Female students' concerns about, and management of, their sexual and reproductive health at the University of KwaZulu-Natal, Pietermaritzburg

Bonisiwe Masinga

212547450

Thesis submitted in fulfilment of the requirements for the degree of Master of Social Science (Psychology) in the School of Applied Human Science, Discipline of Psychology, University of KwaZulu-Natal, Pietermaritzburg.

JANUARY 2021

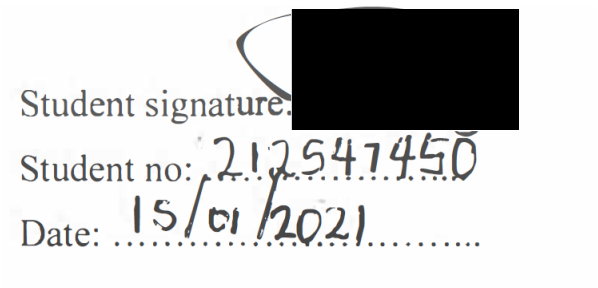
DECLARATION

I declare that:

1. The research reported in this thesis, except where otherwise indicated, is my original work.
2. This thesis has not been submitted for any degree or examination at any other university.
3. This thesis does not contain another persons' data unless explicitly acknowledged as being sourced from other persons.
4. This thesis does not contain another persons' writings unless expressly acknowledged as being sourced from other scholars. Where other written sources have been quoted, then:

(a) Their words have been re-written, but the general information attributed to them has been referenced.

(b) Where their exact words have been used, their writing has been placed inside quotation marks and referenced.



Supervisor: Prof Mary van der Riet

Signature

Date: 15 January 2021

ACKNOWLEDGEMENTS

I would like to thank the following people for helping me with this research project:
My thesis supervisor Prof Mary van der Riet for her unwavering support, encouragement and patience;

Furthermore, I would like to thank my research participants for their passionate participation and input to this study;

Finally, I cannot forget to thank my family and friends for all the unconditional support and encouragement throughout my years of study.

DEDICATION

This thesis is dedicated to my mother, Jabu Phildah Masinga. Without her endless love, encouragement and constant prayers, I would never have been able to make it this far. Thank you, mother, for being a pillar of my strength.

Abstract

Literature on sexual and reproductive health concerns of university students is rare, and yet there is evidence that university students have concerns and misconceptions about sexual and reproductive health. The study presented two aims. Firstly, it aimed to investigate University of KwaZulu-Natal female students 'concerns about sexual and reproductive health. It also aimed to investigate how female students manage their sexual and reproductive health while on campus. Four in-depth interviews and six focus groups discussions were conducted. The data were analysed using thematic analysis. The findings of the study indicate that female students had numerous concerns related to sexual and reproductive health. In the study many students were anxious about contracting sexually transmitted infections (STIs) such as gonorrhoea, chlamydia and syphilis. Their fear about contracting such STIs was that, they affect woman fertility. Further, some students were very scared of contracting HIV because they believed that their sexual partners would reject them if they were HIV positive. Students were also concerned about HIV related stigma that exists in their home community and on campus.

Female students were not only worried about contracting STIs but also falling pregnant while they are students. Many female students reported using hormonal contraceptives such as birth control pills, injectable contraceptives and implants, to avoid pregnancy. However, some students had misconceptions about female contraceptives. They believed that hormonal contraceptives would affect their future fertility. Many students had a strong desire to have children in the future and linked their identity very strongly to childbearing. Another issue raised by students in the study was that of confidentiality at the campus health facilities, stating that their privacy was not sufficiently protected when accessing sexual and reproductive health services on campus and at their community clinics. Although many university students had some understanding about sexual and reproductive health, stigma and discrimination about accessing sexual health services such as testing as well as negative attitudes towards contraceptives, remain an issue. These can put students at risk of poor sexual and reproductive health. It is very important that young people understand what sexual and reproductive health means since such knowledge guides an individual's own sexual behaviour and practices. Support programmes for sexual and reproductive health which include information and service provision, need to address all underlying issues faced by female university students.

TABLE OF CONTENTS

DECLARATION ii
ACKNOWLEDGEMENTS iii
DEDICATION iv
Abstract v
TABLE OF CONTENTS vi
List of Tables ix
List of acronyms x
CHAPTER ONE: INTRODUCTION 1
1.1. Background 1
1.2. Outline of the thesis 2
CHAPTER TWO: LITERATURE REVIEW 4
2.1. Introduction 4
2.2. An overview of sexual and reproductive health 4
2.3. Safe and satisfying sex life 6
2.3.1. Early sexual debut 7
2.3.2. Transactional sex 8
2.3.3. Multiple sexual partnerships 9
2.3.4. Gender-based and intimate partner violence 10
2.3.6. Poor knowledge of STIs 12
2.4. Ability to reproduce 12
2.5. Freedom to decide when to conceive 14
2.6. Rights to sexual and reproductive health care 16
2.7. Summary 18
CHAPTER THREE: RATIONALE AND AIMS 20
3.1. Rationale for this study 20
3.1.2. Objectives 21
3.1.3. Research questions 21
CHAPTER FOUR: METHODOLOGY 22
4.1. Introduction 22
4.2. Research design 22
4.3. Research setting 22
4.4. Study population 22
4.5. Purposive, convenience and snowball sampling 23
4.6. Recruitment process 24

4.7. Data collection methods 26
4.7.1. Focus groups 26
4.7.2. Individual interviews 28
4.8. Data collection process 28
4.9. Data processing 30
4.10. Data analysis 31
4.10.1. Familiarisation 31
4.10.2. Identifying themes 31
4.10.3. Generating sub-themes 31
4.11. Research rigour 32
4.11.1. Credibility 32
4.11.2 Dependability 32
4.11.3. Transferability 33
4.12. Ethical considerations 33
4.12.1. Social value 33
4.12.2. Fair selection of participants 33
4.12.3. Favourable risk–benefit ratio 34
4.12.4. Informed consent 34
4.12.5. Confidentiality 35
CHAPTER FIVE: RESULTS 36
5. 1. Introduction 36
5.2. Concerns about sexually transmitted infections 37
5.3. Fear of HIV 38
5.4. Fear of pregnancy 42
5.4.1. Contraceptive use 43
5.5. Fear of infertility 46
5.6. Access to sexual and reproductive health services. 52
5.6.1. Barriers to access HIV counseling and testing 55
5.7. Summary 56
CHAPTER SIX: DISCUSSION 58
6.1. Introduction 58
6.2. Having a complete state of physical, mental and social well-being. 58
6.3. Having a satisfying and safe sex 60
6.4. Having the ability to reproduce 62
6.5. Having the freedom to decide when to conceive 64

6.6. Rights to sexual and reproductive healthcare decisions 66
6.6. Summary 67
CHAPTER SEVEN: CONCLUSION 69
7.1. Introduction 69
7.2. Were the research questions addressed? 69
7.3. Findings of the study 69
7.4. Strengths and limitations 70
7.5. Recommendations 71
REEFERENCES 73
Appendix 1: Ethical clearance 87
Appendix 2: Gate keepers' approval letter 88
Appendix 3: Study advert 89
Appendix 4: Request to Risk Management Services to put up posters on campus 90
Appendix 5: Memorandum of understanding 91
Appendix 6: Information sheet 96
Appendix 7: Consent document for focus group and individual interview 99
Appendix 8: Confidentiality pledge 100
Appendix 9: Consent to audio record focus group/interviews 101
Appendix 10: Focus group Auntie Stella cards 102
Appendix 11: Interview questions 108
Appendix 12: Jeffersonian transcription conventions 110
Appendix 13: A letter from Child and Family Centre (CFC) 111
Appendix 14: Turnitin report 112

List of Tables

Table 4.1 Summary of the characteristics of Auntie Stell focus group participants 25

Table 4.2 Characteristics of interveiw participants and the focus groupsin which they participated 26

List of acronyms

AIDS	Acquired immunodeficiency syndrome
GBV	Gender based violence
HEAIDS	Higher Education HIV and AIDS Programme
HIV	Human immunodeficiency virus
HCT	HIV counselling and testing
CHASU	Campus HIV/AIDS support unit
IPV	Intimate partner violence
LGBT	Lesbians, gay, bisexual and transgender
MOU	Memorandum of Understanding
SRH	Sexual and Reproductive Health
STIs	Sexually transmitted infections
SV	Sexual violence
TARSC	Training and Research Rupport Centre
UNPFA	United Nations Population Fund
WHO	World Health Organization

CHAPTER ONE: INTRODUCTION

1.1. Background

Sexual and reproductive health (SRH) is important for the overall health of female university students. The World Health Organization (2006) defines sexual health as:

> a state of physical, emotional, mental and social well-being in relation to sexuality. It is not merely the absence of disease, dysfunction or infirmity. Sexual health requires a positive and respectful approach to sexuality and sexual relationships, as well as the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination and violence. (p.5)

Previous research conducted at the University of KwaZulu-Natal (UKZN) indicates that students become more sexually active when they join university (HEAIDS, 2009; Heeren, Jemmott III, Mandeya, & Tyler, 2012; Mulwo, Tomaselli, & Dalrymple, 2009; Mutinta & Govender, 2012; Mutinta, 2014). Students often come to university without sufficient knowledge about sexual health, and then engage in sexual practices that put them at high risk of unintended pregnancy, contracting the human immunodeficiency virus (HIV), and contracting other sexually transmitted infections (STIs) (Heeren et al.,2012).

The study conducted at UKZN by Mutinta, Govender, Gouw and George (2013) found that students on campus engage in several risky sexual practices such as transactional sexual relationships, early sex debut, age-disparate relationships, having multiple sexual partnerships, and performing sexual activities under the influence of alcohol. These findings were the same as those of the study conducted by Ziki (2015) on undergraduate students at a private tertiary institution in Gauteng. Mulwo et al., (2009) and Mutinta (2014) found that several risky sexual practices among UKZN students are associated with living on campus, lack of parental supervision and pressure from peers who are sexually active. Mulwo et al. (2009) and Mutinta (2014) also reported that violence in relationships, the fear of being rejected by a partner, and the need to prove manhood/womanhood, drive students to engage in risky sexual behaviour. This is an indication that university students, like the general population, are at risk of poor sexual and reproductive health.

Reproductive health goes hand in hand with sexual health and it is defined as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity, in all matters relating to the reproductive system and to its functions and processes" (Glasier, Gülmezoglu, Schmid, Moreno, & Van Look, 2006, p8). Reproductive health includes topics about protected sex with freedom to decide when to conceive and access to correct information about SRH, choices regarding family planning (Glasier, et al., 2006). A study conducted by Coetzee and Ngunyulu (2015) among undergraduate students in Gauteng indicated that university students are vulnerable to a range of reproductive health problems, such as unplanned pregnancy, as a result of non-use of contraceptives. The lack of knowledge about contraceptive use amongst university students results in the non-use of contraceptives (Coetzee & Ngunyulu, 2015). A study conducted by Peltzer and Pengpid (2015) among university students in twenty-two countries found that the non-use of contraceptives was associated with not ever being pregnant previously with the belief that contraceptives will affect future fertility. Another study conducted by Chebitok (2017) among UKZN students reported that the low-use of contraceptives was associated with women having no say in negotiating safe sex with their partners. This shows that female university students are not free to make decisions about their reproductive health.

Further, there is a need to understand female students' concerns and their experiences in relation to sexual and reproductive health. Few studies have focused on university students' concerns about sexual and reproductive health. This study aimed to gain insight about UKZN female students' concerns about, and the management of, sexual and reproductive health. Findings of the research will potentially assist policy-makers to design appropriate sexual health interventions for university students.

1.2. Outline of the thesis

This thesis is comprised of seven chapters. Chapter 1 is the introduction, which consists of the background on sexual and reproductive health. Chapter 2 discusses literature on sexual and reproductive health issues and the concerns of young women, particularly female university students. Chapter 3 presents the rationale for the study and explains the specific aims of the study together with the study research questions. Chapter 4 describes the methodology of the study, while chapter 5 highlights findings which emerged from the analysis of the data. Chapter

6 presents the discussion of the study findings. Chapter 7 covers the conclusion, limitations of the study, and recommendations for future research.

CHAPTER TWO: LITERATURE REVIEW

2.1. Introduction

The framework proposed by the United Nations Population Fund Activities (UNPFA), highlighted different aspects of good sexual and reproductive health. In that framework, good sexual and reproductive health is defined as "a state of complete physical, mental and social well-being in all matters relating to the reproductive system" (UNPFA, 2016, p. 1). It entails that individuals are able to have a pleasurable and safe sex life, they must be fit enough to conceive, and have the freedom to decide if, when, and how many children they want (UNPFA, 2016). The framework also stated that people must have access to correct information and the freedom to choose from a range of contraceptives that are safe, affordable and acceptable (UNPFA, 2016). It emphasised that, "people must be informed and empowered to prevent the risks of sexually transmitted infection (UNPFA, 2016). And when they decide to fall pregnant, women must have the right to use services that will assist them to have a healthy pregnancy (UNPFA, 2016). The UNPFA framework also talks about the right of individuals to make their own choices about their sexual and reproductive health (UNPFA, 2016). In this chapter, the different aspects of good sexual and reproductive health from UNPFA framework are discussed in relation to previous literature on young people's SRH issues. Different searching strategies were used to search for information to write the literature review. I focussed on Google scholar, ResearchGate, EBSCOhost and PubMed. The key words used to search for articles were: Sexual and reproductive health, sexually transmitted infections, risk perception, university students, HEAIDS, infertility, UNPFA, and contraceptives. This chapter will begin by presenting background on sexual and reproductive health.

2.2. An overview of sexual and reproductive health

Sexual and reproductive health can be a sensitive topic. In most cases, young women find it difficult to talk to their parents about sensitive reproductive health issues such as pregnancies, due to fear of being reprimanded (Lesch & Kruger, 2005). This is because conception occurring amongst unmarried young people, particularly girls, is culturally and religiously forbidden in some South African communities (Delius & Glaser, 2005). Openness regarding sexual matters is a taboo among African families, particularly where age and marital status are concerned (Phetla, Busza, Hargreaves, Pronyk, Kim, Morison, Watts & Porter, 2008), leading to a lack of communication. This has been attributed to the fact that overt sex talk between adults and

young people is viewed as inappropriate and impermissible (Phetla et al., 2013). Sometimes this means that adults convey sexual and reproductive health messages using hidden referents (Lesch & Kruger, 2005). Occasionally, sex talk would only occur when young women are married or about to wed, and they are informed about expected roles of motherhood (Harrison, 2008). Parents try to indirectly challenge the issue of sex, by encouraging abstinence before marriage, perhaps as a way to avoid talking about sex (Lesch & Kruger, 2005). However, while abstinence is promoted, this does not deter childbearing outside of marriage (Harrison, 2008). Often young people seek advice on sexual issues from peers, which also leads to misinformation (Ngidi, Moyo, Zulu, Adam, & Krishna, 2016). In some households, where sex talks occur between a parent and her unmarried girl child, the conversation would be instructive and prejudiced (Lesch & Kruger, 2005). Opportunities to talk about reproductive health issues are often missed, especially where parents do not have close relationships with their children.

In other instances, parents do not see a need to educate their children about sex because they assume that their children have the necessary information (Van der Riet, 2009). Some parents also assume that young people are educated on these issues in schools (Fentahun, Assefa, Alemseged & Ambaw, 2012). Although sex education is part of the school curriculum, the content is partial and inconsistently presented (Ngabaza, Shefer & Macleod, 2016). Further, many teachers find it inappropriate to educate learners about sex and they are frightened of encouraging sexual activity, or of parents accusing them of this (Francis, 2010). This can prevent young people from receiving adequate information that will help them to make informed decisions about their reproductive health.

A lack of information about sexual and reproductive health can lead to issues such as HIV/AIDS. In South Africa, an estimated 13.1 % of the population is living with HIV/AIDS (Statistics South Africa, 2018). Young people are mostly affected by the disease. In 2015, the infection rate among the age group of 15-24 years was reported to be 7.1% (Statistics South Africa, 2015). In the same year, HIV prevalence among pregnant women aged 15 –24 years was 21.7% (Statistics South Africa, 2015). Trends in HIV prevalence among persons aged 15–24 years are a good proxy indicator of the course of new infections in the population (Statistics South Africa, 2015). In South Africa, many women and children die due to HIV/AIDS. In 2011, an estimated 70.4% of maternal deaths and 50 % of all deaths in children under 5 years in South Africa were associated with HIV infection (Barron et al., 2018). Women in South

Africa are at higher risk of HIV infection due to vulnerabilities created by unequal cultural, social and economic structures (Jewkes, Sikweyiya, Morrell & Dunkle, 2009).

Students attending tertiary education are also affected by HIV. In 2009, within tertiary institutions in South Africa, HIV prevalence for students was about 3.4% (HEAIDS, 2009). The prevalence of HIV was higher in the Eastern Cape Province (6.4%) and lower in the Western Cape Province (1.1%) (HEAIDS, 2009). Female students were reported as being three times more likely to be HIV infected when compared to their male counterparts (HEAIDS, 2010). The prevalence of HIV was high amongst African students (HEAIDS, 2009). At tertiary level, students between the ages of 15–24 years are at higher risk of HIV infection than any other group (Ngidi, Moyo, Zulu, Adam, & Krishna, 2016). High prevalence of HIV/AIDS infection indicates that young people do not practice safe sex and are engaging in sexual risk behaviours. This indicates that there is a need for sexual health education among young people including university students.

The next section discusses the sexual and reproductive health issues in relation to the UNPFA framework. The first issue to be discussed is safe and satisfying sex life.

2.3. Safe and satisfying sex life

Safe sex refers to the sexual activity in which individuals use safety measures to protect themselves and their sexual partners from sexually transmitted infections and unplanned pregnancy (Chukwu, 2017). Sexual satisfaction, on the other hand is a sense of physical desires among two people, trust and quality in relationships and exploration (McClelland & Fine, 2013). The UNPFA (2016) indicates that, good sexual and reproductive health means that people have safe and satisfying sexual lives. However, literature demonstrates that young people are disproportionately affected by poor sexual and reproductive health such as HIV and unintended pregnancies STIs (HEAIDS, 2010; Hoque, 2012; Lengwe, 2009; Mulwo et al., 2009; Mutinta et al, 2013; Raijmakers & Pretorius, 2006; Roberts et al, 2004). Poor sexual and reproductive health means that young people do not have satisfying sex lives. Previous studies conducted with university students indicate that students continue to engage in unsafe sexual practices that put them at risk of unplanned pregnancies and contracting STIs (Lengwe, 2009; Mulwo et al., 2009; Mutinta et al, 2013). The prevalence of sexual risk behaviour among South African university students in heterosexual relationships is 68% (HEAIDS, 2009). The

university environment facilitates an opportunity for students to engage in risky sexual behaviour. Behaviours that place students at risk are early sexual debut, age-disparate relations, sexual freedom, multiple sexual partnerships, transactional sex, low condom use, substance abuse, gender-based and intimate partner violence and poor knowledge of STIs (HEAIDS, 2010; Hoque, 2012; Lengwe, 2009; Mulwo et al., 2009; Mutinta et al, 2013; Raijmakers & Pretorius, 2006; Roberts et al, 2004). These sexual risks behaviours are discussed in the next section.

2.3.1. Early sexual debut

Studies conducted at universities in South Africa indicate that some students have initiated sex at an early age. A study conducted at the University of Western Cape showed that 53% of students had initiated sexual intercourse at a very young age (7–16 years) (Abels & Blignaut, 2011). Early sexual debut among students was also reported in a study done at the University of Venda by Anyanwu, Tugliand and Goon (2013). The study by Anyanwu et al. (2013) found the age at sexual debut ranged from 11-29 years among University of Venda students (Anyanwu et al., 2013). According to Abels and Blignaut (2011), peer pressure, coercion from a sexual partner and alcohol intoxication are common reasons for the first experience of sexual intercourse. Their study conducted at the University of Western Cape found that the majority of female university students, who had sexual intercourse at a young age, did not give consent at the initiation of their first sexual encounter. Young women with older partners are also more likely than their peers to engage in first sex at an early age and forced not use condoms, particularly at their first sexual encounter (Shisana et al., 2014). Additionally, these women are more likely to engage in transactional sex (Lengwe, 2009). They are also likely to engage in sexual risk behaviours later on in life such as having multiple sexual partners (Lengwe, 2009). This suggests that many young women in South Africa do not have the ability to embrace and enjoy their sexual health and well-being, throughout their lives.

Previous studies done in South Africa indicate that social norm often lead to young women engaging in sexual activities at an earlier age than their male counterparts (Shisana et al., 2014). Social norms set up expectations that intercourse and condom use be initiated by men. Social discourses construct women as passive subjects who are always encouraged to comply with men's sexual desires, regardless of their own (MacPhail & Campbell, 2001). Moreover, many young women feel a need to please their partners and accept the refusal of condom use

(Selikow, Ahmed, Flisher, Mathews, & Mukoma, 2009). A study conducted by MacPhail and Campbell (2001) among young people in the South African township of Khutsong, found that women were not in a position to make rational decisions about using condoms and was expected to be submissive to their male partners. Another study done in Limpopo by Mushwana, Monareng, Richter and Muller (2015), demonstrated that young women would accept unprotected sex to avoid violent reactions from their partners. In a study by Selikow et al. (2009) and Peltzer (2000), insisting on the use of a condom was perceived by young people as a sign of mistrust and infidelity and raised questions around love and commitment in the relationship. For example, if an individual initiates a discussion on condom use, it might suggest that they suspect their partner of being infected with HIV (Macphail & Campbell, 2001; Peltzer, 2000).

2.3.2. Transactional sex

Transactional sex is becoming a normative unsafe sexual practice in many communities in South Africa. A study conducted by Mutinta et al. (2013) among students at the University of KwaZulu-Natal, found that 36% of the students had engaged in transactional sex in the past three months. Many university students are engaging in transactional sex due to economic and social deprivation, and not for sexual pleasure (Mulwo, 2009). Research has found that female students sometimes rely on their sexual prowess as an alternative form of income generation. They use sex in exchange for money, clothing, alcohol, food and school fees (Mulwo, 2009; Murudi, Mashau & Ramathuba, 2019). Normally, transactional sex is associated with age-disparate relations. A study conducted among students at the University of Western Cape found that female students engaged in sexual relationships with 'sugar daddies', or older men, to obtain money for fees and to gain a level of social status amongst their friends (Shefer, Clowes & Vergnani, 2012). Transactional sex is a significant contributor to HIV infection among young women in South Africa. There is growing evidence that transactional sex plays a role in unsafe sex and increases the risk of HIV among university students (Mulwo, 2009; Mutinta & Govender, 2012; Murudi, Mashau & Ramathuba, 2019; Shefer et al., 2012). Osuafor & Ayiga (2016) argues that older men prefer young women with the belief that they are unlikely to be infected with STIs, thus it is safe to have unprotected sex with them. It is also common that young women are pressurised by their older sexual partners not to use condoms (Abels & Blignaut, 2011). Some women might also allow such treatment in return for economic benefits. A study conducted by Mutinta & Govender (2012) among UKZN students revealed that some

students cared more about fulfilling their desires for material gain, than about protecting themselves from the risk of HIV.

2.3.3. Multiple sexual partnerships

In many South African societies, men are allowed, and expected, to have multiple partners while women with multiple sexual partners are negatively stereotyped (Fleming, DiClemente & Barrington, 2016). In a study conducted by Bhana and Anderson (2013), women were expected to have monogamous heterosexual relationships, and were identified as "sluts" if they engaged in multiple sexual relationships. Concurrent sexual relationships are common among tertiary students in South Africa. A study conducted at the Vhembe Technical College found that 61% of students reported that they had multiple sexual partners in the past 12 months (Murudi et al., 2019). In this study, a majority of the male students (61.2%) had multiple partners, compared to female students (54.2%). Similar findings were reported in a study conducted at the University of North West, where concurrent partnerships were more common among male students than female students (Mturi & Gaearwe, 2014).

