



**School of Graduate Studies**

**University of Botswana**

**THE RELATIONSHIP BETWEEN KNOWLEDGE, INTENTION AND SELF-  
REPORTED USE OF SAFER SEX PRACTICES AMONG YOUTH AGED 20-24 YEARS  
IN SELECTED DISTRICTS IN BOTSWANA**

A Thesis Proposal Submitted in Partial Fulfillment of a Requirement for the Degree of Master of

Nursing Science: Parent and Child Specialty (Midwifery)

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**By**

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**The Relationship between Knowledge, Intention and Self-reported Use of Safer Sex Practices among Youth Aged 20-24 years in Selected Districts in Botswana**

ABSTRACT

**Introduction**

The youth aged 20-24 years account for 43% of the population in Botswana.(Statistic Botswana, 2011).The youth remain at increased risk of sexually transmitted infections (STIs), unintended pregnanciesand increased fertility. Limited condom and other contraceptive use amongst this age group are prevalent despite their reported high knowledge of safer sex practices.

**Purpose of the study**

The purpose of this study is to explore and describe the relationship between knowledge, intention and use of safer sex practices among youth aged 20-24 years in selected districts in Botswana. This is to identify gapsand guide appropriate interventions to promote safer sex practices amongst youth

**Methods**

The study will be a triangulation design (convergence model) consisting of cross-sectional survey with interpretive integration. Participants will be youth aged 20-24 years in selected settings in Botswana, selected through stratified purposive sampling based on selection criteria. Permissions will be sought from the Ministry of Health and Ministry of Education and Skills Development. Participants will be recruited from tertiary institutions, youth centers, households and health facilities, and they will sign a written informed consent. Data will be collected at the point of recruitment. Participants will complete a self-administered questionnaire for demographic and survey data. Descriptive statistics, cross- tabulation and multiple regression analysis will be used to determine the relationship between knowledge, intention and self-reported use of safer sex practices, and some demographic variables to determine predictors for intentions and the use of safer sex practices. Qualitative data will be content analysed to identify major themes, subthemes and related categories. The results will be presented in tables and narrative thematic descriptions.



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**STATEMENT OF ORIGINALITY**

I declare that this is my original work and that it has never been submitted for the award of any degree. All the literature sources used have been acknowledged by means of complete references.

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**APPROVAL**

This thesis has been examined and approved as meeting the required standards for partial fulfillment of the requirements for the degree of Masters of Nursing Science (Parent and Child – Midwifery)

Internal Examiner ----- Date-----

External Examiner----- Date-----

Supervisor----- Date-----

Dean of Graduate Studies----- Date-----

## **DEDICATION**

This work is dedicated to my late father who has always seen my potential from a very tender age and reinforced it by instilling in me the spirit of wisdom, strength, patience, obedience and most importantly to “always acquire space in the front row”. To my husband and best friend Kenneth Mandla Liwambano for editing my work and for being my mentor throughout, my three boys; Tshepo, Tumo and Tolamo for their enduring support during the long hours of study and lastly my mother for being a mother always.

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**LIST OF ACRONYMS**

**ASRH:** Adolescent Sexual Reproductive Health

**ACHAP:** African Comprehensive HIV/AIDS Partnership

**BDS:** Botswana Demographic Survey

**BFHS:** Botswana Family Health Survey

**ICPD:** International Conference on Population and Development

**ICPD PoA:** International Conference on Population and Development Plan of Action

**IPPF:** International Planned Parenthood Federation

**STI:** Sexually Transmitted Infections

**UNFPA:** United Nations Population Fund

**UNICEF:** United Nations Children’s Emergency Fund

**USAID:** United States Agency for International Studies

**PEPFAR:** President’s Emergency Plan for AIDS Relief

## **The Relationship between Knowledge, Intention and Self-Reported Use of Safer Sex Practices among Youth Aged 20-24 Years in Selected Districts in Botswana**

### **1.0 Introduction and Background**

#### **1.1 Introduction**

The exposure to sexual and reproductive risk among youth worldwide including Botswana remains a concern (United Nations Fund for Population Activities [UNFPA] Status Report, 2012), Population Services International (PSI) 2008, Central Statistics Office Botswana [CSO], 2009). Research is needed to explore knowledge, intention and use of safer sex practices among youth in order to develop relevant prevention programs. This chapter presents the background, problem statement, purpose, objectives, significance and justification, theoretical framework, conceptual model and operational definitions.

#### **1.2 Background**

The populations of youth under age 25 years comprise nearly half of the world population and the greatest proportion is in Sub Saharan Africa where one third is between the ages of 10 and 24 years (UNFPA Status Report, 2012). In Botswana, the youth accounts for 43% of the total population (Statistic Botswana, 2011). The youth are vulnerable to sexual risk behavior as they transition through the turbulent adolescent age into early adulthood, which puts them at increased risk of unintended pregnancy and Sexually Transmitted Infections (STIs). They are also faced with substantial social and economic barriers in accessing sexual reproductive health information and services (Youth Health and Rights Coalition, 2011).

The Botswana government placed various strategies in place to respond to the International Conference on Population and Development's Plan of Action (ICPD PoA,

ICPD+5) of 1994 and 1999 respectively, the Millennium Development Summit, year, 2000 and the International Planned Parenthood Federation (IPPF) Maputo Plan of Action. One common goal for these major strategic frameworks is the universal access to comprehensive Sexual Reproductive Health Services for all by 2015 (Development Research and Policy Analysis Division, 2003). To this end Botswana incepted guidance and counseling in primary and secondary school curricula. The goal was to give students basic knowledge on issues of sexuality including, contraceptive use (Bennell, Hyde and Swainson, 2002). Another strategy was integration and delivery of free Sexual and Reproductive Health and Rights (SRHR) services through the National SRHR Programme using a right based approach to scale up accessibility of SRHR services. This approach places SRHR services as a fundamental human right that facilitates free access of services by all (Ministry of Health, 2004).

Various partnerships were engaged and documents were developed as guiding tools for the Botswana SRHR care delivery. Such documents included amongst others; the National Youth Policy, 1996, the Population Policy, 1997, the National Sexual and Reproductive Health Framework, 2002 and the Adolescent Sexual and Reproductive Health (ASRH) Implementation Strategy, 2003 (ASRH Implementation Strategy, 2012-2016). Amidst these strategic developments, an age specific fertility reflected increased fertility rate and limited contraceptive use amongst Botswana youth aged 20-24 years (Central Statistics Office, 2009; Central Statistics Office and UNICEF, 2009), especially in rural than urban areas (Central Statistics Office, 2009; Central Statistics Office and UNICEF, 2009). This is despite the youth's high knowledge and access to contraceptives (ASRH Implementation Strategy, 2012-2016).

### 1.3 Problem Statement

Youth in Botswana continue to engage in behavioral risk despite their reported high knowledge of sexual safety and the existence of efficient Adolescent and Youth SRH Programmes. This is attributable to various behavioral risk outcomes eminent amongst youth like unintended pregnancies and increased prevalence of Sexually Transmitted Infections (STIs). Though the general fertility rate in Botswana has dropped following implementation of the planned global strategies, an age specific fertility rate reflected increased fertility amongst age group 20-24 years (Abt Associates South Africa. Inc., 2002 and Central Statistics Office, 2009). This is despite reported 97% knowledge amongst the youth of at least one method of contraception and where to get it (ASRH Implementation Strategy, 2012-2016).

An assessment of knowledge and use of family planning also revealed knowledge of at least one method of contraception and use by participants across all age groups and gender. There was no data on dual protection or abstinence (Central Statistics Office, 2009). Childbearing in Botswana also starts as early as ages 15 -19 years and reaches peak by age 20-24 years (Central Statistics Office, 2009). In most instances the pregnancies are unplanned or unintended. Limited condom and contraceptive use is reported to remain a reality among adolescents and youth in Botswana (ASRH Implementation Strategy, 2012-2016).

Occurrence of unprotected sex reflects increased risk of STIs and most of the records in health facilities reflect youth as the most common beneficiaries of STI treatment in Botswana. In most instances data on STIs is aggregated for the age group 15-49 years (ASRH Implementation Strategy, 2012-2016) making it difficult to isolate the magnitude of STIs amongst youth in Botswana alone. PSI (2008) found high levels of STI among youth, that is, 6% for males and 22% for females. Amongst these 22% of males and 9% of females reported concurrent sex

partners in previous months and 30% of both males and females reported multiple sex partnerships.

The behavioral risk among youth in Botswana has been linked to some socio-demographic constraints faced by youth in the ever dynamic socio-economic environment. These factors have been identified as barriers or facilitators to the youth's ability to translate their high knowledge of safer sex practices into practice. Itshekeng (2002) revealed that communication with parents on issues of sexuality increased awareness of condom use. Kabomo-Magowe (2012) stated that even though the youth report self- efficacy in communicating safer sex practices with their partners they still lack confidence in this self-reported behavior. Therefore issues or factors negatively affecting communication of safer sex practices may have a negative impact on the knowledge that the youth have on safer sex practices.

Pitye, Lekone, Bodika, Tau and Zulu (2010) and the Botswana ASRH Implementation Strategy (2012-2016) cited evidence of early sexual debut amongst adolescents/youth. This sentiment was also shared by Meekers and Ahmed (2000) who observed that, it is more prevalent in girls than boys. Mwinga (2012) cited desire to self-satisfaction as an influence to unsafe sex among teenagers. This could therefore result in adolescents transiting into youth with SRH problems like increased fertility and STIs.

