

PREVENTATIVE MEASURES PRACTICED BY TEENAGERS AGAINST SEXUALLY TRANSMITTED INFECTIONS AT A SELECTED CLINIC IN VHEMBE DISTRICT, LIMPOPO PROVINCE

By

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#### DECLARATION

I, Hlungwane Eustacia (student no: 11583466), hereby declare that the dissertation titled *"preventative measures practiced by teenagers against sexually transmitted infections at a selected clinic in Vhembe, Limpopo province*" hereby submitted by me, has not been submitted before for a degree at this or any other University, that is my own work in design and in execution, and that all the references material contained therein has been duly acknowledged.

Signature.

Date: 25 April 2023



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#### Dedications

This mini dissertation is dedicated to my late mother Mrs Mabasa KJ, my husband Mr Mathebe Sampie, and my children Chriselda, Chrishando and Chrisantha and all my siblings.



#### Acknowledgement

To commence with, I would like to thank God almighty for the knowledge, strength and opportunity that he gave me to engage in this research until to the end

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#### LIST OF ABBREVIATION AND ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
ANC	Ante Natal Care
ARV	Antiretroviral
CDC	Centre of Disease Control and Prevention
DHIS	District Health Information System
DOH	Department of Health
FP	Family Planning
HSV	Herpes Simplex Virus
HIV	Human Immune Virus
HPV	Human Papillomavirus
NICD	National Institute for Communicable Disease
PNC	Post-Natal Care
SRH	Sexual Reproductive Health
STI	Sexual Transmitted Infection
ТВ	Tuberculosis
UNICEF	United Nations Children's Fund
WHO	World Health Organization
YFS	Youth Friendly Service



#### ABSTRACT

STIs in South Africa are increasing in alarming rates. The selected clinic is no.5 with the highest STIs, pregnancy and HIV statistics in Limpopo province among 13 to 19 years old teenagers. The purpose of the study was to explore preventative measures practiced by teenagers against STIs at a selected clinic of Vhembe district, South Africa. Qualitative research methodology, which adopted exploratory research design was used. Purposively sampled sixteen teenagers between the ages of 13 and 19 years who are using the selected clinic's youth friendly services participated in the study. Unstructured in-depth face to face interviews were used to collect data. Data were analyzed through an open-coding method. Findings revealed that only two out of sixteen participants aged 13 and 14 years practiced abstinence. The rest of participants were sexually active, using traditional concussion made from boiling aloe or morula tree, which they drank before and after sex, applying plain yoghurt on the vagina once a week OR vaginal steaming. Only six used condoms. Participants cited patriarchy, lack of sex education in rural schools, long distance to clinics and desire to taste sex as reasons for adopting such preventive measures. Risky sexual behavior among 13 to 19 years old teenagers is still rife in rural areas. School health and youth friendly clinics services needs to be strengthened to raise awareness and improve accessibility to condoms and STI education.

**Keywords:** Clinic, Measures, Practiced, Preventive, Sexual transmitted infection, Teenagers, Limpopo province.

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#### CHAPTER ONE OVERVIEW OF THE STUDY

#### **1.1 Introduction**

Sexually Transmitted infection (STIs) are infections that can be contracted when one engages in unprotected sex with someone who already has an infection (WHO, 2019). There are several types of infections; however, the common ones are the following: Human papillomavirus (HPV), gonorrhoea, Genital Herpes and Chlamydia. HPV infections cause warts in different parts of the body. Genital herpes are STI's that manifest through genital pains and sores, while Chlamydia are infections that may not cause symptoms. This section covers study background, problem statement, purpose of the study, objectives, rationale, and significance of the study and definitions of terms.

#### 1.2 Background of the study

Sexually transmitted infections have become a global public health challenge. Every day there are more than 1 million reported cases of daily infections of STIs internationally (WHO, 2019). Furthermore, worldwide, there are about 376 million cases of STI, which include chlamydia, syphilis, trichomoniasis and gonorrhoea. Additionally, worldwide more than 500 million people are estimated to have genital infections, with herpes simplex virus (HSV) being the common one (WHO, 2019). This is partly because sexual activities amongst teenagers have been reported to be increasing universally. China accounts 3% of new STI globally each year. In 2018 new infections rised by 40 000 in the 2<sup>nd</sup> quarter (Mabey, 2017).

Teenagers have their sexual debut between 10 and 19 years, with boys initiating sex earlier than girls (WHO, 2016). According to the United Nations Children's Fund (UNICEF), young people and adolescents constitute a significant part of the people living with HIV in the whole world. In the year 2015, 670 000 youth between the age 15 to 24 years were newly infected with HIV, of whom 250 000 were adolescents aged 15 to 19 years (UNICEF, 2016). The Centre for Disease Control and Prevention (CDC) in the United States (US) reported the highest rate of the sexual transmitted infections worldwide. It estimated that there are more than 20 million new cases of STIs yearly, with adolescents aged 15-24 years accounting for 50% of the infections. The CDC also reports that 46% of students in American high school have had intercourse without using protection and are at risk of contracting HIV and many other STIs (CDC, 2018).



There are also more than 110 million of STIs among men and women in the US, according to estimates by the CDC.

The CDC report also shows that the new annual infections are nearly equal between teen girls (51%) and teen boys 49% (CDC, 2015). Teenagers may have some challenges because they might not know where to find reproductive health services, or be unable to pay for them (WHO, 2020). In a study that was conducted in Ireland (2017), it was found that 37, 3% of the boys and 54, 5% of the girls-initiated sex at 15-18 years (Young, Burke & Gabhaim, 2018). Furthermore, a study conducted by Akokuwebe (2015) in South-western Nigeria showed that teenagers' knowledge about sexual transmitted infections is generally limited to HIV/AIDS and their perception about sex influences their decision to initiate sex. These findings show that there is a need for sexual education and other reproductive interventions in the early years of the teenagers (Amu & Adegun, 2015). Many teenagers know about HIV/AIDS; however, their knowledge about STI is limited (Mohamed, Ishak & Manoharan, 2019).

The National Institute for the Communicable Diseases (NICD) in South Africa (SA) reported that 76.9 million people living with HIV/AIDS in 2017 also have a high number of STIs. It was estimated that 1.9 million had Chlamydia, 2.3 million had gonorrhea and 23.175 had syphilis, among women aged between 15 and 49. Among men, there was an estimated 2.2. Million cases of gonorrhea, 3.9 million of Chlamydia and 47,500 new cases of syphilis among those aged15 to 49 years. The high number of cases of STI in South Africa is partly due to treatment gaps (NICD, 2019). The National Institute of Communicable Disease has provided the male urethritis syndrome (MUS) statistics in South Africa, per province, for 2004 and 2005, with the highest peak being in Mpumalanga, at 39.5%; followed by the Northern Cape at 32.7%, Western Cape at 30%, KwaZulu-Natal at 26, 7%, Eastern Cape at 25, 6%, Free State at 25, 1%, Limpopo at 24, 6% and Northwest at 24%.

The findings of the study that was conducted in Northern Cape in 2014 show that STIs constitute 70%. However, the risks among the teenagers were uniformly low, with 24% for contracting STI and 26% for contracting HIV. The learners' response was that they were not aware of primary health care (PHC) services (Nyasulu, 2018). When an STI is left untreated, it can have a negative impact, such as adverse pregnancy outcomes, intrauterine death, and premature delivery. Limpopo has also experienced an increased rate of STIs. For example, in 2017/2018 the Capricorn District had 69, 4%; Mopani had 68,6%; Sekhukhune had 68,5%, while Waterberg had 98% (DHIS, 2018).



The Department of Health (DOH) has introduced some guidelines on the treatment and prevention of STIs. However, STIs are still a challenge because the rule says both partners should be treated, so that both can be healed completely. Unfortunately, some are too shy to come with their partners because of sexual multiple partners. DOH has also introduced Youth Friendly Services (YFS) at the clinics, to help teenagers about sexual reproductive health.

Programmes such as school health aim to improve understanding about reproductive health at school level. In addition, the Love Life programme was introduced to deal with the prevention of HIV/AIDs among youth. When they were given health advice on the use of condoms at a selected clinic, most teenagers reported that they "don't eat sweets with a wrapper", while some of did not come to the clinic at all. Condoms are given for free to all citizens, including youth. Furthermore, they are available at schools and liquor outlets. However, teenagers still engaged in risky sexual behaviours. These risky behaviours remain a barrier in interventions to prevent sexually transmitted infections.

Several studies have been conducted on the risk perception of sexually transmitted infections in the Northern Cape and other provinces. However, a gap persists, based on the teenagers' regular sexual practices. This is the reason why there was a need for this study to be conducted, based on the findings of the previous studies.

#### 1.3 Problem statement

Despite the availability of the programmes such as the Youth-Friendly Service (YFS), School Health and Love Life, there is still an increase in the number new of sexually transmitted infections in Vhembe District. According to the DHIS, which is a combined report from the Primary Health Care Facilities, clinic reports show that teenagers are still practicing unsafe sex, which leads to STIs and teenage pregnancy (DHIS, 2015). There is also a high rate of STIs, which includes HIV infection. The selected clinic is no.5 in top 10 with the highest STIs, pregnancy and HIV statistics in Limpopo province among teenagers (DHIS, 2022).

This shows that the measures the teenagers are using to prevent infection against STIs are not effective. This is cause for great concern because complications of STI can cause health problems like cervical cancer, pelvic pains, and infertility (Zekayi, 2017). The researcher in this study is a professional nurse who works at a clinic. She had noticed that more teenagers come to the clinic



for the treatment of STIs than for condoms. This shows that there was a need to conduct a study of this nature, to explore the preventative measures practiced by teenagers to protect themselves again STIs.

#### 1.4 Rationale of the study

Several studies have been conducted globally on risky sexual behaviors and STIs preventative measures by teenagers. All these studies show that there is a persistent increase in the number of STI infections (CDC, 2018). This is despite the Department of Health's preventative strategies and programmes, such as Youth Friendly Services, which allows teenagers to consult at the clinic after school between 17h00 to 18h00, School Health and Love Life programmes. Despite these interventions by the Department of Health, to empower teenagers on reproductive health, there are still some challenges. Therefore, the was a need to investigate the STI preventative measures practiced by teenagers; specifically, what these teenagers are using to protect themselves against STIs, as they are not using the recommended measures, as shown by increasing infection rates.

