partners and fathers towards Oral PrEP mobilization. This study aims to understand Oral PrEP uptake among adolescent females through mobilizing male partners and fathers at Vulindlela. It aims to establish male parents and male partners' key messages on the acceptability of Oral PrEP. Below are the themes and sub themes, each picture consists of a description of the poster and the message including a discussion of the debrief of the posters.

Acceptability of Oral PrEP among young women

Participants were asked to represent key messages on their posters, highlighting their perceptions on Oral PrEP uptake among young women. Notably, acceptability, transparency, secrecy, protection, and male involvement were highlighted. Acceptability was highlighted as part of understanding males' perceptions on Oral PrEP. Some of the male parents and male partners did not accept Oral PrEP uptake among young women in relationships because of distrust.

Male partners suggested that Oral PrEP use encourages female partners to be unfaithful.

"A male partner presented a key message, "Guys I would like to advise you to take Oral PrEP pill to be safe from the HIV virus, but I would not advise you to tell your girlfriends to do the same because it might be like you are encouraging her to be unfaithful" (Male partner 11D, 2019).



P11D

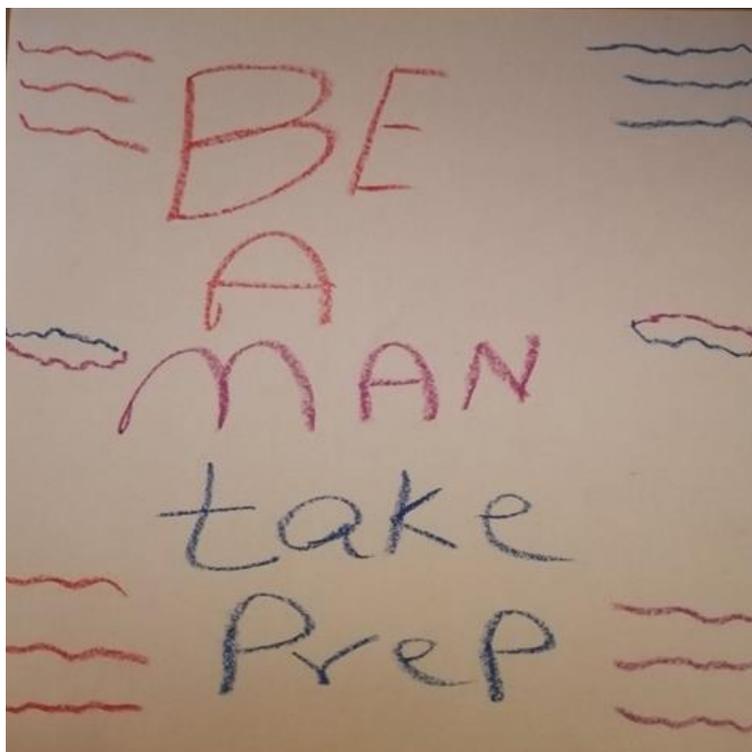
Although previous findings revealed that if male partners received knowledge on the concept of Oral PrEP, it would be easier for them to promote Oral PrEP among AGYW. For instance, previous studies informed that factors such as lack of knowledge about Oral PrEP, relationships and power dynamics, culture, negative attitudes, and perceptions of Oral PrEP by peers influence the behaviour of AGYW (Kharsany and Karim, 2016; Ranganathan, 2017). Distrust remains the main issue that hinders promotion of Oral PrEP among young women.

During the debriefing session, the male partner participant highlighted that *“there is no trust in relationships, so I would not promote you to tell your partner about Oral PrEP, instead protect yourself and her by using Oral PrEP. If you tell her that you use PrEP she will think you are cheating or you are encouraging her to be unfaithful”* (Male partner 5F, 2019).

This highlighted that distrust is one of the main influences that limit the implementation of HIV prevention strategies.

Contrary to the message above, below taking ownership of your health as a man by using Oral PrEP was encouraged by a male partner as opposed to men taking Oral PrEP because of distrust between couples.

“Be a man take PrEP” (Male partner 6D, 2019).

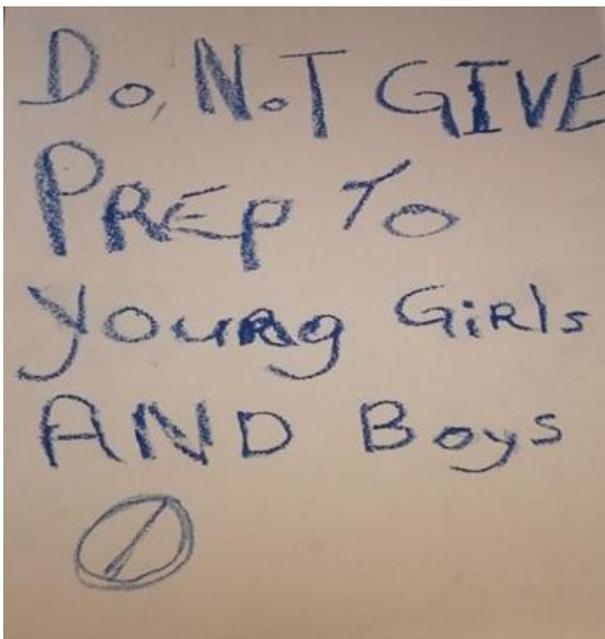


P6D

There was contrast between the previous message and the message that highlighted “*Be a man, take PrEP*” (**Male partner 6D**, 2019). The male partner participant highlighted that the message was to encourage male partners to take Oral PrEP, “*I want a man to take Oral PrEP to protect themselves from HIV and their family. They must also tell their partners to use Oral PrEP but it starts with us to protect our partners*” (**Male partner 6F**, 2019). This finding contests to previous findings that encouraged men to protect their partners by using HIV prevention strategy, B4L showed adverts that included celebrities advocating for testing for HIV, using condoms and choosing a single partner over multiple sexual relationships, the medium for communication included a message “*Yenza kahle!*” (“*Do the right thing!*”) (Collinge *et al.*, 2013). In addition, the male partner participant’s message encouraged male participation in HIV prevention.

Contrary to previous messages directed to both females and males by male partners, a male parent participant highlighted that Oral PrEP must not be given to both females and males.

“*Do not give PrEP to young girls and boys*” (**Male parent 2D**, 2019).



P2D

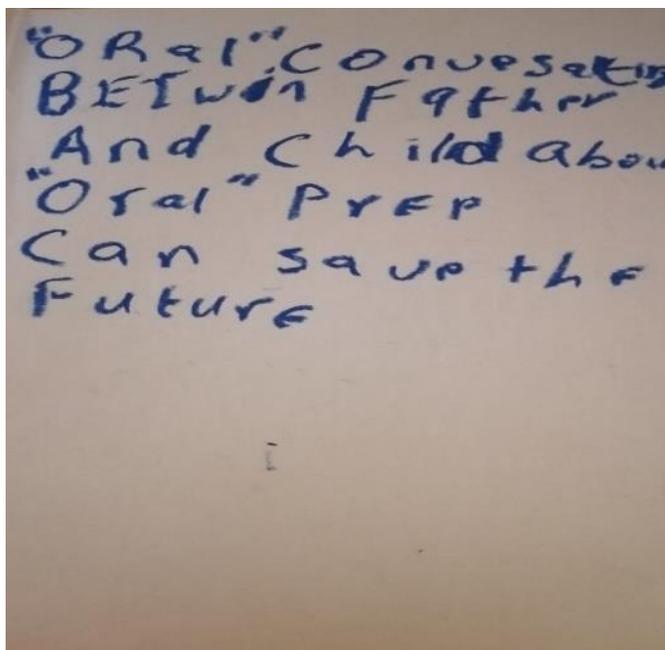
A male parent highlighted that he will not promote Oral PrEP to his daughter and son because he will be promoting mischief and presented a poster with a message, “*Do not give PrEP to young girls and boys*” (**Male parent 2D**, 2019). This showed that perceptions on the acceptability of Oral PrEP varied between male parents and male partners. These perceptions were not based on the limitation of knowledge about Oral PrEP but rather on their personal issues in relationships as male partners and their personal beliefs as male parents.