Poverty, unemployment and inequality amongst this population have a negative impact on their sexual and reproductive health (UNFPA Status Report, 2012). In order to access materials and basic resources the youth engage in age disparate relationships and multiple and concurrent sexual partnerships that expose them to coercion, STIs and unintended pregnancy especially among the less educated and poorer youth (African Comprehensive Partnership for HIV/AIDS Partnership [ACHAP], 2011). Coercion, manipulation and unsafe sex are

more observed in age disparate relationships amongst youth in Botswana (Nkosana and Rosenthal, 2007). Cockcroft et al, (2010) asserted that the youth are aware of the sexual risk associated with this type of relationships yet they continue such relationships for material gain. According to I-Tech (2007) a large number of female sex workers are within ages 20-29 years. Sex work is presumed to provide financial autonomy for females though it carries with it increased risk of sexual abuse, coercion, unintended pregnancy and STIs (I-Tech, 2007). Kalichman, et al (2007) identified multiple and concurrent partnerships amongst youth as a major risk behaviors. Kalichman, Simbayi, Kaufman, Cain and Jooste, (2007) and the United States Agency for International Studies (USAID), President's Emergency Plan for AIDS Relief (PEPFAR) (2013) associated alcohol consumption with increased sexual risk.

In reproductive health, an appropriate behavioral change can be achieved through provision of appropriate knowledge (Moronkola, Ojediran and Amosu, 2006). This study therefore seeks to explore and describe the knowledge of youth on safer sex practices. Swenson et al, (2010) stated that knowledge should be related to measures of motivation like intention. Both intention and knowledge are routes to the actual behavioral outcome in Integrated Behavioral Model. This makes it imperative to describe and explore the relationship between youth's knowledge, intention and self-reported use of safer sex practices.

#### **1.4. Purpose of the study**

The purpose of this study is to explore and describe the relationship between knowledge, intention and use of safer sex practices among youth aged 20-24 years in selected districts in Botswana. This will assist in identifying gaps in the current interventions hence inform and guide existing strategies towards promotion of safer sex practices among youth.

### **1.5 . Specific objectives**

1. Describe the knowledge of safer sex practices among youth aged 20-24 years in selected districts in Botswana.
2. Describe the intention of youth aged 20-24 years in Botswana to use safer sex practices.
3. Describe the self-reported use of safer sex practices in the past 3 months among youth aged 20-24 years in selected districts in Botswana.
4. Explore the relationship between the knowledge, intentions and self-reported use of safer sex practices by youth aged 20-24 years in selected districts in Botswana

### **1.6 Hypothesis**

1. The youth in Botswana with high knowledge of safer sex practices will report having had greater and more consistent use of safer sex practices in the past 3 months than those with less knowledge on safer sex practices.
2. The youth in Botswana with high knowledge of safer sex practices are more likely to have intentions to use safer sex practices within the next three months.
3. Botswana youth who have used safer sex practices in the past 3 months prior to the study are also likely to have intention to use safer sex practices within the next three months.
4. Some socio- demographic factors have a positive influence on the knowledge, intention and having used safer sex practices in the past three months.

### **1.7. Justification and Significance of the Study**

The reported high knowledge on safer sex practices amongst youth in Botswana raises an assumption that it will correlate with increased use hence increased level of prevention of sexual risk. The outcome behavior shows the contrary as it reflects limited contraceptive use and increased age specific fertility amongst this population (Adolescent Sexual and Reproductive Health Implementation Strategy, 2012-2016; Central Statistics Office, 2006). This therefore

reflects that the high knowledge is not translated in to practice. It is hence imperative to explore and describe the knowledge of safer sex practices that the youth are reported to have. The relationship between knowledge, intention to use safer sex practices and the reported actual use of safer sex practices will be determined.

The aspect of a relationship between knowledge, intention and self-reported use of safer sex practice is not broadly reported especially in Botswana. The studies that have reported on correlates or predictors of knowledge are more focused on HIV/AIDS knowledge only and they do not explicitly reflect other sexual reproductive health risks like increased fertility and STIs, e.g. Letamo (2011), Fako, Kangara and Forcheh (2010). This study will focus on the relationship between knowledge, intention and self- reported use of safer sex practices for prevention of unintended pregnancy and STIs. The study will identify gaps in knowledge, intentions and actual self-reported use and how these three variables interrelate. The findings will;

**1.7.1 Guide Nursing Practice:** Information will be obtained on the youth's level of knowledge on safer sex practices and its relationship to the youth's intentions and use of safer sex practices amidst influence of the socio-demographic factors. This information will assist practitioners to identify specific problem areas hence develop relevant plan of action to promote adequate, consistent and correct contraceptive use and reduce the risk of unintended pregnancies and STIs amongst the population of youth aged 20 – 24 years in Botswana at facility level.

**1.7.2 Inform Policy and Programme Planning:** The research will inform the existing strategies aimed at scaling up the sexual and reproductive health programmes for youth in Botswana. It will assist identify gaps in the existing strategies and hence guide programme policy planning and implementation through generation of appropriate protocols. This will contribute towards the strategies aimed at attainment of Botswana's Vision 2016 pillars as they envisage the health and

wellbeing of young people in the country by making facilities available for the special needs including adolescence/youth.

**1.7.3 Research:** This study may generate hypothesis for further research in the area to explore relationships on a larger scale factors that affect the youth's knowledge, intentions and use of safer sex practices, to provide information that can benefit policy, education and practice.

**1.7.4 Education:** The findings may contribute to curriculum refinement to enhance learning through evidence based practice. This will benefit the National Sexual Reproductive Health Unit in their bid to scale up training of health personnel and the community on Sexual Reproductive Health issues with emphasis on youth. The Health Training Institutions will also benefit by utilizing the evidence based material in their teaching and learning environment.

## **1.8 Theoretical Framework**

Integrated Behavioral Model (IBM) also known as Integrative Model of Behavior Prediction (Montano and Kaspersky, 2008) will be used to explore and describe the youth's knowledge and intentions to use of safer sex practices. IBM includes constructs from other behavioral theories including those from the Theory of Reasoned Action (TRA) and the Theory of Planned Behavior (TPB). IBM was developed through discussions and consensus among major behavioral theorists including Fishbein in the early year 2000. The theory has been modified through empirical work over the past decade (Montano and Kasprzyk, 2008).

TRA was introduced by Fishbein in 1967 and modified to the Theory of Planned Behavior by Ajzen and Fishburn in 1980 and Ajzen in 1991 to complement the limitations experienced by TRA alone. TRA and TPB stipulates three key concepts namely, attitudes, subjective norm and perceived control as determinants of intention to perform a given behavior which in turn determines behavioral outcome. The theories (TRA and TPB) map and describe the relationship and influence of the concepts on the individual's intention (willingness to do or

not to do something, with value attached) and outcome behavior. These concepts have their basis on behavioral beliefs, normative beliefs and control beliefs (Montano & Kasprzyk, 2002).

The TPB's construct of perceived behavioral control is also successful at predicting performance of behavior (Armitage and Conner, 2001). Ajzen (2006) states that the role of knowledge in TRA and TPB is whether the information (knowledge) that an individual has works for or against performance of the behavior. Therefore knowledge or correct factual information plays no direct role in these theories but rather information in the form of behavior-relevant beliefs, is a central component of the theory, that is, whether that information is correct or incorrect is immaterial. It is in this regard that Fishbein and colleagues further expanded TRA and TPB to include components from other behavioral theories and hence proposed use of an Integrated Behavioral Model (IBM) in health behavior (Montano and Kasprzyk, 2002).

The most determinant of performing a behavior in IBM is intention which is the case with TRA and TPB (Montano and Kasprzyk, 2008). IBM further recognizes the role of knowledge and skill, environmental factors, saliency of behavior to an individual (whether the behavior is important to the individual) and habits (whether an individual has performed this behavior before) as direct determinants of outcome behavior without prior intentions (Montano and Kasprzyk, 2008). This sentiment was observed by Triandis (1980), that, even if a person has intentions to perform a behavior, they still require knowledge and skill to perform such behavior and that performance of behavior depends on absence of environmental barriers.

The components of IBM and their interactions are believed to be important to consider when designing interventions to promote health behaviors (Montano and Kasprzyk, 2008). IBM also considers correctness of knowledge as crucial for it to be able to influence a positive behavioral outcome. The socio-demographic facilitators and barriers are also likely to influence

knowledge and intentions (Montano and Kasprzyk, 2008). It is therefore imperative to determine the interactions of these components in health behavior planning and implementation.