#### 1.5 Purpose of the study

Purpose of this study was to explore the preventative measures practiced by teenagers against STIs at a selected clinic in Vhembe District.

#### **1.6 Objectives of the study**

- To explore the preventative measures practiced by teenagers to protect themselves against STIs.
- ✤ To describe the factors influencing the teenagers' choices of preventative measures.
- ✤ To describe the factors influencing the teenagers' non-adherence to other recommended preventative practices.

#### 1.7 Significance of the study

Teenagers must be aware of the recommended preventative measures against STIs, such as abstinence and condom use, in order to keep the infection rates low. The Department of Health



may save more money that was previously used to purchase anti-retroviral and STI treatment, as the transmission rates will be very low. In addition, parents may have less responsibility for taking care of their grandchildren while their mothers go to school. This is because the number of teenage pregnancies would decrease. Lastly, the study recommendations will be used in health education and policies on teenagers' reproductive health and policy formulation, to improve the guidelines and policies on teenagers' reproductive health.

#### 1.8 Definition of terms

- Factors influencing are those factors that can affect some features of target object (Miffin, 2018). In this study, it means factors that makes teenagers to practice those measures to prevent STI.
- STIs are a group of pathogens, which include bacteria, fungi, protozoa and virus, which show themselves in different clinical symptoms (WHO, 2017). In this study an STI refers to a disease that teenagers acquire after having unprotected sex.
- A practice is a customary, habitual or an expected way of doing something (Collins, 2020). In the study it can mean abstinence, post-exposure prophylaxis and the use of male and female condoms to prevent STIs.
- Prevention: means stopping something from happening (Collins, 2020). In the proposed study it means what teenagers do to avoid contracting sexually transmitted infections.
- Preventive measures: something intended to prevent or used to hinder, acting as an object (Miffin, 2018). In this study it means those actions teenagers use to protect themselves against STIs, either through abstinence or condom use.
- Teenagers: the phase of growth and development from childhood and adulthood. In this study it is a young person between ages 13 up to 19.
- Non-adherence: in health care it results when a patient does not initiate or continue care that a provider has recommended (Philipson, 2015). In this study it means noncompliance with the use of recommended measures for preventing STIs.



#### CHAPTER TWO LITERATURE REVIEW

#### 2.1 Introduction

There is a challenge of sexually transmitted infections (STIs) and their detrimental effect on health among people across the globe. Literature has shown that this problem had increased with most teenagers practicing risky sexual behaviours. These risky sexual behaviours vary significantly depending on accusations and individual behaviours such negligence of not using protection during sexual intercourse. There are various types of infections that results from having an unprotected sexual intercourse such as HIV, HPV, gonorrhea, genital Herpes, and chlamydia, among others. The previous chapter provided the overview of the study, the aim and highlighted the methodology and ethical precautions to be followed. This chapter discusses the literature on the nature and prevalence of STIs among people from various contexts, the existing measures to prevent the spread of STIs and the role of institutions such as the government and non-governmental organizations towards the prevention of the spread of STIs, especially on teenagers.

#### 2.2 The nature and prevalence of STIs

The prevalence of STIs and its transmission is rampant the world over (Wilton, 2017; van den Berg, Gamarel, Westfall, Fortenberry, Hosek, Wilson and Lally, 2020). The CDC (2021) found out that there were 26 million new STIs reported cases in the United States of America alone in 2018. However, what is interesting to note is that, among the new incidents reported, 50% were the youth between the age of 15 to 24 years (CDC, 2021). In 2017, South Africa had 2.3 million of estimated new cases of gonorrhea, new chlamydia cases were 1.9 million and new syphilis cases were 23,175 among women between the ages of 15 to 49 years. Among men of the same age, there were an estimated 2.2 million new cases of gonorrhea, 3.9 million new cases of chlamydia and 47,500 new cases of syphilis. This portends larger implications for youth in the way they are affected by the STIs and their responsibilities and measures to be considered towards preventing the spread of these STIs among youth. The detrimental effect of the spread of STIs is the cost that is accumulated as a result. In the US, it was estimated the cost of 16 billion US dollars in 2018 (CDC, 2021).



The youth are the most affected with the contracting of STIs. For example, the study by Farahani, Akhondi, Shirzad and Azin (2018) observed that the youth are the most category of people who involve in risky sexual behaviours. Similarly, WHO (2019) indicated that teenagers usually start their sexual activities between 10 and 19 years. The United Nations Children's Fund (UNICEF) (2016) observed that adolescents represent a significant part of people living with HIV in the whole world. In South Africa, 670 000 youth aged 15 to 24 years were identified to be newly infected with HIV, of whom 250 000 were adolescents aged 15 to 19 years (UNICEF, 2016). The CDC (2020) indicated that in the US, it is estimated that there are more than 20 million new cases of STIs yearly, with adolescents aged 15-24 years accounting for 50% of the infections. The CDC (2020) also reports that 46% of students in American high school have had intercourse without using protection and are at risk of contracting HIV and many other STIs. These high rates in the STIs prevalence among people is alarming and calls for action and a rethink of the measures and prevention strategies that are effective to harness this increasing rate.

In South Africa, NICD (2019) indicted that 76.9 million people living with HIV/AIDS have a huge number of STIs. It was estimated that 1.9 million had Chlamydia, 2.3 million had gonorrhea and 23.175 had syphilis, among women aged between 15 and 49. Among men, there was 2.2 million estimated cases of gonorrhea, Chlamydia new cases were 3.9 million and 47,500 cases of syphilis among those aged 15 to 49 years. These statistics are negative to the general health populace in South Africa. The high rates of the STIs are indicative of the need for effective measures to prevent the spread and infections of STIs. This is the purpose of this research to investigate the measures and preventive techniques that are followed by youth to limit the spread of STIs.

Some studies investigated the relationship between same sex and the spread of STIs. For example, the study by Bourne, Reid, Hickson, Torres-Rueda and Weatherburn (2015) observed the risk sex behaviors among gay people in South London. The study indicated that there is a pervasive use of drugs among men having sexual intercourse with other men and this has an influence on the risk sexual behaviors and the spread of STIs (Bourne, et al., 2015). Significantly, the findings cautions the use of drugs and the influence it might have on risk sexual behaviors requires targeted community and sexual health involvement to address the prevention needs of gay men that engage in combining psychoactive substance with sex (Bourne, et al, 2015).



#### 2.3 Factors contributing to risky sexual behaviours and STIs.

The study by Yi, Te, Pengpid and Peltzer (2018) observed that there are behavioral and social influences associated with risky sexual behaviors among university students. The study discovered that the tertiary learners are at a high risk of contracting STIs since they are highly involved in health risk behaviors. It is of more interest to note that the study observed that the measures to prevent the sexual risky behaviors among university students is imperative to prevent the transmission of HIV and other STIs. Thus, the prevention measures are important to limit the burden of HIV/ AIDS and the costs that are experienced on both treatment and caring for the population that could be suffering from the STIs infections.

The study by Yi, Te, Pengpid and Peltzer (2018) observed that there are independent social and behavioral factors that are associated with the non-condom uses among university students. The study observed that the university students are high active and involved in sexual intercourse with different partners. Male students were found to be significantly more likely to have two or more sexual partners in the period of 12 months compared to female students at 1.1%. However, female students were likely to report unprotected sex compared to male students. The factors that were associated with the students who reported to be having two or more sexual partners in the period of 12 months compared of 20 to 30 years, smoking tobacco and drinking alcohol, having severe depressive symptoms, and were found to be violent. Significantly, the study indicated that the prevention measures on the spread of STIs should focus on university students, youth, to reduce the spread of STIs and alternatively the spread of HIV infections. These social and behavioral factors that are associated with risky sexual behaviors should be the focal point towards the prevention on the spread of STIs.

The study Chanakira, O'Cathain, Goyder and Freeman (2014) observed that youth under 25 years of age are increasingly infected with STIs. The most detrimental factor is the poor knowledge about the STIs. This corresponds with what the study by Yi, Te, Pengpid and Peltzer (2018) observed that the lack of knowledge is the most key factor towards the spread of STIs.

Chanakira, O'Cathain, Goyder and Freeman (2014) further discovered that the risky sexual behaviors were influenced by the social context of the university and the lifestyle, high alcohol consumption, increased sexual opportunities, the liberation from the moral surveillance form the parental guidance and the stereotypical expectations on high sexual activities. The study also observed the individual and cultural differences that are linked to risky sexual behaviors with religious students most likely not to involve in risky sexual behaviors due to academic priorities



and adherence to moral values (Chanakira, O'Cathain, Goyder and Freeman, 2014). The study also indicated that the denial factor contributed to students engaging in sexual behaviors apart accessibility to health services, lack of confidentiality and stigma.

#### 2.4 Measures to prevent the STIs.

There are various measures to prevent the spread and infection of STIs (WHO, 2012; 2017) However, previous studies recommends and points to the health sexual practices as the best way of preventing the spread and infection of STIs (Nguyen, Dang, Vu, Nguyen, Le, Truong, Hoang, Tran, Tran, Pham, and Dao, 2019). In South Africa, the DOH (2016) has introduced some guidelines on the treatment and prevention of STIs (Fox, Pascoe, Huber, Murphy, Phokojoe, Gorgens, Rosen, Wilson, Pillay, and Fraser-Hurt, 2018). However, despite these progressive strategies on attempts to harness the problem of the spread of STIs, the challenge remains due to various reasons. For example, the information and knowledge are not accessible to all. This explains why the study by Chanakira, O'Cathain, Goyder and Freeman

(2014) indicated that the lack of knowledge and information regarding the measures to prevent the STIs is lacking, and it is detrimental to the public health. Hence, the focus on the measures and interventions towards the prevention of STIs should stress on the ways knowledge is communicated and reaching the targeted population.