Although previous findings showed that young women are sexually active and that sexual partnering and transactional sex takes place due to poverty, AGYW use the money for luxury and purchase fashionable hair and expensive clothes to publicize it on social media (Onoya *et al.*, 2011; Ranganathan, 2017; Khazan, 2018). Male parents highlighted and believed that Oral PrEP will promote mischief, yet it is an HIV prevention strategy that is meant to assist decrease the number of people at risk of HIV contraction. Consequently, this also revealed that although male partners may accept Oral PrEP as an HIV prevention method to protect themselves, they would not promote it to their female partners as it will encourage promiscuous behaviour.

Although in the previous messages it was evident that male partners and a male parent did not promote the use of Oral PrEP among young women, participants had different perceptions about Oral PrEP uptake among AGYW. However, messages below presented insights of male parents, promoting Oral PrEP among young women, and encouraging fathers to communicate with their daughters about Oral PrEP.

Contrary to the message of the previous male parent, this message suggests that communication between fathers and daughters can save the child's future.

"Oral conversation between father and child about Oral PrEP can save the future" (Male parent 1D, 2019).

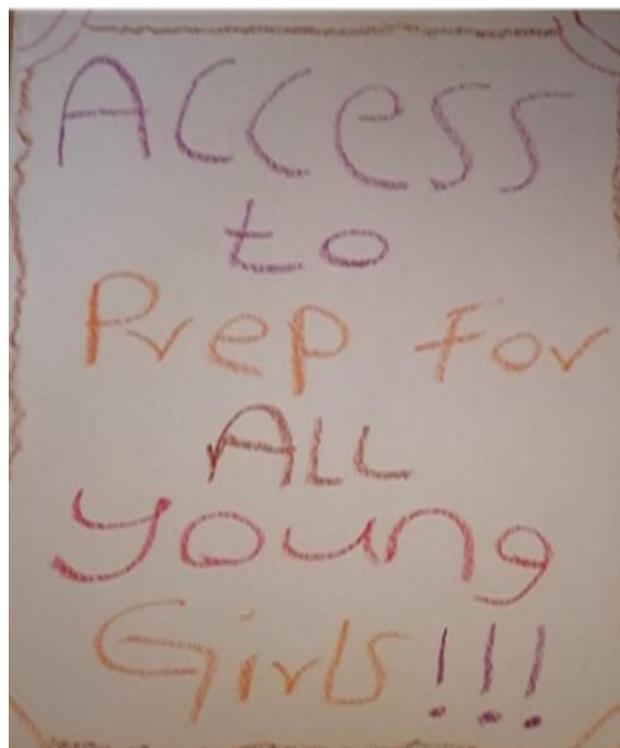


P1D

Communication between male parents and daughters was highlighted. The male parent participant further explained his message, “As a father I think that it is important to talk to our girls about PrEP so we can save our kids. We live in a different era as compared to our times where we were not allowed to talk to our parents about such matters” (**Male parent 2F**, 2019). This message was contrary to the previous messages, the previous male parent did not promote Oral PrEP use among young women and boys, but in this message, one finds that the parent encourages communication about a HIV prevention strategy. This finding shows that the inclusion of male parents in the use of health prevention methods such as Oral is important for intake and adherence for the young women to ensure they are safe of being HIV infected.

All young women are to have access to Oral PrEP, however in secret.

“Access to PrEP for all young girls” (**Male parent 4D**, 2019).



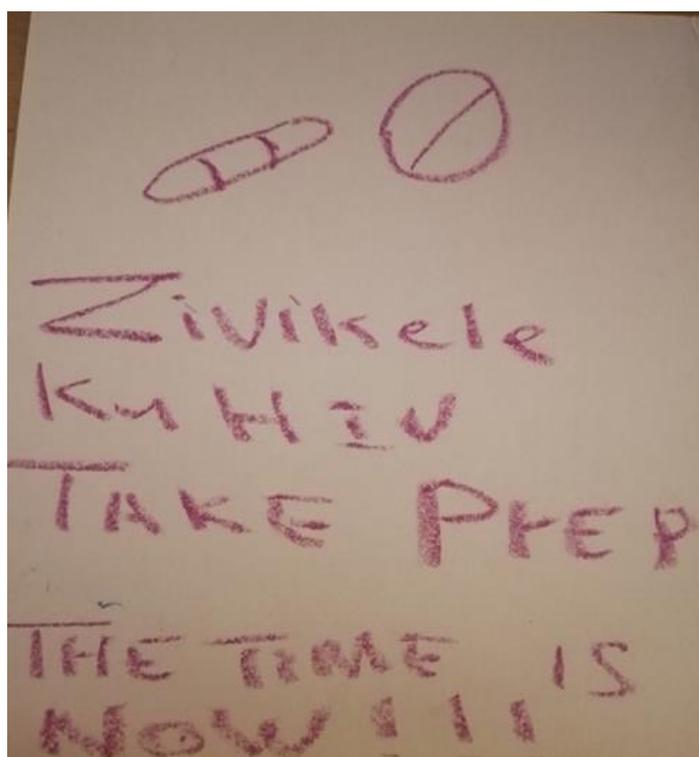
P4D

The male parent participant presented a message that highlighted that all the young women should have access to Oral PrEP. However, the participant further explained that he agrees to young women having access to Oral PrEP but does not encourage the communication about Oral PrEP. The participant stated, “I don’t want to know if she is taking Oral PrEP because she will lose respect for me as her father and I will think she is sexually active” (**Male parent 3F**, 2019). This showed a distinction between a parent not wanting his daughter to have access

to Oral PrEP because of them being afraid of losing respect as compared to reasons being based her sexual behaviour. The main issue is based on the parent's attitudes and assumptions.

In addition to promoting Oral PrEP, a male parent participant relayed a message that encouraged the young women to have agency over their lifestyle and health.

"Protect yourself, take PrEP the time is now" (Male parent 12D, 2019).



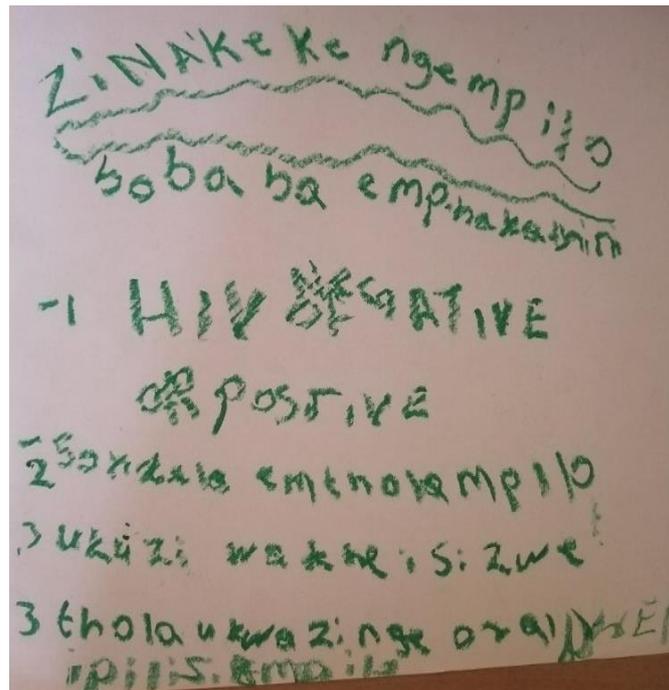
P12D

The male participant presented a message that promoted young women to use Oral PrEP and take ownership of their health and lifestyle. Accessibility of Oral PrEP varied between male parents and male partners. However, the main barriers to Oral PrEP use were not based on lack of know about Oral PrEP instead they were based on the individual's assumptions, attitudes, and beliefs about the outcome young women if they were to use the HIV prevention method. Furthermore, with distrust being the main issue for male partners, male parents contradicted themselves by arguing that they would not promote because it will encourage their daughters to misbehave and be sexually. Previous studies have shown that young women are the susceptible group to HIV contraction, and they are in relationships with older men who are at risk of being HIV infected. Therefore, one would argue that men gain more knowledge on the HIV landscape among young women and their health-related lifestyles.