Engaging in multiple sexual relationships is one of the higher risk sexual behaviours for the spread of STIs, especially if a condom is not used (Abbai et al, 2018; Molefe, 2013). Many studies have found a link between multiple sexual partnerships and inconsistence condom use among university students. Murudi et al. (2019) reported that condom use among students engaging in multiple sexual relationships is relatively low. Such behaviour could be explained by the fact that some university students perceive themselves as invulnerable to STIs. This was evidenced by a study which was conducted at the Vhembe Training College by Mutinta et al. (2012). This study found that the majority of students engaged in unprotected sex because they perceived themselves as not at risk of acquiring HIV. Even those students, who know that they are HIV infected, would continue to not use condoms during sexual intercourse. A study by Mulwo (2009) found that the majority of UKZN students, who engaged in multiple concurrent sexual relationships, were not using condoms consistently, despite the fact that they were infected by HIV. This is alarming considering that South Africa is faced with a high prevalence of HIV.

Many studies conducted in South Africa among university students found a strong association between concurrent sexual partnerships and sexual exploration. In studies conducted at the

University of KwaZulu-Natal, monogamous relationships were perceived by students as old-fashioned and uninteresting (Mutinta & Govender, 2012; Mutinta et al., 2013). These studies revealed that concurrent sexual partnerships among university students were driven by dissatisfaction in relationships and the desire to have sexual experiences with different people (Mutinta & Govender, 2012; Mutinta et al., 2013). In a study by Mulwo (2009), multiple sexual partnerships among UKZN students were facilitated by freedom from parental supervision and social acceptance of open relationships by sexual partners. This suggests that university life, accompanied by freedom of exploration, can jeopardise students' sexual health.

2.3.4. Gender-based and intimate partner violence

Gender-based violence (GBV) is a widespread problem in South Africa. In the country, levels of intimate partner violence (IPV) and non-partner sexual violence (SV) are alarming (Jewkes, Sikweyiya, Morrell & Dunkle, 2009). In South Africa, more women are victims of IPV and SV compared to men. This would impact on young women's general health, but also on their sexual health and mental health. Approximately one in every four women aged 18 - 49 years in South Africa has experienced IPV (Baxter & Abdool Karim, 2016). Some of these women who experience violence in their relationships end up dying. In 2009 alone, more than half of all women murdered were killed by an intimate male partner (Jewkes et al., 2010). In the patriarchal context that manifests in many South African communities, intimate partner violence is reinforced by norms of gender inequality. Such social constructions normalise the controlling and violent behaviour of men towards women (Jewkes et al., 2010; Wood & Jewkes 2006). A study conducted by Fleming et al. (2015) with South African man identified important dimensions of masculine norms, that is, the male-sex drive discourse which is underpinned by assumptions that men are biologically programmed to desire sex often, and wield power over others. A study conducted by Lengwe (2009) at three tertiary institutions in KwaZulu-Natal, indicated that most male students reported that they had an irresistible sexual drive. High-risk sexual behaviours appear to be congruent with the preservation of a masculine identity in South Africa. Studies done in SA reveal that men who embrace masculine norms perpetrate IPV, and are more likely to indulge in harmful practices such as coercive sexual acts, concurrent sexual partnerships, and alcohol abuse (Dunkle et al., 2010; Jewkes, Morell & Christofides, 2009; Jewkes, Sikweyiya, Morrell, & Dunkle, 2011). Similarly, women in societies which accept conventional femininity are likely to experience violence and sexual coercion from their partner (Jewkes et al., 2010; Reddy & Dunne, 2007). A study by Lengwe (2009), found that

constructions of conventional femininity were associated with accepting infidelity and violence from a male sexual partner. Many young women perceive sexual violence as an expression of affection. This was demonstrated in a study done in the rural Eastern Cape province, where some women perceived jealousy and violence from a partner as a symbol of passion (Jewkes & Morrell, 2012). Therefore, issues around IPV need to be addressed since IPV has a negative impact on women's physical and emotional health.

Intimate partner violence limit women's agency to refuse sex or insist on safer sex. A study conducted by Davis (2010) among young heterosexual men in Cape Town, found a strong association between sexual violence and non-condom use. This study found that men who were violent in a relationship were more likely to practise unsafe sex (Davis, 2010). Similar findings were reported in a study done in the Eastern Cape Province, where men who were controlling and violent towards their partners never used, or inconsistently used, condoms (Shai, Jewkes, Dunkle & Nduna, 2012). In this study, men who adopted an extremely 'masculine' identity perceived themselves at lower risk of HIV infection. (Shai et al., 2012). This suggests that male power in relationships is an important risk factor for HIV transmission. This was demonstrated by a study conducted in rural South Africa, which showed that women who experienced IPV were likely to be infected with HIV (Ramalepe & Phaswana-Mafuya, 2008). For women who are already HIV infected, IPV have serious implications for antiretroviral treatment compliance. A study done in South Africa demonstrated that HIV infected women exposed to violence appeared to have lower rates of antiretroviral therapy use and adherence (Ramalepe & Phaswana-Mafuya, 2008). The sexual risk behaviours associated with IPV increase women's vulnerability to poor sexual health.

Gender-based violence in the form of intimate partner violence and non-partner sexual violence is also a profound issue in South African universities. A study done at Rhodes University found the prevalence of rape to be high among female students (De Klerk, Klazinga, & McNeill, 2007). This study also found that women's voices were not being heard in the university (De Klerk et al., 2007). As a result, some female students were not reporting incidences of gender-based violence due to distrust of the university services (De Klerk et al., 2007). In that study, male students blamed women for rape (De Klerk et al., 2007). They believed that women always put themselves in situations that caused them to be victims of rape (De Klerk et al., 2007). Additionally, male students felt that it was the woman's responsibility to protect herself from rape. This kind of blame can leave women feeling inferior and emotionally distressed.

2.3.6. Poor knowledge of STIs

Findings from South African research provide a clear indication why there are still a high number of South Africans who perceive themselves at low risk of HIV infection, and those who have advanced HIV infection without access to antiretroviral drugs. In 2012, only 24.2% of the South African population aged 15-24 years had comprehensive and correct knowledge of HIV/AIDS (Statistics South Africa, 2015). Further, about 76.5% of people aged 15 years and older years in South Africa perceived themselves at low risk of HIV infection, despite the fact that one in ten of this group were already infected without knowing it (Statistics South Africa 2015). Additionally, only 65.5% of the South African population with advanced HIV infection had access to antiretroviral drugs (Statistics South Africa, 2015). Access to health care is still not a reality for many South Africans due to barriers at the individual, interpersonal, community and societal levels. A study conducted in health facilities in eight South African provinces, highlighted several barriers that were associated with poor knowledge about HIV/AIDS, and receiving services for preventing and managing HIV/AIDS (Mohlabane, Tutshana, Peltzer & Mwisongo, 2016). These included long distance and travelling costs, lack of knowledge about HIV services, embarrassment about seeking care, fear of finding out one's HIV status, stigma associated with HIV, poor health staff attitudes, lack of youth-friendly services, concerns about confidentiality in the health systems, and lack of HIV treatment in health facilities (Mohlabane et al., 2016). This study also found that many men perceived seeking health care as a sign of vulnerability, while women had to obtain permission from their spouses before seeking care (Mohlabane et al., 2016).

Another UNPFA aspect of good sexual and reproductive health which is, the ability to reproduce, is highlighted in the next chapter

2.4. Ability to reproduce

The UNPFA (2016) stressed that women should be capable of bearing children and have a choice to decide when to conceive. Inability to conceive children can be a stressful experience, affecting the individuals' mental and social wellbeing (Cousineau & Domar, 2007). In South Africa, motherhood is very important and the construction of motherhood is profoundly shaped by social context and culture (Greil et al., 2011). In an African society, the discourse of motherhood embraces fertility. The cultural construction of motherhood facilitates patriarchal

roles and gender identity, where women are perceived as subordinates and as agents for bearing children (Martin & Barnard, 2013). Expectations related to the role of mothering intensify the social pressure on young women to conform to cultural expectations. In many societies, despite the educational and economic status of a woman, her primary function is that of motherhood (Walker, 1995). Motherhood is highly valued when a woman is married. South African research reveals that motherhood outside of wedlock is stigmatized to the point that many women conform to the pressures of marriage (Baloyi, 2017). Every woman is encouraged to marry and have children in order to express her role of womanhood to the fullest (Walker, 1995). A barren woman is seen as incomplete and worthless in these societies (Baloyi, 2017). One of the consequences of these expectations is the social stigma and psychological effects associated with infertility (Cousineau & Domar, 2007). The social construction of motherhood tends to entrench gender inequality, thus leaving women more vulnerable to its impact.

In South Africa, social constructions of motherhood are in contrast to that of fatherhood. In the patriarchal context that manifests in South African society, fatherhood is a marker of masculinity (Lynch, Brouard & Visser, 2010). In these societies, fatherhood is perceived as a symbol of pride and manhood (Morrell, 2005). As a result, young men seek opportunities to father children (Morrell et al., 2012; Pettifor et al., 2009; Shefer et al., 2012). This often puts pressure on young women to conceive. This is demonstrated in studies conducted in South Africa, where female adolescents were forbidden by their partners to use contraception (Shefer, et al., 2012; Wood & Jewkes, 2006). This can be a dilemma for young women since they are also prohibited from engaging in sexual intercourse or becoming pregnant before marriage. In some South African communities, young boys would receive parental acknowledgement of their need for sexual interaction, while girls would be restrained from exploring their sexuality (Jewkes et al., 2009). Additionally, young men are encouraged to act more masculine by engaging in sex with many sexual partners, or have sex without using a condom (Morrell, Jewkes & Lindegger, 2012). This was evidenced by studies done at the University of KwaZulu-Natal and the Vhembe Training College, where many male students engaged in risky sexual behaviours to prove their manhood (Mutinta & Govender 2012; Murudi et al., 2019). These students engaged in sex with many sexual partners, or had sex without a condom, in order to prove their sexual abilities (Mutinta & Govender 2012; Murudi et al., 2019). Such behaviour is facilitated by an African culture of polygamy (Murudi et al., 2019). Conventionally

masculine behaviour accepted by society potentially disempowers young women and influences them in making inappropriate decisions about their sexual health.

2.5. Freedom to decide when to conceive

The third aspect of good sexual and reproductive health according to UNPFA framework is, freedom to decide when to conceive (UNPFA, 2016). This aspect implies that all women must be free to decide if, when and how many children they want. Early pregnancy and unplanned pregnancy, as indicated by the UNPFA framework seem to interfere with young women's choice to decide when to conceive and how many children they want. Teenage pregnancy is a widespread problem in South Africa (Wood & Jewkes, 1997). In spite of the availability of contraceptives to all women in South Africa, the rates of teenage and unintended pregnancies are still high (Christofides et al., 2014; Hoque and Ghuman, 2012; Mqhayi et al., 2004; Wood & Jewkes, 1997). About 75% of pregnancies in South Africa are unintended, with the highest proportion being among adolescents (Hoque & Ghuman, 2012).

A national study conducted with school going learners in South Africa found that 36.3% of learners reported ever having had sex, and 18% had been pregnant or made someone pregnant (Reddy et al., 2013). In addition, many more female learners had been pregnant compared to the number of male learners who had impregnated someone (Reddy et al., 2013). This study also indicated that 17.5% of sexually active learners did not use any method of contraception, while 8% did not know of any places providing legal abortion services, and 27.0% used traditional healers (Reddy et al., 2013). This shows that many school learners are not always prepared for sexual experience, and that they lack the ability to make informed decisions to protect themselves from unplanned pregnancy.

Research indicates that unintended pregnancies are also common among university students in South Africa. A study done at three tertiary institutions in Durban showed that of the 465 female students, 78 (16.8%) had been pregnant (Roberts et al., 2004). This study indicated that sixty-five (83.3%) of these students had unplanned pregnancies, and 24 (5.2%) had a termination of pregnancy (Roberts et al., 2004). In other words, many students fell pregnant, despite having knowledge about contraceptives. Unintended and teenage pregnancies in South Africa are driven by many factors. For example, intimate partner violence can lead to early or unwanted childbearing. This was evidenced by a study conducted in the Eastern Cape, South

Africa, where adolescent girls who experienced IPV were likely to have unwanted pregnancy (Christofides et al., 2014). In some situations, a teenage pregnancy is a result of a coerced sexual encounter. This was demonstrated in a study done in the Western Cape province, which found that many pregnant teenagers had experienced forced sex (Wood & Jewkes, 1997). Coercion at first sexual intercourse is common among adolescents in South Africa. Such behaviour was reported in studies conducted in Cape Town, where the majority of adolescent girls had forced sex at their first sexual encounter (Jewkes et al., 2001). These findings imply that it is not always a woman's choice to fall pregnant. A better understanding of early or unwanted pregnancy in the society would have important implications when addressing this issue.

Non-accommodating attitudes towards premarital sex serve as a deterrent for young women to seek reproductive health services such as family planning. South African research shows that young people experience stigmatising attitudes from health care workers when it comes to early pregnancy and abortion (Harries, Orner, Gabriel & Mitchell, 2007; Holt et al., 2005; Lince-Deroche, Hargey, Holt & Shochet, 2015). The study by Holt et al. (2012) found that health care workers felt that sex before marriage is a sin and disgraceful. Some research has shown that health care workers sometimes deny young people access to family planning methods (Ehlers, 2003; Kaufman, de Wet & Stadler 2001). Studies conducted among contraceptive users in the Limpopo and Eastern Cape provinces found that health care workers' attitudes prevented adolescents from accessing contraceptives (Chersich et al., 2017; Christofides et al., 2014). In addition, a study conducted by Wood and Jewkes (2006) with adolescents indicated that nurses often try to stigmatise adolescents' sexuality by treating them harshly and reprimanding them in public. Because of such attitudes, young women would rather not access family planning services, delay accessing antenatal care when they are pregnant, and resort to illegal abortion methods (Sensoy et al., 2018). This suggests that young people are still confronted with negative attitudes when it comes to reproductive health issues, and that this might impact on the occurrence of early and unplanned conception amongst women.

On the other hand, young people in South Africa often lack information about where to obtain contraceptives. A study conducted at 26 public clinics situated in urban and rural areas of Cape Town, found that many women did not know if emergency contraceptives were available at the clinic they were attending and assumed they could be obtained from private pharmacies (Myer, Mlobeli, Cooper, Smit & Morroni, 2006). Another study done in Limpopo,

demonstrated that young people were not empowered to use contraceptives and their inadequate knowledge was associated with misconceptions about contraceptive use (Lebese, Maputle, Ramathuba & Khoza, 2013; Ramathuba, Khoza & Netshikweta, 2012). They assumed that contraceptives caused permanent infertility (Lebese et al., 2013), weight gain, headaches and irregular menstruation (Ramathuba et al., 2012). Lack of awareness concerning contraceptive use is also common among South African university students. For instance, a study conducted by Gama (2008) among students at the University of Zululand indicated that most female students were not well educated about the prevention of unplanned pregnancy. Poor knowledge about contraceptives is related to a low utilization of contraception among university students. This was demonstrated in a study undertaken at the Mangosuthu University of Technology, where knowledge about, and practices around, emergency contraceptives were relatively low among female students (Hoque & Ghuman, 2012). Similar findings were reported in a study done amongst students attending the Durban University of Technology (Kistnasamy, Reddy & Jordaan, 2009). That study found that low usage was attributed to limited knowledge about the most effective time frames for taking emergency contraceptives and the side effects of their use (Kistnasamy et al., 2009). These findings are also reported in a study conducted at three tertiary institutions in Durban: the (former) University of Natal, the Durban Institute of Technology and eThekwini College (Springfield and Centec campuses) (Roberts et al., 2004). Not knowing about, or perhaps missing using, family planning methods can have a negative effect on sexual and reproductive health.

2.6. Rights to sexual and reproductive health care

The UNPFA talks about the right of individuals to make their own choices about their sexual and reproductive health. The UNPFA also aims to ensure that individuals have access to sexual and reproductive health care services, and rights such as family planning. A range of sexual and reproductive health services are offered in public and private health facilities in South Africa and all individuals have a right to access them. In most cases the services are provided free of charge by skilled health professionals. Services offered include STI screening, education and treatment, cancer screening and treatment, and voluntary male medical circumcision (VMMC) (National Department of Health, 2015). Other interventions include HIV prevention and treatment services such as HIV counselling and testing, referral to antiretroviral therapy and pre-exposure prophylaxis (PrEP) (National Department of Health, 2015). Among other interventions provided are family planning services such as condoms, and

oral, injectable and implant contraceptives (United Nations, 2015; Dube & Ocholla, 2005). Further, comprehensive antenatal care and obstetric services are offered to all pregnant women (National Department of Health, 2015). In South Africa, sexual and reproductive health services are promoted through various communication institutions. For example, several programmes have been designed to create awareness of HIV, using different strategies ranging from educational messages in magazines, billboards, and radio/television programs, to more creative approaches in media such as film, drama, music, and arts (Dube & Ocholla, 2005; Francis & Hemson, 2006). Some of these programmes include peer education such as the Soul City, Soul Buddyz and love Life programmes, Stepping Stones HIV prevention programme, Old Mutual's I Have Hope AIDS Peer Group Project, and the Society for Family Health's Abasha Phezulu Peer Helper project (Beksinska, Pillay & Smit, 2014).

The Department of Education also promotes awareness on sexual and reproductive health in schools. The focus is on educating South African youth about life skills, abstinence, risk of unsafe sexual behaviors and the impact of violence (Ngabaza, Shefer & Macleod, 2016). Educational lessons in schools are provided through the life orientation curriculum across all grades (Ngabaza et al., 2016). Awareness about SRH is also promoted by institutions of higher learning in South Africa. The institutions offer HIV programmes that include education and training, AIDS Day celebrations, awareness campaigns and support services. In addition, institutional libraries and campus health clinics are important HIV/AIDS information sources (Dube & Ocholla, 2005). Different HIV programmes play a role in addressing sexual and reproductive health issues faced by university students.

Despite the accessibility and the availability of sexual and reproductive health services, many university students have poor knowledge about sexual health (Mulwo, 2009). A study conducted by Anyanwu, Goon and Tugli (2013) among University of Venda students found that students were aware about the consequences of engaging in risky sexual behaviour but lacked knowledge about the mode of transmission of sexually transmitted infections. Lengwe (2009) showed that a gap exists in knowledge of HIV, and this contributed to inappropriate sexual behaviour among students attending the University of KwaZulu-Natal. There seemed to be uncertainty about aspects of STI prevention among university students. For example, a study conducted by Blignaut, Jacobs and Vergnani (2015) at the University of Western Cape found that students continued to engage in risky sexual behaviours, despite knowing about the negative effects of such behaviours. Additionally, a study by Mturi and Gaearwe (2014)

revealed that Mahikeng University students continued to engage in unprotected sex, despite the free supply of condoms on the university campuses. This demonstrated that access to sexual health services does not always reflect good sexual behaviour among students. Sometimes, students would have negative attitudes towards condom use. This was evidenced by a study conducted by Peltzer (2000), where University of the North students believed that sexual intercourse with condoms was unpleasant. In another study conducted at the University of KwaZulu-Natal, students perceived the condoms provided by campus clinics as ineffective, smelly and infectious (Mulwo, 2009). Negative attitudes towards health care and health care services play an important role in the sexual health of students.

Denialism also has a huge impact on university students' sexual health. In a study by Lengwe (2009) among university students, engaging in risky sexual behaviour was associated with feelings of HIV invulnerability, coupled with denial. Denialism affects mental wellbeing and can compromise students' ability to access health care. For example, studies by Peltzer, Nzewi and Mohan (2004), and Peltzer (2005), found that university students in South Africa had negative attitudes towards HIV testing, which resulted in low use of the service. This is a problem since access to health services facilitates education about transmission and management of STIs. Education and awareness about sexual health needs to incorporate messages about reproductive health, since these aspects of health are interlinked.

2.7. Summary

Various legislatives, policies and health programs have been implemented in South Africa to address sexual and reproductive health issues. Despite such progress, many young people in South Africa continue to suffer poor sexual and reproductive health. Young women are more affected than men. In South Africa, many young people are affected by STIs, such as HIV/AIDS, Human papillomavirus, gonorrhoea, chlamydia, syphilis and genital herpes. University students are not an exception. This chapter highlighted the sexual and reproductive health issues and concerns in relation to the UNPFA discussion of good sexual and reproductive health.

The chapter demonstrates that, poor sexual health among university students in South Africa has a huge effect on their mental and social wellbeing. Poor reproductive health among young people in South Africa is related to gender inequality, and social norms that promote

motherhood and manhood. Such social constructs limit women's ability to make informed decisions about their sexual and reproductive capacities, thus resulting in early and unwanted pregnancies. Unplanned pregnancy is common among university students. Therefore, South Africa needs to strength programs aimed at promoting sexual and reproductive health.

The next section discusses the rationale and aims of the study.

CHAPTER THREE: RATIONALE AND AIMS

3.1. Rationale for this study

Sexual and reproductive health plays a fundament role in the well-being of university students. The University of KwaZulu-Natal (UKZN) has health programmes that cater for students' sexual and reproductive health needs. On each of the five UKZN campuses, there is a clinic which provides contraceptives such as free condoms and the morning-after pill (University of KwaZulu-Natal, 2017b). The clinics also provide pregnancy testing and treatment for sexually transmitted infections including anti-retroviral drugs for HIV (University of KwaZulu-Natal, 2017b). The clinics also offer HIV counselling and testing (HCT) for students in need (University of KwaZulu-Natal, 2017). These services are provided by trained health professionals including doctors, nurses and counsellors. On each UKZN campus, there is also a Campus HIV/AIDS Support Unit (CHASU) which consists of HIV counsellors and health promoters. The Campus HIV/AIDS Support Unit works together with the UKZN clinics and provides HIV counselling and testing and promotes positive living and abstinence. The Campus HIV/AIDS Support Unit also advocates for the rights of lesbians, gays, bisexuals and transgender (LGBT) people. Both the UKZN clinics and CHASU have a strict confidentiality policy in place that prevents involuntary disclosure of one's' health status (University of KwaZulu-Natal AIDS Programme, 2015). Despite such availability and access to reproductive healthcare, many students avoid seeking care (HEAIDS, 2010). This means that the sexual and reproductive health of university students is threatened. The onset of tertiary education is a vulnerable stage for young people, particularly female students (Mutinta & Govender, 2012; Selikow et al., 2009). Ziki (2015) highlights that campus social life and related stigma about not being sexually active perpetuates the adoption of unsafe sexual practice among students. This has been documented in several studies done at South African universities, where 'good' behaviours such preserving virginity and monogamous sexual relationships was stigmatised (Mutinta & Govender, 2012; Mulwo, 2009). Such attitudes can easily change one's behaviour. First-year students who often experience immense pressure could succumb to mental illness (Blignaut et al., 2014). This was demonstrated in a study conducted at the University of the Western Cape, where sexually active first year students significantly experienced feelings of depression or suicidal pressure (Blignaut et al., 2014). The beginning of a young person's university years is a good window period for the promotion of interventions aimed at improving sexual health. Several studies have focused on sexual and reproductive health issues of high

school students. It is unfortunate that there are fewer studies on the same issue with university students. Hence, the study aimed to investigate sexual and reproductive health concerns of female students attending the University of KwaZulu-Natal, Pietermaritzburg. In addition, the study aimed to find out how these students manage their sexual and reproductive health while on campus.

3.1.2. Objectives

The specific objectives of the study were to:

1. To investigate students' concerns about sexual and reproductive health
2. To find out how university students manage their sexual and reproductive health on campus

3.1.3. Research questions

This study addressed the following research questions

1.1. What concerns do students have about sexual health?

1.2. What concerns do students have about reproductive health?

1.3. How do students manage their sexual and reproductive health on campus?

1.3.1. Do students utilize campus health services? Why/why not?

1.3.2. How do students engage with campus health services?

1.3.3. What challenges do students face when engaging with campus health services?

1.3.4. What strategies do students use to protect themselves against sexually transmitted diseases including HIV/AIDS?

1.3.5. What strategies do students use to protect themselves against unplanned pregnancy?

The next chapter discusses the methodology used to conduct this study

CHAPTER FOUR: METHODOLOGY

4.1. Introduction

This chapter presents the methodology used to conduct the study. It focuses on the design employed and provides a description of the study sampling techniques, sample size, and data collection and data analysis. In addition, this chapter discusses the credibility, dependability, transferability, and confirmability of the study.