There are also initiatives in schools that focuses on preventive programmes (Mahat and Scoloveno, 2018). The study by Mahat and Scoloveno (2018) indicated that health talk is effective to reduce sexual risk behaviors of the young people. The study indicated that effective of youth peer-led HIV and STIs education programs on knowledge, self-efficacy attitudes and normative beliefs (Mahat and Scoloveno, 2018). The study indicated that in the education environment, peer educators are supposed to place high value on peer-led programs that are tailored towards the prevention of STIs among students. The mediators and/or covariates such as culture, age, sexual experience, and gender are critical towards influencing adolescent peer intervention measures (Mahat and Scoloveno, 2018).

The interventions are supposed to consider the variables and influences such as the role that the community have towards initiatives to preventing the spread and contracting of STIs (Mahat and Scoloveno, 2018). In South Africa, programmes such as school health and Love Life aims to improve understanding about reproductive health at school level and deal with the prevention of



STIs. However, despite all these programmes and the intervention strategies, young people, especially teenagers are still engaging in risky sexual behaviors. These risky behaviors remain a barrier in interventions to prevent transmitted infections. For Gorgos and Marrazzo (2017) effective delivery of services for sexual health lesbians is key and requires an all-round and open discussions of various sexual behaviors and sexual behaviors that are considered risky in a way that extends beyond sexual identities, care providers and female clients.

Adedimeji, Sinayobye, Asiimwe-Kateera, Chaudhry, Buzinge, Gitembagara, Murenzi, Mugenzi, Patel, Castle and Mutesa (2019) observed that there are social factors relating to context that are influencing sexual behavior among gays. Social factors such as discrimination and covert make it difficult for designing measures and strategies to ensure reaching out to the affected and assessing the implications this might have on the spread of the STIs (Adedimeji, 2019). The study also revealed that the transmission of STIs was linked to the limited options available for individuals who are willing to improve their sexual wellbeing (Adedimeji, 2019). This study portends that it is difficult to extract the information and services among gays due to being covert. Therefore, there is a need for effective interventions that address individual and contextual determinants of risky sexual behaviors and access to health services towards attempts to harness the negative implications of the transmission of STIs to the general populace.

The study by Bishop, Okagbue and Adoghe (2021) indicated that there is a need to raise awareness about the unsafe health practices that contribute to the spread of the STIs and the way they could be prevented. The study revealed that the awareness levels among individuals on how STIs could be prevented are generally low to moderate. Instead, there is a widespread misconception about the STIs. Apart from the knowledge and help that individuals could get from the health facilities, the immediate social network of family, friends and religious counselling is significant to model the positive behaviors towards safe sexual practices. This indicates that if people are aware of the mode of STIs transmission, parental, religious, and non-governmental counselling is strong, the risk of risk sexual behaviors and the transmission of STIs could be moderated.

#### 2.5 Governmental and Non-governmental Organizations and STIs

Governments across the world and other non-governmental agencies such the WHO, UNICEF are actively involved in initiatives and programs that are aiming at reducing the spread of STIs. For example, the study by Forsyth et al., (2018) revealed that an intervention is required to prevent



and reduce STI transmission and improve sexual health among young people, particularly those in secondary schools.

Jiang, Xiu, Yang, Zhang, Liu, Chen, and Liu (2018) observed that the non-governmental organizations are on the forefront of promoting health practices and education among most of the developing countries. The non-governmental organizations such as the UNICEF, WHO, Food, Agriculture Organization (FAO), and the Joint United Nations Programme on HIV/AIDS (UNIDAS) are not only involved in funding the programmes and initiatives that are meant to promote and raise awareness regarding the prevention of STIs, but they are also involved in the practical activities through participating in the initiatives and programmes that are aimed at raising awareness and limiting the spread of STIs and consequently HIV/AIDS.

Hossain and Gani (2007) identified that there is evidence of success on the projects and programmes that are run by non-governmental organizations (NGOs) in most developing countries. These programmes are aimed at education and developing prevention skills to various marginalized groups in a sustainable way. The study drew this conclusion from employing qualitative techniques in collecting data such as observations, interviews, and actual program sites. The factors that were found to be facilitating projects and programme success were the full-time commitment of the employees, treating the target group with respect, appropriate motivation of the target group, the availability of sufficient equipment and supplies to validates and execute the tasks, and the actual planning on the way the tasks and projects will be executed (Tian, 2020). The study reveals that the success of interventions towards the prevention of STIs relies on the focus on addressing the needs of the target groups. Therefore, this portends larger implications for interventions that are aimed at preventing STIs. The initiatively.

The government and NGOs are focused on ensuring that the marginalized groups of people could successfully be motivated to practice safer and health sexual practices through the education and programmes to ensure a long-term behavior modelling (Dasgupta and Sinha, 2021). The study portends that behaviors change is not a once-off initiative and practice, but it is an evolving process that requires commitment and sustainable approaches that aims to transform individuals towards effective health behaviors. Despite meeting certain conditions to ensure that the government and NGOs achieve a milestone in preventing the spread of STIs, challenges remain. Parimi, Mishra, Tucker and Saggurti (2012) indicated that the government together with the NGOs are imperative towards ensuring community collectivism towards the prevention of STIs. This is



achieved through programmes and projects that are aimed at improving healthy sexual behaviors =s and refrain from unsafe sexual practices.

Dasgupta (2020) observed that the activities of the NGOs and research plays a key role in impacting discourses on policymaking on initiatives towards the prevention of STIs. These policies vary their degree of focus and emphasis including the discouraging the commercialization of sex pointing to its implications on the spread of STIs (Dasgupta, 2020). These programmes are being engaged under the aspects of communication for developmental and social change (Sullivan and Kiangi, 2017). The government is responsible for facilitating the environment where these policies could be engaged and debated towards alternatives in dealing with the challenge of STIs (Kumar and Krieger, 2018).

#### 2.6 Challenges on measures to prevent the STIs.

The CDC report also shows that the new annual infections are nearly equal between teen girls (51%) and teen boys 49% (CDC, 2015). Teenagers may have some challenges because they might not know where to find reproductive health services, or be unable to pay for them (WHO, 2020). In a study that was conducted in Ireland (2017), it was found that 37, 3% of the boys and 54, 5% of the girls-initiated sex at 15-18 years (Young, Burke & Gabhaim, 2018). Furthermore, a study carried by Akokuwebe (2015) in South-western Nigeria showed that teenagers' knowledge about sexual transmitted infections is generally limited to HIV/AIDS and their perception about sex influences their decision to initiate sex. These findings show that there is a need for sexual education and other reproductive interventions in the early years of the teenagers (Amu & Adegun, 2015). Many teenagers know about HIV/AIDS; however, their knowledge about STI is limited (Mohamed, Ishak & Manoharan, 2019).

The alarming rate of STI in South Africa is due to poor management (NICD, 2019).

The study by Nyasulu, Fredericks and Broomhead (2018) indicated that there is a challenge with the lack of knowledge on how STIs could be prevented from spreading and contracting it, especially among young people. The study observed that most of the participants were not aware of the primary healthcare that are available to them for them to protect themselves from contracting the STIs. This is a challenge because when the STIs are left unattended they can result to adverse health outcomes such as the intrauterine death and premature delivery on female.



The study by Unemo et al., (2017) observed that there are potential challenges that are linked to the socio-economic status of countries on attempts to prevent the spread of STIs. The study indicated that nearly a million people are affected daily with different STIs. The challenges in STIs treatment and control vary from country to country based on the economic status.

There is a challenge in the study by Mbishi, Saronga and Bakar (2021) which observed lack of knowledge on how and with what magnitude same sex could contribute to the spread of STIs. Mbishi, et al, (2021) indicated that same sex sexual intercourse exposes health-related challenges. The findings also indicated that the awareness of the risks on health associated with risky sexual behaviors are somewhat covert because few people they want to be known in public of this status especially in nations where polices are still stringent towards such practices. For Ryan, Nambiar and Ferguson (2019) observed that the lack of knowledge on how STIs could be contracted is heightened by the stigma and disbelieve that STIs could be contracted through engaging in unsafe sexual practices with other female partners.

The study by Beksinska et al., (2017) observed the need for training among those who carrying nation interventions that are meant to promote the health practices or an uptake of any medication or health precaution. This will work towards minimizing the provider-client barriers in terms of understanding and achieving sustained safe health practices. The lack of information, communication and training among health practitioners is a barrier towards initiatives in preventing the spread of STIs. Nguyen, Dang, Vu, Nguyen, Le, Truong, Hoang, Tran, Tran, Pham, and Dao (2019) indicated that the knowledge gap is critically detrimental towards efforts to promote health practices. Folasayo, Oluwasegun, Samsudin, Saudi, Osman, and Hamat (2017) expanded that apart from the knowledge levels, the attitude plays a significant role towards enhancing understanding and the change of behaviors from the practicing unsafe sexual activities.

#### 2.7 Conclusion

The literature showed that there is a pervasive existence in the infection and the transmissions of STIs across the world. Despite the bulk of the literature that exists regarding the ways the STIs are transmitted from one individual to the other, there seems to be limited investigations that involves the young people on what they do and what they do not do to prevent the spread and infections of STIs. There is a strong need for effective intervention towards limiting and harnessing the challenge on the spread of STIs among individuals across globe. The literature showed that



there is amble research on the STIs, however, limited attention has been exerted on the investigation of the viewpoint of the young people regarding the ways to prevent the spread and contraction of STIs. Thus, this study focuses attention on the preventative measures practiced by teenagers against sexually transmitted infections in Vhembe district, Limpopo Province. Chapter Three of this study focuses on the methodology that was employed in this study.



#### CHAPTER THREE RESEARCH METHODOLOGY

#### 3.1 Introduction

Methodology is the most critical aspect of the research (Creswell, 2017). The failure to determine the appropriate research methodologies threatens to lead to the failure in obtaining the research objectives set for the study (Leedy and Ormrod, 2015). The research methodology selected needs to answer the research questions and to respond to research objectives set. A methodology is a set of systematic techniques used in the research study. It is a lead to research on how to conduct it (Brink, 2018). It provides a description and analysis method, as their limitations and resources (Igwenagu, 2016). This chapter will discuss the approach, design, setting, population, sampling, data collection, data analysis, trustworthiness, and ethical considerations.