Health and mobilization

Participants identified and highlighted that Oral PrEP is a health prevention method that can protect men and their partners from HIV contraction due to the following reasons: men have multiple partners, there is secrecy in relationships and promotes HIV testing.

“1. Take care of your health as fathers in the community. 2. whether HIV negative or positive. Go and seek assistance at the clinic to build a nation. 3. Get to know about Oral PrEP pills” (Male parent 3D, 2019).



P3D

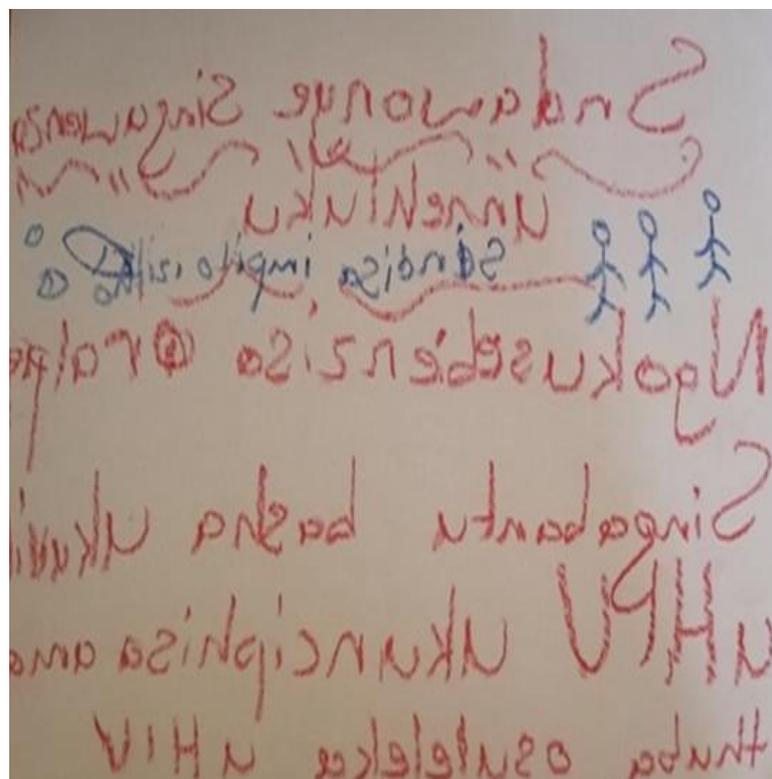
A male parent presented a message which stated, “Take care of your health as fathers in the community” (Male parent 3D, 2019). The participant further discussed in detail the message and highlighted that he wants men to have agency over their health and lead by example in the community through their lifestyle. He suggested that “Men don’t take care of their health and they don’t take it serious, so I want to encourage them to look after themselves” (Male parent 4F, 2019).

Previous studies confirm this finding when a survey was conducted and aimed to identify key issues men face concerning their physical health found that nearly a third admit they do not take care of their health and that they avoid visiting the doctor as they don’t see it as important (Men’s foundation, 2020). Another previous study contested to this finding, it showed that older men and young men were reluctant to use healthcare services, they avoided HIV testing and they did not use condoms (Chikovorea *et al.*, 2016). This shows that there is a need for interventions that will promote men in the community to have agency over their health.

The male parent participant further expressed the second part of his message which encouraged men to live a healthy lifestyle, *“whether HIV negative or positive. Seek assistance at the clinic to build a nation”* (Male parent 3D, 2019). The participant explained that the status of an individual should not determine whether they take care of their health. Men should take care of their health by visiting the clinic more often to ensure that they are healthy and be exemplary health wise. The last part of the message read as, *“Get to know about Oral PrEP pills”* (Male parent 3D, 2019). The participant explained that *“I want other men to know about Oral PrEP pills so that they can tell their kids and partners about it, we can all be safe once we know”* (Male parent 4F, 2019). In conclusion, this highlighted if one wants men to participate in promoting Oral PrEP use, there must first be initiatives that will motivate men to have interest in their health and take care of themselves first since it is evident that they do not pay attention to their health lifestyle.

Like the previous message, a male partner participant relayed a message that was also speaking directly to men. Both male parent and partner were directing messages to other men and not to young women.

“Guys we can make a difference if we use PrEP or Oral PrEP, tell your partner about Oral PrEP. Be faithful to your partner and be unified in your relationship” (Male partner 5D, 2019).

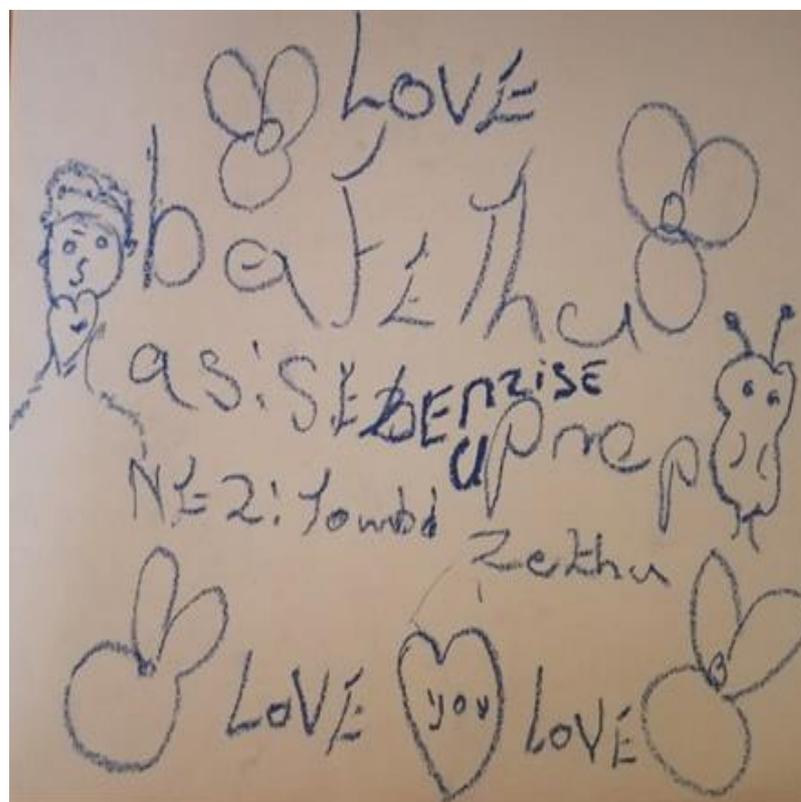


P5D

A male partner participant explained his key message in detail and stated that *“I want men to start making a difference by using Oral PrEP and telling their partners about Oral PrEP. Men must not use Oral PrEP only, but they must be faithful to their partners even if they are using Oral PrEP”* (Male partner 3F, 2019). This finding is informed in previous studies where B4L encouraged men to remain faithful to their partners, *“Be a man who chooses a single partner, over multiple chances with HIV, do the right thing”* (B4L, 2019). This evident that B4L is a campaign that is relevant for male involvement in promoting Oral PrEP among young women and encouraging men to take health related decisions that will not put their health at risk.