4.2. Research design

This study used a qualitative research design to explore female students' concerns and their management of sexual and reproductive health. Qualitative research allows researchers to have an in-depth understanding of human behaviour and factors that influence such behaviour (Maxwell, 1992). A qualitative research design was appropriate for this study to help the researcher gain a broad insight into female students' experiences and concerns about sexual and reproductive health. The qualitative research methods used in this study allowed female students to describe their concerns about, and experiences of, sexual and reproductive health. This design also provided the researcher with an in-depth understanding of sexual and reproductive health concerns faced by female university students. This information is important in designing interventions that will fit with female students' sexual and reproductive health needs.

4.3. Research setting

This study was conducted at the University of KwaZulu-Natal on the Pietermaritzburg campus, South Africa. The Pietermaritzburg campus is one of the five University of KwaZulu-Natal (UKZN) campuses. Furthermore, the Pietermaritzburg campus has five colleges, namely; Agriculture, Engineering and Science, Law and Management Studies, and Humanities. All colleges offer undergraduate and postgraduate degrees.

4.4. Study population

This study was undertaken with both undergraduate and postgraduate female students attending the University of KwaZulu-Natal, on the Pietermaritzburg campus. Female students who participated in the study were in the age range of 18 to 25 years. The criterion of choosing that

age range was that, students above 18 years would not require consent from their legal guardians which could have taken more time, thus slow the data collection process. Further, this age category is reported in the literature as being at the highest risk of HIV/AIDS (Ngidi et al., 2016). The present study only included female university students because, as according to literature young women are more vulnerable to poor sexual and reproductive health such as STIs and unplanned pregnancies (Bhana & Anderson, 2013; Wood & Jewkes, 2006). In general, the sexual and reproductive health of young women is more at risk because they are often forbidden by their sexual partners to use contraception (Shefer et al., 2012; Wood & Jewkes, 2006). Previous studies indicate that unequal gender power relations put women at risk of poor sexual health (Jewkes et al., 2009; Lengwe, 2009; Wood & Jewkes, 2006).

4.5. Purposive, convenience and snowball sampling

Female students attending the University of KwaZulu-Natal, Pietermaritzburg, were recruited as participants for this study and were accessed by means of purposive and convenience sampling. A purposive sampling technique is based on selecting participants who possess qualities that will enable the researcher to answer the research question (Etikan et al., 2016). Convenience sampling is a technique for recruiting participants who are easily accessible and willing to participate in the study (Terre Blanche, Durrheim & Kelly, 2006). Students were selected because of the qualities they possess and their accessibility, and their proximity to the researcher. This form of sampling does not rely on statistical randomness (Babbie & Mouton, 2005). The selection of participants in the study was based on whether they fit the criteria of interest. Selection was made of being a female student, being between 18 and 25 years old. Initially the researcher intended to conduct ten focus groups and ten individual interviews. However, the number of participants who responded to the recruitment process through the posters (which is described below), was small. Snowball sampling was another sampling method used to select participants. Snowball sampling is when study participants are requested to refer other potential participants to the researcher, who may be willing to participate in the study (Babbie & Mouton, 2005). In this study, snowball sampling occurred through asking the students in the focus group discussions to recruit other female students. This snowball sampling strategy assisted in recruiting students who were not aware of the study. With snowball sampling, the researcher managed to recruit participants for six focus groups and five individual interviews.

The three sampling methods purposive, convenience and snowball were suitable for this study, but could have resulted in selection bias. It is possible that female students who did not fall in the age range of18-25 years also experienced many issues related to sexual and reproductive health. Secondly, female students included in this study were selected based on their accessibility and willingness to participate, and the sample did not necessarily represent the diversity of the student population. For instance, white and coloured students did not take part in the study. On the other hand, it may have happened that female students who responded to the advert were potentially more concerned about their sexual and reproductive health. Female students who did not volunteer for the study may also have had concerns about sexual and reproductive health, but not felt comfortable to share their experiences. Further, there were some limitations with using snowball sampling. The additional participants selected through the snowball sampling approach were friends of the already selected participants. Some of them seemed reluctant to talk about their sexual and reproductive health concerns, possibly because of the presence of their friends. However, despite these limitations the study managed to involve seventeen students in the research process.

4.6. Recruitment process

The researcher requested permission to conduct the study before the recruitment process. Ethical clearance was obtained from the University of KwaZulu-Natal's Humanities and Social Sciences Research Ethics Committee (See appendix 1). In addition, the researcher obtained gatekeeper's approval from the University of KwaZulu-Natal Registrar's office, to recruit students (See appendix 2). Participants were recruited by placing posters (see appendix 3) on the university and residence notice boards and permission to advertise was granted by the Risk Management Services (RMS) (see appendix 4). The posters invited students who were 18 to 25 years to participate in a study about sexual and reproductive health. Interested students sent a WhatsApp message or email to the contact details provided on the recruitment poster. The researcher would then contact students via WhatsApp to invite them to participate in a focus group discussion, and discussed dates and times for the focus groups. All students willing to participate were invited for focus group discussions and individual interviews.

The total number of participants recruited was seventeen and all seventeen participants participated in the focus group discussions. Each focus group consisted of 4-8. However, there was also an overlap for participants who took part in these groups. Table 4.1 indicates the characteristics of participants who took part on the Auntie Stella focus groups. In these

focus groups female students addressed issues related to their sexual and reproductive health through using an interactive reproductive health toolkit. The Auntie Stella toolkit is comprised of a series of questions and answer cards addressing issues that young people may experience.

Table 4.1: Summary of the characteristics of Auntie Stella focus group participants

Focus groups	**Card name**	**Card theme**	**Number of participants**	**Age range**
Group 1	Card 30. My husband is unfaithful	Sex and relationships Speaking out	6	18-21
Group 2	Card 7. I had an STI-am I infertile?	Sexually transmitted infections	7	18-21
Group 3	Card 6. I want to have sex like all my friends.	Growing up Sex and relationships	6	18-21
Group 4	Card 12. I pay for lunch don't I deserve sex?	Sex and relationships Forced sex	10 (2 sessions)	21-24
Group 5	Card 15. I'm worried about cervical cancer	Relationships with family and community	6	21-25
Group 6	Card 21. My periods are irregular.	Growing up, Relationships with family and community	4	18-21

After each focus group discussion, the researcher requested participants who were willing, to participate in the individual interviews. Four participants from the focus groups agreed to take part in the individual interviews. Of the four participants who participated in the interviews, two were recruited from the first focus group, one was recruited from the third focus group, and another was recruited from the last focus group. Table 4.2 shows the characteristics of interview participants and the focus groups they participated in.

Table 4.2**: Characteristics of interview participants and the focus group in which they participated**

Participants	Age range	Level of study	Focus groups participated in
P 1	18-21	Undergraduate	Fg 1; Fg 2; Fg 3; Fg 5
P 3	21-23	Postgraduate	Fg 1; Fg 2; Fg 3; Fg 4; Fg 5; Fg 6
P 5	18-21	Undergraduate	Fg 1
P 8	18-21	Undergraduate	Fg 3; Fg 5; Fg 6

4.7. Data collection methods

Focus groups and individual interview were used to collect data in the study.

4.7.1. Focus groups

A focus group is a small collection of individuals who contribute to open discussions for a research (Gavin, 2008). It is used to gain an in-depth understating of social issues (Gavin, 2008). This data collection method was considered useful because it allowed for the use of the Auntie Stella toolkit. The Auntie Stella toolkit is a set of sexual health material designed to be used with young people in a group setting (Kaim & Ndlovu, 2000). The Auntie Stella material was developed by the Training and Research Support Centre (TARSC) in Zimbabwe, to assist young people to make informed decisions about their sexual and reproductive health (Kaim & Ndlovu, 2000. The Auntie Stella material is freely available on the website: (http://www.unpfa.org/sexual-reproductive-health) and consist of young people's letters to Auntie Stella in the format of the 'agony' aunt pages found in many magazines (Kaim & Ndlovu, 2000) .Although the Auntie Stella material is freely available online, the Training and Research Support Centre had an agreement with the Department of Psychology at Rhodes University and the Discipline of Psychology at the University of KwaZulu-Natal about the use of Auntie Stella material. This agreement serves as a Memorandum of Understanding (MOU) (see appendix 5).

In this study, on-going focus group discussions were guided by some of the Auntie Stella cards which were in the form of letters (Kaim & Ndlovu, 2000). My study focuses on sexual and reproductive health. This topic is related to the Auntie Stella material as it seeks to investigate the concerns and experiences that female students might have about their sexual and reproductive health. For instance, concerns related to reproductive development, social and economic pressures to have sex, infertility, HIV/AIDS and sexually transmitted infections, to name a few. Each letter and reply has activities to help participants talk about their experiences, concerns and work together and get the support they need. For each focus group Auntie Stella cards were used as a tool to prompt discussion. One of the reasons for running Auntie Stella in a series of group discussions was to see if there were changes in female students' responses about their sexual and reproductive health concerns, across their participation in the groups. Six focus groups were conducted during times suitable for students.

The focus group sessions were approximately 40-60 minutes long. The length of each focus group was dependent on participants' engagement with the topic and the issue presented in the Auntie Stella cards. For instance, participants in the discussion of the Auntie Stella card number 15 'I'm worried about cervical cancer", participants did not participate as much as with topics in the other groups.

Conducting the focus groups was challenging. Although, most of the female students were relaxed and shared their ideas in a focus group, they opened up more in the individual interview. Some focus group discussions were not easy to manage. For example, in the discussion about the Auntie Stella card 14 "I may be HIV positive", the students were talking over each other. This made it difficult to hear what was said by students in the recording of the focus group, and it was not possible to transcribe the discussion. There were other challenges encountered during focus groups. For instance, some female students were not able to stay for the full length of the focus group sessions. Some students studying Chemistry would leave before the end of the session to attend a practical. The focus groups were also conducted close to the examination period. Many of the participants were preparing for the exams, and could not stay long in the focus group sessions. Additionally, some of the students did not attend all of the groups, only some of the focus groups.

4.7.2. Individual interviews

Individual interviews were also used in this study. Terre Blanche, Durrheim and Kelly (2006) define an interview as a dialogue between two people where the interviewer asks interviewee questions related to the study topic, and the interviewee respond to those questions. An interview was seen as useful for this study because it allowed female students to share personal information that could have been difficult to discuss in a group setting. In the interviews, students were more open to share their concerns and experiences about sexual and reproductive health. The interview sessions lasted between 15 and 30 minutes. In the beginning of the study, the researcher planned each interview to last 40 minutes to 1 hour, but many students had a busy schedule and were not willing to stay for long.

As mentioned above, the interview participants were recruited from the focus groups. Four students out of seventeen recruited for focus groups agreed to be interviewed, however, one of the students did not show up for the scheduled interview. The female students who participated in the interviews were 18-25 years of age.

4.8. Data collection process

In the process of data collection, I conducted the focus group discussions together with another female post graduate student who used the Auntie Stella material for her own Master's thesis. The individual interviews were only conducted by me. During the focus groups and individual interviews, the researcher began each session by thanking the female students for responding to the study advert. They were then informed about the research aims and what would be expected of them. This was done verbally, but also written on an information sheet (see Appendix 6). The information sheet was given to each student who participated in the focus group discussions and interviews. The information sheet specified the processes which would be used to keep students' identity confidential. The information sheet also contained the researcher's details and those of the supervisor in case they wanted to ask more about the study.

Once all of the participants confirmed that they understood what was written on the information sheet and had no further question about the study, they were asked to sign a consent form (Appendix 7). This was done for focus groups and for the interviews. Signing a consent form meant that they were agreeing to participate in the study. The consent forms given to the participants stated that participation was voluntary and there was no specific risk if they decided to opt out of the study. They were informed about the potential benefits of participating

in the study. They were also informed that the findings of this study could assist in the implementation, and strengthening, of sexual and reproductive health interventions designed for university students.

The participants who participated in the focus group discussions were also given a confidentiality pledge to sign (see Appendix 8). Although, they were informed that there were no specific risks to participating in the study, the confidentiality pledge asked them to maintain the confidentiality of the information that they learned in the focus group discussion. It also reminded them that the researcher cannot guarantee that others in the focus group would respect the confidentiality of group members. They were advised not to share very personal information in the focus group discussions. To ensure confidentiality, they were given pseudonyms to use during focus groups, and they were also used in the interviews. All participants were also asked about, and gave their permission to be recorded during the focus groups and interviews (see Appendix 9). The focus group discussions and individual interviews were held at Psychology building located on campus. This venue was accessible to the researcher and participants.

Once the students had given their consent to participate in the focus groups, the researchers informed them about the Auntie Stella material. Thereafter, students were given the Auntie Stella cards. One student was asked to read the card to the group. Afterwards, the talking and action points on the card were discussed. Six Auntie Stella cards were discussed during the focus groups. The cards were: *My husband is unfaithful* (card 30), *I had an STI- am I infertile (card 7), I want to have sex like all my friends (card 6), I pay for lunch don't I deserve sex (card 12), I'm worried about cervical cancer (card 15) and lastly, my periods are irregular (card 21*) (see appendix 10). These cards were chosen because they were related to the research topic. The selected cards addressed issues about sexual activity, sexually transmitted infections, infertility and intimate relationships, which all impact on sexual and reproductive health. However, for some of the cards, the talking points did not specifically address the questions of my study. In those cases, I added questions to the focus group discussion process. These questions are outlined in appendix 10.

Individual interviews were used to recruit participants from the focus groups with the aim to understand their experiences about sexual and reproductive health. I used a set of open-ended questions to conduct the interviews (Appendix 11). The questions were drawn from the

objectives of the study and designed in relation to the research questions. The interview questions covered topics on sexually transmitted infections, pregnancy, infertility, contraceptive use, and HIV testing. These questions assisted in examining students' concerns and experiences about sexual and reproductive health and their management of SRH while on campus. During the interviews, I tried to rephrase questions and probe students' responses to gain an in-depth understanding about sexual health and reproductive health concerns.

English was used during the focus group discussions and the individual interviews sessions. However, participants would sometimes codeswitch to *isiZulu.* I am fluent in *isiZulu,* and my fellow student who was assisting with the facilitation of the focus groups was also fluent in *isiZulu*. We were thus able to understand and respond to the participants whether they spoke English or *isiZulu*.

All focus group discussions and individual interviews were audio recorded. As mentioned above, the participants provided their consent for this recording. The purpose of the recording was to obtain accurate data for analysis. The participants were informed that audio recordings will be kept for a period of at least five years in the supervisor's office, where they would only be accessed by the supervisor and the researcher and thereafter they would be destroyed.

4.9. Data processing

The recordings obtained from the focus group discussions and individual interviews were transcribed by me and the other Masters student. I transcribed the following Auntie Stella cards: *I had an STI- am I infertile (card 7), I'm worried about cervical cancer (card 15) and lastly, my periods are irregular (card 21*). She transcribed the following Auntie Stella cards: *My husband is unfaithful* (card 30), *I want to have sex like all my friends (card 6), and I pay for lunch don't I deserve sex (card 12).* Jeffersonian transcription conventions were used in the transcribing (see appendix 12). This allowed for the transcription of not only what was said but also how it was said (Jefferson, 2004). I transcribed all of the individual interview recordings.

Data in the study were translated by myself and the other Masters student, who are fluent English and *isiZulu* speakers. The sections of the transcripts which were translated were also back translated. Back translation, according to Chen and Boore (2009), is the act of translating from the target language back to the source language. Back translation assisted in checking the accuracy of the translation of the recordings, because it looks for equivalence of

4.10. Data analysis

Data analysis was conducted after data transcription. For the purpose of analysis, transcripts from the focus groups and interviews were combined into one dataset. Thematic analysis was used for this study. Thematic analysis is used in analysing qualitative data (Braun &Clarke, 2006). This method is widely used in the field of psychology (Braun &Clarke, 2006). The researcher followed these steps when conducting thematic analysis: familiarisation, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the report.

4.10.1. Familiarisation

In this study, analysis began with the researcher becoming familiar with the research data by reading the Auntie Stella material and transcripts as well as listening to the audio recordings. While becoming familiar with the transcripts, the researcher took notes in a journal. It was important for the researcher to re-read the entire data set before starting coding as this helped in shaping ideas and identification of possible patterns. On the other hand, it was important to be familiar with all aspects of the data in order to code correctly.

4.10.2. Identifying themes

The researcher then identified the following themes from the analysis of data: concerns about STIs; fear of HIV; fear of pregnancy; access to sexual and reproductive health services. These themes emerged from participants' responses and were chosen because they best related to the research problem, research objectives and research questions of the study. Further, these themes were discussed in relation to the UNPFA framework of sexual and reproductive health. The aspects of SRH identified in the framework are:(1) a complete state of physical, mental and social well-being, (2) pleasurable and safe sexual experiences, (3) the capability to reproduce, (4) the freedom to decide when to conceive, and, (5) rights to sexual and reproductive health services.

4.10.3. Generating sub-themes

The researcher identified overt patterns and repeating issues in one or more interviews and focus group discussions. The researcher also marked data that addressed the research questions. Thereafter, the researcher generated a "start list" of potential codes from the dataset that had reoccurring patterns. These codes were noted in the journal. The researcher then refined these codes by adding, removing, combining and splitting potential codes. For example, I read the

data until I obtained a clear understanding of it; then I went through the data line-by-line to code as much as possible. I categorized my codes and fitted them into the coding frame. Thereafter, I identified segments of data that shared a common code. The data was then assigned to these codes. After this stage, initial codes were combined into overarching subthemes that accurately depicted the data. I then re-read and refined the themes to ensure that the codes contained within them were properly related and relevant.

I entered the codes into Microsoft excel to structure and organise the codes and themes. Afterwards, I looked at the whole data set and ensured that participants' responses were accurately represented. Reflecting back on the original data and analytical stages was important to reduce the possibility of misinterpreting participants' responses.

4.11. Research rigour

4.11.1. Credibility

In the qualitative paradigm, credibility refers to how trustworthy the results are (Shenton 2004). In the study, I transcribed the participants' response without changing their words. Participants had the right to withdraw from the study at any time and that ensured the trustworthiness and honesty of the information given (Shenton, 2004). The participatory tool used in the focus groups (the Auntie Stella material) assisted in building trust between me and the participants, and among the participants. Trust building made it easy for participants to speak more freely and openly about their experiences and concerns.

4.11.2 Dependability

Dependability in qualitative research refers to the consistency of data and that, if this study was repeated with similar respondents in similar contexts, the findings would yield similar results (Silverman, 2006). In the methodology section I have provided a clear description of the study methods so that if another researcher were to use the same method, they may obtain similar results. Further, all focus groups were conducted in the same manner. For instance, the Auntie Stella material was used in all focus groups and each group was conducted by two researchers, one was facilitating and one was taking note. The recording of all discussions retains the original commentary of the participants; and data was transcribed using Jeffersonian transcription conventions. Any terms or sentences in *isiZulu* were translated into English, and also back translated, to enhance the credibility of the transcribed data.

4.11.3. Transferability

Transferability is the extent to which the findings of the study can be transferred or generalised to similar contexts with other respondents (Silverman, 2000). The findings in this study are not generalizable as the sample size was small. However, Shenton (2004) states that in order to achieve transferability of the study a researcher should provide a detailed description of the methods used in the study to enable readers to decide whether the study can be applied to another similar situation. I have provided detailed descriptions of the research design used for this study, the sampling methods, the data collection methods, and the data analysis approach used to conduct the study. This will allow readers to make an informed judgment about whether the findings of this study can be transferred to similar people in similar contexts.

4.12. Ethical considerations

Wassenaar and Mamotte (2012) highlighted various ethical principles that are essential to a research study. Those principles are: social value, fair selection of participants, favourable risk benefit, informed consent, and confidentiality.

4.12.1. Social value

It is important for the research to specify who will benefit from the study and how they will benefit, either directly or indirectly (Wassennar & Mamotte, 2012). The beneficiaries of this study are its participants and female students from other universities who might have concerns about their sexual and reproductive health. In the study, the direct benefit included support during the focus groups which potentially enhanced students' mental and social wellbeing. Indirect benefits might be that the results of the study could inform the design of health interventions for university students.

4.12.2. Fair selection of participants

Wassenaar and Mamotte (2012) emphasized that fair subject selection should always be ensured before initiating a project. According to this principle, I have also treated all the participants in an ethical manner. All prospective participants who meet the eligibility criteria were given the opportunity to participate in the study. Prospective participants were not excluded simply because they were more susceptible to poor sexual and reproductive health than others. In addition, participants were not randomly selected but were selected through placing advertisements on the university premises.

4.12.3. Favourable risk–benefit ratio

According to Wassenaar and Mamotte (2012), study participants should be informed about all possible harm and benefits. Although, the study topic was a sensitive one, the researcher ensured that the study did not emotionally harm participants. Participants were advised that there were no specific risks of participating in the study but should they experience stress from sharing their problems or hearing about others' stressful experiences, they would be referred to a counselling service. Permission was obtained from the university Child and Family Centre (CFC) to refer participants to them if they needed any counselling as a result of their participation in the study (Appendix 12). However, no participant needed to be referred to CFC as a result of participating in this study. It was also specified on the information sheet (Appendix 6), that if they needed advice on further health management or if the research raised any other social or psychological health issues, they could visit the Campus Clinic or the Student Counselling Services. The details of these services were provided on the information sheet. Participants were also informed that the potential benefits of participating in the study was to hear others talk about their knowledge and management of sexual health and reproductive issues, and be able to learn more from each other.

4.12.4. Informed consent

Informed consent, according to Wassenaar and Mamotte (2012), involves providing potential participants with clear, detailed information about the study, its methods, and its risks and benefits so that they can make an informed, voluntary and rational decision to participate. This was achieved by giving participants an information sheet explaining what the study is about. The information sheet also assured participants that their identity would be protected and it specified the risks and benefits of the study. Participants were requested to sign the consent form, should they agree to volunteer in the study. Participants were also informed of their right to choose to participate or withdraw from the study without giving any reason to the researcher. As mentioned above participants were also requested to give consent to audio record focus groups and interviews. Participants were compensated for their time and they were informed in the beginning of the focus group that they will be given a R30 voucher to be used at the UKZN campus cafeteria. Participants were given this voucher after participating in every two focus group discussions, so that it could not interfere with their participation. This voucher was not a payment but a form of compensation for the time they had given to the study.

4.12.5. Confidentiality

In this research, the identities of the participants were protected and no names were recorded anywhere throughout the transcription process or during the writing up of the thesis. Throughout the study pseudonyms were used furthermore, students were informed that data will be kept in the supervisor's office for a period of five years and after that it will be destroyed.

The above chapter presented the methodology and design of the study, and discussed the research process used in this research study. The next chapter will present the results of the study

CHAPTER FIVE: RESULTS

5. 1. Introduction

The study aimed to investigate sexual and reproductive health concerns of female students attending the University of KwaZulu-Natal on the Pietermaritzburg campus. Further, the study aimed to find out how female students manage their sexual and reproductive health while on campus. The study used the Auntie Stella material in group discussions to assess the students' general concerns about sexual and reproductive health. After the Auntie Stella group discussions, individual interviews were carried out with four female students. These students were recruited from the focus groups. The aim of using interviews was to understand participants' personal concerns and experiences of sexual and reproductive health and how they manage their sexual and reproductive health while on campus.