**Theoretical Framework for the study: the IBM Model**

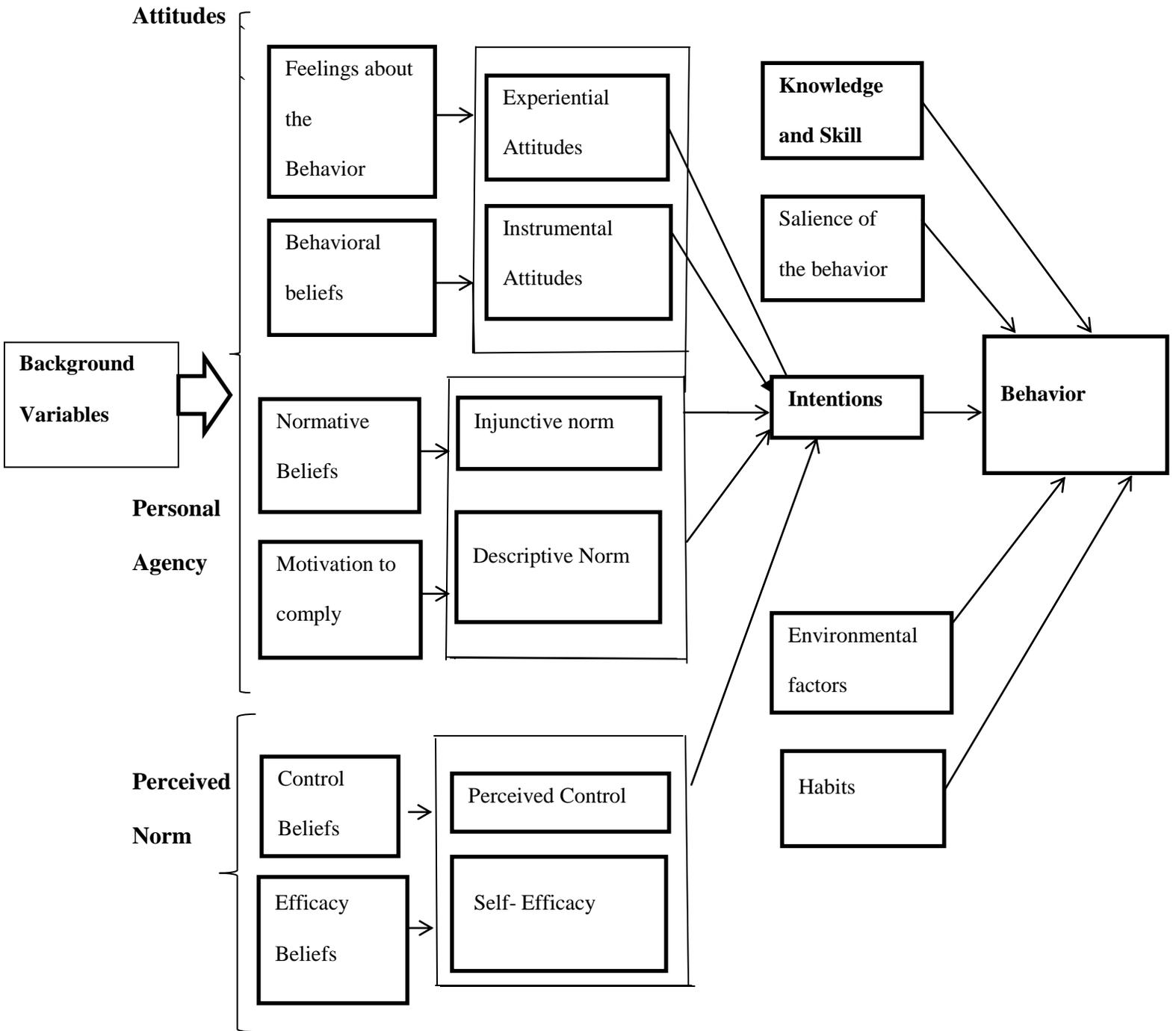


FIGURE 1: Integrated Behavioral Model; Source: Montano & Kasprzyk (2008).

**1.9 Conceptual Framework for the Study**

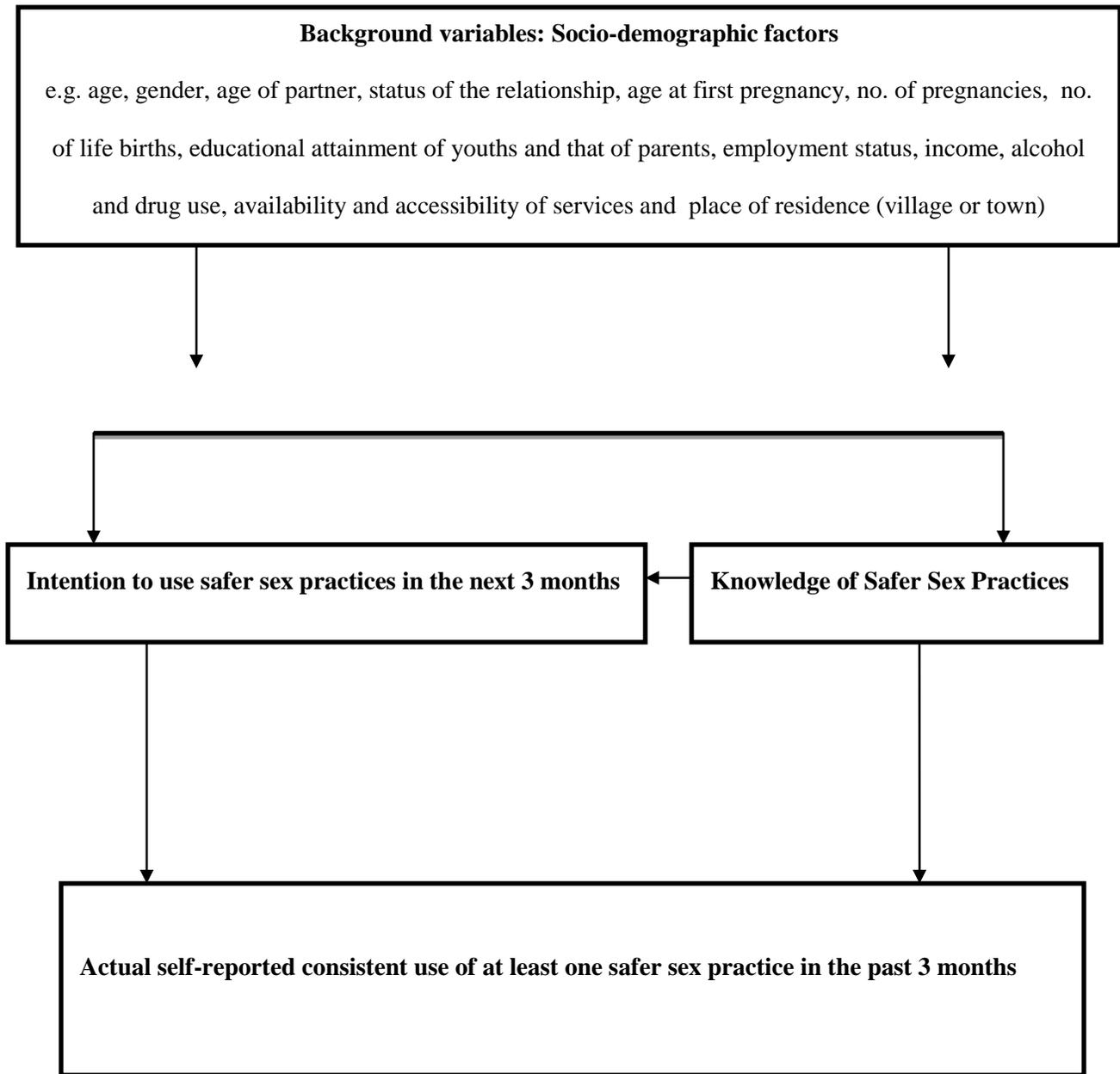


FIGURE 2: Modified IBM to suit the study

Socio-demographic factors may have indirect influence on intentions because they are likely to have a direct influence on the three constructs of TRA and TPB that are route to intentions (Yzer, 2012). These constructs are considered antecedents to intention hence they are conceptualized as possible sources of beliefs that are grounded in an individual's socio-demographic factors (Yzer, 2012). An individual with intentions to perform a behavior requires knowledge to perform such behavior and that performance of such behavior will depend on the absence of environmental barriers (Triandis, 1980). These environmental barriers could be in the form of socio-demographic factors as it will be the case in this study. Knowledge and intentions are routes to behavior change and the socio-demographic facilitators and barriers are likely to influence knowledge and intentions (Montano and Kasprzyk, 2008).

The socio-demographic factors will therefore be measured to determine their influence on youth's knowledge and intentions to utilise safer sex practices. The youth's utilisation of safer sex practices will be determined through self-reports. The findings may assist in planning different interventions for the population of youth according to their identified needs (Yzer, 2012). It is therefore important to utilise IBM constructs for this study to allow for a broader focus on the relationship between knowledge and intentions as direct determinants of a behavioral outcome.

### 1.10. Operational Definitions

**Safer sex practices;** are the activities that provide protection to prevent pregnancy and STIs reflecting a positive behavioral outcome. These include abstinence and all modern contraceptive methods available for youth in Botswana and knowing one's and partner's HIV status.

**Contraceptive method: refers to** any modern method of contraception currently available in Botswana, including condom (male and female), pill, intrauterine contraceptive device, Inject able (Depo-Provera), and morning after pill,

**Dual Purpose Contraception** refers to use of one method that is effective against pregnancy and STIs including HIV such as the male and/or female condom.

**Dual Method Contraception** refers to the use of two contraceptive methods(condom and another method)to improve method effectiveness in preventing pregnancy, STIs and HIV,

**Intention to use safer sex practices** is the statement or expression of willingness to use safer sex practices in the near future, such as in the next three months.

**Knowledge of safer sex practices;** this refers to individual responses to test items relating to the use of safer sex practices, especially on abstinence contraceptive and methods available in Botswana. This will reflect knowledge of their mode of action, directions for use, eligibility criteria for use, dose, benefits, possible side effects, where to find them, costs and sources of information on safer sex practices. The knowledge will be measured by a score indicating the level of the knowledge on items in a knowledge scale and objective questions.

**Self-reported use of safer sex practices;** refers to youth's response to items on their use of safer sex practices in the past three months.

**Youth;** means any individual aged 20-24 years who meets the eligibility criteria for the study

## **2.0 CHAPTER 2: LITERATURE REVIEW**

### **2.1. Introduction**

This chapter presents a search of the literature to explore and describe the knowledge, intention and the self-reported use of safer sex practices by youth in Botswana. The databases searched on this topic included Google scholar and Ebscohost. The key words used were; safer sex practices, knowledge of safer sex practices, intentions, self-efficacy, self-reported use of safer sex practices, dual protection and dual purpose contraception, youth sexual and reproductive health problems. National, regional and international policy and practice guidelines and reports were also explored to provide information on the study variables and objectives. The various contributory factors such as the social and economic barriers in accessing sexual and reproductive information and services by youths were also explored (Youth Health and Rights Coalition, 2011). The literature review was grouped in themes according to the constructs of IBM or predictive model as stipulated by Ajzen and Fishbein, 1967, Ajzen and Fishburn, 1980, Ajzen in 1991, Fishbein, 2000 and Montano and Kasprzyk (2008).

### **2.2 Youth's Vulnerability to Sexual Risk**

The youth remain vulnerable to sexual risks which increase their vulnerability to poor sexual health with long term consequences associated with unintended pregnancy and STIs. Thurman, Clark and Doncel (2011) stated that adolescent pregnancies worldwide are estimated to be over 100 million annually, despite the availability of a variety of effective contraceptives. Furthermore, the prevalence of STIs ranks among the five most important causes of sexual and reproductive health loss in developing countries. Knowledge about STIs is reported to be very low even in communities where there is high prevalence (Youth Health and Rights Coalition, 2011).