#### 3.2 Study design

A study design is a set of methods or framework and procedures used to collect and analyses data on variable specified in a particular research problem (Creswell, 2017). This research used the qualitative research approach. The qualitative research refers to a broad range of research methods and designs to a study phenomenon (Babbie & Mouton, 2018). This approach focuses on the qualitative aspects of the meaning, experience and understanding of the phenomenon. It is the use of qualitative research to study human experience from participants' point of view in the context in which the actions take place (Brink, 2018). The researcher makes use of a qualitative research approach to explore preventative measures practiced by teenagers to protect themselves from contracting STIs, identifying factors influencing choices of preventative practices and the factors influencing their non-adherence to condom use and abstinence.

The researcher chose an exploratory and descriptive research design. An exploratory study is usually directed to study a problem that has not been defined clearly before; it helps to have a better understanding of the problem (Burns & Groove, 2015). An exploratory research design is used in this study to explore preventative measures practiced by teenagers to protect themselves from contracting STIs. Descriptive research, according to Leedy and Ormrod (2015) allows the researcher to get an in-depth description and understanding of the events and actions regarding the phenomenon that is under investigation. Descriptive studies aim at obtaining complete and

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accurate information about a phenomenon (Burns & Grooves, 2015). The researcher chose this design to obtain an in-depth and accurate information, by interviewing participants and probing, to get more in-depth information about the preventative measures practiced by teenagers against STIs. She continued this process until data were saturated.

#### 3.3 Study settings

A study setting refers to the area where the study will be conducted (Brink, Van de Walt & Van Rensburg, 2017). This study was conducted at Manavhela Clinic, which is situated at Manavhela Village. The clinic is found within the Collins Chabane Municipality, Vhembe District in Limpopo Province, South Africa. The clinic falls under the Bungeni Local Area. Manavhela serves 6 communities namely: Manavhela, Tshitungulwane, Tshilaphala, Tshivhulana, Makhadzi and Hasani-Dakari. It is situated next to Nzhwelule Primary School and a football field. The clinic is located 52km away from Makhado and 28km to Tshilidzini Hospital, which is the referring hospital. The clinic renders a 24-hour services through an on-call system, from 18h00 to 07h00 am daily. The services covered include Tuberculosis (TB), treatment of minor ailments, HIV & AIDS; as well as Youth Friendly Services (YFS), which deals with family planning and productive education among teenagers, Ante-natal Care (ANC) and conducting deliveries. Many residents of Manavhela belong to the Christian faith, while some belong to the traditional faith. Furthermore, they depend on social grants for survival. On weekends, young people jog in the morning and after hours, then later go to taverns to drink alcohol all night. The researcher chose Manavhela Clinic as her study location because she works there as a professional nurse and accessing participants for this study becomes easy. The other reason is that the researcher has identified a gap in research on preventative measures practiced by teenagers against STIs.

#### 3.4 Population and sampling of the study

This section contains the target population, sample and sampling and inclusion and exclusion criteria.



#### 3.4.1 Target population

According to Brink (2017) a target population refers to the total set of people who have some ordinary features that the researcher believes form part of the study. Therefore, in this research the target population will be all teenagers aged 13 -19 years, who came to Manavhela Clinic for Youth Friendly Services. Table 3.1 below convey the number of the teenagers who visited Manavhela Clinic in the year 2020 for different healthcare issues that they are experiencing and the information they might need regarding healthcare services.

Table 1. Total number of teenagers who	visited Manavhela Clinic
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Months	March 2020	April 2020	May 2020	June 2020	July 2020	Total
Total	107	100	98	110	108	523
number of teenagers who visited the clinic						

Manavhela Clinic register March-July 2020

#### 3.4.2 Sample size and sampling

Brink (2017) defined sampling as the procedure of selecting the sample from the population, to get the information regarding the phenomenon, in a way that represents the population of interest. The sample size were 16 participants: 2 were aged 13; 2 aged 14; 2 aged 15; 3 aged 16; 2 aged 17; 3 aged 18 and 2 aged 19 years. The interview started with the 13 years age-group, then 14 years age group, until 19 years in that order. 2 to 3 participants in each age group were interviewed until data saturation was achieved. The researcher identified that data saturation has been reached since all the research questions asked were answered with different perspectives being shared and that there were no new data that was emerging. Study sampling was conducted at Manavhela Clinic because the researcher has observed the alarming rate of STIs among teenagers, compared to those from Tshino and Tshimbupfe Clinics which were also close to the researcher preference and as potential data collection points.



#### 3.4.3 Sampling

The non-probability accidental sampling was used to select the participants. This method enabled the researcher to evaluate and choose participants who possess useful information about the phenomenon. The accidental sampling was used in the sampled population because they were readily available and convenient including the teenagers who walks into the clinic. Hence, the sampling was accidental because it included the teenagers who could be readily available during data collection. Non-probability enabled the researcher to select participants who can articulate and explain in detail about the topic (Brink, 2018). This technique is thus based on the researcher's judgement regarding participants who are especially knowledgeable (Brink, 2018). The researcher gave the first preference to participate in this study to the teenagers who have attended the Youth-friendly Service.

#### 3.4.4 Inclusion criteria

Inclusion criteria refers to qualities of the participants (Du Plooy-Cilliers, Davis and Bezuidenhout, 2014). In this study the researcher selected all teenagers at Manavhela Clinic, aged 13-19 years, giving the first participating preference to those who attends Youth friendly Service at Manavhela Clinic. Only the teenagers who came to the clinic during the set 3 weeks were included in the study.

#### 3.4.5 Exclusion criteria

Exclusion criteria refers to qualities of individuals from the population which prevent the individuals from being part of the study (Du Plooy Cilliers, 2014). In this study exclusion criteria excluded teenagers who do not attend Youth-Friendly Services at Manavhela Clinic; however, data saturation was not attained based on the set objectives the researcher also included the teenagers who did don't attend the Youth-Friendly Service.

#### 3.5 Data collection tool

A data collection tool is an instrument to collect information from the participants (Du Plooy Cilliers, 2014). For the purposes of this study, an interview guide was used to collect the data on the

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measures that are being practiced avoiding contacting STI? Identifying what are the factors that make teenagers use those measures? What are the factors that make teenagers fail to use the recommended preventative measures, such as condoms and abstinence? And assess the dependence of the responses to the 2 central questions. The researcher also used a voice recorder the interview to help when analyzing the data. The researcher used open-ended questions to collect data. The probing questions were used guide the direction of the research and generating new data that the researcher might never thought of. The questions on the interview guide were used in English, and those who do not understand English were helped with translation to their mother tongue by the researcher. The interviews were set to take 15-30 minutes per participant; however, this time frame was not consistent with all the participants because some participants had more knowledge and information to share during the interviews.

Verbal responses were recorded from the participants using the researcher's recording smart mobile device. The important notes were being noted down by the researcher in a notebook for it to be integrated into the mainstream data transcribing.

#### 3.5.1 Pre-testing

A pre-test is the testing of a data collection tool that is used when collecting data (Brink, 2017). The researcher pre-trial the research questions, to check if they are clear enough to provide detailed information and are not leading questions that required a 'yes' or 'no" answer. The voice recorder was connected, to check its functionality and to check the batteries' lifespan to ensure that the process of collecting data will not be interrupted. The researcher allocated three (10%) participants from the target population that were first met, and interview them, to check the effectiveness of the interview guide. In so doing, the researcher was able to check the interview time and the resolve the ambiguity of the questions and make appropriate adjustments. All participants who were part of pre-testing also formed part of the final study to ensure that the despondences provided during the pre-testing phase were also integrated to the study.

#### 3.6 MEASURES TO ENSURE TRUSTWORTHNESS

Trustworthiness measures the degree to which procedures were employed to ensure accuracy of findings (Brink, 2017). Trustworthiness is important to measure the quality of the procedure in the

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data collection and the findings themselves (Du Plooy Cilliers, 2014). Trustworthiness was adhered to and addressed in this study through credibility, transferability, dependability, and confidentiality.

#### 3.6.1 Credibility

Credibility was achieved through engagement with the participants, rapport and trust established through member-checking (Du Plooy Cilliers, 2014). Member checking was done through spending reasonable time with the participants and by understanding their language, culture, and their understanding to the issues to be discussed in the data collection process.

Triangulation was another technique that was used to ensure credibility of the data. Triangulation was done with data collection, field notes and with a voice recorder. Furthermore, participant checking was done through follow-up interviews, playing back recorded interviews, to confirm responses, verifying the accuracy of the researchers' interpretation and rephrasing.

#### 3.6.2 Transferability

Transferability means the ability to bear on the findings in the study to other contexts (Brink, 2018). To achieve this, the researcher described the methodology thoroughly, as well as the sampling method that was used, data collection and how data was analyzed. Furthermore, the researcher used collect in-depth one to one interview, to enhance transferability, until data saturation was reached.

#### 3.6.3 Dependability

Dependability almost like reliability; however, it refers to data solidity over the time and circumstances (Du Plooy Cilliers, 2014). In this study the researcher gave the data collected to two different researchers, to check it and compare the results. The researcher also saved the raw data in the voice recorder and field notes, so that the ethic committees can use it if there are some doubts about the study findings.



#### 3.6.4 Confirmability

Confirmability refers to freedom from bias in the procedures of research (Du Plooy Cilliers, 2014). The data that were collected reflected on the voices of participants, not of the researcher's (De Vos, 2015). It is emphasizing the need to ask if study findings can be confirmed by another (Babbie & Mouton, 2018). All transcripts and the voice recorder were available to the supervisors to confirm the findings. An independent coder was used, to confirm neutrality of the findings. The researcher also used audit trails, in which data collection methods as well as decisions about the data collected was carefully documented, so that the supervisor will find the same results with the researcher.

#### 3.7 PLAN FOR DATA COLLECTION

#### 3.7.1 Recruiting the participants.

After receiving ethical clearance, the researcher applied to the Limpopo Department of Health for permission to conduct study at Manavhela Clinic. To avoid bias recruitment of the participants was done by home base cares and the personnel from NGO who come to the clinic in a weekly basis, since the researcher is the nurse by profession. Participants were recruited during the facilitation of Youth Friendly Services at Manavhela clinic. Participants were informed of the interview allocated time frames prior to the interviews.