The following themes were identified through the use of thematic analysis: concerns about STIs, fear of HIV, fear of pregnancy, fear of infertility, access to sexual and reproductive health services. These themes are presented in relation to the different aspects of sexual and reproductive health proposed by the UNPFA framework. Hence, this section presents how participants' experiences, concerns and views are related to this framework proposed by the UNPFA.

In the presentation of the data, the researcher will illustrate the themes with extracts from the transcripts. In these extracts the letter 'P' stands for participant. Participants' names were coded with a number for an example P1, P2, P3 and so forth. Additionally, the letter 'R' in these extracts represents the name of the researcher. There were two researchers and their names were coded as R1 and R2. The code 'R1' was used to refer to myself while 'R2' was the other Masters student who also used the Auntie Stella material for her thesis. The letter, 'I' in the extracts for individual interviews stands for me, the interviewer. The extracts also contain transcription conventions used in the process of transcribing the audio recordings. The Jeffersonian transcription conventions were used, and these are contained in appendix 12. Three dots in the extracts (…) indicate lines that have been left out in the extract. The numbering down the left hand side of the extract indicates the line numbers in the full extract.

5.2. Concerns about sexually transmitted infections

Many participants were worried about contracting sexually transmitted infections such as gonorrhoea, chlamydia and syphilis. These STIs seem to threaten participants' state of mental wellbeing because they were very anxious and stressed about contracting them. They also believed that such STIs cause infertility, especially if left untreated.

In the focus group discussion about the Auntie Stella card number 7 "I had an STI, am I infertile?", participants were asked how they would feel if they found out that they had contracted any kind of sexually transmitted infection. Extract 1 illustrates the responses of some participants in the focus group.

Extract 1:

20. P3: very scared cause if STIs like gonorrhoea and syphilis are not treated for a long time,
21. they can cause infertility
22. P2: (uhm)true but it depends on what kind of STI that a person has, I think so because,
23. if you have maybe gonorrhoea or syphilis (.) okay HIV is also an STI right? So, if you
24. have HIV, you still become fertile (.) you still are fertile but maybe if you have (uhm)
25. some other types of STIs like the syphilis (.) or whatever, the gonorrhoea, and the
26. cauliflower, you can't we all know the other kinds of STIs, on my perspective

Extract 1 indicates that P3 was very concerned about catching STIs such as gonorrhoea and syphilis because she believed that if these STIs are left untreated they '*can cause infertility'* (line 20). P2 supported P3 but she used the words '*it depends on what kind of STI'* to show that she did not view all STIs as causing infertility (line 21). She believed that HIV could not cause infertility (line 23-24). However, she seemed more concerned about getting gonorrhoea and syphilis than having HIV. She believed that gonorrhoea or syphilis could cause infertility when a person has had them for a 'long period of time' (line 25-26). Participants seemed to be concerned about not being fertile. Their fear of infertility, suggests that they planned to have children in the future and were afraid that gonorrhoea and syphilis could jeopardise their chances. This extract indicates that participants' concerns about gonorrhoea and syphilis were based on how these STIs would affect their fertility and not on how infectious they are, or how they are harmful to sexual and physical health in general.

STIs such as gonorrhoea also seemed to threaten the physical and social wellbeing of participants because they affect their ability to engage in relationships. In the individual

interview with P1 (a female student aged between 18-21) she seemed to be anxious about STIs such as gonorrhoea. She stated that a person with chlamydia and gonorrhoea cannot have sexual intercourse *'can't go do that'* because these STIs have visible symptoms that are not sexually appealing (line 21-23), hence the sexual partner '*might dump you* (extract 2):

Extract 2:

21. P1: and now if you have gonorrhoea, cauliflower or the ones that gives you rashes you
22. can't go do that because like it doesn't look appetizing down there (laughs) you know, it
23. doesn't look right down there because you just had this rash there or you got flaky things
24. or whatever so yah, as I said with the ones that just shows to your partner and stuff so he
25. might dump you

While many students were concerned about contracting STIs, only one of the students reported a history of STIs. In an individual interview with a participant aged between 21-25 years, she stated that she had once suffered from bladder infection and experienced symptoms of STIs(extract 3):

Extract 3

20. P6: (uhm) I'm not sure if bladder infection is a sexually transmitted but you get it
21. when you had sex (.)so I've once experienced bladder infection yah and all I felt was
22. painful urine, abdominal pain like smelling discharge, itchy rash like but
23. if you have sex all the time then you might experience bladder infection

In the above extract, P6 was not absolutely sure if a bladder infection was a sexually transmitted infection. She said that she had a painful feeling during urination, and '*abdominal pain*' and a '*smelling discharge*' (line 21). She believed that bladder infection is caused by frequent sexual intercourse (line 21-22). This extract indicates that sexually transmitted infections had an effect on the physical wellbeing of a student.

In the study there were participants who were concerned about contracting HIV and this is discussed in next section.

5.3. Fear of HIV

Some participants in the study were very concerned about contracting HIV. HIV threatened their mental wellbeing because they were very anxious and distressed about contracting it. HIV also threatened their relationships, and therefore their social wellbeing. For instance, two

participants in the individual interviews were very concerned that having HIV would lead to rejection by a sexual partner after disclosure.

P8, a female student aged between 21-25 years, was asked about how she would feel if she found out that she had contracted HIV and this is how she responded (extract 4):

Extract 4:

56. P8: if I had HIV I would cry I would cry so much because like I know that if I
57. find somebody and I tell them, you know what I have HIV, they would be like ok, and the
58 first thing they'll be they will assume is that you had sex with everybody and leave

P8 said that she would be very upset if finds that she had contracted HIV '*I would cry so much'* (line 56). These words show that she would be devastated. Her distress seems to be linked to having to inform her sexual partner (line 57). She said '*they will assume that you had sex with everybody and leave'* (lines 58). Her comment indicates that there is stigma related to having HIV (line 58).

Another participant in the interviews was afraid of contracting HIV because she would have to disclose to her partner and experience rejection (extract 5):

Extract 5:

48. P1: I think anybody will be afraid of STIs such as HIV, it's something we don't
49. talk about, if you have like, let's say you had a boyfriend, right? And then you get
50. HIV and then you have that partner and you tell that partner and he would not want to be
51. intimate with you, he would be like, he would leave.

P1, a female student aged between 18-21 believed that everyone is afraid of contracting STIs such as HIV (line 48). She said they choose not to talk about HIV (line 48-49). P1's comment indicates that there is stigma associated with having HIV and that is why people choose not to talk about it. She was concerned that her sexual partner would refuse to have sex with her when he finds out that she had HIV and reject her. It is possible that the sexual partner would refuse intimacy as a result of stigma. A partner refusing intimacy could also be a result of how STI's are perceived by him or society.

The above extracts indicate that participants' dominant concerns about HIV were not about it affecting their health (their physical or sexual health). Rather they focussed on how HIV would

lead to rejection by a sexual partner. This also seemed to have a link to the way in which they disclosed their HIV status.

Although P1 and P8 seemed to be extremely concerned about HIV, there were a few participants in the study who seemed not to be concerned about HIV. These participants had a positive attitude towards HIV (extract 6):

Extract 6:

294. P2: I think uhm what kills you if you have HIV is not the fact that that you are not
295. taking your medication, I think its negative attitude about HIV like what you think has
296. you accepted the situation or you in denial cause you can take your medication
297.but then if you don't believe that you have the disease and this is, you even change your
298. lifestyle and that's gonna kill you like I know people who live a long time with it
299. P4: I do believe that medication can only help you if you have accepted your diagnosis
300. so people need to accept their diagnosis
301. P5: yes, I think it's like any other condition like when it comes to high blood pressure
(...)
306. you have to just let go, take your meds and yah it is a lifestyle change you need to
307. accept that ok some things I can't do but that's life

In the above extract, P2 believed that '*what kills'* people with HIV are their 'negative attitudes' towards the disease and *'denial'* (line 294-295). She stated that a person infected with HIV should accept their HIV status and take ARVs (line 296). She also stated that people can take ARVs and live longer with HIV (line 298). She knew '*people who live a long time with it'.* She said that if you have HIV, you even '*change your lifestyle'* (line 297). Her comments indicate that she was aware that HIV is manageable, and a person with the disease needs to live a healthy life. P4 believed that, '*medication'* would only works if a person has 'accepted' his or her HIV status, so people need *to accept their diagnosis* (line 300). P5 supported P2 and P4 and she believed that HIV is a '*condition 'like any other illness'* such as *'high blood pressure'* (line 301). She highlighted that a person with HIV should *'let go'* and take *'medication'* (line 306). She was aware that stress in an HIV infected person could affect his or her mental health. She believed that having HIV is a '*lifestyle change'* and people with HIV *'need to accept'* their condition (line 306-307). This extract shows that, participants were informed about HIV and that people infected with HIV can live long if they take medication and accept their HIV status.

In contrast, one of the participants in the same focus group had a negative attitude towards HIV. This participant did not believe that people can live longer with HIV (extract 7):

Extract 7:

249. P7: uhm for me it will most definitely a concern coz I just feel that to be honest I do feel

250. that the moment they tell you that you HIV positive you know you just feel you are in the

251 verge of dying you know you gonna die instantly.

In the above extract, P7 associated an HIV diagnosis with death. She was concerned about contracting HIV because she believed that being HIV positive means that a person will die, will be on the '*verge of dying*' or '*die instantly*' (line 250-251). This extract suggests that the participant was not well informed about HIV/AIDS.

HIV seemed to threaten the social wellbeing of many participants because they were worried about the stigma related to HIV. They believed that people with HIV are not accepted in the society.

5.3.1. Stigma about HIV

In the focus group discussion about Auntie Stella card number 15 'I'm worried about cervical cancer', participants were asked to mention a chronic disease that they thought is the most feared. Although the card focussed on cancer, the concern for these students was not about cancer. In the discussion P4 and P7 reported that HIV is the most feared disease because there is a stigma attached to HIV (extract 8):

Extract 8:

532. P4: we more concern about getting HIV but then with getting HIV in my community, you

533. know, there's a certain stigma that comes with it

(...)

536. P4: still even to this day and age you got HIV what were you doing incorrectly you

537. could have got it by just cutting

538. P7: [or using the same needle with someone but still there's gonna be that stigma in

539. our community on how you got it

(...)

540. P4: yah you could have just got it by helping someone who was in an accident and you

541. had an open sore but then there's also (.) but then immediately you gonna have that

542. stigma towards you that you have HIV, you were promiscuous

In the above extract P4 stated that they are more concerned about getting HIV (line 531). She was worried about getting HIV because of the '*certain stigma*' related to having the disease in the community (line 532-533). She stated that if you have HIV, the society would question your behaviour, '*what were you doing incorrectly*'? (line 536). She also reported that HIV is associated with promiscuity (line 542). She stated that HIV can be transmitted through blood contact with someone who had an open sore. P7 supported P4 by stating that HIV can be transmitted through sharing the *'same needle with someone'* infected with HIV (line 538). This extract shows that participants were knowledgeable about modes of HIV transmission. They seemed to be concerned that HIV transmission was mostly linked to sexual behaviour, and this created a stigmatisation. The stigma about HIV may have an effect on the way female students access HIV services on campus such as HIV testing.

In the study I also explored female students' concerns about their reproductive health. When it comes to reproductive health, female students in this study were worried about being pregnant while pursuing their studies. The next section presents the third theme which is fear of pregnancy. This theme is related to the second aspect of sexual and reproductive health, which is the concept of capability to reproduce' in the UNPFA framework.

5.4. Fear of pregnancy

In the focus group discussion about the Auntie Stella card number 21 "My periods are irregular", participants were asked about the concerns they had about their reproductive health. One of the participants was extremely concerned about falling pregnant while she is still a student (extract 9):

Extract 9:

22. P9: getting pregnant and the other thing ey men they don't really use protection and if I
23. miss a period like I always think about pregnancy if I missed my period thinking ey I will
24. be thrown out of the house and take care of the child so this is a big concern to I don't want
25. to get pregnant anytime soonest

In the above extract, P9 seemed to be concerned about pregnancy and she said that men dislike condoms, '*they don't really use protection'* (line 22). She stated that if she '*missed'* her 'periods', she always worries about pregnancy (line 22-23). She stated that she is not intending to '*get pregnant anytime soon*' (line 24). She said that her family will chase her away and she will be forced to take care of the child. It was evident in the extract, that although the participant

was concerned about pregnancy while being a student, she seemed to be constrained about using a condom. This is indicated by her words '*ey men, they don't really use protection'* (line 22).

P8, a female students aged between 18-21 years, was also concerned about falling pregnant while she is still a student on campus When the researcher asked her, what concerns she had about her reproductive health, this how she responded (extract 10):

Extract 10:

15. P8: as a young person I worry about getting pregnant, especially because I'm in campus,
16. eh I don't think that a child would be helpful while I'm coming to campus so it would
17. make it feel as if, I have too much responsibility and I wouldn't be able to focus on my
18. studies more or drop out to take care of my child and besides there is a financial risk of
19. having a child

In the above extract P8 stated that having a child while on campus would come with many responsibilities and she would not be able to focus on her studies (line 16-18). She also stated that a child would make her '*drop out*' at the university. She also stated that there is a 'financial risk' of having a child.

It is evident in the above extracts that pregnancy affects the mental wellbeing of participants because they were very anxious about becoming while pursuing their studies. It was also evident that pregnancy affects the social wellbeing of participants because students were worried that it would affect the relationship with their parents, and they would be thrown out of their homes. For this reason, they were using hormonal contraceptives to prevent pregnancy whilst they were still students. Their actions around the prevention of pregnancy were related to them being students. This is discussed in the next section.

5.4.1. Contraceptive use

In the individual interviews participants were asked how they protect themselves against sexually transmitted infections and unplanned pregnancies. Most participants reported that they use birth control pills to prevent pregnancy, while a few reported using the contraceptive injection, or the implant. No participant reported using condoms or abstaining.

In an individual interview with P1, a female student aged between 18-21 years, she was asked about how she protects herself from unplanned pregnancy and STIs and this is how she responded (extract 11):

Extract 11:

244. P1: I have used contraceptives, since my first (eh) encounter with sex, right?
245. I make sure I go on the pill, you know? because, I'm on campus, I can't afford to get
246. pregnant, you know? I don't wanna be thrown out of the house (laughs), because my
247. mum would be like, (oh), you pregnant and this and that and I don't want you in my
248. house and so, that one of the reasons I have to be careful about being pregnant
(...)
250. P1: so yah I go to campus clinic to get my pill

In the above extract, P1 stated that she had been using oral contraceptive '*birth control pills*' since she started being sexually active. Her motive for using contraceptives was driven by the fear of becoming pregnant while being a student (line 245-246). She was afraid of being '*thrown out of the house'* by her mother if she became pregnant during her studies (line 246-248). She received her contraceptives from the '*campus clinic*' (line 250).

Another participant who reported using birth control pills was P8 (a female student aged between 18-21). She stated that her main concern was not to fall pregnant because she did not want to 'drop-out' at the university and take care of the child (line 22) (extract 12):

Extract 12:

21. P8: I'm on birth control pills and I need to use safety precautions properly eh the main
22. concern is I don't wanna get pregnant and then leave or drop-out on campus because I'm
23. gonna have a baby to take care of emotionally and like physically so it's a responsibility

P8 stated that having a child is a huge responsibility involving caring for them both physically and emotionally.

Although participants were using oral contraceptives to prevent pregnancy, they seemed to have misconceptions about contraceptive use. This is evident in the interview with P1 (extract 13):

Extract 13:

279. P1: I am scared because everybody is saying bad things about contraceptives that they

280. do this, no they cause infertility, it might damage your ovaries and like that I won't be
281.able to have children in future, you know, that was one of the things that scared me so like I
282. stopped

P1 stated she stopped (line 282) using the pill because '*everybody'* criticised contraceptives, referring to their consequences, for example, for causing harm to the body such as they 'cause infertility' (line 280). She feared that contraceptives would affect her ability to become a mother in the future (line 280-281). It is evident in the above extracts that, myths and misinformation have created fear which then prevented some young women from continuing to use to use birth control pills.

In the interviews, only one participant, P4 (a female participant aged between 18-21 years) stated that she had an *'implant'* contraceptive inserted, *'two years* ago' (line 55) from the campus clinic (line 55) (extract 14):

Extract 14:

55. P5: I've got an implant two years ago
56. I: mm so where did you go for implant
57. P5: here at the campus clinic

The researcher then asked P5 what the implant was like, and she expressed discomfort (extract 15):

Extract 15:

58 I: so how does it treat you?
59. P5: (uhm) implant is annoying
(…)
62. P5: I get like cravings and period cramps that come annoying.

The above extract indicates that P5 was not comfortable about using an implant. She reported that an implant giving her '*cravings and period cramps'* (line 62). It is evident in the above extracts that participants were not empowered with the knowledge about how to use hormonal contraceptives to prevent pregnancy. In their discussion of the use of contraceptives they mostly raised concerns and difficulties.

P3 (a female student aged between 21-23) was the only participant who seemed to be comfortable and confident about using contraceptives. P3 reported using the two monthly injectable contraceptive which she got from the campus clinic (extract 16):

Extract 16:

62. P3**:** *I've been using two months' injection from campus clinic just to be on the safe side*

(…)

73. I: (mmh) so how does two months injection one treat you

74. P 3: I'm not experiencing anything bad about it

75. I: ok so it just like treat you like=

76. P 3: =yah yah It's normal to me like no side effects I even forget that I'm on contraceptive

In the above extract P3 used the words '*to be on the safe side'* to indicate that she wanted to be safe about preventing pregnancy (line 62). When asked about her experience of this form contraception, she stated that it was normal for her and she had not experienced any side effects. It is evident female students can access many different forms of contraception, and other sexual and reproductive health services, but sometimes lack knowledge about these forms of contraception. The fact that they can use the contraceptives also suggests that there is relative freedom amongst students to decide when to conceive. For example, they can have sex without always conceiving, but misconceptions and misinformation about contraceptives limits and constrain them.

Although, participants wanted to control pregnancy while studying, they were also concerned about being able to conceive in the future.

5.5. Fear of infertility

The issue of infertility is related to the third aspect of sexual and reproductive health in the UNPFA framework which is, the ability to reproduce. Many participants expressed the desire to have children in the future. They reported they were not planning to fall pregnant while they were still students but would be concerned if they found that they were infertile.

In the focus group discussion about the Auntie Stella card number 21 'My periods are irregular', the researcher asked participants how they would feel if they found out that they cannot get pregnant, two participants in the focus group responded (extract 17):

Extract 17:

156. P2: well in my age I'm 20 and I don't have any plans of having child or children

157. anytime but if I were told that I'm infertile I will be really depressed cause I like children

158. yes, I'm not planning of having one now but that would be like really hit me cause I want

161. children, I want to have children so being infertile it is a worry for me (.) I'm not really

162. worried now but then it something that I can (.) something that is on my mind if I can

(...)

164. P7: (uhm) being infertile for me it's not a worry currently but then later on it will

165. be, I do wanna be a mother and eish (laughs) being infertile of course it has to stress

167. everyone in our age and age group and at a later stage we all want to kids and
168. everything

In the above extract, P2 stated that she was not planning to have a child at 20 years of age (line 156), but she did intend to have children in the future (line 158-161). She was concerned about infertility (line 157 and line 161). She used the words '*depressed*' (line 157) and '*worry*' (line 161) to show how concerned she was about infertility. P7 also stated that having children is not her current plan but she would love to be a mother in the future (line 164-165). She assumed that all women would be concerned about infertility by using the words 'e*veryone*', and '*we all want*'.

Another participant expressed the desire to have children in the future. When the researcher asked how she would feel if found that she is infertile, she responded (extract 18):

Extract 18:

382. P1: you know, I think most women would be concerned about infertility and I mean like,
383. as a woman, it's our instincts, to become a mother, it's our instincts

P1 believed that '*most women'* would be concerned about infertility (line 382-383). She used a biological argument by saying '*as women, it's our instincts*', suggesting that is natural and expected to want to have children (line 383). Her used of the words '*it's our instincts',* refers to all women, including herself, suggesting that she was also concerned about fertility.

Another participant, P4 (a female student aged between 18-21), after the focus discussion about the Auntie Stella card number 21 'My periods are irregular', said that she was concerned about infertility. When I asked her during the interview about what concerns she had about her reproductive health, she responded (extract 19):

Extract 19

33. P4: [being infertile, that's my main concern (.) as a woman, you scared that what if I can't
34. have children because basically you've been conditioned that that's your woman purpose,
35. as a woman that the capacity that you have that (.) so that's my concern, uhm

In the above extract, P4 stated that her main concern was '*being infertile*' (line 33). Her desire for children was associated with the expectations of society, she argued that '*you've been conditioned*' that being a woman means having children (line 43).

It seems as if P4 would be devastated if she could not conceive. When I researcher asked her how she would feel if she cannot have children, this is how she responded (extract 20):

Extract 20:

48. P4: oh no what if I can't have kids you know because I've seen that, throughout it literally
49. breaks you because you feel worthless the same way a man would feel worthless if they could
50. no longer have sex because they think that it's their purpose (eh) I feel like if I can't have
51. children I think that should be the end of me I shouldn't feel like that because there's
52.more it is more to myself but then I want to have kids I want to have those little blondies
53.((laughs)) yeah

P4 was concerned about her ability to become pregnant, '*what if I can't have children' (line 33).* She described a woman's purpose in life as being able to have children and a man's purpose as being able to '*have sex*' (line 49-50). She believed that sex defines a man while women are defined by having children. She has been '*conditioned*' to believe that women should value childbearing, while men should value sex. She believed that being unable to have children would 'break' her (line 48-49). She also believed that if she could not bear children, she would '*feel worthless'* and defeated in life '*should be the end of me'* (line 48-51). This extract shows that her self-worth and self-esteem is dependent on her ability to conceive.

In the focus group discussion about Auntie Stella card number 15 'I'm worried about cervical cancer', two other participants also desired to have children in the future and stated that their success is dependent on them having children in the future (extract 21):

Extract 21:

270. P12: Something you wake up for in the morning if you don't have kids you don't
271. have anything that is going on in your life why am I waking up, what am I am working
272. for, it has to be kids
280. P2: yes, uhm I say children are part of you they are yooh I don't know hh, you share
281. something with them you love them so, I don't know how to explain this but they give
282. you purpose that no matter what, I'm studying for my kids, I'm working for my kids.

P12 believed that children are everything and you do not have '*anything*' going on in your life if you do not have children (line 270-271). She used the words '*something you wake up for'* to show thatchildren are a motivation to engage with life (line 270). She said that children are an inspiration to go to work (line 271-272). P2's view is the same as that of P12, and she associated the identity of a woman with having children. She believed that as a woman, your '*children are part of you'* (line 280), and *'they give you purpose'* (line 281-282). She stated that her desire to have children motivates her in life to study and work '*I'm studying for my kids, 'I'm working for my kids'* (line 282). She wants to share her affection for them '*you share something with them', 'you love them' (line 280-28)).* What is interesting about these comments is that participants are certain and absolute about their desire to have children.

In the same focus group discussion, another participant also had a strong desire to have children in the future. Her motivation to study is driven by her desire to have children (extract 22):

Extract 22:

114.P2: haibo no what am I studying for ((laughter)) I wanna have a family who's gonna be
115. an heir I want to be I wanna own businesses like I wanna be successful I wanna have money
116. I wanna be moneyed who is gonna like enjoy this money besides me ok besides my family
117. like the mothers and the sisters (.) yah like I need an an heir like you see I wanna get
118.married .and yah and you see this femininity like I wanna be feminine (hh) I wanna be like
119. worshiped that ok she's a female she's a full woman

In the above extract, P2 highlighted that she is motivated to study by a desire to have children. She used a question '*what am I studying for?*' to demonstrate how important it is for her to have children (line 114). Her purpose for studying and owning '*businesses'* is to achieve, to *'be successful'*, but specifically for a child, '*an heir*' (line 115). She stated that she wants to have a family and an heir to enjoy her money with (line 114-116). She was concerned about who would inherit her money, '*who's gonna be an heir',* when she passes on (line 114). In order for her to have children, she wants to get married and be 'worshipped' as a complete woman (line 118-119). In this statement she is linking marriage to femininity (line 119).
In the focus group discussion about the Auntie Stella card number 7, 'I had an STI, am I infertile?', participants also raised concerns about the inability to conceive. One of the participants spoke about how infertile woman are seen in the society (extract 23):

Extract 23:

600. P2: Even families and like community if (uhm) you are infertile they don't take you as
601. a person it's like there is something wrong about you you are not a complete woman yes
602. you are not a complete woman especially if you are married even if you are not married
603. (.) there is that thing that you are not taken (eh) as a woman as a complete woman they
604. don't respect you just have that thing so infertility would sort of be a worry.