The outcome of evaluation of the Botswana SRH Implementation Strategy in 2010 revealed that limited condom and contraceptive use remains a reality among youth in Botswana. This is despite 97% of this population reporting knowledge about at least one method of contraception and where to get it (ASRH Implementation Strategy, 2012-2016). Childbearing in Botswana starts relatively early in reproductive ages, by age 15 -19 years and reaches peak by age 20-24 years and there is evidence of increased fertility amongst this population (Central Statistics Office, 2009). This therefore calls for exploration of knowledge and the youth's intention to use safer sex practices and their self-reported use of safer sex practices. The findings will assist identify gaps in interventions and hence guide strategic planning in youth SRH.

### **2.3. Youth's Knowledge of Safer Sex Practices and the Socio-Demographic Factors'**

#### **Influence on their Knowledge to use Safer Sex Practices**

Knowledge is a broad concept that may take various forms as it plays a pivotal role in learning and instruction (de Jong and Ferguson-Hessler, 1996). Young people lack basic knowledge about prevalence of STIs and they remain confused and ambiguous about the use of contraceptives and whether both methods are equally effective for safe sex practices (East, Jackson, O'Brien and Peters (2007). Small and Weinman (2009) stated that despite high knowledge on issues of sexuality, it has not been followed with the same behavioral change and there is still less access to Youth Friendly Services. This could be attributable to various factors like, lack of accurate information, education and communication regarding sexuality education.

According to the am FAR AIDS Research (2010) the adolescents/youth's lack of knowledge on preventive measures is due to inaccurate curricula in some schools like those that emphasise abstinence only. Since the youth at this age are still in the formal operational stage of cognitive development and universal ethical principle orientation of moral reasoning

(Hockeberry and Wilson, 2012), they are likely to be curious to explore and experiment the aspect of abstinence, that is, they may decide to explore the aspect of not abstaining by testing this phenomena.

Ellis and Grey (2004) stated that sexual behavior may be due to a number of personal and structural determinants of risk including lack of skills in using a condom, lack of knowledge about the risks of different sexual behavior and lack of skills to negotiate safer sex. Teklu and Davey (2008) stated that predictors of dual prevention include knowledge on dual protection and that individuals with knowledge of dual prevention are more likely to use a condom than those who don't have such knowledge.

Education empowers one with knowledge and understanding as it is associated with increased rates of dual method use (Sales, Whiteman, Kottke, Madden and Diclemente, 2012). When education rises, fertility declines due to increased levels of contraceptive use and demand (Bongaarts (2010). In addition, lack of knowledge of the source of condom contributes to sexual risk behavior (Ohene and Okoto, 2010) and it is influenced by knowledge about reproductive, health, self-efficacy and attitudes towards condom use (Prata, Vladnia and Fraser, 2005). Those females in age appropriate grades or higher grades are likely to engage in consistent condom use while males who enroll in less than age appropriate grades have decreased rates of being sexually active at an earlier age (Ishida, Stupp and McDonald, 2011).

The source of knowledge about safer sex practices also influences the youth's intention towards safer sex practices. Teklu and Davey (2008) stated that individuals who have discussed with their Family Planning providers are much more likely to use dual protection than those who didn't. Wagner III (2011) adds that youth who have received primary information about safer sex

practices from a health care provider are more likely to utilise this information to engage in safer sex practices than those who receive the information from the internet.

## **2.4. Youth's Intentions to use Safer Sex Practices and Socio-Demographic Factors'**

### **Influence on their Intentions to use Safer Sex Practices**

The mechanism to influence the youth's intention towards safer sex practices includes their educational attainment and level of religiosity of both the youth and their parents (Kalmuss, Davidson, Cohall, Larague and Cassell, 2003). Level of religiosity is a predictor of intention to use condom and that this should be accompanied with knowledge of risk (Ojo and Kehinde, 2009). The predictors of intentions to practice sexual safety for the youth who are not experienced in sexual intercourse include susceptibility to sexual risk and perceived benefits of sexual safety. The significant predictors of intention to practice safe sex for the youth who are experienced in sexual intercourse include barriers to sexual safety and self-efficacy (Hae-kyung, 2010)

The intention to use safer sex practices correlates positively with high self- efficacy (Chilisa et al, 2013) and there is a significant association between intention to use safer sex practices and history of previous use and this is predicted by attitudes, subjective norm and self-efficacy (Fetene, 2009). Increased rates of alcohol use which is more prevalent in youth can act as a barrier to youth's intention to use safer sex practices (Zilmer, 2012). George et al (2009) supported the notion that as Blood Alcohol Content (BAC) increase, intentions to engage in sexual risk taking behaviors in both men and women. Adolescents and Youth aged 18-24 reportedly engaged in sexual risk taking such as unprotected sex as a result of drinking alcohol possibly resulting in STI's (Hingson, Heeren, Winter and Wechsler, 2005).

## **2.5 Socio-Demographic Factors' Influence on Youth's Use of Safer Sex Practices**

**2.5.1 Religiosity:** Nishtar, Sami, Farugi, Khowaja and Ul-Hasnain (2013) cited socio-cultural and religious factors as common influences to myths and fallacies related to condom use and vasectomy among married youth. According to am FAR Research (2010) some religious denominations and family settings encourage or preach abstinence as a measure for prevention of sexual risk while on the other hand the youth are likely to explore or test these phenomena. Hindin and Fatusi (2009) stated that youth that publicly conform to religious doctrines do not always do so in their private time. However, Ojo and Kehinde (2009) found that level of religiosity accompanied with knowledge of risk is a predictor of intention to use condom while Ishida, Stupp and Mc Donald (2011) observed that the youth's weekly attendance of religious services was a protective factor against sexual risk.

**2.5.2 Parental influence:** Parental influence is believed to be the strongest predictor for premarital sexual abstinence (Sokhulu, et al, 2013) while Itshekeng (2002) stated that adolescents /youth are more likely to comply with safer sex practices like condom use following communication with extended family members like grandparents. Kalmuss, Davidson, Cohall, Larague & Cassell (2003) cited parents' low educational attainment as a barrier to communication with their children. They further assert that youth's own level of educational attainment and religiosity of both parents and adolescent/youth operates as social influence mechanism to influence the youth's intention towards safer sex practices. Jimmy-Gamma (2009) asserted that health care providers play dual roles, that is, as moral guardians and health service providers. This, he believes, can interfere with their service delivery capabilities especially when the role of morale guardian precedes that of being a health service provider.

**2.5.3 The youth's age and the age of partner:** This has been associated with lack of decision making or immature decision-making capabilities and this could be attributable to fear of partner or coercion (De Bruyn, 2000). De Bruyn further stated that in addition to the fact that youth face additional restrictions due to age-based factors and biases, young women often have less decision-making power regarding sexuality than adult women. Power in abusive relationships and adherence to traditional gender roles make it difficult for female youth to effectively negotiate safe sex or openly discuss issues of sexuality with their male partners (Robertson, Stein and Baird –Thomas, 2006). These issues are more prevalent with age discrepancy between partners (Villaruel, Jemmott and Ronis, 2004).

**2.5.4 Influence of substance abuse:** Another factor that has been observed to reduce the youth's self-efficacy is increased rates of alcohol use which is more prevalent in youth. This can act as a barrier to application of knowledge by youth and as well on their intention to use safer sex practices. Alcohol is believed to impair one's judgment hence increased vulnerability to sexual risk as observed by Shisana and Simbayi (2002). In most instances alcohol consumption is more strongly associated with decreased protective behaviors among younger individuals (Cooper, 2002).

**2.5.5 Socio-economic factors:** The socio economic status of communities also plays a salient role in influencing the sexual reproductive health of young men. Hunter (2007) stated that, survival sex and prostitution are a result of the impact of socio-demographic and economic constraints. Young men living in more disadvantaged neighborhood appeared to be in greater reproductive risk than their peers (Lyndburg and Orr (2011). Furthermore, males who are in better socio economic backgrounds are less likely to have been sexually active or have multiple partners, (Ishida, Stupp and Mc Donald, 2011). Those who had access to multimedia like radio

were more likely to have access to information hence more likely to use safer sex practices while marital status did not reflect any variation in their intention while significant regional variation in use of safer sex practices is apparent (Ikamari and Towett, 2007).

Poverty can play a major role in youth's engagement in sexual risk because it can breed ignorance or act as a barrier to access SRHR services and information. Leclerc-Madlala (2003) revealed that growing unemployment and media conspicuous consumption results in multi-partnered negative transactional sexual relationships. This affects those in urban areas mostly as they act to access power and resources hence it is viewed as a modern activity than human inequality and human rights. In their report of the findings of assessment and analysis of interventions towards promotion of youth Reproductive Health, the SADCC secretariat (2008) revealed issues like lack of educational opportunities for youth and unemployment resulting in low self-esteem as factors that are perpetuated by poverty and vice versa.

In conclusion, the literature search revealed influence of the socio-demographic variables on the youth's intention to use safer sex practices and on utilisation of the knowledge that they have on safer sex practices. Knowledge also plays an important role in influencing the youth's behavioral outcome. Background variables are shown to play a pivotal role in all the IBM constructs hence indirectly influencing the youth's intention and behavioral outcome in sexual safety. The aspect of a relationship between knowledge, intention and self-reported use of safer sex practice is not broadly reported especially here in Botswana.

This study will therefore benefit the Botswana youth's sexual reproductive health care strategies by identifying knowledge gaps and the influence of motivating factors like intention on knowledge and vice-versa. It will further establish the interrelations with the self-reported use

and finally the findings will be used to inform and guide the exiting strategies in scaling up of SRH service delivery, especially for vulnerable groups like youth.