There was a continuation in motivating men to take care of their health and mobilize Oral PrEP to their partners.

“Guys let us use PrEP with our girlfriends” (Male partner 8D, 2019).



P8D

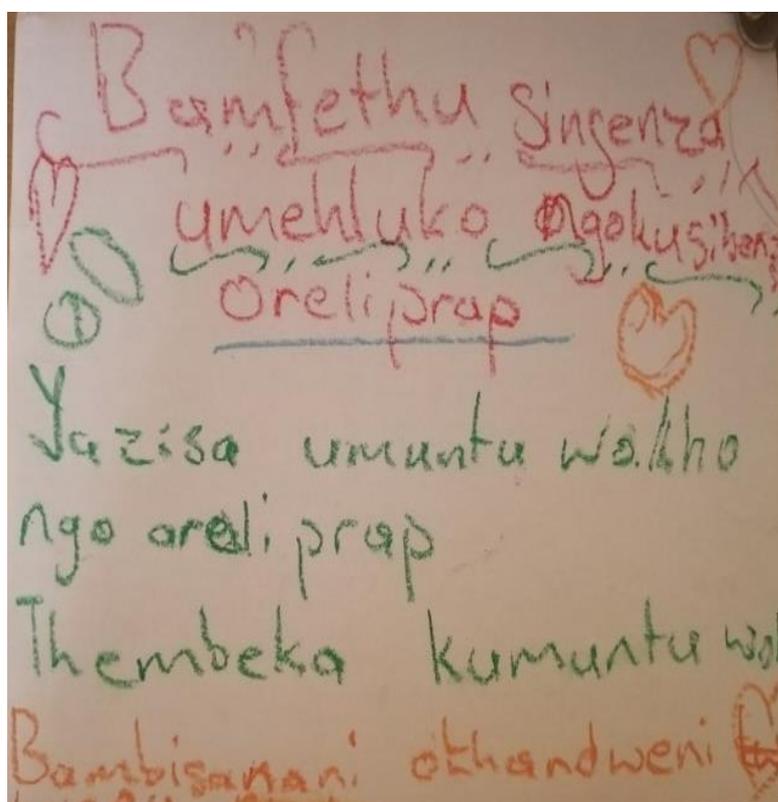
A male partner participant explained that their key message was to encourage men in heterosexual relationships to promote and use Oral PrEP with their partners. This revealed that male partners can be involved in promoting Oral PrEP through using the prevention method with their female partners. Contrary to previous findings that revealed that women use HIV prevention contraceptives in secret to avoid negotiating because they are afraid of sexual abuse (UNAIDS, 2018; Kharsany and Karim, 2016; Men’s foundation, 2020), some of the participants’ messages revealed that men want to be involved in health-related decision and that women should not use HIV prevention technologies in secret.

Consequently, this section motivated men to mobilize Oral PrEP and to take care of their health, promoting self efficacy and for men to have agency over their health. Although both male parents and male partners promoted the use of Oral PrEP, male partners emphasized that men should remain faithful to their partners even if they are using Oral PrEP.

Communication and secrecy

Previous studies revealed that secrecy is one of the main influences that has resulted to women negotiating for contraceptive use, causing limitations of Oral PrEP implementation (Montgomery et al., 2015). This section will discuss males' perceptions about Oral PrEP use and secrecy and the relevance of communication.

"Guys we can make a difference by using Oral PrEP. Inform your partner about Oral PrEP, be faithful to your partner and work together in your relationship" (Male partner 10D, 2019).

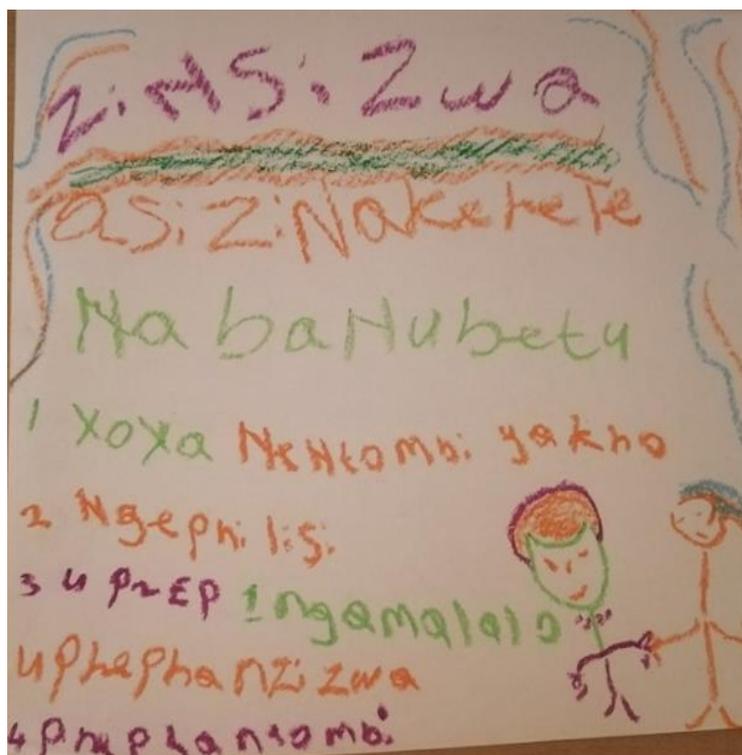


P10D

A male partner participant explained their message and stated, *"I think we can make a difference we don't have secrets and tell our partners about Oral PrEP and try to be faithful to each other. We must be like a team"* (Male partner 4F, 2019). This highlighted the relevance of being faithful to one another and communication in relationships to ensure a healthy relationship and to prevent yourself from contracting HIV.

Like the previous male partner participant, communication is emphasized in ensuring contraceptive use, Oral PrEP.

“Men we must look after ourselves and our partners. Talk to your girlfriend about prep and use the pill so that you will be protected female and male” (Male parent 9D, 2019).



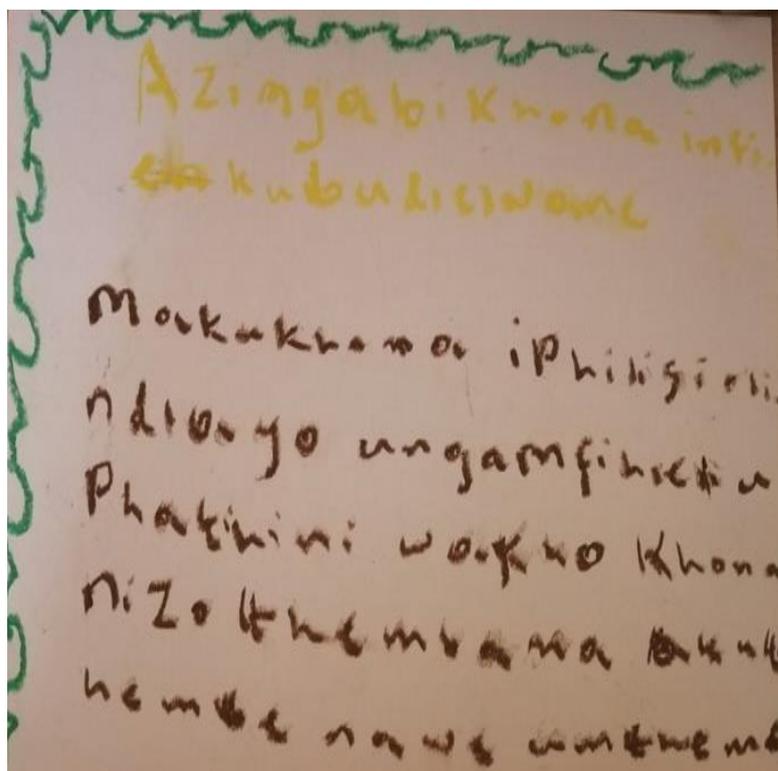
P9D

This participant decided to relay a key message that spoke to him and his partner instead of his daughter. The participant explained that he decided to write a message that speaks to older people and not his daughter because he does not promote the use of Oral PrEP among young women (**Male parent 6F**, 2019). Consequently, there were similarities in messages relayed by a male partner, *“Men we must look after ourselves and our partners” (Male partner 9D, 2019)* and a message relayed by a male parent earlier, *“take care of your health as fathers in the community” (Male parent 3D, 2019)*. This showed that both male parents wanted men to take care of their health to ensure that they take care of their partners and daughters.