P2 highlighted that women who are unable to bear children are not respected by their families and the community (line 601), and that if you cannot have children, *'they don't take you as a person'* (line 600-601). She stated that a woman who is unable to procreate is seen as if '*there is something wrong'* about her and she is not perceived as '*a complete woman',* especially when a woman is married (lines 601-602). Her comments indicate that woman's identity and personhood, her 'being a person', is dependent on her being able to produce children. Her fear of infertility could be linked to how she would be stigmatised, or valued, if she was unable to have children. It is evident that many participants believed that a woman can be complete with children and a woman's purpose and identity in society is to have children.
It is interesting in this section that there is such a strong expression of the desire, need and expectation about having children. It also evidenced in the above section that female students do not exist in a vacuum, but in an environment that collectively nurtures their identities, values and practices. Although the study indicated that most female students were dominated by the

expectation to be mothers, very few expressed a different opinion. Few participants argued that they could either adopt, or would prefer not to have children.

P11, a female student aged between 21-25 years seemed not to be concerned about infertility. When the researcher asked her how she would feel if found that she is infertile, she responded (extract 24):

Extract 24:

193. P11: uhm yah so I don't think I'm defined by kids uhm yah I don't really

194. like kids actually (laughs) uhm I still (.) yah I don't like kids

195. (...)

196. R1: now or later? You don't want kids now and later?

197. P11: I just haven't hhh I think I will adopt

In the focus group discussion about the Auntie Stella card number 21 'My periods are irregular', P11 stated that she is not '*defined by kids'* (line 193). She also said that she does not '*like kids'* and she prefers adoption (line 197).

This stance was also explored in the individual interviews, and enabled the participants to discuss the issue more privately. In the interview with P3, a female student aged between 18-21, she was more open about her concerns of reproductive health than she was in the focus group. When the researcher asked her if she would like to have children in the future, she responded (extract 25):

Extract 25:

113. P3: first of all, maybe I'm not sure whether it's temporary but I don't want to
114. have any babies I don't want shame I don't want babies so I've never been concerned
115. about my (.) whether I can produce or not cause I do not want babies yah I'm not sure
116. whether is it temporary or what is it for now or it gonna last forever (.)
...
121. I: mhh so what is the reason about that why is=
122. P3: = I feel like I've encountered a lot of bad things that broke my spirit like my
123. relationships so (uhm) I don't wish it like I don't want to happen to my kids and I feel
124. like the world is too (.) growing up is not a child's play first of all so I feel like the
125. world is too cruel and all that so I don't see it for me to bring someone on this earth coz

126. there is nothing good about this world especially the more we grow up the more we
127. face problems we face depression and all that so I feel like I've experienced a lot at a
128. very young age and my mother doesn't know about it and I don't want my child to sleep
129. ok to not sleep crying the whole night and I don't about it I feel like (.) I don't like I
130. don't wish anyone to be born

In the above extract, P3 seemed to be uncertain about her decision to have children *'I'm not sure whether it's temporary'*. She was not concerned about not being able to have children (line 113-114). She had a strong feeling that she would not change her mind about wanting to be a mother, that her feeling '*gonna last forever'.* Her decision about not wanting children was influenced by personal experiences including relationship issues in the past which had broken her spirit and she did not wish her child to undergo the same experience (line 122-123). She felt that the '*world is too cruel'* and did not want to raise a child in a world where she will experience '*problems'* and '*depression*' (line 124-127). She highlighted that she experienced '*alot at a very young age*' without her mother being aware, and she did not want her child to have the same experience (line 128-129). What is interesting about this extract is that P3 spoke about her own childhood experiences as a reason for her not wanting children.

It is evident in the above extract that P11 and P3 did not see having children as defining them as women. These participants were different from other participants who believed that a woman is incomplete without children.

The previous sections discussed female students' concerns and experiences about sexual and reproductive health. The next section discusses how female students access sexual and reproductive health services on campus.

5.6. Access to sexual and reproductive health services.

This issue is related to the fourth aspect of sexual and reproductive health in the UNPFA framework – rights to sexual and reproductive healthcare. Participants were asked how they manage their sexual and reproductive health while on campus and the strategies they use to protect themselves against STIs and unplanned pregnancy. This question was only addressed in the individual interviews as this was a more personal and confidential matter. All participants in the interviews reported that they used the campus clinic to access sexual and reproductive health services such as HIV testing and hormonal contraceptives.

In extract 26, P1, a female student aged between 18-21 stated that used the campus clinic to get birth control pills and test for HIV (line 356-357) (extract 26):

Extract 26:

353. I: (mh), so how do you manage your sexual and reproductive health? do You
354. use campus health services or you just go outside campus?
(…)
356. P1: that's where I went to get my birth control pill (mh) at this campus clinic and
357. and I also went there to test for HIV

Although the services were available for students, it was not easy to access them because of stigma and social issues. although P1 reported using campus clinic to access SRH services, she was anxious about using the clinic (extract 27):

Extract 27:

359. P1: the challenge I had with campus clinic is that I might be seen by someone I know if I
360. enter that door cause they know it's for HIV issues so they will think I have it

P1 was concerned about being seen by 'someone' she knows when accessing HIV services at the campus clinic (line 359-360). Although she did not reveal her HIV status, she seemed to have an experience of using the campus clinic for HIV services. She was concerned that other students are aware of which consultation rooms are for HIV services in the clinic and '*they know it's for HIV issues*' (line 360). She was also concerned that if you '*enter that door'* meaning the door of a particular consultation room, other students would know what services you were seeking, and '*they will think*' you have HIV (line 46-47). The fear of exposure, related to the stigmatization of HIV, shows that the sexual and reproductive health needs of students might not always be met.

Another participant, P8 seemed to be referring to similar issues with using the campus clinic that is access to sexual and reproductive health services. When the researcher asked what challenges she faced with using the campus clinic to access sexual and reproductive health services, she responded (extract 28):

Extract 28:

65. P8: one of the challenge because people look at you and think, why you going to a
66. certain place and like, there are certain rooms and stuff so, if a girl has been in that

67. room before she knows why she's been there and then she's gonna look at you and say, ok
68. I know why she's taken to that room (laughs), yah.
69. R1: so does it bother you, like?
70. P8: No, it doesn't bother me but how can I put this (hh) (.) I get scared sometimes to walk
71. in there, maybe I'll see somebody who I know, who's in there as well and they might ask
72. me oh what are doing here, and then I'm gonna be in a position when I can't tell them
73. like, what's going on with me, you know you know I'm here to get the pill

P8 was concerned that other students would judge her when accessing certain services in the clinic (line 65-66). She indicated that students would '*look'* at her and wonder *'why'* she was *'going to* a *certain place'* (line 65-66), meaning entering specific consultation rooms in the clinic. She was concerned that she would be seen by someone whom she knew entering the consultation room (line 71). P8 said that she did not want to be in an uncomfortable '*position*' of explaining to someone why she was getting a contraceptive '*pill'* at the clinic (line 71-73).

Another participant, P3, a female student aged between 18-21, seemed to be reluctant about using the clinic. She feared being stigmatised by healthcare workers when accessing contraceptives, and HIV related services such as testing (extract 29):

Extract 29:

160. R1: ok so what challenges do you face in the government clinic?
(…)
162. (uhm) first of all there must be young nurses in the clinics because there are (.)
163. khona ((there are)) like abo grannies there we feel like they are old and we respect them
164. sometimes we(.) I fear going there causewe don't want them to know that we sexually
167.active I respect them and some people don't go there cause they feel like badala ((they
168.are old)) and they are afraid that like they gonna ask why you sleep around so I feel like
169. if there are young people then we can engage even more with them

In the above extract, P3 suggested that the campus clinic should employ '*young nurses'* (line 161-162). She believed that with the young nurses it would be easier for students to open up about their sexual and reproductive health issues (line 168-169). She stated that the current nurses at the clinic are *'old'*. She was concerned about '*going'* to the clinic because she feared the nurses and she did not want them to know that she is sexually active (line 164). She believed

that some students avoid going to the clinic because they are afraid of being judged by nurses for being sexually active '*they gonna ask why you sleep around'* (line 168).

It is evident in the above that most participants were using the campus to access sexual health services such as hormonal contraceptives and HIV testing. However, participants were afraid of being judged by their peers and health care workers when accessing these services for sexual and reproductive health. Fear of being judged constrained these female students in using these health services.

Participants also raised concerns about the HIV testing campaign which is conducted through putting up tents on campus. They felt that this campaign lack confidentiality.

5.6.1. Barriers to access HIV counseling and testing

In the focus group discussion about Auntie Stella card number 30 'My husband is unfaithful', two participants spoke about their main reasons for avoiding HIV testing on campus (extract 30):

Extract 30:

602. P7: I feel like this is the main this is the main problem I mean this is the main um
603. reason why we don't wanna go um check our status on campus, you see (.) we're afraid of
604. what students are gonna say out there if going in that tent e e e-groundini (h) =
605. (h)
606. P10: = ((?)) there like ngase library and then they'll be like mhm kshuthi u (participant name)
607. has suspect something or maybe I slept with someone or I have it you see these are the main
608. reasons why we don't go do thingy (uhm) testing because you guys thingy ourselves (h)
609. and you we got out of that tentafter receiving results then other student will be waiting there

In the above extract P7 believed that the '*main*' reason students do not go for HIV testing on campus is because they fear what people would say when they are seen entering the HIV mobile tent on campus for testing (line 603-604). P10 stated that if someone goes for HIV testing, they will be suspected of having HIV, or of being sexually active (line 607). She believed that students '*don't go*' for HIV testing on campus because they fear that they might be stigmatized. It seems as if P10 is concerned that the setting of the HIV testing process on campus is not private. She raised a concern that, after '*receiving*' HIV test results, one has to exit the testing area and face other students waiting in the queue (line 609). In this extract, participants seem

to be talking about a testing campaign, which is conducted through putting up tents for testing on campus and it does not seem as if they are referring to the campus clinic.

P1, in an interview also expressed a fear of going for an HIV test, but her fear was related more to the outcome of the test (extract 31):

Extract 31:

79. P1: I don't like because, an HIV testing, you know the wait would be the worst
80. fear if I had to go for test, you know and so I, when I go for an HIV test, I
81. probably be sitting there and I would be like, (oh) shit, (oh) shit, what if I am? What
82. if I'm not? You know?

P1 did not want to engage in the experience of testing for HIV because she feared waiting to find out the test results of her HIV status (line 79-80). Her words *'oh shit oh shit, what if I am'* indicate her worry and anxiety, and how awful she thinks it would be to receive an HIV positive result (line 79-81).

It is evident in the above extracts that, there are issues about SRH services being available, but not being accessed because of stigma and social issues. The stigma and social issues seemed to constrain them from using these services.

5.7. Summary

This chapter presented the analysis of the data. It identified and discussed various themes in the data. The chapter also provided evidence of the themes in the analysis in the form of extracts from the data. Four major themes were presented: concerns about STIs, fear of HIV, fear of pregnancy, fear of infertility, and access to sexual and reproductive health services. These themes were discussed in relation to aspects of sexual and reproductive health proposed by the UNPFA.

This chapter reported that female students were very anxious about contracting STIs such as gonorrhoea, chlamydia and syphilis. An obsessive worry or anxiety about contracting STIs threatened their mental wellbeing. Fear of these STIs was about the physical symptoms which would turn the partner off and lead to rejection. This demonstrates that these STIs will negatively affect their sexual and social health. Further, this chapter showed a link between

HIV and social wellbeing. Female students were concerned about contracting HIV because of the stigma that exists in their home communities. They reported that HIV infection in their community is associated with promiscuity. Female students were also concerned that HIV infection would lead to rejection by a sexual partner. Hence, this shows how HIV stigma negatively affects social wellbeing.

Further, presented in this chapter were the concerns of female students about falling pregnant while pursuing their studies. This issue of falling pregnant is related to the third aspect of sexual health which is the ability to reproduce. Female students were concerned that falling pregnant while being students would affect their mental health because it would be stressful to maintain both student roles and mothering roles. For this reason, many female students, during the interviews reported using hormonal contraceptives such as birth control pills, injectable contraceptives and the implant, to avoid pregnancy. This enhanced their reproductive health because students were able to access contraceptives on campus. However, there were myths and misconceptions about contraceptives, as reported by participants. For example, there was a belief that using contraceptives could cause infertility in women. The majority of the participants desired to have children in the future and reported that the identity of a woman and her role in society is to have children. Some of these female students seemed to have no freedom to decide not to have children, because they were so worried about the societal expectation of a woman to procreate. This seemed to have a huge impact on their social wellbeing. These findings also demonstrate that there is a tension between the ability to reproduce and the freedom to decide when, and how often. Female students wanted to have children, and must be seen to be fertile, but not at this time of being a student.

Lastly, this chapter discussed how female students access sexual and reproductive health services. Female students reported using the campus clinic to access female contraceptives and HIV related services such as testing. Although these services are available for them, they are restricted in using them. Participants feared being seen by other students and being stigmatised. They were also concerned about being criticised by health care workers for being sexually active.

The next section will discuss the findings highlighted in this chapter while relating them to other research on the sexual and reproductive health concerns of students .

CHAPTER SIX: DISCUSSION

6.1. Introduction

This study investigated UKZN female students' concerns about sexual and reproductive health. This study also explored how female students managed their sexual and reproductive health while on campus. The Auntie Stella material was used in group discussions to assess the students' opinions, ideas, beliefs and concerns about sexual and reproductive health. After the focus group discussions, the individual interviews were conducted. Six ongoing focus group discussions were conducted with 17 students. Four of the 17 students were involved in individual interviews.

This chapter discusses the significance of the study findings in relation to previous research. Findings were analysed in relation to the framework proposed by the UNPFA about sexual and reproductive health. The framework proposes a particular definition of good sexual and reproductive health, and what it is comprises of, what enhances it; as well as the various rights of individuals. The different aspects of sexual and reproductive health mentioned in the framework are: (1) a complete state of physical, mental and social wellbeing, (2) satisfying and safe sex, (3) ability to reproduce, (4) freedom to decide when to conceive, and (5) access to sexual and reproductive health services. These aspects are presented in the next section.

6.2. Having a complete state of physical, mental and social well-being.

This study found that female students had numerous concerns and experiences related to sexual and reproductive health which seemed to have a profound impact on their state of physical, mental and social well-being. With regards to sexual health, many female students were very concerned about getting STIs such as gonorrhoea, chlamydia and syphilis, or having these STIs. Female students' anxiety about contracting these STIs was that, they cause infertility, especially if left untreated. It is possible that they would not worry about getting gonorrhoea and syphilis if they did not perceive these STIs as a threat to fertility. It seems from this data that infertility had the potential to have a profound impact on women's mental and social well-being. Fear of STIs affecting fertility was shown in a study conducted by Svensson and Waern (2013) among university students in Thailand. In the current study, one female student reported having contracted an STI and experienced symptoms such as a vaginal rash and sores. This student suffered a great deal of physical discomfort. The burden of STIs as reported in the study

conducted by Francis et al., (2018) increases and young people especially women are affected by chlamydia, herpes simplex virus type and bacterial vaginosis.

Another significant concern amongst participant was about being known to be HIV positive. HIV seemed to have a negative effect on their social wellbeing because it affects their ability to engage in relationships. For instance, female students were concerned about having to inform their sexual partner about their HIV status. They feared that their partner would leave them if they had HIV, because he would assume they were promiscuous. It seemed to be the physical symptoms of the STI which would 'turn a partner off'. The fear however was not about transmission of the HIV to one's partner, but of rejection. Thus for these participants, one's social wellbeing seemed to be more important than their physical health, particularly sexual health. The emotional strain of having an STI in terms of its consequences in one's relationship was significant for these students. This finding is supported by the study conducted by Pillay (2020) among HIV-positive students at the University of KwaZulu-Natal, Pietermaritzburg campus which found that students were afraid of disclosing their HIV status to their current sexual partners as they were rejected in their previous relationship. Fear of rejection due to having HIV can discourage individuals from informing their partners that they have contracted the disease and discussing safe sex with the sexual partner (Skinner & Mfecane, 2004).

Further, the study found that many students were very concerned about the HIV stigma that exists in their communities. Female students who were concerned about HIV stigma suffered a great deal of emotional and social distress. They indicated that people living with HIV are not accepted in their community and are labelled as promiscuous for acquiring HIV. A study conducted by Haffejee, Maughan-Brown, Buthelezi and Kharsany (2018) among students at the tertiary institution in Durban also found that students were very concerned about HIV-related stigma within their home community. In the current study many students indicated that it would be difficult to live as a student, and in their own home communities, because of the stigma and discrimination. These students were implying that the context in South Africa is not safe to live in as an HIV positive person. Further, some female students felt that there is stigma about HIV in campus society and HIV diagnosis is associated with promiscuity. Similar findings were documented in the study by ABDE and Sadeghi (2008) among senior school students in Iran. That study found that students believed that HIV diagnosis is a result of promiscuity. Further, in that study, students felt that people living with HIV/AIDS should be put in designated institutions and that they should not live or receive care. These finding

indicate that female students had not achieved a complete state of mental, physical and social wellbeing, because of the existence of HIV, but also because of their potential exposure to HIV infection.

However, there was tension and contradiction in the participants' responses because participants were extremely fearful of contracting HIV but appeared to understand the importance of good mental health for people living with HIV. These students understood that HIV is manageable like any other disease such as "high blood pressure". They were aware that treatment for HIV is effective and available in South Africa. They were aware that with anti-retroviral treatment, an HIV infected person can live as long as someone who do not have the disease. They stated that the availability of anti-retroviral treatment in South Africa changed the image of how HIV is perceived. These students believed that because of anti-retroviral treatment, HIV had become normalized in South Africa and is no longer viewed as a 'slim' disease. Similar results were shown in the study conducted by Khamisa, Mokgobi and Basera (2020) among private higher education in Johannesburg. In that study, the majority of female students (90.9%) were aware that an individual can contract HIV and infect his or her sexual partners without showing any signs of the disease. These findings indicate that these female students could manage their mental and physical wellbeing if they were HIV positive.

6.3. Having a satisfying and safe sex

According to the framework proposed by UNPFA, having safe and satisfying sex is one of the aspects of good sexual and reproductive health. The study demonstrates that a lot of students' concern about sex was about safety in relation to pregnancy. They seemed to want to take responsibility for sexual health and safety, through condom use, but commented that this was not what their male partner wanted. They seemed to have to agree with this demand from men, for sex without protection. This finding is well supported in the literature. For instance, in the study conducted by MacPhail and Campbell (2001) among young people in the South African township of Khutsong, young women were not in a position to make rational decisions about using condoms and were expected to be submissive to their male partners. Further, a study conducted by Selikow (2009) among adolescents in Cape Town reported that many young women feel a need to please their partners and accept the refusal of condom use. In that study, insisting on the use of a condom was perceived by young people as a sign of mistrust and infidelity and raised questions around love and commitment in the relationship. For example, if an individual initiates a discussion on condom use, it might suggest that they suspect their

partner of being infected with HIV (Macphail & Campbell, 2001; Peltzer, 2000). These findings indicate that young women in South Africa are affected by gender inequality, based on the context of their intimate relationships. It has been documented in the South African literature that gender inequality facilitates power imbalances between men and women (MacPhail & Campbell, 2001; Fleming et al., 2015). Inequality between men and women in South Africa is rooted in social constructions of gender. A study conducted by Lengwe (2009), at three tertiary institutions in KwaZulu-Natal found that men were perceived as having a biological irresistible sexual drive compared to women. This shows that, female university students are not free to embrace their sexuality in the way they want to.

The current study indicated that female students have sexual desires and want to engage in sex, but they cannot always be safe and that is affecting their mental, physical and social wellbeing. The study also indicated that some female students were very worried about their own sexual risk, but they did not seem to be empowered to engage with their male sexual partners about this worry and risk. A study conducted by Fleming et al. (2015) with South African man disputes the fact that women have sexual desires. That study reported that men are biologically programmed to desire sex often, and wield power over others. A study conducted by Lengwe (2009) at three tertiary institutions in KwaZulu-Natal, also revealed that most male students had an irresistible sexual drive. High-risk sexual behaviours appear to be congruent with the preservation of a masculine identity in South Africa. The literature reveals that men who embrace masculine norms perpetrate IPV, and are more likely to indulge in harmful practices such as coercive sexual acts, concurrent sexual partnerships, and alcohol abuse (Dunkle et al., 2010; Jewkes, Morell & Christofides, 2009; Jewkes, Sikweyiya, Morrell, & Dunkle, 2011).

The current study also found that students were not empowered to access SRH services such as hormonal contraceptives because of fear of being judged by health care workers. For instance, some female students in the study felt that many health care workers employed at the campus clinic are very ‘old’, hence they do not understand the sexual and reproductive health issues of young people These students were reluctant to obtain hormonal contraceptives at the clinic and feared that the health service providers (the staff) would react negatively to them for being sexually active, hence, this is the issue about youth friendly services. This finding supports the previous research on the stigmatising attitudes of health care workers towards young people (Harries, Orner, Gabriel & Mitchell, 2007; Holt et al., 2005; Lince-Deroche, Hargey, Holt & Shochet, 2015; Yunos, 2010). For example, the study by Holt et al. (2012)

among young people in Soweto found that health care workers felt that sex before marriage is a sin and disgraceful. These findings indicate that students' access to sexual and reproductive health services is threatened by health workers' negative attitudes about sexual activity. In addition, a study conducted by Yunos (2010) among UKZN students revealed that young women were often embarrassed to go to local clinics and hospitals for contraception as they experienced criticism from nurses and health care workers for engaging in sex at a young. Other studies conducted among young people in the Limpopo and Eastern Cape provinces found that the negative attitudes of health care workers prevented adolescents from accessing contraceptives (Chersich et al., 2017; Christofides et al., 2015;). In addition, a study conducted by Wood and Jewkes (2006) with adolescents indicated that nurses often try to stigmatise adolescents' sexuality by treating them harshly and reprimanding them in public. These findings indicate that the sexual and reproductive health of young women is not achieved, and they do not necessarily have satisfying and safe sex.

6.4. Having the ability to reproduce

According to the UNPFA framework good sexual and reproductive health means that women have ability to fall pregnant when they want to. In this study, some female students were afraid of becoming pregnant while pursuing their studies. These students wanted to complete their studies and believed that pregnancy would jeopardise that. Similar findings were documented in the study conducted by Chebitok (2015) among students at the University of KwaZulu-Natal, Pietermaritzburg. That study reported that female students were more responsible for the prevention of pregnancy because their focus was to complete their studies within the required time. Hence, students in that study perceived pregnancy as a barrier hindering them from achieving their goals. In the current study, students commented that becoming pregnant while pursuing studies will cause a great deal of psychological and social distress. This finding is in line with a study conducted by Anyawu et al. (2013) among students at the University of Venda, where unplanned pregnancy was perceived as leading to impaired mental health. In that study, unplanned pregnancy was also believed as resulting in shame, suicidal attempts and withdrawal from society. A study conducted by Corfe (2019) among student mother at the University of KwaZulu-Natal, Pietermaritzburg also reported that student mothers experienced high levels of depression, suicidal thoughts and academic failure. In the current study, many female students were afraid that they would be thrown out of their family house if they were to become pregnant while studying. Similar results were documented in the study conducted by Yunos

(2010) among students at the University of KwaZulu-Natal, which reported that students were afraid that being pregnant would lead to family disapproval and even exclusion. This indicates that they would not receive support to raise a child from their families and they may drop out of university. Chebitok (2015) reported that pregnant students and those with STIs are at higher risk of dropping out of college, becoming depressed or anxious. It is possible that if the students drop out of the university, they would not be able to secure better employment due to lack of skills, thus causing them to struggle with raising a child. It is also possible that these female students would be stigmatized for dropping out of the university because of pregnancy or for falling pregnant before wedlock

In the current study there was also a report that caring for a child financially and nurturing them would be very difficult. This finding is supported by the previous studies conducted among student mothers at the University of KwaZulu-Natal which found that students had difficulties to balance student roles and mothering roles (Corfe, 2019; Kubeka, 2016). Kubeka (2016) in her study among student mothers at UKZN reported that students felt a sense of guilt for not being present in their child's life, specifically to provide nurturing and foster their development. It is no doubt that having a child would be time consuming and emotionally frustrating for female students. It is clear that becoming pregnant can have many social, psychological and economic consequences for university students (Breier, 2010).