### **3.0 CHAPTER3: METHODOLOGY**

#### **3.1 Introduction**

This chapter presents the research design, study population and sampling procedures, setting, instrument development processes and data collection techniques, data collection tools, data handling, ethical considerations.

#### **3.2 Study Design**

The study will be a triangulation design (convergence model) mixed method (MM) with concurrent and identical sampling design which will allow the researcher to use the same sample for both quantitative and qualitative designs (Onwuegbuzie and Collins, 2007). These will entail across-sectional survey with interpretive integration. Mixed methods involve collection and analyses of data, integration of findings and drawing of inferences using both methods in a single study (Tashakkori and Creswell (2007); Teddlie and Tashakkori, 2009). The purpose of triangulation is to obtain different data about the central phenomenon under study (Beck and Polit, 2012, p 610) for convergence of findings (Onwuegbuzie and Collins, 2007). This method will strengthen the credibility of findings as there is little or inadequate research on youth's knowledge, intentions and self-reported use of safer sex practices here in Botswana. Data will be collected simultaneously and equal priority will be given to each strand (QUAN + QUAL). The quantitative approach will be used to explore knowledge, intentions, the self-reported use of safer sex practices and the socio-demographic factors that can influence knowledge and intentions using a scale. The qualitative approach will be used to describe these phenomena related to knowledge and intentions or safer sex practices using open-ended and semi-structured questions.

### **3.3 Setting**

The study will be conducted in Molepolole village and Gaborone city both in southern Botswana. Molepolole has been selected as the study site because it is in Kweneng District where knowledge about safer sex practices and use of safer sex practices was reportedly low (Central Statistics Office, 2009) and also similar in characteristics to other semi-rural to rural setting while Gaborone, the capital city of Botswana, has the highest population of youth nationally and also presents a cosmopolitan characteristic population of youth with more access to health facilities and information on health and preventive measures. The focus for data collection will be government and government affiliated health facilities offering youth sexual and reproductive health services, youth centers, households and at least one tertiary education institution per setting.

### **3.4 Population**

The population for the study is youth aged 20-24 years of age who are either sexually active or have ever been sexually active and those who have chosen to abstain. This population has been targeted by the researcher because literature has shown their higher level of knowledge regarding safer sex practices yet this knowledge does not seem to translate into practice. (Adolescent Sexual and Reproductive Health Implementation Strategy, 2012-2016). The youth at this age are still in the formal operational stage of cognitive development and the universal ethical principle orientation of moral reasoning (Hockeberry and Wilson, 2012).

According to Kohlberg's theory of moral development, they are at social contract orientation in which they portray concern with individual rights and legal contract (Hockeberry and Wilson, 2012). Therefore their orientation to internal decision conscience does not yet have a clear rationale or universal principle (Hockeberry and Wilson, 2012) hence they are still bound

to vulnerability from factors in their environment (socio-demographic factors). The Botswana national Sexual Reproductive Policy also consider this age range of as an age range in which an individual can make informed decisions regarding their health care without parental consent.

### **3.5 Sampling and Sample Size**

#### **3.5.1 Sampling**

A stratified purposeful sampling will be used based on predetermined selection (inclusion and exclusion) criteria, derived from the literature and researcher's knowledge about the population from which to select the sample. This will consider disproportional strata by gender and geographical region of residence. The sampling procedure will therefore consider 50% of participants per setting and this will further comprise 50% of males and 50% of females per setting. A verbal invitation to participate will be conveniently extended to all prospective participants available at the setting by time of data collection hence giving them equal chance and opportunity to participate (Onwuegbuzie and Collins, 2007).

#### **3.5.2 Inclusion Criteria**

Youth aged 20-24 years, male and females who report to be sexually active, ever been sexually active or chosen to abstain, able to read and write both Setswana and agreeing to participate in the study will be considered for participation.

#### **3.5.3 Exclusion Criteria**

The youth with overt cognitive, mental and physical challenges and those who are unable to read and write both Setswana and English as these may interfere with their ability to respond to questions.

### 3.5.4 SampleSize

The desirable sample size depends on the expected variation in the data of the most important variables (Varkevisser et, al, 2003) and maximizing precision is another aspect of statistical power, that is, the ability to detect true relationships among variables (Beck and Polit, 2012). This study aims to determine variability/disparity in the youth's reported knowledge about safer sex practices, their intention to use safer sex practices and their self-reported use of safer sex practices. To determine the sample size a sampling theory will be used, which states that we have to ensure that  $\Pr\{|\hat{p} - P| > d\} \leq \alpha$  for some prescribed  $d$  and small  $\alpha$  (Cochran, 1977). We needed to specify the tolerance level,  $d$  (margin of error),  $p$  is the proportion of units in a given category (in this case it is the proportion of youth aged 20-24 years) and the risk  $\alpha$  which is the likely risk of not obtaining such tolerance ( $d$ ), that is, we want the probability or chance of obtaining an estimate that is different from the true value in either direction by a specified amount  $d$ , to be small.

The minimum sample size for this study is then calculated as:

$$n \geq \frac{p(1-p)Z_{\alpha}^2}{d^2}$$

This gives us the minimum sample of  $n \geq \frac{0.38(1-0.91)1.96^2}{0.03^2} = 145.9808$

Therefore a sample of 146 respondents and probability proportional to size to select respondents from each EA, where measures of size will be the number of households in the EA as defined by the 2001 Population and Housing Census. Since according to BIAS III the country's HIV prevalence is 17.1 percent, a minimum 374 (which is 17.1% of the sample) was adopted.

### **3.6 Recruitment**

Youth will be selected from households, youth centers, tertiary institutions and those who have come to seek sexual and reproductive health services in selected health facilities in government and government affiliated health institutions. Recruitment will be on verbal invitation for those individuals who meet the inclusion criteria, the schools heads, teachers, youth officers and health care workers will be engaged to assist advertise the study.

### **3.7 Data Collection Tools**

The instrument comprises both quantitative and qualitative questions. There are 29 closed ended questions on socio-demographic variables that are likely to influence knowledge and intentions. The questions on knowledge focus on general knowledge of contraceptives, preventive action of specific contraceptive methods that are available in Botswana, their correct and consistent use, eligibility criteria for use, side effects, how side effects of these contraceptive methods are managed, precautions, follow up visits and where to get the contraceptive methods. Questions that explore knowledge are close ended while those intended to describe knowledge are open ended.

A Knowledge scale comprising 47 questions on safer sex practices with response options in the True and False format are meant to test youth's knowledge regarding safer sex practices. Questions 1 to 8 test youth's general knowledge on safer sex practices. Questions 9 to 47 are questions on specific contraceptive methods available in Botswana. Most of the response options are correct while a few are incorrect. The incorrect responses were deliberately included to assist identify possibility of participants guessing correctly (Kaskowitz, 2007). All correctly answered responses will carry a score of one (1) while those that are incorrect will score zero (0). These knowledge questions are labeled as Part one (1) of the knowledge test and responses will be

precoded in SPSS. Part two (2) comprise eight (8) open ended questions on youth's general knowledge on safer sex practices, these are, questions 48 to 56. Correctness of knowledge will be assessed and the findings utilised to determine the youth's knowledge of safer sex practices.

Youth's intention intentions to use safer sex practices in the next three months is explored through 10 questions on a scale with responses ranging from; "Strongly Agree", "Agree", "Not Sure", "Strongly Disagree" and "Disagree". The youth's self-reported use of safer sex practices in the past three months is also explored. It comprise four (4) closed ended questions, that is, question; 1,2,5,6,8, and four (4) open ended questions, that is, question; 3,4,7 and 8. The tool was developed by the author guided by various knowledge scales from different studies/authors on Adolescent and Youth Sexual and Reproductive Health some of which are Kaskowitz, 2007, Motta Martins et al, 2006 and Chagas de Almeida, Leao de Aquino, Gaffin and Magnani, 2003. The author only utilised material from these studies to guide the design and construction of her tool.

### **3.11 Data Collection Techniques**

Data will be collected through visits to the selected study sites, approaching the selected institutions' management or occupants of selected households to obtain access. The study and its procedures and processes will be explained to those who meet the inclusion criteria and agree to participate. A written consent will be sought from the prospective participants prior to filling in the instrument. A self-administered questionnaire and interview guide will be given to those who have signed the consent form and agree to participate in the study. The researcher will avail herself to answer and clarify any questions from the participants. At the end the researcher will check the

instruments page by page for completeness then package them for transportation to a safe and secure place to await data entry and analysis.

### **3.12 Ethical Consideration**

Permission to conduct the study will be sought from the University of Botswana's Office of Research Development, (ORD), and ethics committee for approval, The Health Research Unit in the Ministry of Health and authorities of different health facilities and other relevant institutions that will be utilized for this study through correspondence. At household level, permission will be sought verbally. A written informed consent will also be sought from individual participants upon recruitment. Anonymity and confidentiality will be observed at all levels of data handling. Use of numbers in place of names will be considered to promote anonymity and only the researcher and the research team will have access to the data. Only individuals who are legally able to give consent will be involved in the study hence an age verification form will be availed to prospective participants to fill prior to filling the instrument.

### **3.13 Pilot Testing**

The data collection tool will be pilot tested at the University of Botswana clinic and the campus to test it for readability, acceptability and cultural relevance, language equivalence of the instrument and feasibility of study methods. These facilities have been selected purposively by the researcher because they offer services to a client population with the same characteristics like those of the study population. Data collection tools will be distributed and supervised by the researcher. The setting and participants at the pilot site will not be included in the analysis of the main study data.

### **3.14 Data Management**

The instrument will be photocopied to a total number equivalent to the size of the sample, that is, 1-146 copies. These will be divided in to half, that is, no. 1- 73 will be distributed to Gaborone participants while no. 74-146 will be distributed to Molepolole participants. The researcher will use lockable bags with compartments for carrying both the answered and the unanswered copies and kept in a lockable cabinet in the research supervisor's office. Following completion by participants the instruments will be checked page by page for completeness at the point of data collection and the completed copies counted against the number of participants seen per day. The completed copies will be stored under lock and key in the research supervisor's office to await data entry and analysis. A password protected data base in SPSS version 21 will be used and the computer will be kept under lock and key in the research supervisor's office. Following data analysis the instruments will be stored in a safe and secure place for the next five (5) years after which they will be disposed by shredding and deletion from the computer.