The male parent participant further explained his message during a debriefing discussion and said, *“I want men to take care of themselves and their partners by using PrEP and talking to their partners about it so that we can all be protected from HIV” (Male parent 6F, 2019)*. This revealed that although the male parent did not promote Oral PrEP among young women (daughters), he was willing to encourage his female partner about Oral PrEP use and ensure they are safe.

Like previous messages, the male participant advocated for transparency as one of the issues in contraceptive use is lack of transparency.

“There mustn’t be any secrets in relationships. If you take a pill, then you must tell them so that there will be trust between us” (Male partner 7D, 2019).



P7D

Contrast to previous findings where it was confirmed that there is distrust in relationships and it influences contraceptive use as women must negotiate the use of it, the participant advocated for transparency. The participants highlighted that male can be involved in promoting Oral through ensuring that is transparency and using Oral PrEP. This highlighted that the influences that can promote Oral PrEP uptake are communication and avoiding secrecy.

Moreover, this section showed the perceptions of male parents and male partners about Oral PrEP through their key messages which answered the last research question of the study, which was to understand what the perceptions of male parents and male partners on Oral PrEP uptake are. Although both male parents and male partners had difficulties in accepting the use of Oral among young women, the participants were willing to use the HIV prevention method. Some of the male partners and male parents were willing to promote Oral PrEP to young women but with specific conditions.

Conclusion

This chapter has presented all the data collected through the workshop and group debriefing discussion on the posters created. The chapter analysed this data in relation to the literature reviewed to answer the research questions that guided the study. It presented an analysis of the data that was collected through focus group discussions and messages created during poster creation (action media) conducted with two sets of participants. The data show revealed three main themes and sub-themes. The main themes were as follows: Key themes are outlined in this chapter as they guide the data presentation: 1. Awareness of Brothers for Life Campaign and HIV prevention between fathers and male partners is influenced by communication methods used. 2. Limited Oral PrEP knowledge influences parent and partner support for Oral PrEP use. 3. Varying Oral PrEP acceptability between male partners and fathers influences Oral PrEP mobilization and use among young women.

The findings showed contrast and similarities between the perceptions of male parents and male partners about Oral PrEP. Some male parents didn't accept Oral PrEP usage among their daughters, but they suggested that they would allow their daughters to use the prevention method without their consent to ensure they don't lose respect as parents. Male partners on the other hand highlighted that they would use Oral PrEP as men, but they would not inform their female partners about it to avoid encouraging promiscuous behaviour. Some fathers and male partners stated that they would not promote Oral PrEP to avoid promoting promiscuous behaviour because of distrust in the relationships. Furthermore, B4L campaign was found effective as a health prevention campaign and the posters were effective. The participants outlined that the message on the posters is what is most of importance when mobilizing health prevention strategies. Chapter six will present a detailed discussion of the findings and relate these to the objectives of the study and the theoretical framework applied in the study.

CHAPTER 6: DISCUSSION AND CONCLUSION

Introduction

Demand creation for Oral PrEP among young women remains a health prevention issue that has resulted to the consideration of male involvement. The purpose of this study was to create demand for Oral PrEP use among young women through exploring the perceptions and support of males on the implementation of Oral PrEP in Vulindlela, KwaZulu-Natal. The premise that informed the study was that AGYW remain the key population of high HIV incidence rate because of the interrelated barriers that include the individual and interpersonal relationships which limit the implementation of Oral PrEP among young men. Furthermore, men play a major role in the limitations of the implementation of health prevention strategies among young women. This chapter of the dissertation extends on the analysis in chapter five to present a summary of the key findings of the study in relation to research questions and the theoretical framework.

This study gathered data through the SCT within the SEMCHB, which encouraged dialogue and critical thinking amongst the male partners and fathers on mobilizing Oral PrEP use among young women. The data was analysed through thematic analysis, which required reading transcribed data in search of repetitive themes and discussing data relating it to the identified themes. This chapter presents a discussion of the findings captured through the following themes: 1. Awareness of Brothers for Life Campaign and HIV prevention between fathers and male partners is influenced by communication methods used. 2. Limited Oral PrEP knowledge influences parent and partner support for Oral PrEP use. 3. Varying Oral PrEP acceptability between male partners and fathers influences Oral PrEP mobilization and use among young women. It will further discuss how these themes relate to the study's objectives and research questions. The study will attempt to make sense of the findings of the study in the context of theories of health communication, notably the Social Cognitive Theory by Bandura (1986) and the Social Ecology Model and Health Behaviour (SEMCHB) by Kincaid *et al* (2007).

Summary of key findings

In the next section of this chapter, the discussion will be methodically presented under each of the study's objectives below:

Research question 1: Effectiveness of Brothers for life campaign and their posters as a medium for mobilizing men in HIV prevention

In relation to the first research question on the effectiveness of the Brothers for Life campaign and their posters a medium for mobilizing men in health prevention. Findings of this study revealed that Brothers for Life campaign has been effective with the interventions that it has conducted, however, in some cases posters were not an

effective medium for mobilizing in health prevention. Several reasons were put forward to explain this situation. Among them is the fact that posters did not reach to male parents as compared to male partners in heterosexual relationships who have access to media and other social media platforms. Social media and television were the most suggested settings to display the posters to reach a wider audience by male partners. Door to door interventions were encouraged to promote health in the community by male parents as compared to male partners who encouraged the use of television.

Age differences had an influence on the contrast because male parents were older, aged 35-49 years and majority did not access media and other social media platforms as compared to male partners who were younger, aged 24-35 years and have access to social media. The contrast in preferences also showed that there were differences in background knowledge. Such limitations result to the fathers having limited knowledge about health prevention strategies which causes a barrier when implementing prevention methods for young women. This encourages the use of posters because they can be placed in the settings of the community which will accommodate male parents and the posters can be shared on social media platforms to accommodate male partners.

Furthermore, the posters were found to be relevant and reach a wider audience if they included celebrities according to both male partners and fathers of AGYW. There was contrast on this finding, fathers of young women explained that the celebrities attract the audience to read the poster but the placement of the celebrity on the poster does not ensure that there will be behaviour change. However, male partners suggested that celebrities attract one to read the poster and it encourages one to take care of their health if they see their role model advocating for a health prevention strategy.

In this study, majority of the male parents and male partners' participants were aware of B4L campaign. The participants' knowledge on previous B4L campaigns established that B4L was not only an HIV prevention intervention that focused on an individual, but it also focused on interpersonal relationships while taking into consideration the male partners and fathers' culture, beliefs, and attitudes.