#### 3.7.2 Data collection process

The researcher was the main data collector. Data about STIs preventative measures practiced by teenagers was collected at Manavhela Clinic because that is where the researcher has noticed an increase in STI infections. Data was collected by interviewing teenagers to get more information regarding the topic. Interview took 15-30 minutes. The interview questions were written in English and the researcher clarified the words in to local languages of Tshivenda and Xitsonga to the teenagers who had difficulties in comprehending the questions. The process of data collection took 2 months after the approval by the University Research Ethics Committee. The researcher used the 3 techniques of ensuring that data was quality: data summarization,



probing and listening. Summarizing: is the process that allows the researcher to condense and clear the participants' statements. Probing enables the researcher to request for more information during the interview, by making vague comments that could have different meanings (De Vos, 2015). Listening enables the researcher to listen attentively to the participants' responses to the meaning of their messages, to enhance the interview (De Vos, 2015).

#### 3.8 DATA ANALYSIS

Data analysis is a process of applying logical techniques to illustrate and describe recap and to evaluate data. The importance of data analysis is to make sure of the accuracy and appropriate analysis of the findings (Miles, Huberman & Saldana, 2014). Thematic analysis was used to analyze data. Those steps are, familiarization, where the researcher familiarizes herself with the data, by listening to the audio recordings, as well as reading and re-reading interview transcripts (De Vos, 2015).

The data analysis followed the generation of initial codes: after familiarizing with the data by the researcher. The researcher started coding data and grouping the data according to their meaning and relevancy of the study. Group into themes: the researcher sorted and collect all important coded data into themes.

Review themes: the researcher reviewed themes, to ensure that they make sense. Comparison of the collected data from the participants were done with the other ones to determine final themes. Definition and naming of themes, the researcher conducted an analysis of each theme, identify the story that it tells and summaries the content of the theme.

Producing a report this is the final stage, where the researcher transformed analysis into an interpretable piece of writing, by using compelling extract examples that relate to the themes, research questions and literature. The codes help the researcher analyses and summaries the entire study. The researcher followed the thematic data analysis. There that come out from the data analysis were used to become part of the body. Through the deductive approach, the themes that emerged were analysed in line with existing literature.



#### **3.9 ETHICAL CONSIDERATIONS**

Ethics is a discipline dealing with principles of moral values and moral conduct (De Vos, 2015). Following the ethical principles in research, the researcher ensured that the research is carried with integrity and honesty. Research ethics are important to ensure that the participants in the research are informed of their rights and ensure that these rights are upheld to attain credible and reliable results. The ethical issues discussed and upheld in this study include that the researcher ensures that the permission to conduct research is attained, the informed consent is signed by the participants before participating in the study, confidentiality, and anonymity, avoiding bias, and ensuring that there is no harm causes to the participants.

#### 3.9.1 Permission to conduct the study

The research proposal was submitted to the Department, then to the School of Health Sciences Higher Degrees Committee. The research was also presented to the University Higher Degrees Committee for approval, then to the Research Ethics Committee of the University of Venda, for ethical clearance. The proposal was then be submitted to the Department of Health, Vhembe District offices, to grant permission to conduct research and to the Operational Manager of Manavhela Clinic.

#### 3.9.2 Informed consent

The researcher provided the informed consent that contained detailed information letter that is detailed about the study (annexure B), the benefits and the beneficiaries and how long the interview took, that was given to the participants (Barker, Pistrang & Elliots, 2015). The participants were also informed that participation is voluntary, and they are free to withdraw from the study if they feel uncomfortable, without prejudice. Participants were informed that audio record as a tool of data collection that was used. Furthermore, the objectives of this study were explained to the participants. A consent form was offered to the participants to sign, as a form of agreement to take part in the research.



#### 3.9.3 Confidentiality and anonymity

Confidentiality means reassuring the participants that the identities and information provided were not given or shared to anyone (Du Plooy Cilliers, 2014). Codes, such as participant 1, were assigned to participants, instead of their names. Privacy and anonymity were achieved since the researcher did not ask the participants of their names or any other identifying name. The codes that were used are P1 and P2, meaning Participant 1 or Participant 2. Raw data were entered into the computer using codes. Data were collected during normal consultation time, no one at the clinic know the specific day for data collection. Voices was lowered during data collection so that people from other cubicles could not hear anything.

#### 3.9.4 No harm to the participants

Participants were given assurance that there is no harm that they could experience through participating in this study According to Creswell (2017) avoiding harm entails not reminding the participants of painful experiences in the past through asking sensitive questions. Furthermore, participants' information was not disclosed to anyone, other than the researcher and the supervisor. However, the topics discussed. In this study are fairly sensitive. Thus, the researcher, with the help of the supervisors, experts in the field, was assisted to tailor the questions to ensure that the sensitive issues are minimized, and that the researcher asks questions in a professional way. The study is emotionally sensitive, the participants were likely to be emotionally harmed, and this study may trigger some traumatic event, for instance, sexual assault. No harm happens during data collection, one was forced to form part of the study and that participants were free to opt out of the study anytime even after giving consent. The research did not experience an emotional harm feedback form the participants.

#### 3.10 DELIMITATION AND LIMITATIONS OF THE STUDY

The study was conducted at a selected clinic in Vhembe district. The participants were teenagers who come to the clinic for youth friendly services. The qualitative research method was used, and the sampling method was non-purposive, accidental technique. The study was limited to teenagers who consult for Youth Friendly Services at Manavhela Clinic. As a result, generalizations to Vhembe District clinics were not possible because the study was conducted at one clinic only.



#### 3.11 PLAN FOR DISSEMINATION AND IMPLEMENTATION OF THE RESULTS

The study findings are ready to be communicated to the participants who are willing to verify the way the data was presented. A soft copy of the research findings is filed at the university library and another copy to be submitted to the Department of Health via email once the research passes through the phases of examination. The findings can also be published or presented at regional or national conferences provided there arises the opportunity and platform.



### CHAPTER FOUR PRESENTATION OF THE STUDY FINDINGS

### 4.1 Introduction

This Chapter presents and discusses the findings of the study. The data is presented using codes and themes. The findings in this study broadly adopted the descriptive data presentation, the researcher followed the questions used in the interview guide to direct the data presentation. Literature review was done to compare with the previous research and to support the findings. The purpose of the study was to explore the preventative measures practiced by teenagers against STIs at a selected clinic in Vhembe District. The study objectives were to:

- To explore the preventative measures practiced by teenagers to protect themselves against STIs.
- ✤ To describe the factors influencing the teenagers' choices of preventative measures.
- To describe the factors influencing the teenagers' non-adherence to other recommended preventative practices.

### 4.2.1 Demographic characteristics of the participants

The section outlines the biographic information of the teenagers who were interviewed those who attendant Youth Friendly services during data collection months at Manavhela clinic, under Collins Chabane Municipality at Vhembe District. Sixteen teenagers were interviewed, in which 2 teenagers were of 13 years of age, another 2 of 14 years, 2 of them were 15 years, another 3 were of 16 years, the other 2 were of 17 years, 18 years were 3 and 19 years were 2. All the participants' falls within the age group as per criteria set for eligible teenagers who could form part in the study. **Table 2** illustrate the demographic distribution of the participants.

### Table 2. Demographic characteristics of the participants

NAME	SEX	AGE
Participant 1	Female	13
Participants 2	Female	17



Participants 3	Female	13
-		_
Participants 4	Female	18
Participants 5	Male	15
Participants 6	Female	14
Participants 7	Female	17
Participants 8	Female	16
Participants 9	Male	14
Participants 10	Male	18
Participants 11	Female	15
Participants 12	Female	16
Participants 13	Female	19
Participants 14	Male	16
Participants 15	Female	19
Participants 16	Female	18

4.2.3. The participants were numbered per sequence of the interview process, from participant 1

to 16. Table 3 shows the themes and sub- themes that were formed from the data collected.

 Table 3. Themes and sub-themes

Themes	Sub-themes
STIs recommended preventative measures	Abstinence
	Condom use
Indigenous knowledge	Cultural believes and
	Home remedies
	Patriarchy
Socio economic factors	Lack of sex education
	Peer pressure
	Accessibility and Affordability

### 4.3.1 Theme 1: Sexually transmitted infections recommended preventative measures

The related sub-themes are abstinence and condom use.



### 4.3.1.1 Sub-theme 1: Abstinence

This study was set to investigate the measures that are being practices by the teenagers who participated in this study on attempts to prevent contracting STIs. The discovery from this study shows that the best way to protect oneself from contracting STIs is through abstaining from sexual activities. P1 said:

"I just abstain from sexually activities to prevent myself from contracting sexually transmitted infections. P3 reiterate that: I'm still young, so abstaining from sexual activities is the best way for me to avoid being affected by the STIs. However, with our generation it is difficult to meet these requirements. It is just difficult to abstain, I am saying this because there are many teenage girls that gets pregnant these days that will come as a shock to a lot of people".

The findings, following the p 3's response, shows that despite the participants in this study being aware of the effectiveness of abstaining from sexual activities as a measure to prevent the contraction of STIs, they are still not actually practicing abstinence because some of them are pregnant as the participant said..

### 4.3.1.2 Sub-theme 2: Condom use

Some of the participants said they are engaged in sexual activities, but they do not wear protection. However, there are other participants who cited that they do use protection some other times which indicates that they are not consistently using protection, in some other times they do not use the protection. To reiterate this, p5 said:

"I use protection some other times and sometimes I do not. On most occasions I use protection and in some few I can say I did not. Some of these things you cannot control it. Sometimes you are caught in a situation where you end-up doing something you never planned to do".

P10 also said: I usually use a condom when I planned to have sex, but in case of emergency I don't because I didn't have time to prepare for sex it just happened. If it is an emergency, my boyfriend will release outside my vagina".

The findings of this study revealed that the teenagers have some knowledge regarding the use of protection for prevention of the transmission of STIs. However, there is no direct relationship



between the knowledge and the actual practices of these preventive measures. This is indicated by p10 above.