### **3.15 Data Analysis**

Following data collection an excel spreadsheet will be created for entry of qualitative data into the computer from which common themes will be identified and coded.

#### **3.15.1 Quantitative Data**

A database will be developed with a coding scheme in SPSS version 21 for quantitative data entry. The data will be double entered to ensure accuracy in a password-protected laptop. The demographic data will be analyzed using descriptive statistics to explore the data and obtain mean, standard deviation and median. Cross- tabulation and Multiple regression analysis will be conducted to determine the relationship between the knowledge, intentions and self-reported use of safer sex practices.

### **3.15.2 Qualitative Data**

Data will be analyzed using qualitative description method. This method entails a straightforward description of phenomena, in which the descriptions always rely on the perceptions, inclinations and sensitivities of the describer (Creswell, 2012). This method is suitable for this study as it seeks to describe use of safer sex practices among the selected group of youth.

The data will be organized systematically by identifying the major features regarding themes, concepts and beliefs. The researcher will analyse the data by examining, sorting, categorizing, evaluating, comparing data from the open ended questions. The physical procedures will involve open coding which include; line by line, sentence, paragraph or entire document analysis. Where new information is generated, it will be post-coded and given a new theme. Analyses will also be completed by developing detailed knowledge of the content of interview, taking note of the participant's statements, developing themes which reflect recurring ideas, and analysing them. This process include summarizing new impressions, comparing and identifying commonalities and differences of the participants' responses, and establishing themes which described patterns and observations found across the descriptions. Direct quotes from participants will be italicized within quotation marks in the text or italicized and indented in block format without quotation marks. Weft software will be used in analysing the data to come up with categories.

### **3.16 Dissemination of Results**

The results of this study will be disseminated through the University of Botswana, Ministry of Health, workshops and seminars for youth and stakeholders, conferences, print media and through publication.

**3.17 Strengths of the study:**

The use of mixed methods will allow for collection of rich data as the qualitative aspect of the data will give participants an opportunity to expand on their quantitative responses. A self-administered interview guide and questionnaire will also promote freedom of expression hence rich data despite questions that seek private sexual information from participants. Even the if findings may not be generalized, they are transferable and may promote more inquiry on the subject.

**3.18 Limitations**

This study explores the sexual behavior of individuals hence participants may view questions as invasive to their private and confidential information. This is therefore likely to yield resistance in divulging a true picture of participants' sexual behavior and beliefs. To delimit these factors the researcher opted to give participants a self-administered questionnaire in which they will not be expected to write their names or any information that will link them to the instrument. The aspects of anonymity and confidentiality will be observed as stated under ethical consideration. Triangulation will also assist as both methods will complement each other.

### References

- Abt. Associates South Africa (2002). The Impact of HIV/AIDS in Botswana. Retrieved from [www.undp.org/bw/docs/BotDemogrepFinal.pdf](http://www.undp.org/bw/docs/BotDemogrepFinal.pdf).
- am FAR AIDS Research (2010). Youth and HIV/AIDS in the United States: Challenges and Opportunities for Prevention. The Foundation for AIDS Research.
- Armitage, C. J., & Conner, M. (2001). Efficacy of the theory of planned behavior: A meta-analytic review. *British journal of social psychology, 40*(4), 471-499.
- Ajzen, I., & Fishbein, M. (2000). Attitudes and the attitude-behavior relation: Reasoned and automatic processes. *European review of social psychology, 11*(1), 1-33.
- Bennell, P., Hyde, K. & Swainson, N. (2002). The Impact of the HIV/AIDS Epidemic on the Education Sector in Sub- Saharan Africa: A Synthesis of the Findings and Recommendations of Three Country Studies. *Centre for International Education. University of Sussex Institute of Education.*
- Berry, L., & Hall, K. (2009). Teenage pregnancy. *Children's Institute. University of Cape Town.*
- Bongaarts, J. (2010). The causes of educational differences in fertility in Sub-Saharan Africa. *Vienna year Book of Population Research, 31-50.*
- Brown, A., Jejeebhoy, S. J., Shah, I., & Yount, K. M. (2001). *Sexual relations among young people in developing countries: evidence from WHO case studies*: World Health Organization, Department of Reproductive Health and Research Geneva.
- Brownlee, A., Pathmanathan, I. & Varkevissser, C. M (2003). Designing and Conducting Health Systems Research Projects. KIT publishers. Amsterdam International Development Research Centre and WHO Regional office for Africa.

Central Statistics Office (2009). Botswana Family Health Survey 2007: Total Fertility Rate.

Gaborone. Botswana

Central Statistics Office (2009). *Botswana Demographic Survey 2006*. Gaborone. Botswana.

Changas de Almeida, M.C., Lea O de Aquino, E.M., Gaffikin, L& Magnani, R.J. (2003).

Contraceptive Use among Adolescents at Public Schools in Brazil. *Rev Saude Publica* 2003, 37(5)

Chilisa, R., Tlhabano, K., Vista, C., Pheko, M., Losike, N., Mosime, S., Mpeti, K. & Balogun,

S.K. (2013). Self-efficacy, Self-esteem and the Intention to Practice Safe Sex among Botswana Adolescents. *IOSR Journal of Humanities and Social Science (IOSR-JHSS)*, 9(2), (Mar. - Apr. 2013), p 87-95 e-ISSN: 2279-0837, p-ISSN: 2279-0845.

[www.Iosrjournals.Org](http://www.Iosrjournals.Org)

Cockcroft, A., Lengwe-Kunda, J., Kgakole, L., Masisi, M., Laetsang, D., Ho-Foster, A.,

Marokoane, N., & Anderson, N. (2010). Community views on inter-generational sex: Findings from focus groups in Botswana, Namibia and Swaziland. *Psychology, Health & Medicine*, 15(5):507-514.

Cooper, M. L., (2002). Alcohol use and Risky Sexual Behavior among College Students and

Youth: Evaluating the Evidence. *Journal of Studies on Alcohol / Supplement no.14*: 101 – 117, 2002

Creswell, J. (2012). *Educational research: Planning, conducting, and evaluating quantitative*

*and qualitative research* (4th ed.). Upper Saddle River, NJ: Pearson Education.

Creswell, J. W., & Tashakkori, A. (2007). Editorial: Differing perspectives on mixed methods

research. *Journal of mixed methods research*, 1(4), 303-308.

- De Bruyn, M (2000) *Gender, adolescents and the HIV/AIDS epidemic: The need for Comprehensive sexual and reproductive health responses*. IPAS. USA.
- de Jong, T., & Ferguson-Hessler, M. G. (1996). Types and qualities of knowledge. *Educational psychologist, 31*(2), 105-113.
- Development Research and Policy Analysis Division, 2003). Economic and Social Commission for Asia and the Pacific. *Asia- Pacific Economies: Resilience in challenging Times*. United Nations.
- East, L., Jackson, D., O'Brien, L. & Peters, K. (2007). Use of the male condom by heterosexual adolescents and young people: literature review. *Journal of Advanced Nursing, 59* (2).
- Ellis, S., & Grey, A. (2004). *Prevention of Sexually Transmitted Infections (STIs): A Review of Reviews Into the Effectiveness of Non-clinical Interventions; Evidence Briefing*: Health Development Agency.
- Fako, T.T., Kangara, L.W. & Forcheh, N. (2010). Predictors of Knowledge about HIV and AIDS among young people: Lessons from Botswana. *Journal of AIDS and HIV Research, 2*(6), 116-130.
- Fatusi, A. O., & Hindin, M. J. (2010). Adolescents and youth in developing countries: health and development issues in context. *Journal of Adolescence, 33*(4), 499-508.
- Fetene, G.T. (2009). *Self –Reported Sexual Experiences, Sexual Conduct and Safer Practices of Ethiopian Undergraduate Male and Female Students in the context of HIV/AIDS Pandemic*. A dissertation for Doctor of Philosophy. State University of New York. ProQuest LLC. East Eisenhower Parkway.USA. Retrieved

from [http://media.proquest.com/media/pq/classic/doc/1786258731/fmt/ai/rep/NPDF?\\_s=MStK1Wbx5XzFA6Iabc8j5Rqn9s](http://media.proquest.com/media/pq/classic/doc/1786258731/fmt/ai/rep/NPDF?_s=MStK1Wbx5XzFA6Iabc8j5Rqn9s)

Fishbein, M. (2008). A Reasoned Action Approach to Health Promotion. *Med Decis Making*, 28, 834. doi: 10.1177/0272989X08326092. Sage Publication. Society for Medical Decision Making

George, W.H., Davis, K.C., Norris, J., Heiman, J.R., Stoner, S.A., Schacht, R.L., Hendershot, C.S., and Kajumulo, K.F. Indirect Effects of Acute Alcohol Intoxication on Sexual Risk-Taking: The Roles of Subjective and Physiological Sexual Arousal. *Arch. Sex. Behav.* Published online: April 23, 2009 (DOI 10.1007/s10508-008-9346-9).

Hingson, R., Heeren, T., Winter, M & Wechsler, H. (2005). Magnitude of Alcohol-Related Mortality and Morbidity among U.S. College Students Ages 18–24: Changes from 1998 to 2001. *Annual Review of Public Health*, 26, 259-279 (Volume publication date April 2005) DOI: 10.1146/annurev.publhealth.26.021304.144652.

Hockeberry M & Wilson D. (2012), *Wong's nursing care of infants and children*, 9<sup>th</sup> edition, Elsevier. Mosby, USA.

Hoffman, S., O'Sullivan, L. F., Harrison, A., Dolezal, C., & Monroe-Wise, A. (2006). HIV risk behaviors and the context of sexual coercion in young adults' sexual interactions: results from a diary study in rural South Africa. *Sexually Transmitted Diseases*, 33(1), 52-58.