Furthermore, for both male parents and male partners' language barrier was one of the main limitations for the posters to reach wider audience. Some of the posters were not written in native language and the messages were not concise. This resulted to participants not gaining insight and therefore it becomes a barrier for health prevention practice. Participants suggested that for the posters to be effective, they need to be written in their native language, resulting to the promotion of behaviour and social change. Both male parents and male partners emphasized that the message on the poster is of relevance and therefore the messages need to be written in their native language. Consequently, findings revealed that Brothers' for Life is an effective campaign for promoting health prevention. However, there key influences that cause limitations for the social change that need to be considered.

Research question 2: Male parents and male partners' perceptions and support of Oral PrEP uptake for AGYW

This second research question that the study sought to answer had to do with males' perceptions and support of Oral PrEP uptake for young women through key messages of men. There was contrast between male partners and fathers on their perceptions about Oral PrEP uptake among young women. Male partners suggested that they would promote Oral PrEP to their partners to ensure that they protect themselves from HIV contraction, because they are not sure about their partners' whereabouts. However, fathers argued that they would not promote Oral PrEP to their daughters instead they would take Oral PrEP and encourage their sons to take Oral PrEP to promote both themselves and their partners because their sons have multiple sexual partners. These findings revealed that the background knowledge of an individual on health prevention can cause limitations to the use of health prevention practices. This suggests that health prevention interventions need to find creative ways to share insight on health prevention practices to ensure that people are well informed about the contraceptive use before it is rolled out to the key populations.

Findings in the study also showed that the settings in which the male partners participants were informed about Oral PrEP caused limitations on the awareness of Oral PrEP in the community and there is still a need for demand creation for Oral PrEP use in the Vulindlela. The settings in which the male partners' participants were informed about Oral PrEP were one of the influences on the limited knowledge of Oral PrEP because less participants were exposed to those places. In this study, limitation of Oral PrEP knowledge was evident and therefore awareness campaigns need to be implemented to mobilize the community about Oral PrEP for people to gain more knowledge on Oral PrEP uptake among young women.

Research question 3: Male parents and male partners' perceptions and support of Oral PrEP for young women based on key messages

The last research question that the study sought to answer had to do with demand creation for Oral PrEP through understanding male parents and male partners perceptions and support of Oral PrEP for young women through key messages. Both male partners and fathers mobilized the use of Oral PrEP. However, someone participants promoted Oral PrEP for their female partners, and some promoted Oral PrEP to other men instead of promoting it to their female partners and daughters. Self-efficacy and taking care of one's health was of relevance for majority of the men. Findings suggested that men would prefer to take Oral PrEP themselves to protect their partners from being HIV infected instead of encouraging their partners and daughters to take Oral PrEP. It was a positive outcome for some of the male participants to encourage self-efficacy and promoting a healthy lifestyle among themselves, but Oral PrEP was not promoted to their female partners which still puts young women at risk.

Furthermore, some fathers explained that they accept Oral PrEP as a HIV prevention method that has the potential to change the HIV rate and therefore, they would encourage their daughters to use Oral PrEP. However, they suggested that they would prefer for their daughters to use Oral PrEP in secret to ensure that they don't lose their respect as fathers. One male parent argued that he would not have an issue if their daughter took Oral PrEP but he would prefer to not be informed by his daughter if his daughter is using Oral PrEP. In contrast to this, another parent suggested that he would promote Oral PrEP but would first want to communicate with his daughter about life and the importance of taking care of your health as an individual. Another parent suggested that he would promote Oral PrEP because he is not aware of his daughters' whereabouts.

In this study, this shows that although insight was shared about Oral PrEP during the data collection process, the male 'participants still had different perceptions and beliefs about who to mobilize the prevention strategy to. It further suggests that for an individual to be influenced, there are different interrelated levels of sources that contribute to their behaviour that need to be considered. The individual level is important for behaviour change but other levels play an important role in social and behaviour change.

Theoretical significance of the research findings

This study was placed within the Social Ecology Model for Communication and Health Behaviour (SEMCHB) to understand culture, socio-economic factors and social norms that influence social change. The study was located within the individual and interpersonal levels of the SEMCHB framework to understand males' perceptions and support of Oral PrEP use among young women through key messages. The study acknowledged that health and behavioural change decisions are influenced by interrelated factors in a community are not made independently. Thus, the SEMCHB aims to understand how different levels interrelate in health communication. The Social Cognitive Theory (SCT) within the Social Ecology Model of Communication and Health Behaviour (SEMCHB) will also analyse the effectiveness of Brothers for Life campaign and its use of posters as a medium to encourage HIV prevention strategies such as Oral PrEP. The SCT is relevant in this study as it explains how people develop and maintain behavioural patterns. The individual perceptions as shown in the previous chapter is important in understanding the barriers for Oral PrEP uptake in Vulindlela among young women.

Findings in the previous chapter confirm the important role that both these frameworks can play in influencing the outcomes that will promote behaviour change. Male partner and fathers of young women had strong views on the use of posters, language barrier and the inclusion of celebrities to encourage behaviour change. This suggested that posters can be an effective medium for communication for Oral PrEP uptake if they are created with appropriate key messages for health communication, written in appropriate language for the audience and include celebrities. Thus, understanding the role of role modelling, culture and, individual's perceptions and beliefs is important in making sense of the relevance of the study. This reveals of the significance of role modelling in the SCT. Furthermore, male partners' perceptions on the acceptability of Oral PrEP varied but

some of the men did not promote the use of Oral PrEP among young women because of distrust. Thus, understanding of the role of relationships in health prevention implementation among young women is fundamental in making sense of the study. This shows the relevance of the interpersonal level of the SEMCHB.

For the relevance of this study, in the SCT the following constructs will be applied: agency, self-efficacy, role modelling and collective efficacy. In the SEMCHB the constructs that will be applied in the chapter is the individual level, interpersonal level, and the community level.

Self-efficacy

The SCT focuses on the individual's behaviour with an understanding that behaviour change can result to a change in an individual's personal aspects, and it can change their external experiences (Bandura, 1986; Nabavi, 2014). Behaviour is influenced by external and internal factors or experiences. In the context of this study, self-efficacy refers to the person's self-confidence in their ability to perform a specific task or obtain a goal with or without assistance through controlling their actions, thoughts, and feelings (Bandura, 1998; Bandura, 2004; Carruth, 2008). Self-efficacy is important for personal change and is a key element in SCT model. Self-efficacy was encouraged through the key messages that men relayed about Oral PrEP uptake.

In the findings a male parent relayed a key message that stated, "*1. Take care of your health as fathers in the community. 2. whether HIV negative or positive. Go and seek assistance at the clinic to build a nation. 3. Get to know about Oral PrEP pills*" (**Male parent 3D**, 2019). The message in the poster encouraged men to take care of their health by seeking help at the clinic and get insight about Oral PrEP to protect yourself from HIV contraction. Self-efficacy would assist by giving an individual confidence to go to the clinic and get tested and go to the clinic and learn about Oral PrEP. An individual would learn to take a new prevention method and adhere to it resulting to an increased self-esteem because the individual will be aware of their status. This would encourage personal change but will also have a positive impact on their social life. Consequently, once an individual gains confidence they will be able to share their experiences with other men in the community.

Agency

Agency is also another important construct for health communication because it encourages a person to be proactive and take ownership of their health (Bandura, 2015). Findings of the study showed that although some men didn't promote the use of Oral PrEP to young women but both male parents and male partners encouraged other men use Oral PrEP. This action would allow men to take ownership of their health and know their status. If men had agency over their health, then it would help in decreasing the number of young women HIV infected because men would be proactive and take Oral PrEP before they get HIV infected. However, young women would not have agency over their health because they would not be allowed to use Oral PrEP. Young women will still be at risk of being HIV positive in cases where their male partner does not take Oral PrEP or if the young women have multiple partners that are HIV positive.