The findings of this study also revealed that some of the teenagers are less aware of the methods that could be used and how to implement these methods to prevent and protect themselves from the STIs. Some of the participants indicated that they use contraceptive pills but not sure if it is effective on preventing STI, P8 have this to say:

"Myself I use contraceptive pills to protect myself from getting pregnant and contracting STIs but am not really sure that they are effective on STIs preventions because sometimes I will have smelly vaginal discharges and later it vanishes without going to the clinic for consultation".

### 4.3.2 Theme 2: Indigenous knowledge

This theme consists of three sub-themes that are being discussed below which are: Cultural believes, home remedies and patriarchy.

### 4.3.2.1 Sub-theme 1: Cultural believes and home remedies.

This study also revealed that there are cultural practices and influences towards practice of measures to prevent exposure to STIs among teenagers. There is the existence of myth around the actions of teenagers regarding STIs.

Another participant also has another method of protecting oneself from contracting STIs before and after having unprotected sex. P9 said:

"I will boil aloe (tree) and drink the water before and after sex, and I will also give it to my girlfriend to drink so that we will be protected and safe from the STIs".

These misconceptions and myths surrounding the ways on how the contraction and spread of STIs could be prevented are not a new phenomenon. These sentiments are resonating with the findings of this study and to reiterate this, p7 had this to say:

"I boil the morula tree (stem) before sex and drink the water while it is warm. This will prepare my body to resist the possibilities of being affected and that my partner is also protected".



### 4.3.2.2 Sub-theme 2: Patriarchy

Some of the teenagers are still leaving in patriarchy society that males or boys are the only people who have a say when it comes to sex related matters, supporting this statement p13 had this to say

"I don't usually use any other means of protection. If my boyfriend says we should use a condom we do that, if he says we should not use it we simple don't, don't forget that males are head of the family we as females should support whatever they say. My boyfriend has a final say on our sex life".

### 4.3.3 Theme 3: Socio economic factors

This theme consists of 3 sub-themes which are lack of health education, peer pressure and Accessibility and Affordability

### 4.3.3.1 Lack of sex education

The reasons provided by the participants regarding the reasons why they choose to follow the protective measures against STIs. Some of the participants are aware of the measures to be used to protect themselves from the STIs. These participants point to the importance of knowledge and information accessible to them through the healthcare programmes and through formal education that shapes their health behaviors, attitudes and understanding. P6 had this to say:

"I follow safer practices to prevent the contraction of STIs when engaging in sexual activities because I do know how one can be contracted with the STIs and how it could be spread from one person to another. To my understanding I think most of my friends could take education and schooling very seriously some of the things that happens will not happen, such as teenage pregnancy".

The findings of this study also showed that they do practice what they are told to do to prevent the contraction of STIs that are not scientifically proven because they lack access to the resources and the formal education regarding the prevention of STIs. The other participant indicated that she is far from accessing the condoms since where they are residing is considerably far from the nearest clinic and alternatively the hospital.



I think some of us we end up using the traditional methods we are told of preventing the spread of STIs because we do not have access to the condoms or the knowledge regarding the prevention of STIs, let alone to know exactly what the STIs are. I use concussions because is the first-hand information that I get at home and from my school mates.

Some of the participants are of the view that the reasons why they use the methods they use on attempts to prevent the spread of STIs is that they are shy to be identified that they are now engaging in sexual activities. To reiterate this p2 had this to say:

"I think there is a need to rethink of a strategy on how to encourage the teenagers to use the appropriate measure to prevent them from contracting and spreading STIs. The availability of the condoms at school does not mean that all the teenagers who are going to school with thus use them, some they are shy to take them while they are being watched by others which result in them using the non-scientific and traditional methods that we are not sure if they are to assist".

Some of the teenagers are reactive to measures and practices towards prevention against the spread and contracting the STIs. For instance, some participants are of the view that they should engage in sexual activities without efforts to protect by condoms for example, and they can only visit the clinic or hospital after. The perception of these teenagers is that the clinic or hospitals could be responsible to ensure that they remain healthy, hence they could act reckless and engage in risky sexual behaviors. Again, there are indications of some cultural connotations on reasons why the recommended health sexual practices are not being actualized. P12 said:

"I just enjoy sex without protection. Just like the saying that I cannot eat a sweet with the plastic or covering material on, I need to remove the plastic, the same applies to sex you cannot wear a condom or else it will not be sex that you will be experiencing but half sex. After sex I will deal with the consequences, if I fell sick, I will go to the clinic and be treated there".

#### 4.3.3.2 Sub theme 2: Peer pressure

The finding of this study also revealed that some of the participants use the preventive measures to protect the contraction of STIs because of the friends. There is evidence that there is too much pressure and informal information they will be sharing as teenagers. P11 indicated that:



"I sometime don't use protection I can also say that I get influenced by the friends on the measures we can use to prevent ourselves form contracting the STIs. There are some other stories, [based on myth that we might be holding], that we might be sharing for fun as teenagers when we are alone, and these stories are powerful in that we will want to try these things when we are alone since we want to experience staff". Some of the participates in this study argue that they could prevent the contraction of STIs with unfounded and non-scientific practices such as the use of plain yoghurt to cleanse the vaginal area after having unprotected sex. When asked what measures you use to avoid contracting STIs, p4 & 16 had this to say:

"I use nothing, after having an unprotected sexual intercourse with someone I will then use plain yoghurt to wash and cleanse my vagina, or sometimes steam my vagina using salty warm water put it in the bucket and sit on top of it, all the discharges will be wiped away".

While other participants are of the view that having positive attitudes towards the formal knowledge that we gain from the health programmes and the formal education. The perception that some of the participants have been that the adolescent's experiences cannot be predicted and childish. The notion is that they do not want to practice what they know are the correct measures to prevent contracting STIs and protecting others. To some extent there is an element of curiosity that also pushes the teenagers to involve in risky sexual behaviors. When asked about the factors that makes oneself to follow the measures, they use to protect from STIs, p14 had this to say:

"I use the appropriate methods to protect and prevent the contraction of HIV/AIDS, it is because I have the knowledge regarding how to protect myself and my partner. I also have a positive attitude towards these measures such as the use of condoms".

### 4.3.3.3 Sub-theme 3: Accessibility and Affordability

Some of the participants are certain that if they could be having hospital and clinics close to their residents and communities, they were likely to act in health sexual behaviors. The reason they are not complying to health sexual behaviors is that they are not close to the health facilities for them to access the information and the recommended protection such as female and male condoms and other services such as the post exposure prophylaxis (PEP). To reiterate this, p8 had this to say:



"I think some of us we might be exposing ourselves to STIs, HIV/AIDS because we lack the information on how these STIs could be transmitted, but also because we are far from the clinics where we can get the information and other services such as the PEP pills you can get after you think that you might have been exposed to HIV/ AIDS. More health programs should come to our community to educate more people regarding the transmission of STIs and how we can protect each other".

### 4.4. DISCUSSION

This research has achieved the goals set at the onset of the study. The findings of this study largely indicate that there is limited knowledge regarding the practices towards measures to prevent STIs. The participants in this study are of the view that the knowledge and information regarding the protection from STIs is not supposed to be relegated to the healthcare institutes and healthcare professionals alone, however programmes that are aimed at promoting these measures need to be initiated to a wide scale including fostering curriculums from secondary schools that intensely covers these topics and aspects. Although there are varied attitudes towards the coming-up open about the sexual practices among the teenagers it shows that there is a need for engagements such as these, that shows and emphasize on the need to strengthen safer sexual practices among youth from the early ages.

This study was set to investigate the measures that are being practiced by the teenagers for the selected context on attempts to prevent contracting STIs. The main findings for this study revealed that the best way to protect oneself from contracting STIs is through abstaining from sexual activities. This is similar to other previous studies that also indicated the adolescents are of the view that the best possible way to prevent contracting STIs and protect its spreading is to abstain from sexual activities (Caico, 2014; Conley, Matsick, Moors, Ziegler and Rubin, 2015). For Clonan-Roy, Goncy, Naser, Fuller, DeBoard, Williams and Hall (2021) abstinence are the only to prevent the spread and contraction of STIs for it is the only way that does not require any safety precaution or worry.

However, different from the previous studies that indicated that despite the participants being aware of abstinence as the only best possible way to prevent the contraction of STIs, the participants in this study still indicate that they are involved in risky sexual behaviors. This explains why there has been plenty of studies that focused on investigating the social, economic, and



cultural factors that might be influencing the unhealthy sexual behaviors. For example, the South African study by Kheswa and Pitso (2014) on socio-economic challenges such as having no source of income and homelessness. Another South African study by Francis, Myers, Nkosi, Petersen Williams, Carney, Lombard, Nel and Morojele (2019) indicated that the unhealthy sexual behaviors are influenced by religiosity.

The findings of this study indicated that the teenagers have some knowledge regarding the use of protection for prevention of the transmission of STIs. However, there is no direct relationship between the knowledge and the actual practices of these preventive measures. This is not a new phenomenon, the previous studies also indicated that engaging in safe sexual activities is an individual aspect that involves individual character, behaviors, and willingness. The Nigerian study by Ugoji (2014) indicated that unsafe sexual activities are influenced by intersocial factors such as emotional intelligence and self-esteem.

The findings of this study also revealed that some of the teenagers are less aware of the methods that could be used and how to implement these methods to prevent and protect themselves from the STIs. This is not a new phenomenon, the study by McManus and Dhar (2008) also discovered that adolescent girls seem to be aware of different preventive methods regarding the spread of HIV/AIDS, but they are not aware of how these methods are different from one another and what are they could be used for.

This study also revealed that there are misconceptions, myths and non-scientific beliefs that influences the practice of measures to prevent exposure to STIs among teenagers. The fact that some of the participates in this study argue that they could prevent the contraction of STIs using plain yoghurt to cleanse the virginal area after having unprotected sex, and other participant indicated that they boil aloe (tree) and drink the water before sex and after sex and safe from the STIs. This is like what other previous studies have discovered. For instance, the study by Kang'ethe (2014) indicated that the study indicated that there is a practice in the use of natural microbicide, intravaginal lime and/ or lemon juice to be used as contraception and male circumcision is perceived as another way to reduce the chances of being infected with the STIs.