Hunter, M. (2007). Changing the Political Economy of Sex in South Africa: The significance of Unemployment and Inequalities to the Scale of AIDS Pandemic. *Social Sciences and Medicine*, 64(3), 688-700

Ikamari, L., & Towett, R. (2008). Sexual initiation and contraceptive use among female adolescents in Kenya. *African Journal of Health Sciences*, 14(1), 1-13.

International Planned Parenthood Federation Africa Region. Maputo Plan of Action (2005).

Transforming Possibilities in to realities

Ishida, K., Stupp, P., & McDonald, O. (2011). Prevalence and correlates of sexual risk behaviors among Jamaican adolescents. *International Perspectives on Sexual and Reproductive Health*, 6-15.

Itshekeng, M.E. (2002). *The role of family background on HIV/AIDS awareness and condom use among secondary school students in Selebi- Phikwe (Botswana)*. NORAD (Norway-Botswana Health Sector Agreement). A Data Base for HIV and AIDS Researches in the SADC Region (2007). Matris System. Retrieved from [http:// HIV AIDS research.com/sadcaidsinfo/dipe/proj.details.cfm?id= 2128](http://HIV/AIDSresearch.com/sadcaidsinfo/dipe/proj.details.cfm?id=2128)

Jimmy-Gamma. D.B. (2009). *Assessment of the Capacity of Facility Based Youth Friendly Reproductive Health Services to Promote Sexual and Health among unmarried Adolescents: Evidence from Rural Malawi*. PhD thesis. Queen MargaretUniversity. Retrieved from <http://ethesis.qmu.ac.uk/132.pdf>.

Kalichman, S., Ntseane, D., Nthomang, K., Segwabe, M., Phorano, O., & Simbayi. L. (2007a). Recent Multiple Sexual Partners and HIV Transmission Risks among People Living with HIV/AIDS in Botswana. *Sexually Transmitted Infections*, 83:371-375.

Kalichman, S. C., Simbayi, L. C., Kaufman, M., Cain, D., & Jooste, S. (2007b). Alcohol use and sexual risks for HIV/AIDS in sub-Saharan Africa: systematic review of empirical findings. *Prevention Science*, 8(2), 141-151.

Kalmuss, D., Davidson, A., Cohall, A., Laraque, D. & Cassel, C. (2003). Preventing risk behaviors and pregnancy among teenagers. Linking Research and Programmes. *Perspectives on Sexual Reproductive Health*, 35(2).

- Kaskowitz, A.P. (2007). *Online availability of hormonal contraceptives without a health care examination: effect of knowledge and health care screening*. A Thesis presented to the Department of Public Health and Preventive Medicine and the Oregon Health & Science University School of Medicine for the degree of Master of Public Health. *Student Scholar Archive*. Paper 805
- Leclerc-Madlala, S. (2003). House Hold AND Families in Southern Africa: Transactional Sex and the Pursuit for Modernity. *Social Dynamic: Journal of Africa Studies* 29(2).doi 10.1080/02533950308628681
- Letamo, G. (2011). Does correct knowledge about HIV and AIDS lead to safer sexual behavior? The case of young people in Botswana. *African Population Studies*, 25(1)
- Lindberg, L. D., & Orr, M. (2011). Neighborhood-level influences on young men's sexual and reproductive health behaviors. *Journal Information*, 101(2).
- Low, N., Broutet, N., Adu-Sarkodie, Y., Barton, P., Hossain, M., & Hawkes, S. (2006). Global control of sexually transmitted infections. *The Lancet*, 368(9551), 2001-2016.
- Magowe, M. K. (2012). The meaning, Lived Experiences and Intentions for Safer Sex Communication among young Botswana women in Dyadic Relationships. *Open Journal of Nursing*. <http://dx.doi.org/10.423/ojn.2012>
- Meekers, D. & Ahmed, G. (2000). Contemporary patterns of adolescent sexuality in urban Botswana. *J Biosoc Sci*. 2000, 32 (4), 467-85.
- Ministry of Health. Botswana. Adolescent Sexual and Reproductive Health Implementation Strategy, 2012-2016. Government Printers. Gaborone.

Montano, D. E., & Kasprzyk, D. (2008). Theory of reasoned action, theory of planned behavior, and the integrated behavioral model. *Health behavior and health education: Theory, research, and practice*, 4, 67-95.

Motta Martins, L.B., Costa-Paiva, L., José D Osis, M., Maria Helena de Sousa, Pinto Neto, A.M & Valdir Tadini, V. (2006). Knowledge of contraceptive methods among adolescent students. *Rev Saude Publica*, 40(1).[www.fsp.usp.br/rsp](http://www.fsp.usp.br/rsp)

Mwinga, A.M. (2009). *Factors contributing to Unsafe Sex among Teenagers in the Secondary Schools of Botswana*. University of South Africa. Retrieved from [http://uir.unisa.ac.za/bitstream/handle/10500/6060/thesis\\_mwinga\\_a.pdf?sequence=1](http://uir.unisa.ac.za/bitstream/handle/10500/6060/thesis_mwinga_a.pdf?sequence=1)

Nishtar, N., Sami, N., Faruqi, A., Khojwa,S., Farid – ul –Hasnain, S.(2013). Myths and Fallacies about Male Contraceptive Methods: A qualitative Study amongst married Youth in slums of Karachi. *Global Journal of Health Sciences*, 5(2).2013. ISSN 1916 – 9736. Canadian Center of Science and Education.

Nkosana, J., & Rosenthal, D. (2007). The dynamics of Intergenerational Sexual Relationships: The experiences of schoolgirls in Botswana. *Sexual Health*, 4(3):181-187.

Ohene, S. & Akoto, I.O. (2008) Factors Associated with Sexually Transmitted Infections among Young Ghanaian Women. Female Youth STI correlates. *Ghana Medical Journal*, 42 (3).

Onwuegbuzie and Collins (2007).A Typology of Mixed Methods Sampling Designs in Social Science Research.*The Qualitative Report*, 12: 281-316

<http://www.nova.edu/ssss/QR/QR12-2/onwuegbuzie2.pdf>

Pitye, J., Lekone, P., Bodika, S., Tau, N., Zulu, T. (2010). Early sexual debut and associated HIV-related sexual risk behavior among students aged 14-19 years in Botswana. 19<sup>th</sup> International AIDS Society. Abstract No. TUPE 238.

Prata, N., Vahidnia, F., & Fraser, A. (2005). Gender and relationship differences in condom use among 15-24-year-olds in Angola. *International Family Planning Perspectives*, 192-199.

PSI Botswana (2008). Multiple Concurrent Partnerships among Men and Women aged 15 – 34 in Botswana. A Baseline Study. Retrieved from [www.gov.bw/Global/NACA%20MINISTRY/psi%20Botswana.pdf](http://www.gov.bw/Global/NACA%20MINISTRY/psi%20Botswana.pdf)

Robertson, A.A., Stein, J.A., Baird – Thomas. (2006). Gender differences in the prediction of Condom use among incarcerated Juvenile offenders: testing the Information – Motivation- Behavior Skills (IBM) model

SADC Secretariat (2008). Report of A Rapid Assessment and Analysis of Vulnerabilities facing Orphans and Other Vulnerable Children and Youth. Retrieved from [www.sadc.int/files/4913/5293/3506/Assessment\\_of\\_situationof\\_OVC\\_Youth\\_in\\_SADC](http://www.sadc.int/files/4913/5293/3506/Assessment_of_situationof_OVC_Youth_in_SADC)

Sales, J. M., Whiteman, M. K., Kottke, M. J., Madden, T., & Diclemente, R. J. (2012). Dual Protection Use to Prevent STIs and Unintended Pregnancy. *Infectious Diseases in Obstetrics and Gynecology*, 2012.

Sandelowski, M. (2010). What's in a name? Qualitative description revisited. *Research in Nursing & Health*, 33(1), 77–84.

Shipitsyna, E., Krasnoselskikh, T., Zolotoverkhaya, E., Savicheva, A., Krotin, P., Domeika, M., & Unemo, M. (2013). Sexual behaviors, knowledge and attitudes regarding safe sex, and prevalence of non-viral sexually transmitted infections among attendees of youth

- clinics in St. Petersburg, Russia. (Report). *Journal of the European Academy of Dermatology and Venereology*, 75. doi: 10.1111/j.1468-3083.2012.04512.x/abstract
- Shisana, O., & Simbayi, L. C. (2002). Nelson Mandela/HSRC Study of HIV/AIDS: South African National HIV Prevalence, Behavioral Risks and Mass Media: Household Survey 2002: Executive Summary: HSRC Press.
- Simbayi, L., Chauveau, J., & Shisana, O. (2004). Behavioral responses of South African youth to the HIV/AIDS epidemic: a nationwide survey. *AIDS care*, 16(5), 605-618.
- Small, E., Weinman, M. L., Buzi, R. S., & Smith, P. B. (2009). Risk factors, knowledge, and attitudes as predictors of intent to use condoms among minority female adolescents attending family planning clinics. *Journal of HIV/AIDS & Social Services*, 8(3), 251-268.
- Tashakkori, A., & Creswell, J. W. (2007). Editorial: The new era of mixed methods. *Journal of Mixed Methods Research*, 1(1), 3-7.
- Tashakkori, A., & Teddlie, C. (2009). Integrating Qualitative and Quantitative Approaches to Research. *Handbook of Applied Social Research Methods*. 2nd ed. Thousand Oaks, CA: Sage Publications, 283-317.
- Thachil, A., & Bhugra, D. (2006). Literature update: A critical review. *Sexual and Relationship Therapy*, 21(1), 91-98.
- Thurman, A.R., Clark, M.R., Doncel, G.F.(2011). Multipurpose Prevention Technologies: Biomedical tools to prevent HIV – 1, hsv – 2 and unintended pregnancies. *Infec.Di.Obstet.Gynaecol*.2011: 1 – 10.doi: 10.1155/2011/429403.Epub. 2011
- Titilayo, A., Agunbiade, M.O. & Kehinde, O. (2009). Perception and Attitudes of Christian Youth towards Condom Use: Implications for HIV/AIDS in Nigeria. *African Journal Online*, 3(1).