Moreover, findings showed that there were some male partners and parents that promoted Oral PrEP. This would be of benefit to both males and females because the individuals will be able to take ownership of their health and the HIV incidence rate among young women would decrease. This will also ensure that young women do not negotiate for contraceptive use, which is the main purpose of the rollout of Oral PrEP. They will be confident of their health and have a healthy lifestyle, allowing them to take ownership of other aspects in their lives.

Role modelling (observational learning)

Observational learning is influenced by observations of other people's behaviour, it is learning from other people's behaviour in community or environment instead of learning through your own experiences (Glanz and Rimer, 1995:21; Wood, 2006; Nabavi, 2014). These people whose behaviour is observed for learning and behaviour change are people of stature and in most cases celebrities. In the context of this study, role modelling influenced the people's interest on the poster and the health prevention strategy because findings confirmed that the participants were encouraged to read messages on the posters if there was a celebrity on the poster. Previous findings suggest that observational learning in the SCT has the potential to create demand, demonstrate and promote prevention practices. Observational learning is an important construct for behaviour change. Contrary to this, male parents argued that the celebrities on posters do attract the people to read the posters, but it is the message that encourages behaviour change and not the celebrity.

Findings further argued that celebrities who advocate for health prevention strategies must be people who live a lifestyle that is in line with what they are advocating for. This shows that for posters to be effective and promote behaviour change, they need to have celebrities that live a lifestyle that confirms the message that they are relaying to the people. There must be an interconnectedness between the celebrities, health prevention message and the audience. Also, if older men in the community that are role models for the young men were involved in mobilizing health prevention strategies, then the young men would have someone that they can learn from about living a healthy lifestyle who resonates with them as compared to a celebrity. may be role models for the younger men This will ensure that men have people that they can use as reference for health prevention, and it would create a demand for Oral PrEP among women using men for mobilization. For example, a B4L poster with a celebrity that lives a lifestyle that advocates for HIV prevention, would be very influential if they were to promote the use of Oral PrEP among young women through male involvement.

Collective efficacy

Collective efficacy is when a group of people work together and have outcomes through their actions (Thompson, Parrott and Nussbaum, 2011). There is a difference between self-efficacy and collective efficacy. Self-efficacy is when the outcome is based on the individual's efforts whereas collective efficacy is when the outcome is dependent on a group of people (Thompson, Parrott and Nussbaum, 2011). In the context of this study, findings highlighted that collective efficacy had a positive impact on behaviour change and can change people's perceptions about a health prevention strategy. For instance, a male participant was encouraged by a message on a poster that promoted circumcision. At first, he had no interest in circumcision until he read the poster with his friends and decided to go and get circumcised. This revealed that as an individual he had no interest in getting circumcised but when he was with his friends, he became motivated to go and get tested because of the influence of his friends.

This showed that as much it is important to take into perspective the individuals' attitudes and beliefs for behaviour change, there are other factors that influence behaviour change. Although the SCT is influential in health prevention communication campaigns, one may argue that it does not consider cultures which influence the people's decisions as culture it focuses on the social norms (Airhihenbuwa and Obregon, 2000). Thus, this study will discuss the SEMCHB to understand the males' perceptions and support of Oral PrEP uptake among young women, considering the interrelatedness of the individual level, interpersonal level, and the community level.

The SEMCHB levels

Individual level

In the SEMCHB, the first level that influences behaviour change is the individual level which consists of self-efficacy, knowledge, cultural norms, and beliefs (Storey and Figueroa, 2012; Kapusta, 2017). In the context of this study, findings showed that the fathers preferred the traditional medium of communication such as posters and male partners preferred technology because they have access to it and technologically advanced as compared to the fathers. This was based on the background knowledge and what both male partners and fathers have been exposed to. The preferences of male parents show how background knowledge can cause limitations. For instance, the fathers do not have background knowledge on social media and some of them do not know how to use social media. Therefore, to ensure that the B4L campaign is effective for both male partners and male parents there one would suggest that use of posters because the fathers will be able to have access to them in the community and the male partners will have access to them on social media.

Moreover, more findings were gathered on the effectiveness of posters as medium for communication. Both male parents and male partners suggested that for the posters to be effective, they need to be written in their native language, resulting to behaviour and social change. Consequently, previous findings in the SEMCHB suggested that culture and social norms are important to consider when working with a community, therefore language is an important concept in relation to culture. This showed that it is imperative to consider the culture and people's beliefs when implementing a prevention strategy. Participants outlined that the significant of a poster is the message and if the participants don't understand the poster there will be no behaviour change.

In addition to culture, findings showed that Oral PrEP use for men would allow them to practice their cultural beliefs of being *isoka*, having multiple female partners. A male partner suggested that "in our Zulu culture you need to have many girlfriends, Oral PrEP could help prevent me from infecting others" (**Male partner**, 2019). This revealed that even though there is an increase in the HIV incidence rate among young women, some male partners are not willing to remain faithful to one partner. The response of the participant towards Oral PrEP use implied that the use of Oral PrEP by men may promote the behaviour of having multiple intimate partners. This may put the male partners at risk of being infected with STIs instead of being HIV infected. Overall, findings showed that culture influences health related behaviour in heterosexual relationships and that culture needs to be taken into consideration when implementing behaviour and social change initiatives.

Furthermore, another finding showed that participants gained more insight on health prevention interventions such as testing and circumcision on previous B4L interventions. Some of the participants were encouraged to have self-efficacy and agency over their health, resulting to personal change. Yet other participants did not change their behaviour even though they obtained the same information. This finding contested to previous findings that suggested that knowledge does not guarantee behaviour change, instead personal attitudes and beliefs influences people's decisions and behavioural practices (Cramer and Kapusta, 2017).

These findings revealed that although background knowledge at an individual level within the SEMCHB can cause limitations to health prevention practices but once the people gain insight, they are able to make informed decisions about their health. Furthermore, there are other social factors that influence an individual's behaviour and decisions, the interpersonal level and community level be discussed in relation with the findings.

Interpersonal level

The interpersonal level of influence in SEMCHB's is important for behaviour and social change because it considers the social networks, parenting or intimate partners and their perceptions on health prevention interventions (McLeroy *et al.*, 1988). In the context of the study, findings revealed that the male partners stated that they would use Oral PrEP but they would not influence their female partners to use Oral PrEP because there is distrust in their relationships and they believed that if they promote Oral PrEP to the young girls then they would become promiscuous. The male partners further explained that the distrust in the relationships would make the young girls to assume that their partners are cheating hence they are using Oral PrEP or the young women would assume that their partners are using Oral PrEP because they don't trust them.

This showed the significance of the interpersonal level as it considers how parents and intimate partners influence behaviour change. It also showed hidden factors in relationships that cause limitations for the mobilization of health prevention strategies. In addition, some of the male parents also stated that they would not promote Oral PrEP because they believe they would be promoting promiscuous behaviour. This finding showed the role that parents play in their daughters' lives and that it is imperative for male parents to be involved in the implementation of health prevention strategies centred for the HIV key population. The involvement of male parents would increase the demand for Oral PrEP and encourage the young women to use Oral PrEP and promote adherence as they would be using the pills at home without having to negotiate Oral PrEP use.