This study was set to investigate the preventative measures practiced by teenagers against STIs and the factors that makes them not to use the recommended practices. Various reasons were put forward by the participants in this study. The dominant reason that was put forward by the participants is that they are aware of STIs and the measures to be used to protect themselves from these STIs. This expands on the findings by the previous studies on the motivating factors



towards the use of protection during sexual activities. For example, the study by Randolph, Pinkerton, Bogart, Cecil, and Abramson (2007) indicated that individuals make use of the condoms to protect from HIV/AIDS infections. Also, the Nigerian study by Ajayi, Ismail and Akpan (2019) indicated that the fact that most of the individuals use condoms and other protective measures when they are engaging in sexual activities is that of not knowing their partners HIV/STIs status, and the unprotected sexual intercourse was associated with the partners that have a steady relationship and knowing each other's HIV/STIs status. This is like the South African study by Eakle, Bourne, Mbogua, Mutanha and Rees (2018) that indicated that individuals are more cautious when having sex with unknown partners, and also triggering some notions of having a second layer of condom protection by some individuals.

Apart from that, the findings of this study also revealed that some of the participants are of the view that formal knowledge that is gained through formal schooling regarding safe sexual practices. Barker, Gill and Harvey (2018) indicated that formal education and knowledge regarding the practice of safe sexual practices is important to guard against misconceptions and the other pervasive misleading information from different media platforms, images and print media. Similarly, the study by Sondag, Johnson and Parrish (2022) indicated that school sex education is crucial towards ensuring safe sex practices among young adults. For that reason, Sondag, et al (2022) indicated that schools require professional training and development on teachers that unpacks the complexity of sex education comprehensively.

The perception that some of the participants have is that the adolescent's experiences cannot be predicted. Expanding on what other previous studies have discovered, the findings of this study indicated that another factor that influence unsafe sexual behaviors is because of peer pressures. The findings observed that the misconceptions and myths regarding sex is through friends' discussions. The attitudes among peers and the misconceptions they may have contribute to the shaping of sexual behaviors of the others. The findings of this study indicated that the misconceptions regarding the sexual practices that are shared among teenage peers also influence the methods and practices of unsafe sexual activities such as the uses of nonscientific methods such as the boiling of aloe tree and the use of plain yoghurt to wash and cleanse the vaginal area after having unprotected sex.

Previous studies focusing on the challenges on how different and cultural perceptions shape how the measures and the prevention of STIs are prevented from spreading have been prevalent. For example, the study by Shaffer (2022) indicated that the knowledge, preventive practices, and



attitudes towards measures to protect contraction of STIs among the adolescents. Various factors such as beliefs, partner, family, and community attitudes towards prevention measures intersects to shape their health beliefs and preventive decision-making.

Another study, Kang'ethe (2014) by indicated that the study indicated that there is a practice in the use of natural microbicide, intravaginal lime and/ or lemon juice to be used as contraception and male circumcision is perceived as another way to reduce the chances of being infected with the STIs.

This study was also set to discover that factors that makes teenagers not to practice safe sexual activities. The findings of this study revealed that there is a pervasive lack of knowledge and understanding towards STIs and how it is spread and could be contracted. The ignorance among some of the teenagers is alarming. For example, some of the teenagers indicating that they do not make efforts to use protection when engaging in sexual activities because they want to get sick first then they will consult, after all it is nurses duty to treat them. These beliefs and misconceptions have roots in religion and culture (Ezeonwu, Stecher, Carrick, Smith, Hoock, Bain and Kamboj, 2020). Religiosity and culture have a part towards factors influencing the unsafe sexual practices among individuals (Yakubu and Salisu, 2018; Atakro, Addo, Aboagye, Menlah, Garti, Amoa-Gyarteng, Sarpong, Adatara, Kumah, Asare and Mensah, 2019; Erena, Shen and Lei, 2019).

Also, some of the teenagers in this study indicated that they involve in unhealthy sexual behaviors because they cannot access the recommended protection such as condoms for free from the communities to which they reside, especially does who do not attend school and also stays far from the health care facilities. This is similar to other previous studies that identified that there is a challenge in terms of healthcare resources in rural areas of most developing countries. For example, the study by Hall, Garabiles, De Hoop, Pereira, Prencipe and Palermo (2019) highlighted that unhealthy sexual activities are linked to the poverty-related stressors and the lack of means to access the recommended protection service and the information. For Ezeonwu, Stecher, Carrick, Smith, Hoock, Bain and Kamboj (2020) also observed differently that poverty and the lack of resources among individuals in the rural areas results in them not having access to the information that is essential for their health since now much of the health information is now being shared through online platforms.



The findings of this study indicated that there are various reasons that motivate the teenagers towards measures to protect themselves from contracting STIs. Formal knowledge towards the measures to protect from contracting STIs proved to be significant towards safe sex practices among teenagers. The formal knowledge is also important to ensure that the teenagers could be able to filter the misconceptions and myths that promotes unhealthy sexual practices. The previous studies have also emphasised on the importance of knowledge towards the safe sexual practices. McKee, Watson and Dore (2014) observed that the application of safe sex knowledge is practically important towards measures to protect individuals from contracting STIs. Similarly, Chaumaroeng and Panza (2019) also indicated that knowledge regarding health sexual life is important towards preventing the spread of STIs and the unwanted early pregnancy among adolescents. For Lianawati, Demartoto and Adriani (2018) knowledge regarding health sexual activities is important among adolescents and that it should be integrated effectively in the school curriculums and the teachers to receive formal training in this regard. This research advocates for health programmes on sex that are initiated from the clinics and hospitals targeting communities in rural areas since some of the teenagers in this study hinged that they might not be attending school. The focus on targeting adolescents and youth through school environments risk to exclude the some of the teenagers from attaining this knowledge but being exposed to the misconceptions and myths around the measures on protecting against STIs.

#### **4.5 CONCLUSION**

The findings of this study largely indicate that the knowledge, attitudes and the practices towards the measures to prevent the contraction and spread of STIs are intertwined and inseparable towards the understanding of sexual behaviors among teenagers. The discovery on this study also shows that the cultural beliefs, misconceptions and myths works well in the teenagers who might have not yet been exposed to the knowledge and information regarding the STIs and the measures that are readily available to their disposal towards prevention of contracting and spreading these STIs.



### CHAPTER FIVE LIMITATION, RECOMMENDATION AND CONCLUSIONS

### **5.1 INTRODUCTION**

This chapter consist of the limitations of the study, recommendations for department of health and for the future studies and conclusion.

### **5.2 LIMITATION OF THE STUDY**

The limitations refer to the weaknesses that the researcher observed in the entire process of the research. To begin with, the researcher feels that the results of this study could be enhanced if the population sample is expanded. Although the research had adequate sample population to inform of the objectives for this study, still more could be achieved through gathering different perspectives from the larger population. Future research could also focus on including different racial groups as part of the population sample since this research only covered the Black teenagers. This was because the context of this research was predominantly a Black community. Since the study was conducted only at Manavhela clinic under Collins Chabane municipality, the findings cannot be generalized to all other municipalities of the other districts even the province of Limpopo since their information may be different.

### 5.3 Recommendations

### 5.3.1 Recommendations of the future studies

The researcher is of the understanding that there are different factors that influence the patterns in the use of protection during sexual activities among teenagers from context to context. Religiosity and culture are context best factors. This means that what could influence individuals on approaches to protecting themselves against the STIs differs from context to context. Therefore, the researcher suggest that future research should focus on these factors that influence the uses or the non-uses of the protective measures to protect against STs form different



context that covers various ethnic groups and religion to attain a better level of understanding on these factors so that health programmes and education on sexual activities are derived from being informed by these perspectives.

The researcher also feels that if different studies are carried from both urban and rural settings, it will be important to provide the full picture of the demographic influence towards the ways teenagers from the urban areas and those from the rural areas approach measures to protect themselves from the STIs, especially looking at accessibility to resources and healthcare facilities proximity. Subsequently, a large population sample for this inquiry could be significant in broadening the results and enhance the picture on the nature of measures followed by teenagers to protect from STIs.

### 5.3.2 Recommendations for department of health

The health department should provide health educations at schools about reproductive health through school health programmes.

Reproductive health talks should also be available at taverns and churches.

The department should provide more funding for condoms so that they will be available in most grooving places, by so doing teenagers will have access to condoms everywhere.

Health talks should also be available on televisions and radio platform in a weekly basis.

There should be programmes that will empower teenagers to resist pressure from the peers or from the parents regarding unsafe sex in other to fit on a society or for financial gain.

### 5.3.3 Recommendations for community members

The researcher recommends that reproductive health educations should start at home by the parents and at the community meetings.

Communities should listen to radio or television talks so that everyone should have knowledge about reproductive talks, this will help to reduce the cultural practices that are being passed from generations to generations which are not recommended.



Parents and guardian should monitor their children closely to detect early behavior of negative sexual risk behaviors such as access to social media platforms which can expose teenagers to pornographic videos.

#### **5.4 CONCLUSION**

The study compromised of 16 participants who participated in the interview, this number was determined by data saturation. Findings revealed that only two out of sixteen participants aged 13 and 14 years practiced abstinence. The rest of the participants were sexually active, using traditional concussion made from boiling aloe or morula tree, which is dranked before and after sex, applying plain yoghurt on the vagina once a week whether experiencing signs and symptoms of STIs or not and vaginal steaming. Only six participants used condoms. Some teenagers believes that they should contract STIs intentionally so that the nurses can work because it's their jobs to treat people. Participants cited patriarchy, lack of sex education in rural schools, long distance to the clinics and desire to taste sex as reasons for adopting such preventive measures.