However, there seems to be a tension in these results because female students were concerned about becoming pregnant while they are students but wanted to be fertile and to be seen to be fertile in the future. Their desire to have children in the future was influenced by societal expectation of a woman to have children. Societal expectation of a woman to have children seemed to have a major impact on students' social wellbeing. For instance, many female students felt that infertile women are not accepted in society and they are judged for being infertile. Similar results were documented in the study conducted by Yunos (2010) among students at the University of KwaZulu-Natal, Durban. That study found that young black women in particular are often pressurized to prove their fertility in order to make the bride price more worthwhile. Literature also revealed that young women are encouraged to marry and have children in order to express their role of 'womanhood' to the fullest (Baloyi 2017; Walker, 1995). In many South African societies, a barren woman is seen as incomplete and worthless

(Baloyi, 2017). One of the consequences of these expectations is the social stigma and psychological effects associated with infertility (Cousineau & Domar, 2007).

6.5. Having the freedom to decide when to conceive

In the current study, many students felt that being fertile was important to them as women. Similar findings were documented in a study conducted by Goundry et al. (2013) among pregnant college and university students in the United Kingdom. In that study, many students felt that topics concerning fertility were important to them and that they were concerned about being infertile in the future. The current study revealed that many female students stopped using oral contraceptives pills because they had a misconception that contraceptives would damage their ovaries and causes them to become infertile. Other students were afraid that hormonal contraceptives will affect their weight. Stopping contraceptives can prevent the students from controlling pregnancy, and put them at risk of unplanned pregnancy, which has other consequences for example, needing to suspend their education. It is possible that university students in this study hold these misconceptions about contraceptives causing infertility because they rely on their peers for advice than using the campus clinics and Department of Health clinics. These findings are well supported in the literature. For instance, a study conducted by Lebese et al. (2013) among adolescents in Vhembe district in Limpopo province found that adolescents were not empowered to use contraceptives because they assumed that they cause permanent infertility, weight gain and irregular menstruation. Another study conducted by Ramathuba, Khoza and Netshikweta (2012) among school girls in Thulamela municipality, Limpopo reported similar findings. Lack of awareness concerning contraceptive use is also common among South African university students. For instance, a study conducted by Gama (2008) among students at the University of Zululand indicated that most female students were not well educated about the prevention of unplanned pregnancy.

Findings of the current study indicate that female students were not in a complete state of mental wellbeing as they were distressed about the possibility of being infertile in the future because of contraceptives. Many female students wanted to be seen as fertile and that this was an extreme pressure, and it affects their reproductive health care decisions. The literature reveals that, conventionally masculine behaviour accepted by society potentially put pressure on man on young men to father a child (Morrell, 2006; Morrell, Jewkes & Lindegger, 2012). In the society, young women are expected to conform to such behaviour and pressurised to

conceive (Morrell, 2006). In the current study, motherhood was very important and it was seen as the motivator for most female students to attain their degrees and pursue careers. In the study, students wanted to be successful in life and have money to share with their children. These students linked procreation with legacy, because they want to have children to either represent their names or inherit their assets when they die. Having children was perceived as the basis of happiness in a woman's life. This indicates that students' self-worth and self-esteem as women was tied to having children.

It may seem as if female students in this study were free to decide whether or not to have children but societal expectation limits that choice. In reality, cultural norms were a significant factor in female students' attitudes towards, and decisions about, motherhood. Similar results were shown in a study conducted by Yunos (2010) among UKZN students. That study highlighted that many cultures and customs encourage young married women to bear children immediately after marriage to prove their fertility and also because children are highly valued. In the current study, the majority of female students were worried about societal expectations that made procreation such a significant part of being a woman. They seemed to have internalised these cultural norms, and argued that motherhood was a significant part of a woman's identity.

These findings indicate that female students had little freedom to decide when to have children and how many children they want. This suggests that no matter how educated and successful female students could be, not having children would make them of less value in their societies. In South Africa, motherhood is very important and the construction of motherhood is profoundly shaped by social context and culture (Greil et al., 2011). In an African society, the discourse of motherhood embraces fertility. Female students in the current study could potentially experience emotional and social distress because they were very anxious about the stigma related to infertility. For example, some female student highlighted that their community discriminates against, and disrespects, a woman who is infertile. Fear of infertility seemed to have a negative impact on students' psychological and social wellbeing. Many, female students were very anxious about being infertile because they believed that an infertile woman is perceived as 'incomplete' by her family. The fact that most female students in the study did not seem to have the power to exercise their reproductive health rights, suggests that they do not have the ability to maintain their sexual health. Female students are forced to accept

the reality that women do not exert power in childbearing decision-making. The inability of female students to make informed decisions about their sexual and reproductive health speaks to gender inequality.

6.6. Rights to sexual and reproductive healthcare decisions

The UNPFA (2016) framework talks about individuals' rights to make their own choices about sexual and reproductive health. In that framework, they also talk about various resources being available for individuals to access. The University of KwaZulu-Natal and government health facilities offer a range of sexual and reproductive health services for students to check on their physical health, and their health related to STIs (National Department of Health, 2015; University of KwaZulu-Natal, 2017b). Although, these health services are present it seems that there are social and emotional constraints on students' use of these services. Female students were concerned about the nature of how sexual and reproductive health services are provided at university and government health facilities. They felt that there is no confidentiality in accessing these services and that they could potentially be exposed to stigmatisation. For instance, students raised concerns about HIV/AIDS campaign conducted through putting up mobile tents for HIV testing. They were reluctant to go for HIV testing in that mobile tents because they would be seen by peers and be suspected of having HIV or promiscuous. Similar findings are shown in the study conducted by Pillay (2020), among HIV positive students at the University of KwaZulu-Natal, which found that HIV positive students are stigmatised for accessing HIV related services on campus. Another study conducted by Meiberg et al. (2008) at the University of Limpopo reported that the main barriers to testing were fear of being stigmatised and fear of knowing one's HIV positive status. Fear of knowing one's status was also reported as a barrier to HIV testing by the participants in this study.

It is highly significant in the present study that stigma and discrimination constrain and curtail students' rights to access sexual and reproductive healthcare. The university context and the nature of health services merge to create barriers for students to access sexual and reproductive health services. The mere fact that students are stigmatised when accessing HIV testing or contraceptives, indicates that their rights to use these services is being infringed upon. One of the human rights that students have is the right to is privacy. Lack of privacy can deny students the right to manage their fertility and prevent sexually transmitted infections. If students believe that their privacy is not protected, they might avoid seeking health services. Despite multiple interventions about how to maintain sexual health and safety in relation to HIV transmission it

is significant that this group of educated and relatively resourced young women are affected by the influence of peers and sexual partners. This means that young women cannot easily make their own decisions. Despite what happens in health interventions in terms of information and developing awareness, there are other social dynamics in young people's contexts and lives that drive their behaviour. This suggests that interventions need to be dealing with these issues, rather than only education about rights or about methods to protect oneself.

Further many female students seemed to avoid HIV testing because ofHIV-related stigma within their home community. They stated that in their community, people living with HIV are always judged and blamed for acquiring HIV.A few participants avoided HIV testing because they feared receiving HIV positive results. Fear of HIV positive results was also reported in a study conducted by Venugopala (2013), among undergraduate students at the University of KwaZulu-Natal.This shows that the stigmatisation in South African society is significant and not in their control. It seems that in their sexual and reproductive health behaviour they choose to do the things that are in their control, for example not to test, and not to disclose.

6.6. Summary

This section discussed the findings of the study in relation to the framework proposed by the UNPFA about sexual and reproductive health. The findings that there were many concerns faced by female students which affected their mental, physical and social wellbeing. Firstly, this chapter indicates that, many students were concerned about catching STIs such gonorrhoea, chlamydia and syphilis than HIV. They feared that these STIs have noticeable and painful symptoms and would affect intimate relationships and potentially cause infertility in women. It is interesting that the students' worry about STIs was based on the fact that these diseases could affect their relationships, but not about the health impacts of the disease. Though, students were worried that untreated STIs could cause infertility, their concern was more based on the fact that infertility could affect their relationships with families and sexual partners.

When it comes to HIV/AIDS, many female students were very concerned about the stigma and discrimination attached to the disease that exists in their home communities and on campus. Stigma about HIV affected their social wellbeing and this prevented them from engaging with HIV interventions on campus, such as testing. Stigma about HIV/AIDS can constrain the opportunities available to students to learn about their status, disclose their HIV status and receive the necessary health care.

Further, this chapter indicates that female students did not want to fall pregnant while pursuing their studies. For this reason, the majority of female students were using hormonal contraceptives such as birth control pills, the injection and implants. Female students were obtaining contraceptives from the campus clinic. This enhanced the sexual and reproductive health of female students. However, although, students were worried about pregnancy and wanted to protect themselves, they were not in a position to make informed decisions about safe sex. They seemed to be pressurised by their sexual partners to not use condoms. This suggests that female students in the study were not necessarily engaging in satisfying and safe sex.

Further, this chapter indicates that female students had misconceptions about the use of hormonal contraceptives. They believed that contraceptives affect women's fertility; hence, many students stopped using female contraceptives. Although female students were not planning to fall pregnant currently, they desired to have children in the future. They seemed to link their identity very strongly to procreation. However, their choice to decide when and how often to conceive seemed to be determined by societal expectation of a woman to procreate. Only a few female students did not want to bear their own children.

This chapter also indicates that the UNPFA goals to ensure universal access and rights to sexual and reproductive health services are not achieved for the students in this study. It was documented that students have access to sexual and reproductive health services on campus but the stigma constrained them from using these services. This suggests that there is a problem in how sexual and reproductive health services are managed, and the rights of young of people to use these services, is constrained.

The next chapter will conclude and make recommendations.

CHAPTER SEVEN: CONCLUSION

7.1. Introduction

This study aimed to investigate female students concerns about sexual and reproductive health. It also aimed to find out how students manage their sexual and reproductive while on campus. This chapter comprises of a summary of the study, discussion of the main findings, the strengths and limitations of the study and the recommendations for future intervention and research.

7.2. Were the research questions addressed?

The study addressed the research questions. Participation in the focus groups and engaging with the Auntie Stella materials enabled students to talk about the concerns of sexual and reproductive health that they had as female students and receive emotional support from each other. These focus groups also helped students to address the challenges that they face when accessing sexual and reproductive health such as the issue of confidentiality when accessing HIV testing and contraceptives. The study indicated that the sexual and reproductive health female students is threatened.

7.3. Findings of the study

All of the students in the study knew about issues affecting young people's sexual and reproductive health. They also knew about different STIs and their mode of transmission. Many female students were concerned about catching STIs such as gonorrhea, chlamydia and syphilis. They feared that these STIs cause infertility in women. Fear of STIs indicates that students were more concerned about maintaining relationships with sexual partners than worry about the effects of these diseases on their SRH. A concern about what others think of them seems to have a major impact on their SRH. For example, some students were concerned that having HIV would lead to rejection by their sexual partner after they have disclosed. Further, some students in the study were worried about what other students would say if they sought out SRH services. This has prevented them from using HIV testing services and contraceptive services at the campus clinics. Findings of the study demonstrate that pressure from peers; sexual partners and the community affect how these students manage their sexual and reproductive health.

The study also found that many female students were managing their reproductive health through the use of hormonal contraceptives such as birth control pills, the injection

contraceptives and the implant, to prevent pregnancy. However, there were misconceptions about contraceptives. For instance, there was a belief that contraceptives affect infertility. This affected their use of contraceptives because many female students desired to have children in the future. They also seemed to need to conform to the constructions of motherhood and expectations of women, in their society.

The next section discusses the strengths and limitations of the study.

7.4. Strengths and limitations

The strength of the study is that the use of the Auntie Stella material in ongoing group discussions encouraged female students to discuss issues related to sexual and reproductive health concerns. The process of ongoing group discussions allowed me and the other researcher to build a close relationship with the participants. Participants became aware of each other and the researchers and this potentially increased their level of comfort in the groups, facilitating their participation. However, some participants seemed to be reluctant to talk about their sexual and reproductive health concerns in the presence of the people they know. Another strength of the study is that individual interviews allowed me to gain a more in-depth and personal perspective of female students' sexual and reproductive health concerns, and experiences. In the individual interviews, the participants seemed to be freer to discuss their personal concerns and experiences.

Another strength of the study is that the researcher ensured that the trustworthiness and credulity of the study was enhanced. Credibility was enhanced by providing the views of the participants in the analysis and write up without being biased. The use of the audio recording in the focus groups and interviews also enhanced the credibility of the study. This process allowed me to re-listen to the interviews and focus groups and ensure that the participants' own words were transcribed.

Transferability was enhanced through providing a thick description of the methods used to conduct the study. For example, the researcher provided detailed descriptions of the research design used for this study, the sampling methods, and the data collection methods used to conduct the study. This will provide future researchers with the opportunity to make an informed judgment about whether these findings are transferable to similar people in similar contexts.

One of the limitations of this study was that the sample size was relatively small. The study comprised of a sample of 17 female students attending the University of KwaZulu-Natal. However, the rigour in reporting the study, and basing the analysis of the data firmly in the extracts, enables the reader to assess the transferability of the study findings to similar people in similar contexts. A possible limitation in the study was the use of the Auntie Stella material, which did not also address the wide range of issues within the topic of sexual and reproductive health. Although the focus groups provided a really innovative and participatory method of collecting data, other focus groups which a clearer focus on the topic of sexual and reproductive health might have obtained more detailed information in relation to the research questions.

7.5. Recommendations

University students are a high risk group that needs to be paid attention to. They continue to engage in sexual behaviours that put them at risk of STIs and unplanned pregnancies. Therefore, strategies in South Africa aimed at addressing poor sexual and reproductive health, also need to focus on university students. As this group of students is also part of the most at risk group of young people in relation to HIV and AIDS, in South Africa, it is important to address the broad issue of sexual and reproductive health, and not just HIV and AIDS.

The South African government, together with the University of KwaZulu-Natal, need to strengthen interventions for sexual and reproductive health that will address issues faced by university students. This could include conducting mass campaigns and interactive workshop on campus which would address the concerns about and experiences of sexual and reproductive health faced by female students. Students' concerns about sexual and reproductive health in the study show that mass campaigns should provide education regarding female contraceptives such as how they work and their side effect. Further, sexual health education should also be mandatory from high school. This means that schools should maintain guidance counsellors to educate young people about sex and reproduction. Students could benefit from more specific information about STI's like gonorrhoea, chlamydia and syphilis and also about the interaction between contraceptive use and fertility

It is important that, when first-year students enter the university, they are well informed to make decisions to prevent themselves from contracting HIV or falling pregnant. Further, universities could host awareness campaigns that will promote family planning and educate female students about the positive impact of birth control on reproductive health. It has also been documented in this study that access to healthcare is an issue among female students. In

the study female students reported some challenges when using the campus clinic to access contraceptives and HIV related services such as testing. Perhaps, the campus clinic needs to have a different way of using their space and resources in relation to HIV testing, specifically in preventing the identification of students who access their services. A simple restructuring of space might involve having two doors, one to enter and the other to exit the building, preventing students who have engaged in a consultation from meeting other students who are in the waiting room.

REEFERENCES

Abdeyazdan, Y. Z., & Sadeghi, N. (2008). Knowledge and attitude toward AIDS/HIV among senior school students in Isfahan. *Iranian Journal of Clinical Diseases, 3* (2),93-98.

Anyanwu, F. C., Tugli, A., & Goon, D. T. (2013). Socio-demography and sexual experiences of University of Venda students: implications for health: health and fitness. *African Journal for Physical Health Education, Recreation and Dance, 19*(2), 459-478.

Ajzen, I. (1985). From intentions to actions: A theory of planned behaviour. In J. Kuhl, & J. Beckman (Eds.), *Action control: From cognition to behaviour,* (pp. 11–39). Heidelberg: Springer.

Ajzen I. (1991). The theory of planned behaviour. *Journal of Organisational Behaviour and Human Decision Processes, 50*(1), 179–211.

Ajzen, L., & Fishbein, M. (2004). Questions raised by a reasoned action approach: Comment on Ogden (2003). *Health Psychology, 23*(4), 431–434.

Babbie, E., & Mouton, J. (2005). Qualitative studies. In E. Babbie, & J. Mouton (Eds). *The Practice of Social Research* (pp 269–311). Cape Town: Oxford University Press.

Baloyi, M. E. (2017). Gendered character of barrenness in an African context: An African pastoral study. *In Die Skriflig, 51*(1), 1-7.

Baron, D., Essien, T., Pato, S., Magongo, M., Mbandazayo, N., Scorgie, F., & Delany-Moretlwe, S. (2018). Collateral benefits: How the practical application of Good Participatory Practice can strengthen HIV research in Sub-Saharan Africa. *Journal of the International AIDS Society, 21* (2), 51-75.

Baxter, C., & Abdool Karim, S. (2016). Combination HIV prevention options for young women in Africa. *African Journal of AIDS Research, 15*(2), 109-121.

Beksinska, M. E., Pillay, L., Milford, C., & Smit, J. A. (2014). The sexual and reproductive health needs of youth in South Africa–history in context. *South African Medical Journal, 104*(10), 676-678.

Bhana, D., & Anderson, B. (2013). Desire and constraint in the construction of South African teenage women's sexualities. *Sexualities, 16*(5-6), 548-564.

Bhana, D., & Pattman, R. (2011). Girls want money, boys want virgins: The materiality of love amongst South African township youth in the context of HIV and AIDS. *Culture, Health & Sexuality, 13*(8), 961-972.

Blignaut, R. J., Vergnani, T., & Jacobs, J. J. (2014). Correlates of sexual activity versus non-activity of incoming first-year students at a South African university. *African Journal of AIDS Research, 13*(1), 81-91.

Blignaut, R. J., Jacobs, J., & Vergnani, T. (2015). Trends in HIV risk behaviour of incoming first-year students at a South African university: 2007–2012. *SAHARA-J: Journal of Social Aspects of HIV/AIDS, 12*(1), 39-50.

Braun, V., & Clarke, V. (2006) Using thematic analysis in psychology. *Qualitative Research in Psychology, 3* (2), 77-101.

Chebitok, B. (2017). *Knowledge of contraceptives, attitudes towards contraceptive use, and perceptions of sexual risk, among university students at a South African university*. (Unpublished Master's dissertation). University of KwaZulu-Natal, Pietermaritzburg.

Chen, H. Y., & Boore, J. R. (2010). Translation and back-translation in qualitative nursing research: methodological review. *Journal of Clinical Nursing, 19*(1-2), 234-239.

Chersich, M. F., Wabiri, N., Risher, K., Shisana, O., Celentano, D., Rehle, T., & Rees, H. (2017). Contraception coverage and methods used among women in South Africa: A national household survey. *South African Medical Journal, 107*(4), 307-314.

Christofides, N., & Jewkes, R. (2010). Acceptability of universal screening for intimate partner violence in voluntary HIV testing and counselling services in South Africa and service implications. *AIDS Care, 22*(3), 279-285.

Christofides, N. J., Jewkes, R. K., Dunkle, K. L., McCarty, F., Shai, N. J., Nduna, M., & Sterk, C. (2014). Risk factors for unplanned and unwanted teenage pregnancies occurring over two

years of follow-up among a cohort of young South African women. *Global Health Action*, *7*(1), 23719.

Chukwu, E. O., Iornengen, E. M., Fiase, T. M., Chia, T., Haruna, H., & Hamina, D. (2017). Knowledge and practice of safe sex among students of College of Medical Sciences, University of Maiduguri, Borno State, Nigeria. *Journal of Research in Nursing and Midwifery*, *6*(1), 016-024.

Coetzee, M. H., & Ngunyulu, R. N. (2015). Assessing the use of contraceptives by female undergraduate students in a selected higher educational institution in Gauteng. *Curationis*, 38(2), 1-7.

Corfe, W.R. (2019). *The value of ongoing peer support group participation for supporting tertiary student mothers in South Africa*. (Unpublished Master's thesis). University of KwaZulu-Natal, Pietermaritzburg. South Africa.

Cousineau, T. M., & Domar, A. D. (2007). Psychological impact of infertility. *Best Practice & Research Clinical Obstetrics & Gynaecology*, *21*(2), 293-308.

Davis, K. C. (2010). The influence of alcohol expectancies and intoxication on men's aggressive unprotected sexual intentions. *Experimental and Clinical Psychopharmacology*, *18*(5), 418–428.

De Klerk, V., Klazinga, L., & McNeill, A. (2007). The habitus of the dominant: addressing rape and sexual assault at Rhodes University. *Agenda*, *21*(74), 115-124.

Delius, P., & Glaser, C. (2005). Sex, disease and stigma in South Africa: historical perspectives. *African Journal of AIDS Research*, *4*(1), 29-36.

Dube, L., & Ocholla, D. N. (2005). Insight into the management and diffusion strategies of HIV/AIDS Information in institutions of Higher Education in South Africa. *South African Journal of Libraries and Information Science*, *71*(2), 187-200.

Ehlers, V. J. (2003). Adolescent mothers' utilization of contraceptive services in South Africa. *International Nursing Review*, *50*(4), 229-241.

Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, *5*(1), 1-4.

Fentahun, N., Assefa, T., Alemseged, F., & Ambaw, F. (2012). Parents' perception, students' and teachers' attitude towards school sex education. *Ethiopian Journal of Health Sciences, 22*(2).

Fleming, P. J., DiClemente, R. J., & Barrington, C. (2016). Masculinity and HIV: Dimensions of masculine norms that contribute to men's HIV-related sexual behaviours. *AIDS and Behavior, 20*(4), 788-798.

Francis, D. A. (2010). Sexuality education in South Africa: Three essential questions. *International Journal of Educational Development*, *30*(3), 314-319.

Francis, D. (2016). 'I felt confused; I felt uncomfortable… my hair stood on ends': Understanding How Teachers Negotiate Comfort Zones, Learning Edges and Triggers in the Teaching of Sexuality Education in South Africa. In V. Sundaram, & H. Sauntson. (Eds.) *Global perspectives and key debates in sex and relationships education: Addressing issues of gender, sexuality, plurality and power* (pp. 130-145). Palgrave Macmillan, London.

Francis, S.C., Mthiyane, T.N., Baisley, K., Mchunu, S.L., Ferguson, J.B., Smith, T., & Shahmanesh, M. (2018). Prevalence of sexually transmitted infections among young people in South Africa: A nested survey in a health and demographic surveillance site. *Plos Medicine, 15* (2), e1002512.

Gama, N. N. (2008). *The effects of unplanned pregnancy on female students of the University of Zululand*. (Unpublished Doctoral dissertation). University of Zululand, South Africa.

Gavin, H. (2008). Thematic analysis. *Understanding research methods and statistics in psychology*, *17*(2) 273-282.

Glasier, A., Gülmezoglu, A. M., Schmid, G. P., Moreno, C. G., & Van Look, P. F. (2006). Sexual and reproductive health: a matter of life and death. *The Lancet*, *368*(9547), 1595-1607.