In the context of the effectiveness of the B4L being an effective campaign, it was found to be an effective campaign for HIV prevention interventions because it considered the interpersonal level when implementing health prevention initiatives. An example previous findings showed that they promoted men to have agency over their health by getting circumcised and HIV testing to protect themselves and their partners from the risk of HIV. The males and their social networks were considered when implementing interventions. Furthermore, the messages on B4L campaigns focused on influencing the individual's behaviour by promoting self-efficacy and one to have human agency over their health.

Consequently, this section showed that it is important to consider the interpersonal level in the SEMCHB when promoting health prevention strategies. The SEMCHB stated that behaviour is influenced by multiple levels of intrapersonal, interpersonal, community, and policy environments (Kincaid *et al.*, 2007). The behaviour of the male participants and their attitudes towards Oral PrEP have negative influence on the health prevention practices of the young women. This contests to previous findings which highlighted that the interpersonal level influences an individual's behaviour. Here, the individual relationships, support groups, social networks and cultural context comes into play to influence behaviour (McLeroy *et al.*, 1988; Storey and Figueroa, 2012).

Community level

Within the community level collective efficacy, social relationships, community centres, healthcare providers are included (Jo McCloskey, 2011; Storey and Figueroa, 2012; Cramer & Kapusta, 2017; Golden *et al.*, 2021). These different settings are needed when creating demand for Oral PrEP, especially when displaying the posters in the community. This will assist in reaching a wider audience in the community to ensure that people in the community get insight on Oral PrEP. Furthermore, the use of B4L campaign for mobilizing Oral PrEP will ensure that men are able to promote Oral PrEP using social relationships in the community. For instance, male leaders of faith-based organisations and community-based organisations can be involved in mobilizing Oral PrEP uptake among young women. These leaders are influential in the community, and male partners and male parents would be able to resonate with the leaders in community allowing them to become their role models. This shows that there is an interrelation between the SCT and the SEMCHB, identifying the social factors that influence an individual's behaviour.

To conclude, this chapter has analysed data collected in this study to answer the guiding research questions, taking into consideration the theoretical framework. It began by exploring the support and perceptions of men towards the Brothers for Life campaign and HIV prevention. The researcher closely analysed at the audience's general understanding of the campaign and how effective it has been with regards to contraceptive use and promoting HIV prevention. The researcher also explored which mode of media communication was perceived to have communicated Brothers for Life messages well, including the use of posters to promote HIV prevention. Moreover, the researcher gained an understanding the men's perception of young women's contraceptive use, specifically Oral PrEP in KwaZulu-Natal (KZN), where there is an increase in HIV contraction. The researcher was able to gain insight on whether the male parents and male partners would create demand for Oral PrEP use among young women. In the final concluding chapter which follows, will state the recommendations highlighted from this study and suggest further research to follow from this study.

Conclusion

This study explored the males' perceptions and support of Oral PrEP use among young women in Vulindlela. To comprehensively undertake this exploration, the study was guided by three research questions. Firstly, it sought to understand the effectiveness of Brothers for life campaign and their posters as a medium for mobilizing men in HIV prevention. Secondly, the study aimed to explore male parents and male partners' perceptions and support of Oral PrEP uptake for AGYW. Lastly, the study sought to understand the male parents and male partners' perceptions and support of Oral PrEP for young women based on key messages developed by men. Literature was reviewed that pointed to the high risk of HIV infection among AGYW and the contributing factors to the increased risk of new infections. These included socio-cultural, behavioural, and structural factors and biological factors. Young women were established as the HIV key population at risk, resulting to the need of

demand creation for Oral PrEP uptake among them. The B4L campaign was identified as an effective campaign for mobilizing HIV prevention strategies towards men. Posters were identified as an effective medium for health prevention communication. Empirical evidence was collected through focus group discussions and action media (poster creation) to understand the perceptions of male parents and male partners on Oral PrEP use among AGYW.

In the main, the study found that the male parents and male partners had limited knowledge on Oral PrEP uptake due to various interrelated influences. The limited Oral PrEP knowledge influenced parent and partner support for Oral PrEP use. Some male parents and male partners did not have insight of Oral PrEP use which resulted to them not able to promote Oral PrEP. There were differences in Oral PrEP acceptability between male partners and fathers, which influenced Oral PrEP mobilization and use among young women. Some participants did not promote Oral PrEP for their daughters because they assumed that it would encourage mischief and the parents would lose respect of the daughters.

Moreover, key messages showed that men would rather use Oral PrEP to protect themselves from being infected with HIV than to promote it to young women. This was because they believed that if they encouraged Oral PrEP to their partners, it means that they are promoting Oral PrEP because they are cheating. This showed distrust in heterosexual relationships and showed the importance of understanding not only the individual level but the interpersonal level in the SEMCHB. Findings further suggested that some male parents would encourage their daughters to use Oral PrEP because they are not aware of the whereabouts of their daughters.

In realising the benefits of Oral PrEP in reducing new HIV infections, male parents and male partners need to be equipped about Oral PrEP and mobilize Oral PrEP implementation among young women. A contextual understanding of the cultural beliefs, social relationships, beliefs, and knowledge remains imperative to the effective implementation of oral PrEP in the community of Vulindlela. The findings showed that culture played an important role in behavioural change in such contexts and must therefore be given serious consideration in planning effective communication on oral PrEP. Oral PrEP awareness programs should be conducted targeting male leaders in the community to ensure mobilization of Oral PrEP among young women. The perceptions and support of male leaders in Oral PrEP implementation among young women is important for reaching a wider audience and for behaviour change.

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Appendix 1: Interview Schedule Guide

Focus Group Questions

Questions to be directed to subjects of the study

These questions only apply to the focus groups discussions and action media (poster). These questions will attempt to answer the three main research questions.

How is the Brothers for life campaign and their posters effective as a medium for mobilizing men in HIV prevention?

- 1). Do you recognise or know of the Brothers for life campaign?
- 2). If so, where did you hear of the campaign?
- 3). Have you seen their posters and if so, which health prevention campaign was the poster created for?
- 4). Were their posters effective for using men in HIV prevention?

What are some of the key messages' men will utilise to promote Oral PrEP to AGYW?

- 1) Have you heard of Oral PrEP?
- 2) If you have heard of Oral PrEP, what is your understanding of Oral PrEP?
- 3) Where did you hear of Oral PrEP?
- 4) Do you think there should be a demand created for Oral PrEP among young women and if so, why?
- 5) Does your female partner/daughter/ female family member use Oral PrEP?
- 6) What is your perception on secrecy in the use of Oral PrEP
- 7) How can men promote the use of Oral PrEP
- 8) How does cultural practices, values and power dynamics influence the uptake of Oral PrEP?

Poster creation, include in your poster:

Interpersonal level - Fathers

- Your understanding or perceptions of Oral PrEP.
- What are the key messages to advocate Oral PrEP for your daughters?
- How can fathers promote the use of Oral PrEP to their daughters through pictures, words etc on the poster?

Interpersonal level - relationships either married or co-habiting

- Your understanding or perceptions of Oral PrEP
- What are the key messages to increase demand for product uptake?
- Do you promote the use of Oral PrEP in your relationships as males?
- Perception on secrecy in the use of Oral PrEP

Community level- community leaders

- Your understanding or perceptions of Oral PrEP
- What are the key messages to increase demand for product uptake in the community?
- Do you promote the use of Oral PrEP in relationships?
- Perception secrecy in the use of Oral PrEP

What do these messages suggest about males' perceptions and support of Oral PrEP for women?

- 1) Do males accept and promote the use of Oral PrEP?
- 2) What are their perceptions on Oral PrEP?
- 3) How does cultural practices and values and the community influence the uptake of the product?
- 4) Can men be used to promote Oral PrEP to other men for them to encourage the use of it to females?