The result of this study shows that beyond the mere conception to the understanding of factors that influence measures towards protection against the STIs, there are many factors that act in felling the adoption or failure to adopt these measures. The discovery of this study revealed that apart from religiosity and culture that most previous research had extensively focused on, this study reveals that peer-to-peer conversations on sex experiences significantly shape the sexual behaviors among teenagers. This makes issues around health sexual behaviors to be a complex phenomenon and it could not be accomplished and understood from a single perspective. Misconceptions and myths around the issues on health sexual behaviors are still a huge concern much as it was in the previous decades as indicated in the literature. This indicates the need for reforms on health programmes targeting the challenges of sexual practices that put teenagers at risk of contracting the STIs. Lack of knowledge regarding safe sexual practices is also a critical constraining factor towards the teenagers practicing health sexual lifestyle. The study findings of this research also indicates that new modalities of addressing the misconceptions regarding health sexual lifestyle is important among teenagers. Risky sexual behavior among 13 to 19 years old teenagers is still rife in rural areas. School health and youth friendly clinics services needs to be strengthened to raise awareness and improve accessibility to condoms and STI education



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### Appendices

Annexure A: Interview guide

INTERVIEW GUIDE FOR TEENAGERS AGED 13-19 YEARS A SELECTED CLINIC IN VHEMBE DISTRICT, LIMPOPO PROVINCE

TOPIC: PREVENTATIVE MEASURES PRACTICED BY TEENAGERS AGAINST SEXUALLY TRANSMITTED INFECTION AT A SELECTED CLINIC IN VHEMBE DISTRICT, LIMPOPO PROVINCE

What are the measures that you practice avoiding contacting STIs?

What are the factors that make you use those measures?

What are the factors that make you fail to use the recommended preventative measures, such as condoms and abstinence? (This 3<sup>rd</sup> question will be asked depending on the responses to the 2nd central questions above).

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### Annexure B: Letter of information

### **UNIVEN INFORMED CONSENT**

LETTER OF INFORMATION

Title of the Research Study: Preventative Measures Practiced by teenagers against sexually Transmitted Infections at a Selected Clinic, Vhembe District Principal investigator/Researcher: Hlungwane Eustacia (MPH)

Co-supervisor/supervisor: Dr Mudau AG and Prof Tshitangano TG

Introduction and purpose of the study

Sexually transmitted infections are diseases that one contracts when having unprotected sex with someone who already has the disease. These include HIV/AIDS, chlamydia and gonorrhea. The purpose of the study is to investigate the preventative measures practiced by teenagers against STIs at a selected clinic in Vhembe District.

Outline of the procedure

Interviews will be conducted at the Manavhela clinic. Participants will be teenagers at Manavhela Clinic, aged 13-19 years, who came for reproductive health services (YFS), who are sexually active. Those who will be excluded from the study will be individuals from the population who do not meet the criteria: for example, those who are not sexually active. The interview will take 1530 minutes per participant. The researcher will listen and understand your views and questions. You can ask questions when need arises during the interview. During the interviews, you should feel free: you will not be forced to answer questions that make you feel uncomfortable. Further view, no judgement will be passed during the interviews.

Risks or Discomforts to the Participant

The study is emotionally sensitive, the participants are likely to be emotionally harmed, and this study may trigger some traumatic event e.g., sexual assault. If any harm happens during data collection the researcher will offer counselling since she is a psychiatric nurse and refer to psychologist if more counselling is needed.



Reason/s why the participant may be withdrawn from the study

Participants may be withdrawn due to non-compliance, illness or when they decide to withdraw to continue with the study and there will be no adverse consequence or penalties if a participant chooses to withdraw.

### Remuneration

There will be no monetary compensation or other types of remuneration to be received.

### Cost of study

Participants are not at all expected to cover any cost towards the study.

### Confidentiality

Confidentially and anonymity was ensured, by providing each participant with a code name to conceal the real name. Code names, such as p1 or p2 (participant 1 or 2), was used when discussing, and analysing data. The master list of participants' names and matching codes is kept safe during the study process. After the study is complete, the list of real names will be destroyed by the researcher. Data was collected during normal consultation time, no one at the clinic knew the specific day for data collection. Voices was lowered during data collection so that people from other cubicles will not hear anything. Lastly, the information will not be given to anyone except the supervisor and the University Research Ethics committee on demand.

#### **Research-related injury:**

There will be no form of compensation should there be any research-related injury or adverse effects, but counselling will be offered if there will be emotional harm during data collection.

### CONTACT DETAILS

Takalani.tshitangano@univen.ac.za (supervisor), please contact the researcher (0785540868), my supervisor (0824484111), or the University Research Ethics Committee Secretariat on 015 962 9058. Complains can be reported to the Director: Research and Innovation, Prof GE Ekosse on 015 962 8313 or Georges <u>lvo.Ekosse@univen.ac.za</u> General:

Participation is voluntary, refusal to participate will not involve any penalty and withdrawal from participation by participant can be made anytime without risk to the wellbeing of the participants or the profession.



### Annexure C: Informed consent

Statement of Agreement to participate in the Research Study

Inhereby confirm that I have been informed by the researcher, (Hlungwane Eustacia), about the nature, conduct, benefits and risks of this study.

- I am aware that the results of the study, including personal details regarding my sex, age, date of birth, initials, and diagnosis, will be anonymously processed into a study report.
- In view of the requirements of research, I agree that the data collected during this study can be processed in a computerized system by the researcher.
- I may, at any stage, without prejudice, withdraw my consent and participation in the study.
- I have had sufficient opportunity to ask questions and (of my own free will) declare myself prepared to participate in the study.
- I understand that significant new findings developed during this research, which may relate to my participation, will be made available to me.

Full Name of Participant	Date	Time	Signature
I			

(Name of researcher: Hlungwane E) Herewith confirm that the above participant has been fully informed about the nature, conduct and risks of the above study.

Full Name of Researcher		
Hlungwane Eustacia	Date: 20 September 2022	Signatu
Full Name of Witness (if applicable)		
	Date	Signature
Full Name of Legal Guardian (if applicable)		
	Date	Signature



### Annexure D: Parents' consent form

Statement of Agreement to participate in the Research Study

- I hereby confirm that I have been informed by the researcher, (Hlungwane Eustacia), about the nature, conduct, benefits and risks of this study
- I am aware that the results of the study, including personal details regarding my sex, age, date of birth, initials and diagnosis, will be anonymously processed into a study report.
- In view of the requirements of research, I agree that the data collected during this study can be processed in a computerized system by the researcher.
- I may, at any stage, without prejudice, withdraw my consent and participation in the study.
- I have had sufficient opportunity to ask questions and (of my own free will) declare myself prepared to participate in the study.
- I understand that significant new findings developed during the course of this research, which may relate to my participation, will be made available to me.

Name of the parent/legal guardian

date

signature

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### Annexure E: Assent Form

I understand that I have been asked to participate in the study about *Preventative Measures Practiced by Teenagers against Sexually Transmitted Infections at a Selected Clinic in Vhembe District.* 

I will be asked to answer questions which will take about 15-30 minutes. I understand that I do not have to participate, I can quit at any time. I also understand that I do not have to answer any questions I don't want to answer or do anything I don't want to do.

My parents, teachers or anyone else who is not involved in the study will not know what I have said or done in the study.

This study is being conducted by Hlungwane Eustacia at Manavhela clinic. Her contact number is 0785540868 and her email address is <u>Eustaciaeusy@gmail.com</u>.

If I have any questions or concerns about the study, I can call and ask her about them.

By signing my name, I agree to participate in the study, and that all of my questions have been answered, I have also been given a copy of this form.

Name	
Date	•

Signature.....

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#### Annexure F: Permission to conduct study at Manavhela clinic



### Department of Health

Ref LP-2021-12-001 Ms PF Mahlokwane Enquires 015-293 6028 Tel Phoebe.Mahlokwane@dhsd.limpopo.gov.za Email

Hlungwane Eustacia

#### PERMISSION TO CONDUCT RESEARCH IN DEPARTMENTAL FACILITIES

Your Study Topic as indicated below;

Preventative measures practiced by teenagers against sexually transmitted infections at a selected clinic in Vhembe district, Limpopo province

- 1. Permission to conduct research study as per your research proposal is hereby Granted
- Kindly note the following:
  - a. Present this letter of permission to the institution supervisor/s a week before the study is conducted.
  - b. The approval is ONLY for Manavhela Clinic
  - c. In the course of your study, there should be no action that disrupts the routine services, or incur any cost on the Department.
  - d. After completion of study, it is mandatory that the findings should be submitted to the Department to serve as a resource.
  - e. The researcher should be prepared to assist in the interpretation and implementation of the study recommendation where possible.
  - The approval is only valid for a 1-year period.
  - g. If the proposal has been amended, a new approval should be sought from the Department of Health
  - h. Kindly note that, the Department can withdraw the approval at any time.

Your cooperation will be highly appreciated

Gonel Some?

pp Head of Department

07/02/2022

Date

Private Bag X9302 Polokwane Fidel Castro Ruz House, 18 College Street. Polokwane 0700. Tel: 015 293 6000/12. Fax: 015 293 6211. Website: http/www.limpopo.gov.za

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#### Annexure G: Ethical clearance

STHES APPROVAL CERTIFICATE

#### RESEARCH AND INNOVATION OFFICE OF THE DIRECTOR

#### NAME OF RESEARCHER/INVESTIGATOR: Ms E Hlungwane

STUDENT NO: 11583466

#### PROJECT TITLE: Preventative measures practiced by teenagers against sexually transmitted infections at a selected clinic in Vhembe district, Limpopo province.

#### PROJECT NO: FHS/21/PH/22/2211

#### SUPERVISORS/ CO-RESEARCHERS/ CO-INVESTIGATORS

NAME	INSTITUTION & DEPARTMENT	ROLE
Prol TG Tshilangano	University of Venda	Supervisor
Dr AG Mudau	University of Venda	Co - Supervisor
Ms E Hlungwone	University of Venda	Investigator - Student

#### lype: Masters Research

Risk: Minimal risk to humans, animals or environment (Category 2) Approval Period: November 2021 - November 2023

The Human and Clinical Trails Research Ethics Committee (HCTREC) hereby approves your project as indicated above.

#### General Conditions

this chines approval is subject to all declarations, uncertainings and agreements incorporated and signed in the application form, please note Vie

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**ISSUED BY:** UNIVERSITY OF VENDA, RESEARCH ETHICS COMMITTEE Date Considered: October 2021

Name of the HCTREC Chairperson of the Committee: Dr NS Mashau