Goundry, L., Finlay, E.R., & Llewellyn, C.D. (2013). Talking about links between sexually transmitted infections and infertility with college and university students from SE England, UK: a qualitative study. *Reproductive Health, 10* (1), 47.

Greil, A., McQuillan, J., & Slauson-Blevins, K. (2011). The social construction of infertility. *Sociology Compass*, *5*(8), 736-746.

Heeren, G. A., Jemmott III, J. B., Mandeya, A., & Tyler, J. C. (2012). Sexual attitudes and behavior of university students at a rural South African university: Results of a pilot survey. *Journal of Human Behavior in the Social Environment*, 22(8), 1021-1032.

Harries, J., Orner, P., Gabriel, M., & Mitchell, E. (2007). Delays in seeking an abortion until the second trimester: a qualitative study in South Africa. *Reproductive Health, 4*(1), 7.

Harrison, A. (2008). Hidden love: Sexual ideologies and relationship ideals among rural South African adolescents in the context of HIV/AIDS. *Culture, Health & Sexuality, 10*(2), 175-189.

HEAIDS. (2009). *HIV prevalence and related factors – Higher education sector study, South Africa*, 2008–2009. Retrieved from https://www.ukzn.ac.za/wpcontent/miscFiles/publications/HEAIDS.pdf

Holt, K., Lince, N., Hargey, A., Struthers, H., Nkala, B., McIntyre, J., & Blanchard, K. (2012). Assessment of service availability and health care workers' opinions about young women's sexual and reproductive in Soweto. South Africa, *African Journal of Reproductive Health, 16*(2), 283-294.

Holt, K. (2012). *Young Women's Sexual and Reproductive Health in South Africa: Service Availability and HealthCare Workers' Opinions in Soweto. Ibis Reproductive Health: Young Women's Reproductive Health Brief Series*. Retrievedfrom:http://www.ncbi.nlm.nih.gov/pubmed/22916560

Hoque, M. E., & Ghuman, S. (2012). Knowledge, practices, and attitudes of emergency contraception among female university students in KwaZulu-Natal, South Africa. *PLoS One*, *7*(9), 34-46.

Hunter, M. (2010). *Love in the time of AIDS: inequality, gender, and rights in South Africa*. Indiana University Press.

Jewkes, R. K., Gumede, T., Westaway, M. S., Dickson, K., Brown, H., & Rees, H. (2005). Why are women still aborting outside designated facilities in metropolitan South Africa? *An International Journal of Obstetrics & Gynaecology*, *112*(9), 1236-1242.

Jewkes R, Nduna M, Levin J, Jama N, Dunkle K, Puren A, et al. (2008). Impact of stepping stones on incidence of HIV and HSV-2 and sexual behaviour in rural South Africa: *Cluster Randomised Controlled trial*, *10* (337), 7-11.

Jewkes, R., Morrell, R., & Christofides, N. (2009). Empowering teenagers to prevent pregnancy: lessons from South Africa. *Culture, Health & Sexuality*, *11*(7), 675-688.

Jewkes, R. K., Dunkle, K., Nduna, M., & Shai, N. (2010). Intimate partner violence, relationship power inequity, and incidence of HIV infection in young women in South Africa: a cohort study. *The Lancet*, *376*(9734), 41-48.

Jewkes, R., & Morrell R. (2010). Gender and sexuality: emerging perspectives from the heterosexual epidemic in South Africa and implications for HIV risk and prevention. *International AIDS Soc, 13* (20), 1–11.

Jewkes, R., Wood, K., & Duvvury, N. (2010). 'I woke up after I joined Stepping Stones': meanings of an HIV behavioral intervention in rural South African young people's lives. *Health Education Research*, *25*(6), 1074-1084.

Jewkes, R., Sikweyiya, Y., Morrell, R., & Dunkle, K. (2011). Gender inequitable masculinity and sexual entitlement in rape perpetration South Africa: findings of a cross-sectional study. *PLoS One*, *6*(12), e29590.

Jewkes, R., Vundule, C., Maforah, F., & Jordaan, E. (2001). Relationship dynamics and teenage pregnancy in South Africa. *Social Science &Medicine*, *52*(5), 733-744

Jewkes, R., & Morrell, R. (2012). Sexuality and the limits of agency among South African teenage women: Theorising femininities and their connections to HIV risk practises. *Social Science & Medicine*, *74*(11), 1729-1737.

Kaim, B., & Ndlovu, R. (2000). Lessons from 'Auntie Stella': using PRA to promote reproductive health education in Zimbabwe's secondary schools. *Participatory Learning and Action Notes: Sexual and Reproductive Health, 37* (3), 45-49.

Karim, Q. A., & Baxter, C. (2016). The dual burden of gender-based violence and HIV in adolescent girls and young women in South Africa. *SAMJ: South African Medical Journal*, *106*(12), 1151-1153.

Kaufman, C. E., De Wet, T., & Stadler, J. (2001). Adolescent pregnancy and parenthood in South Africa. *Studies in Family Planning*, *32*(2), 147-160.

Kelly, K., & Ntlabati, P. (2002). Early adolescent sex in South Africa: HIV intervention challenges. *Social Dynamics*, 28(1), 42-63.

Khamisa, N., Mokgobi, M., & Basera, T. (2020). Knowledge, attitudes and behaviours towards people with HIV and AIDS among private higher education students in Johannesburg, South Africa. *Southern African Journal of HIV Medicine*, *21*(1) 360-388.

Kistnasamy, E. J., Reddy, P., & Jordaan, J. (2009). An evaluation of the knowledge, attitude and practices of South African university students regarding the use of emergency contraception and of art as an advocacy tool. *South African Family Practice*, *51*(5), 423-426.

Kubeka, C. C. (2016). *Balancing the role of student and motherhood: the experience of students at the University of KwaZulu-Natal.* (Unpublished Master's thesis). University of KwaZulu-Natal, Pietermaritzburg, South Africa.

Lebese, R. T., Maputle, S. M., Ramathuba, D. U., & Khoza, L. B. (2013). Factors influencing the uptake of contraception services by Vatsonga adolescents in rural communities of Vhembe District in Limpopo Province, South Africa. *Health SA Gesondheid*, *18*(1).

Lengwe, J. (2009). *Listening and talking as HIV prevention: A new approach to HIV and AIDS campaigns at the three Universities in KwaZulu-Natal*. (Unpublished Doctoral dissertation). University of KwaZulu-Natal, Durban, South Africa.

Lesch, E., & Kruger, L. M. (2005). Mothers, daughters and sexual agency in one low-income South African community. *Social Science & Medicine*, *61*(5), 1072-1082

Lince-Deroche, N., Hargey, A., Holt, K., & Shochet, T. (2015). Accessing sexual and reproductive health information and services: A mixed methods study of young women's needs and experiences in Soweto, South Africa. *African Journal of Reproductive Health, 19*(1), 73-81.

Lynch, I., Brouard, P. W., & Visser, M. J. (2010). Constructions of masculinity among a group of South African men living with HIV/AIDS: reflections on resistance and change. *Culture, Health & Sexuality, 12*(1), 15-27.

MacPhail, C., & Campbell, C. (2001). 'I think condoms are good but, aai, I hate those things': Condom use among adolescents and young people in a Southern African township. *Social Science & Medicine, 52*(11), 1613-1627.

MacPhail, C., Kahn, K., & Pettifor, A. (2019). The Relationship Between School Dropout and Pregnancy Among Adolescent Girls and Young Women in South Africa. *Health Educ Behav*,*46*(4),559-568.

Martin, P., & Barnard, A. (2013). The experience of women in male-dominated occupations: A constructivist grounded theory inquiry. *Journal of Industrial Psychology, 39*(2), 01-12.

Maxwell, J. (1992). Understanding and validity in qualitative research. *Harvard Educational Review, 62*(3), 279-301.

McClelland, S. I., & Fine, M. (2013). Over-sexed and under surveillance: Adolescent sexualities, cultural anxieties, and thick desire. In L. Allen, M.L Rasmussen, & K. Quinlan. (Eds.) *The Politics of Pleasure in Sexuality Education* (pp. 28-50). Routledge.

Meiberg, A. E., Bos, A. E., Onya, H. E., & Schaalma, H. P. (2008). Fear of stigmatization as barrier to voluntary HIV counselling and testing in South Africa. *East Afr J Public Health*, 5(2), 49-54.

Mhlahlo, A. P. (2009). *What is manhood: the significance of traditional circumcision in the Xhosa initiation ritual*. (Unpublished Doctoral dissertation). University of Stellenbosch, Western Cape, South Africa.

Mohlabane, N., Tutshana, B., Peltzer, K., & Mwisongo, A. (2016). Barriers and facilitators associated with HIV testing uptake in South African health facilities offering HIV Counselling and Testing. *Health SA Gesondheid*, 21(1), 86-95.

Molefe, K. M. (2013). *Risky sexual behaviour among the youth of South Africa*. (Unpublished Doctoral dissertation) Northwest University, Mafikeng, South Africa.

Morrell, R. (2005). Youth, fathers and masculinity in South Africa today. *Agenda*, *30*(8), 84-87.

Morrell, R., & Jewkes, R. (2009). 'I am a male, although I am a little bit soft': Men who care in South Africa. A case study of masculinities and gender equality. *International Journal of Health Equity17 (2),* 561-576.

Morrell R, Jewkes, R., &Lindegger G. (2012). Hegemonic masculinity/masculinities in South Africa: Culture, power, and gender politics. *Men and Masculinities, 15* (1), 11-30.

Morrell,R., Bhana, D & Shefer, T. (eds). (2012*).* Books and Babies: Pregnancy and Young Parents in Schools. *HSRC Press.*

Mqhayi, M. M., Smit, J. A., McFadyen, M. L., Beksinska, M., Connolly, C., Zuma, K., & Morroni, C. (2004). Missed opportunities: Emergency contraception utilisation by young South African women. *African Journal of Reproduction Health,* 8(2), 137–144.

Mturi, A.J. and Gaearwe, L. (2014). Gender differences in sexual behaviour amongst university students in Mahikeng, South Africa. *Etude de la Population Africaine, 28*(1), 526.

Mulwo, A. K., Tomaselli, K. G., & Dalrymple, L. (2009). Condom brands, perceptions of condom efficacy and HIV prevention among university students in KwaZulu-Natal, South Africa. *African Journal of AIDS Research, 8*(3), 311-320.

Mutinta, G., & Govender, K. (2012). The Socio-environmental Determinants of Students' Sexual Risk Behaviour and HIV Prevention at the University of KwaZulu-Natal. *Journal of Human Ecology*, *38*(1), 17-29.

Mutinta, G., Govender, K., Gouw, J., & George, G. (2013). An investigation on students' risky sexual behavior at KwaZulu-Natal University, Durban, South Africa. *American Journal of Sexuality Education, 8*(3), 121-139.

Mutinta, G. (2014). Multiple Sexual Partnerships and their Underlying Risk Influences at the University of KwaZulu-Natal. *Journal of Human Ecology 46*(2), 147-155.

Murudi , N.S., Mashau, N., & Ramathuba, D.U(2019). Risky Sexual Behaviour amongst Students at a Training College in Vhembe District of Limpopo Province, South Africa. *Gender and behaviour16*(2), 11740-11750.

Mulwo, A. (2009). *An analysis of students' responses to ABC and VCT messages at three universities in KwaZulu-Natal Province.* (Unpublished Doctoral thesis). University of KwaZulu-Natal, Durban, South Africa.

Mushwana L., Monareng L., Richter, S., & Muller, H. (2015). Factors influencing the adolescent pregnancy rate in the Greater Giyani Municipality, Limpopo Province - South Africa. *International Journal of Africa Nursing Sciences*, *2*, (20), 10-18.

Myer, L., Mlobeli, R., Cooper, D., Smit, J., & Morroni, C. (2006). Knowledge and use of emergency contraception among women in the Western Cape province of South Africa: a cross-sectional study. *BMC Women's Health*, 7 (1), 14.

National Department of Health. (2015). National consolidated guidelines for the prevention of mother-to-child transmission of HIV (PMTCT) and the management of HIV in children, adolescents and adults. Available at https://sahivsoc.org/Files/ART%20Guidelines%2015052015.pdf

Ngabaza, S., Shefer, T., &Macleod, C. I. (2016). Girls need to behave like girls you know: the complexities of applying a gender justice goal within sexuality education in South African schools. *Reproductive Health Matters*, *24*(48), 71-78.

Ngidi, N. D., Moyo, S., Zulu, T., Adam, J. K.., & Krishna, S. B. N. (2016). Qualitative evaluation of selected social factors that impact sexual risk-taking behaviour among African students in Kwazulu-Natal, South Africa. *Journal of Social Aspects of HIV/AIDS*, 13(1), 96-105.

Osuafor, G. N., & Ayiga, N. (2016). Risky sexual behaviour among married and cohabiting women and its implication for sexually transmitted infections in Mahikeng, South Africa. *Sexuality & Culture, 20*(4), 805-823.

Peltzer, K. (2000). Factors affecting condom use among junior secondary school pupils in South Africa. *Health SA Gesondheid*, 5(2), 37-44.

Peltzer, K., Nzewi, E. & Mohan, K. (2004). Attitudes Towards HIV-Antibody Testing and People with AIDS among University Students in India, South Africa and United States. *Indian Journal of Medical Sciences, 58*(3), 95 –108.

Peltzer, K. (2005). Sexuality of Black South African University Students in the Context of HIV/AIDS. *Journal of Psychology in Africa, 15*(1), 17–24.

Peltzer, K. & Promtussananon, S. (2005). HIV/AIDS Knowledge and Sexual Behavior among Junior Secondary School Students in South Africa. *Journal of Social Sciences*, 1(1), 1 –8.

Pettifor, A., Lippman, S. A., Selin, A. M., Peacock, D., Gottert, A., Maman, S., et al. (2015). A Cluster Randomized-Controlled Trial of a Community Mobilization Intervention to Change Gender Norms and Reduce HIV Risk in Rural South Africa: Study Design and Intervention. *BMC Public Health*, 15(1), 1 –7.

Pettifor, A., O'Brien, K., MacPhail, C., Miller, W. C., & Rees, H. (2009). Early coital debut and associated HIV risk factors among young women and men in South Africa. *International Perspectives on Sexual and Reproductive Health, 15* (1), 82-90.

Phetla, G., Busza, J., Hargreaves, J. R., Pronyk, P. M., Kim, J. C., Morison, L. A., ...& Porter, J. D. (2008). 'They have opened our mouths': increasing women's skills and motivation for sexual communication with young people in rural South Africa. *AIDS Education & Prevention, 20*(6), 504-518.

Pillay, G. (2020). *Challenges in the process of HIV/AIDS disclosure: Perspectives of HIV positive students in a South African university*. (Unpublished Master's thesis). University of KwaZulu-Natal, Pietermaritzburg.

Raijmakers, L. R., & Pretorius, J. D. (2006). A snapshot: South African university students' attitudes, perceptions and knowledge of HIV/AIDS. *South African Journal of Higher Education, 20*(2), 299-317.

Ramalepe, M., & Phaswana-Mafuya, N. (2008). Experience of abuse among women in a rural subdistrict of Limpopo Province, South Africa. *Acta Criminologica: Southern African Journal of Criminology*, *21*(2), 46-55.

Ramkissoon, A., Searle, C., Burns, C., & Beksinska, M. (2010). Sexual and reproductive health and rights: reflections on the Millennium Development Goals. *South African Health Review*, 2010(1), 33-48.

Ramathuba, D. U., Khoza, L. B., & Netshikweta, M. L. (2012). Knowledge, attitudes and practice of secondary school girls towards contraception in Limpopo Province. *Curationis*, *35*(1), 1-7.

Reddy, S., & Dunne, M. (2007). Risking it: Young heterosexual femininities in South African context of HIV/AIDS. *Sexualities*, *10*(2), 159-172.

Roberts, C., Moodley, J., & Esterhuizen, T. (2004). Emergency contraception: knowledge and practices of tertiary students in Durban, South Africa. *Journal of Obstetrics and Gynaecology*, *24*(4), 441-445.

Selikow, T. A., Ahmed, N., Flisher, A. J., Mathews, C., & Mukoma, W. (2009). I am not 'umqwayito': A qualitative study of peer pressure and sexual risk behaviour among young adolescents in Cape Town, South Africa. *Scandinavian Journal of Public Health*, *37*(2), 107-112.

Sensoy, N., Korkut, Y., Akturan, S., Yilmaz, M., Tuz, C., & Tuncel, B. (2018). Factors Affecting the Attitudes of Women toward Family Planning. *Family Planning, 33* (2), 77-89.

Shefer, T., Clowes, L., & Vergnani, T. (2012). Narratives of transactional sex on a university campus. *Culture, Health & Sexuality*, *14*(4), 435-447.

Shenton, A. K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information, 22*(2), 63-75.

Shisana, O., Rehle, T., Simbayi, L. C., Zuma, K., Jooste, S., Zungu, N., & Onoya, D. (2014). *South African national HIV prevalence, incidence and behaviour survey*. Cape Town: HSRC Press

Silverman, D. (2000). *Doing qualitative research.* (3rd Ed). London: Sage

Skinner, D. & Mfecane, S. (2004). Stigma, discrimination and the implications for people living with HIV/AIDS in South Africa. *Journal of Social Aspects of HIV/AIDS2* (3), 157-164.

Svensson, L., & Waern, S. (2013). Knowledge of and attitudes to sexually transmitted diseases among Thai university students. *Public Health and Caring Science, 2* (35), 41.

Terre Blanche, M. T., Durrheim, K., & Painter, D. (Eds.). (2006). *Research in practice: Applied methods for the social sciences*. Cape Town: UCT Press.

UNFPA (2016). *Adolescent sexual and reproductive health*. Available at https://www.unfpa.org/sexual-reproductive-health

United Nations. (2015). *Sustainable development goals. Geneva: United Nations*. Retrieved from: https://sustainabledevelopment.un.org/topics.

Van der Riet, M. (2009). *The production of context: using activity theory to understand behaviour change in response to HIV and AIDS*. (Unpublished Doctoral dissertation). University of KwaZulu-Natal, Pietermaritzburg, South Africa.

Venugopala, R. (2013). Perceptions of undergraduate students of University of KwaZulu-Natal regarding HIV counselling and testing in the year 2012 (Unpublished Doctoral dissertation). University of KwaZulu-Natal, Durban.

Walker, C. (1995). Conceptualising motherhood in twentieth century South Africa. *Journal of Southern African Studies*, *21*(3), 417-437.

Wassenaar, D.R., & Mamotte, N. (2012). Ethical issues and ethics reviews in social science research. In M. Leach, M. Stevens, G. Lindsay, A. Ferrero, & Y. Korkut (Eds). *The Oxford Handbook of International Psychological Ethics,* (pp. 268–282). New York: Oxford University Press

WHO (2006): *Reproductive health indicators: Guidelines for their generations, interpretation, and analysis for global monitoring, Geneva, Switzerland.* Available at https://apps.who.int/iris/bitstream/handle/10665/43185/924156315X_eng.pdf

Wood, K., Lambert, H., & Jewkes, R. (2007). 'Showing roughness in a beautiful way': Talk about love, coercion, and rape in South African youth sexual culture. *Medical Anthropology Quarterly*, 21(3), 277-300.

Wood, K., & Jewkes, R. (2006). Blood blockages and scolding nurses: barriers to adolescent contraceptive use in South Africa. *Reproductive Health Matters, 14*(27), 109-118.

Ziki, P. (2015). *Factors influencing adoption of high-risk sexual behavior by undergraduate students at a private tertiary institution in Gauteng Province, South Africa, in the context of the HIV/AIDS epidemic*. (Unpublished Doctoral dissertation). Stellenbosch University, Western Cape, South Africa.

Appendix 1: Ethical clearance

UNIVERSITY OF KWAZULU-NATAL
INYUVESI YAKWAZULU-NATALI

08 August 2017

Ms Bonisiwe Masinga (212547450)
School of Applied Human Sciences – Psychology
Pietermaritzburg Campus

Dear Ms Masinga,

Protocol reference number: HSS/1043/017M (Linked to HSS/0445/017)
Project title: Students' concerns about and management of Sexual and Reproductive Health at the University of KwaZulu-Natal, Pietermaritzburg Campus

Approval Notification – Expedited Application

In response to your application received on 29 June 2017, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol has been granted **FULL APPROVAL.**

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number.

PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

The ethical clearance certificate is only valid for a period of 3 years from the date of issue. Thereafter Recertification must be applied for on an annual basis.

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully

[redacted]
.....
Dr Shenuka Singh (Chair)

/ms

Cc Supervisor: Dr Mary van der Riet
Cc Academic Leader Research: Professor D Wassenaar
Cc School Administrator: Nonhlanhla Radebe / Ms Nondumiso Khanyile

Humanities & Social Sciences Research Ethics Committee
Dr Shenuka Singh (Chair)
Westville Campus, Govan Mbeki Building
Postal Address: Private Bag X54001, Durban 4000
Telephone: +27 (0) 31 260 3587/8350/4557 **Facsimile:** +27 (0) 31 260 4609 **Email:** ximbap@ukzn.ac.za / snymanm@ukzn.ac.za / mohunp@ukzn.ac.za
Website: www.ukzn.ac.za

Appendix 2: Gate keepers' approval letter

UNIVERSITY OF KWAZULU-NATAL
INYUVESI YAKWAZULU-NATALI

5 July 2017

Ms Bonisiwe Masinga (SN 212547450)
School of Applied Human Sciences
College of Humanities
Pietermaritzburg Campus
UKZN
Email: msiwez91@gmail.com VanDerRiet@ukzn.ac.za

Dear Ms Masinga

RE: PERMISSION TO CONDUCT RESEARCH

Gatekeeper's permission is hereby granted for you to conduct research at the University of KwaZulu-Natal (UKZN), towards your postgraduate degree, provided Ethical clearance has been obtained. We note the title of your research project is:

"Students' concerns about and management of sexual and reproductive health at the University of KwaZulu-Natal, Pietermaritzburg campus".

It is noted that you will be constituting your sample by conducting interviews, and/or focus groups with undergraduates and postgraduates students from all colleges on the Pietermaritzburg campus.

Please ensure that the following appears on your notice/questionnaire:

- Ethical clearance number;
- Research title and details of the research, the researcher and the supervisor;
- Consent form is attached to the notice/questionnaire and to be signed by user before he/she fills in questionnaire;
- gatekeepers approval by the Registrar.

You are not authorized to contact staff and students using 'Microsoft Outlook' address book. Identity numbers and email addresses of individuals are not a matter of public record and are protected according to Section 14 of the South African Constitution, as well as the Protection of Public Information Act. For the release of such information over to yourself for research purposes, the University of KwaZulu-Natal will need express consent from the relevant data subjects. Data collected must be treated with due confidentiality and anonymity.

Yours sincerely

[redacted]

MR SS MOKOENA
REGISTRAR

Office of the Registrar
Postal Address: Private Bag X54001, Durban, South Africa
Telephone: +27 (0) 31 260 8005/2206 **Facsimile:** +27 (0) 31 260 7824/2204 **Email:** registrar@ukzn.ac.za
Website: www.ukzn.ac.za

1910 - 2010
100 YEARS OF ACADEMIC EXCELLENCE

Founding Campuses — Edgewood — Howard College — Medical School — Pietermaritzburg — Westville

Appendix 3: Study advert

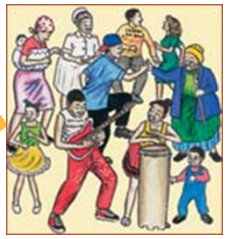
WE WANT TO TALK ABOUT SEXUAL HEALTH

Would you be interested in participating in a series of discussions about sexual health and gender?

Are you a young woman or man, an undergraduate or postgraduate student from the University of KwaZulu-Natal and over the age of 18?

We are looking for students to participate in a study.

If you are interested or would like more information, please email: srhipts1@gmail.com



Appendix 4: Request to Risk Management Services to put up posters on campus

Dear Risk Management Team

REQUEST PERMISSION TO PUT POSTERS ON CAMPUS WALLS

My name is Bonisiwe Masinga and I am a registered Masters student in the Discipline of Psychology at the University of KwaZulu-Natal, Pietermaritzburg campus. My supervisor is Dr Mary van der Riet.

The proposed topic of my research is: Female students' concerns about, and management of, their sexual and reproductive health at the University of KwaZulu-Natal, Pietermaritzburg

. The objectives of the study are:

1. To investigate students' concerns about sexual and reproductive health.
2. To explore how university students, manage their sexual health while on campus.

However, to conduct this study on students I need to put advertisements around campus notice boards, requesting them to participate. I am hereby seeking your consent to put posters around campus notice boards.

Your permission will be highly appreciated.

Yours sincerely,
Bonisiwe Masinga.

Appendix 5: Memorandum of understanding

Memorandum of Understanding
Between
Training and Research Support Centre, Zimbabwe
and
Department of Psychology, Rhodes University
School of Applied Human Sciences, University of KwaZulu-Natal
South Africa

This agreement serves as a Memorandum of Understanding between the Training and Research Support Centre (TARSC) located in Harare, Zimbabwe and the Department of Psychology, Faculty of Humanities at Rhodes University (RU) and the Discipline of Psychology, School of Applied Human Sciences at the University of KwaZulu-Natal (UKZN) (hereafter called the Research Team), both based in South Africa. It outlines conditions by which TARSC will co-operate with RU and UKZN in the translation of the reproductive health pack 'Auntie Stella: Teenagers talk about sex, life and relationships' into isiZulu and isiXhosa for use as hard copy and in the web provision of the translated materials.

The Principal Investigator and contact person for the South Africa partners to this agreement is Prof. Jacqueline Akhurst, Associate Professor, Department of Psychology, Faculty of Humanities, Rhodes University, and Honorary Research Professor, School of Applied Human Sciences, University of KwaZulu-Natal (where Dr Mary van der Riet is the chief collaborator).

This Memorandum is in line with TARSC policy on materials, including copyright policies.

TARSC declares that it is entitled to use the 'Auntie Stella' material for the purpose of this co-operation, in particular to reproduce, disseminate or publicly communicate it either in whole or in part, including their storage by means of electronic data processing and electronic dissemination in multi-media form, furthermore to carry out adjustments, and translations. TARSC declares that it is also entitled to assign or grant rights of use to the Research Team.

A. CONDITIONS OF ADAPTATION AND TRANSLATION

1. TARSC gives permission to the Research Team to adapt and translate into isiZulu and isiXhosa the 'Auntie Stella' material (to adapt and translate a select number of the 42 question and answer cards, and to adapt if and where appropriate the Facilitator's and Adaptation Guide and two information sheets), but only for non-profit purposes.

2. TARSC retains full copyright over the 'Auntie Stella' material, including the translated version. All copyright provisions on the original version will apply to the translated version. The translated version will in writing acknowledge TARSC as the copyright holder and will include TARSC's logo and institutional address on the front cover of the translated version.

3. The Research Team shall be acknowledged on the inside cover and back cover of the material. Full acknowledgement shall include the co-operating institutions' logos and contact information.

4. The isiZulu and isiXhosa versions of 'Auntie Stella' will be uploaded as a PDF file onto the TARSC website (www.tarsc.org) with a url link to the partners' websites and with acknowledgements to the Research Team for their contribution in translating the material.

5. Any use of the 'Auntie Stella' letters on the Research Team websites shall be partial (i.e. no permission is given for the full set of letters or material to be used) and shall clearly refer to TARSC authorship and make links to the TARSC website for the full materials.

6. The Research Team can put the isiZulu and isiXhosa version of 'Auntie Stella' on CDROM for free distribution, on condition that the correct acknowledgement, as provided for in point 2 above, is followed.

7. Ten copies of the final isiZulu and isiXhosa versions, whether hard copy or CDROM, must be sent to TARSC within one month after production and will be lodged with the TARSC library, electronic copy with the web administrator and a copy sent to the Zimbabwe National Archives.

8. While it is recognized that the Research Team will need to adapt the content of the 'Auntie Stella' material to meet conditions of users in South Africa, the overall format (Question Card, Talking Points, Answer Card and Action Points) and spirit of its content will remain as per the original version. In the event of disagreement on adaptation, TARSC's word is binding in line with conditions of copyright.

9. Final approval of the content and design (including use of graphics, front and back covers) has to be given in writing by a TARSC Programme Manager and/or Director before distribution.

B. DISTRIBUTION AND MONITORING

1. The Research Team will have shared rights with TARSC to distribute the isiZulu and isiXhosa versions of 'Auntie Stella' in South Africa, on condition that distribution is only for non-profit purposes. Any costs recovered on the distribution of the materials shall not exceed the costs of production and shall be applied to costs of further print runs or further development of participatory materials by TARSC. The Research Team will not apply any charges on the materials without reaching a separate and explicit mutual agreement with TARSC on the charges, the management and application of funds collected.

2. TARSC retains the right to distribute the isiZulu and isiXhosa versions through its own distribution channels in and outside of South Africa.

3. The Research Team shall not give the impression in any way that they produced the original version of 'Auntie Stella', or take any communications in relation to production and content, or project any role in production other than that of translator of the material. All such communications are to be referred to TARSC.

4. The Research Team is liable to ensure compliance with laws of the countries it is operating in and bring to TARSC's attention any legal provisions that may affect distribution prior to agreement to distribute.

5. TARSC and any member of the Research Team will notify each other if either party intends to evaluate use of the isiZulu and isiXhosa versions of 'Auntie Stella'. Where possible, and by mutual agreement, they will work in collaboration in monitoring use of the isiZulu and isiXhosa version of 'Auntie Stella'.

6. The Research Team will provide TARSC with user comments and experiences, share evaluation findings or other information relating to the 'Auntie Stella' material, and provide user statistics such as the number and characteristics of users.

7. The Research Team will provide acknowledgement of TARSC's copyright of 'Auntie Stella' in any reports about or evaluations of its work relating to the use of this material.

C. FINANCIAL AND OTHER COMMITMENTS

1. The Research Team will fund translation of a select number of 'Auntie Stella' cards; the selection of cards will be at the discretion of the Research Team.

2. TARSC will provide technical input into adaptation, and provide all graphics from the English version. This role will be reimbursed via a one-off payment to TARSC of R10 000.

3. TARSC will absorb costs for uploading the pdf files of the isiZulu and isiXhosa version onto the 'Auntie Stella' website.

4. TARSC and the Research Team will each be responsible for their own distribution costs.

5. Any other costs arising will be distributed as agreed by both parties and in line with the principles set out in this agreement.

6. TARSC and the Research Team will come to a separate financial agreement should the Research Team request a training of trainers workshop in the use and monitoring of the 'Auntie Stella' pack.

7. This MOU covers the adaptation, translation and trialling of a select number of 'Auntie Stella' cards into isiZulu and isiXhosa for use with university students. A separate MOU will cover design and printing of the cards and more widespread trialling and distribution. This second phase is dependent on the procurement of additional funds by the Research Team.

Signed:

_____	_____
Dr. Niki Jazdowska	Prof Jacqueline Akhurst
Director	Assoc Professor in Psychology
Training and Research Support Centre	Dept of Psychology, Faculty of Humanities
Harare, Zimbabwe	Rhodes University
Date: _____	Date: _____

_____

Dr. Mary van der Riet

Senior Lecturer

School of Applied Human Sciences

Discipline of Psychology

University of KwaZulu-Natal

Date: _____16 March 2016_____

APPENDIX: PROPOSED METHODOLOGY FOR TRANSLATION

Prepared by members of the Research Team

1. The research team will select about 30 cards related to youth sexuality, relationships and risk, and STI's.

2. Masters level students will use a back-translation technique to translate the cards from English into isiZulu and isiXhosa

2.1 This technique means one person will translate the cards into the identified language. Another person will translate these translations back into English. The research team will then review the two English versions and assess the discrepancies. Re-translation of the cards will take place until there is an adequate 'fit' between the English version and the first language version.

3. The research team will consider the relevance of the content of each card, and make adjustments to names of persons, place names, local slang terms.

3.1 The research team will also consider the relevance of the content of the response to each card (the facilitators 'answer')

4. These translated and adapted cards will be piloted with a group of honours level (4th year) Psychology students, and or with undergraduate students whose first language is isiZulu, or isiXhosa. We will conduct two groups – a group of male students with a male facilitator and another group of female students with a female facilitator.

4.1 These focus groups will be recorded. The discussion will proceed with the following steps

4.1.1 First the focus group will be conducted as if the cards are being used in a conventional 'Auntie Stella' discussion group

4.1.2. The focus group members will then be asked to comment on the translation of the cards. We will work through each card and consider any issues with this group of first language speakers.

4.1.3 Simultaneously, with each card, the group will discuss the relevance of the content of the cards, place names, local slang terms etc.

4.1.4 In addition to this, the focus group will be asked to comment on the facilitator's response to the cards (i.e. the 'answer'), and make suggestions about relevance, contextually-specific material.

5. Technical issues. All of these discussions will be recorded. Most of the discussion will be transcribed (by the student researchers) so that an analysis of the different parts of the research process can be conducted. This means

5.1 An analysis of the actual process of administering the Auntie Stella translated cards (the participants' responses, their discussion of the issues)

5.2 An analysis of the issues raised in the translation and adaptation of the cards.

Appendix 6: Information sheet

The study

This study is part of a broader Auntie Stella project run under my supervisor Dr Mary van der Riet. The aim of this study is to investigate students' concerns about and management of sexual and reproductive health. To investigate this, I will facilitate group discussions within the broader project and use the data generated as part of my study. The results of the study could assist with designing sex and reproductive health interventions for students on campus.

The focus groups

The focus groups will take about 1 h 30 minutes per session. It will involve several discussions groups over a period of a few weeks. They will be held in a room in the Psychology building. The researcher will bring the Auntie Stella cards, which includes questions, and answer cards. The researcher will then ask questions related to SRH issues using the Auntie Stella cards. The questions to be asked will be broad and not directed to any individual in the group Students are invited to speak openly and freely, but also to be aware that this is a group discussion, so only to discuss issues which you are happy to share with other people.

In the discussion we will not use your name or student number, instead we will use pseudonyms (false names). Each person who participates will choose a pseudonym, so that his or her name will be protected. This means that in the final data from the project no one will be able to know who said what in the focus groups.

Because you are in a group setting, you will be requested to sign a confidentiality pledge saying that everything discussed in the focus group will be kept confidential. By signing, you are agreeing that you will not reveal and discuss what was said in the focus group. You will be also asked to choose a fake name during the discussion. However, be advised that we cannot guarantee confidentiality even if a pledge is signed. For this reason, you will be asked general questions as a point of discussion. You are advised not to disclose any sensitive personal information about yourself during the discussion

After participating in a focus group, you may be asked to participate in a separate, personal interview.

The interview process

The interview will take approximately 90 minutes. It will be held in a room in the Psychology building. The researcher will ask you questions about sexual and reproductive health. The study wants to find out your personal concerns about sexual and reproductive health as well as how you manage your sexual and reproductive health on campus. There are no right or wrong answers. You are encouraged to express yourself freely and informally. You can answer questions you are comfortable to answer and leave the ones you wish not to comment on.

Recording

With your permission, the focus groups and interviews will be recorded so that the researcher can transcribe and analyze what people have said.

Please be advised that taking part in this research project is voluntary. You may refuse to answer any questions that you do not feel comfortable to answer. If you decide to skip some questions or withdraw, you will not be penalised in any way.

After the focus groups

After the discussion we will take the recordings and transcribe them into a written form. In this process you will still be referred to by your pseudonym. The transcription will be analyzed and reports will be written.

The information may also be used in future research projects. The information collected in the research process will also be used to write research articles, and to present at conferences so that other people may learn from the experience of our research. These written documents, will use only pseudonyms and not reveal any identifying information related to the participants in the study.

A synopsis of the results of the study will be made available to you on request.

Storage of Information

The information will be kept for future research purposes. It will be stored in a secure location for a period of five years, after which it will be destroyed.

Any risks and benefits?

I do not anticipate any risks to you participating in this project other than those encountered in day-to-day life**.**

The benefits of the study are that you will hear others talk about their knowledge and management of sexual health and reproductive issues and be able to learn more from each other.

Anything else?

If you need advice on further health management or the research raises other social or psychological issues you can visit the Campus Clinic or the Student Counselling Services. At the campus clinic you can get information and assistance on HIV testing, pregnancy testing, sexual advice, information on the management of sexual and reproductive health issues. At the clinic you can book an appointment to either Sr Govender or Sr Peters via email govenderna@ukzn.ac.za and petersi@ukzn.ac.za. You can also approach the Child and Family Centre at the University, for an appointment with an intern psychologist (Ms N Naidoo: naidoon2@ukzn.ac.za; 033 260 5166)

If you have any concerns about this study you can also contact Ms Phume Ximba of the Humanities and Social Science Research Ethics Committee (031 260 3587; email ximbap@ukzn.ac.za)

If you have any questions about this study, then please talk to the researcher and or email the supervisor of this research study Dr Mary van der Riet (tel 033 260 6163; email vanderriet@ukzn.ac.za).

Appendix 7: Consent document for focus group and individual interview

- I hereby agree to participate in the study
- I have read and understood the participant information sheet.
- I understand what the project is about and the benefit it may bring on campus.
- I understand that what the researchers find out in this study may not be shared with others and my name will be confidential.
- I am fully aware of what I will have to do, and of any risks and benefits of the study.
- I know that I am choosing to take part in the study and that I can stop taking part in the study at any stage without giving any reason to the researchers.

Signature of participant……Date……..

Appendix 8: Confidentiality pledge

I will ask you to sign below to indicate that you will keep all comments made during the focus group confidential and not discuss what happened during the focus group outside the meeting.

However, it is important to be aware that in the focus group, the researcher cannot guarantee that others in the group will respect the confidentiality of others in the group. Therefore, it is important that you manage what you say in the group and do not discuss issues which you do not want the group to know about

We ask all group members to pledge to:

- I agree to maintain confidentiality of information shared in this focus group, and not reveal the content of this discussion to people outside of this group.

Signed _____Date: _____

Appendix 9: Consent to audio record focus group/interviews

This study involves the audio recording of the focus group discussion/ interviews. Neither your name nor any other identifying information will be associated with the audio or audio recording or the transcript. Only you and the research team will be able to listen (view) to the recordings. The tapes will be transcribed by the researcher and erased once the transcriptions are checked for accuracy. Transcripts of the focus group discussion/interviews may be reproduced in whole or in part for use in presentations or written products that result from this study. Neither your name nor any other identifying information (such as your voice or picture) will be used in presentations or in written products resulting from the study.

Do you consent to the recording of this discussion?

If yes, then please sign here _____ Date _____

Appendix 10: Focus group Auntie Stella cards

6. I want to have sex like all my friends!

Theme: Growing up

Sex and relationships

Dear Auntie Stella

I am a 16-year-old boy in Form 3 at a boarding school. My problem is this: I know many girls but I would like a proper girlfriend so we can enjoy love together. All my friends boast when they speak about having sex and I would also like to be doing this.

I am afraid that I am getting so old that when I finally find a girlfriend she'll laugh at my failure to do it well. I am thinking seriously about going to see a *n'anga* (traditional healer) for love potions for these girls to like me very much. Please auntie, give me some advice.

Titus

TALKING POINTS

- What is the difference between love and sex?
- Do you think it is true that Titus' friends have already had sex? If it isn't true, why are they pretending?

12. I pay for lunch; don't I deserve sex?

Theme: Sex and relationships

Forced sex

Dear Auntie Stella

I am a boy at school and I want to have sex with my girlfriend. I buy her lunch at school, pay bus fare and sometimes even give her gifts but she won't have sex with me. My friends say that other girls do this. Why can't she give me sex to say thank you for the things I do for her?

Themba

TALKING POINTS

- Do you feel you have to have sex with your boyfriend if he gives you presents or money? BOYS: Do you expect your girlfriend to have sex with you because you buy things for her?
- Why do you think Themba's girlfriend refuses to have sex with him? What advice would you give Themba? And what advice would you give his girlfriend?
- Some say boys and girls don't want the same thing from relationships.What do they each want? Do you all agree?

• What successes do you pretend about? Is this helpful or harmful for you and your friends? • Why do you think you and your friends want to be the same as each other and do the same things? What is good about this? What dangers are there in this?	**Additional question:** • Besides, transactional sex, what do you think are the factors that increase the risks of poor sexual health such as HIV among women, particularly university students

15. I'm worried about cervical cancer

Theme: Relationships with family and community

Dear Auntie Stella

I am a 15-year-old girl and I am worrying about something which I heard. My aunt said that one of her neighbours is very sick with cervical cancer and it is a disease which can kill women.

I never heard of it before, and I am really worried. How do people get it and is it true that it can kill you?

Shamiso

TALKING POINTS

- Have you heard about cervical cancer (or cancer of the cervix)?
- Do you know what causes it?
- What can girls and women do to avoid getting it?
- Can it be cured?

21. My periods are irregular

Theme: Growing up

Relationships with family and community

Dear Auntie Stella

I am a girl aged 15 years old. I started my periods when I was 13 years old. Now my problem is that I haven't had my periods for the last four months. I am a virgin and have never had a boyfriend. Is there something wrong with me? My friends say that I am infertile. Is this true? Please help because I'm scared that maybe I can't have children.

Pauline

TALKING POINTS

- Do most girls you know have regular periods (once a month) or irregular ones?
- Discuss the reasons why some girls have irregular periods like Pauline.
- Do you think it is likely that missing periods means that Pauline is infertile?

Additional questions: • What is your understanding of cervical cancer and the effects it has on women's reproductive health?	**Additional questions:** • Do you think irregular periods have an effects on women ability to bear children? (why or why not) • As you are on campus, how would you feel if find that you are pregnant?

36. My sugar daddy treats me badly

Theme: Sex and relationships

Forced sex

Dear Auntie Stella

I am a girl of 16 years. I dropped out of school because I want to be a model. My boyfriend is a businessman and also owns a big farm. I met him three months ago when I was at his store and he proposed love to me.

My friends told me to agree because he had the three Cs: cash, car and cellphone. They said sugar daddies give you clothes and proper food like chicken. At first he gave me presents and said he would help me become a model. He even gave my brother a job on his farm. We went in his car and even stayed at hotels. But now he only wants to have sex and go. He shouts if I ask for anything, and calls me a prostitute.

Last week I asked him to use a condom because it was safer but he got angry and hurt me when we had sex. He says if I want presents I must give him sex without wrappers. He promised to get herbs for me if I need them. But I am still afraid. He has not said any more about me being a model.

Auntie, what can I do? I boasted to my friends to make them jealous and they will laugh at me if I ask for advice.

7. I had an STI – am I infertile?

Theme: Sexually transmitted infections

Dear Auntie Stella

I broke up with my boyfriend a few months ago because I knew he was sleeping with other girls. Then a week ago he came to say that he has an STI (sexually transmitted infection) and that I should go for a check-up in case he gave it to me.

Anyway, I went to the clinic yesterday and after some tests the nurse told me I have an STI. She said I MUST take all the pills because, if I don't, I may end up not being able to have children.

Now, that really scares me! I want to have lots of kids when I'm older and have found the right guy. I'd die if I found out I could never get pregnant.

Auntie, is it true? Do you think I may never have kids? Please tell me.

Fortunate

TALKING POINTS

Is it true that a boy or girl who has an untreated STI for a long time may become infertile? What else causes infertility?

What would you worry about most if you found that you were infertile and couldn't have children?

Nyarai TALKING POINTS **<u>Additional question:</u>** • Do you think female students are in a position to discuss safe sex with their sexual partners? (Why or why not)	When a couple cannot have children, do you think it is most often because: – the man is infertile? – the woman is infertile? – it could be either the man or the woman? Do you think a couple can be happy without children? Why or why not?

Appendix 11: Interview questions

I want to thank you for taking the time to meet with me today. My name is Bonisiwe Masinga and I met you from the focus group. I have seen in the focus group that you were active and able to express yourself a little bit more about the issues that we were talking about. I heard about the concerns and issues that the group have spoken about but now I would like to know a little bit more about you and your experiences of sexual and reproductive health. The interview should take about an hour.

I will be taping the session because I don't want to miss any of your comments. Because we're on tape, please be sure to speak louder so we don't miss any comments. All responses will be kept confidential. This means that your interview responses will only be shared with my supervisor and I will ensure that any information I include in the report does not identify you as the respondent.

Are there any questions about what I have just explained?

Are you willing to participate in this interview?

Questions related to sexual health

1. Tell me what forms sexually transmitted infections you know about. And which ones are you concerned about?
2. Have you ever been concerned that you might have an STI or your partner might have one?
3. Have you ever had an STI? (If yes, how did you treat it?)
4. How would you feel if you find that you had an STI such as HIV? (Why would feel like that?)
5. Would you be concerned if find that you have HIV? (Why or why not?) (What would be your concern if find that you had contracted HIV?)
6. Have you ever go for HIV testing? (Why or why not?)
7. What strategies do you use to protect yourself against STIs including HIV?

8. What do you think are the factors that increase the risk of STIs/ HIV among students on campus?

9. Why do you think they face these particular risks?

10. Tell me about the sexual risky situations you have faced.

(What made you decide to do that? What did you fear when you encountered these risks?)

Questions related to reproductive health

11. What concerns do you have about your reproductive health?

(Why are you having those concerns about your reproductive health?)

12. How would you feel if you find that you were infertile?

(Why would you feel like that?)

13. What do you think are the factors that affect women fertility?

14. As you on campus, how do you manage your reproductive health?

15. Do you use any type of contraceptives?

15.1. If yes, what are your experiences of using contraceptives?

16. Do you use campus health services e.g. campus clinic?

(If no, why not?) (If yes, how did you engage with the campus clinic? What challenges do you face in using the campus clinic?).

Appendix 12: Jeffersonian transcription conventions

(.) the dot on the transcripts indicates an untimed pause

equal double parentheses (( )) indicates the translation of participants' words

equal sign (=) indicates the continuation and no gap between the two lines

left bracket ([) indicates a point at which a current speaker was interrupted by another person during the conversation

The notation (uhm) indicates that the speaker is thinking or guessing.

The notation, (hh) indicates in-breath and out-breath respectively.

Appendix 13: A letter from Child and Family Centre (CFC)

UNIVERSITY OF KWAZULU-NATAL
INYUVESI YAKWAZULU-NATALI

27 June 2017

To whom it may concern

This letter serves to provide the assurance that should any participant interviewed by Ms Bonisiwe Masinga (Psychology Masters student) require psychological assistance as a result of any distress arising from the research project titled *"Students' concerns about and management of sexual and reproductive health at the University of KwaZulu Natal Pietermaritzburg campus"*, the service will be provided by Masters one Psychology students and intern psychologists at the University of KwaZulu-Natal, Pietermaritzburg Campus Child and Family Centre – phone 033-2605166.

Yours sincerely,

Y. Chilimanzi
Director: Child and Family Centre
University of KwaZulu-Natal
Pietermaritzburg Campus

Child and Family Centre
School of Applied Human Sciences

Postal Address: Private Bag X01, Scottsville, Pietermaritzburg, 3209, South Africa

Telephone: +27 (0)33 260 5166 **Facsimile:** +27 (0)33 260 5809 **Email:** Naidoon2@ukzn.ac.za **Website:** psychology.ukzn.ac.za

Founding Campuses: Edgewood Howard College Medical School Pietermaritzburg Westville

Appendix 14: Turnitin report

Female students' concerns about sexual and reproductive health

ORIGINALITY REPORT

7%	4%	4%	2%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	www.tc.columbia.edu Internet Source	<1%
2	Submitted to University of Technology, Jamaica Student Paper	<1%
3	Singh, S., and A. Hamid. "Reflections of a group	<1%