Triandis, H. C. (1980). Reflections on Trends in Cross - Cultural Research. *Journal of Cross-Cultural Psychology*, 11(1), 35-58.

UNFPA (2012) *Adolescents and Young People in Sub-Saharan Africa: Opportunities and Challenges* Africa Regional Office. Johannesburg. South Africa.

USAID, PEPFAR & R&P (2013) *Integrated HIV Serological and Behavioral Surveillance among Persons attending Alcohol Consumption*. Venues in Gaborone, Botswana

Villaruel, A. M., Jemmott III, J. B., Jemmott, L. S., & Ronis, D. L. (2004). Predictors of sexual intercourse and condom use intentions among Spanish-dominant Latino youth: a test of the planned behavior theory. *Nursing Research*, 53(3), 172-181.

Wagner III, W. E. (2011). Source of Safe Sex Knowledge and Sexual Behavior among University Students. *Wagner III, W./Californian Journal of Health Promotion*, 9 (1), 25-35.

Weinstein, N. D. (2007). Misleading tests of health behavior theories. *Annals of Behavioral Medicine*, 33(1), 1-10.

Youth Health and Rights Coalition (2011). *Promoting the Sexual and Reproductive Rights and Health of Adolescents and Youth: Country Strategies and Supplemental Guidance on the Women, Girls, and Gender Equality Principle*. Building on Global Health Initiative. Retrieved from [www.pathfinder.org/publications-tools/pdfs/Promoting-the-sexual-and-reproductive-rights-and-health-of-ado/](http://www.pathfinder.org/publications-tools/pdfs/Promoting-the-sexual-and-reproductive-rights-and-health-of-ado/)

Yzer, M. (2012). Perceived Behavioral Control in Reasoned Action Theory A Dual-Aspect Interpretation. *The ANNALS of the American Academy of Political and Social Science*, 640(1), 101-117.

Yzer, M. (2012). The Integrative Model of Behavioral Prediction as a Tool for Designing Health Messages. *Health Communication Message Design: Theory and Practice*, 21-40.

Zillmer, A. N. (2012). *The Relationship between Alcohol Consumption, Sexual Health Beliefs and Safer Sex Behaviors*. Research Report submitted to the University of Wisconsin- Stout, Graduate School for the Graduate Degree/ Major: MS Applied Psychology. Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.389.5113>

## Appendix A.1

**INFORMED CONSENT****Title: The Relationship between Knowledge, Intention and Self-Reported Use of Safer Sex Practices among Youth in Selected Districts in Botswana****Introduction:**

You are asked to participate in this study because you are a young person and you can provide relevant information about the study topic. We would like to understand young people's knowledge, intentions and self-reported use of safer sex practices. The study will be conducted in Molepolole, Botswana.

**Purpose of the Study**

The purpose of this study is to explore and describe the relationship between knowledge and use of safer sex practices among youth aged 20-24 years in selected districts in Botswana. This will assist in identifying whether their knowledge of contraception, intention to use contraceptives, has influence on actual outcome behavior (use of safer sex practice). This will also assist in identifying gaps for appropriate interventions towards promotion of safer sex practices among youth. Understanding the unique dynamics of the reproductive health of the Botswana youth through their self-reported preventive behavior is also crucial to inform and guide the existing implementation strategies.

**Eligibility criteria**

The research focus is on the youth aged (20-24 years) males and females, who reports being sexually active or having ever been sexually active.

**Study procedure:**

- Government and government affiliated health facilities, youth centers, households and tertiary institutions will be purposively selected. Those who meet the inclusion criteria will be identified through the assistance of the relevant personnel.
- Prospective participants will be purposively identified and an invitation to participate in the study will be extended to them verbally, if one agrees to participate then they will be offered a chair and table to sit and complete a self-administered questionnaire and interview schedule.

**Recruitment**

- Invitation to participate in the study will involve explanation of the study purpose, duration of interview and ethical considerations.
- A conducive space will be identified and those who agree to participate in the study will sit and complete a self-administered questionnaire
- Participant will be given at least one hour (1hr) to complete the questionnaire and interview schedule
- Any youth who meets the inclusion criteria and agrees to participate in the study will be requested to sign a consent form and append each page prior to completing the questionnaire and the interview schedule

**Risks and/or discomfort:**

Perceived risks in this study are that one has to divulge their private sexual information which is linked to intrusion of privacy. This risk would therefore be handled by positively acknowledging to participants that they are adults and they have the right to privacy with their

sexual information but that their participation in the study will assist come up with findings that may help to positively shape their Sexual Reproductive Health benefits as youth in this country.

**Benefits:**

There are no direct benefits to the participants for taking part in this study, but the findings of the study will be utilised to inform or guide the current strategies that are geared towards improvement of the Sexual and Reproductive Health and Rights of youth in Botswana.

**Costs to subjects and compensation:**

This process will not generate cost to participants and no compensation is to be expected and except to offer each participant P20.00 towards the cost of transport to and from data collection sites as their chance to get their convenient transports will be interrupted by the time they spend completing the questionnaire and the interview schedule.

**Voluntary participation:**

Participation is voluntary and refusal to participate will involve no penalty or loss of benefits to which the participants are otherwise entitled to.

**Right to withdraw**

Subjects have the right to withdraw at any point in time in the interview process. Withdrawal will involve no penalty or loss of benefits to which the subjects are otherwise entitled to.

**Privacy, Anonymity and Confidentiality**

The instrument is designed in a way that it will not request for names but participants will rather be identified by numbers. The data obtained will be kept confidential(shared) as only the principal investigator and her research team will have access to the data and this access will only be through the principal investigator's permission.

**Future use of information**

The information will be analysed and following analysis a report will be prepared and shared with relevant authorities. It is expected that the findings will inform or guide the current strategies that are geared towards the Sexual and Reproductive Health and Rights of youth in Botswana. Following data analysis, report writing and dissemination of results the raw data will be kept safely for a period of 5 years and thereafter it will be shredded.

**Who to contact:****Mophuthi Liwambano.**

Principal Researcher. BNSc. RM, RN, Masters Nursing Student University of Botswana.

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**Ms Dimpho Ndjadingwe**

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**Mr Pilate Khulumani**

Health Research Unit

Ministry of Health

Gaborone, Botswana

Contact Details: +267 362 018

**Statements of consent:**

Consent to participate in the interview

*I have read or I have the above statements read to me in relation to participating in this interview. I was given a chance to ask questions and questions were answered to my satisfaction.*

*I understand that I can stop taking part in this interview anytime. To exit or to refuse to join the interview will not hinder me or my family to receive health services in this district/area/region or anywhere else. I agree to take part in this interview as a volunteer.*

\_\_\_\_\_  
Signature of participant                      Date

\_\_\_\_\_  
Signature of Researcher                      Date

## **Appendix A.2**

### **TETLA YA GO TSAYA KAROLO**

**SETLHOGO SA PATLISISO:KA MANO GARENG GA KITSO ,MAIKAELELO LE GO**

**IPONAGATSA GA TIRISO YA MANANEO A TLHAKANELO DIKOBO E E**

**BABALESEGILENG GARENG GA BANANA BA DINGWAGA TSE MASOME A**

**MABEDI GO YA KWA MASOME A MABEDI LE BONE MO DIKGAOLONG TSA**

**GABORONE LE MOLEPOLOLE MO BOTSWANA**

**MOTLHOMAMISI MOGOLO:** Mophuthi Liwambano

**Mogala:** +267 72974251

**MORUTINTSI WA GAGWE:** Mme Mable, Kefilwe, Moeng Magowe

**Mogala:** +267 3554669/76192326

**Se o tshwanetseng go se itse ka patlisiso e:**

- Pampiri e e tsentse bothokwa jwa go tsaya karolo mo patlisisong ele ditlamorago tsa teng.
- O na le tshwanelo ya go gana go tsaya karolo, kana go boela morago tshwetso e o neng o e tsere go le pele.
- Sekaseka pampiri e ka keletlhoko,botsa fa o na le potso
- Ga o patelediwe go tsaya karolo

### **MOSOLA WA PATLISISO**

Bothokwa jwa patlisiso e,ke go batlisisa le go tthalosa kamano magareng ga kitso,maikaelelo a go iponagatsa ga tiriso ya mananeo a tlhakanelo dikobo e babalesegileng gareng ga banana ba dingwaga tse masome a mabedi go ya go ba dingwaga tse masome a mabedi le bone mo kgaolong dingwe tsa Botswana. maikalelo magolo ke go tla go thusa ka megopolo e tla rotloetsang boitsholo jo bontle jwa banana mo kgang tsa tlhakanelo dikobo.

**DIPHATSA KGOTSA DINTLHA TSE DI SA ITUMEDISENG**

Ga go na bodiphatsa bope mo go tseyeng karolo mo patlisisong e. Mo patlisisong e, fago ka nna le dipotso dingwe tse di ka gogomosang maikutlo o letlelelwa go di tlola.

**THULAGANYO LE NAKO**

Fa o dumela go tsaya karolo mo patlisisong e, o tla kopiwa go tla tsa pampiri ya dipotso e nang le dipotso di ka tshwana lekgolo tse di ka tsayang metsotso e le masome a marataro.

**DIPOELO TSA GO TSAYA KAROLO**

Motsaa karolo ga a na go lebogiwa ka dituelo tsa madi ,mme go tsaya karolo gago re go lebogela go menagana ,ka go nne go tla oketsa kitso mo go ruteng le go tlhabolola mananeo a banana ka botsogong jwa bone mabapi le tlhakanelo dikobo e babalesegileng.

**PABALELO YA MEKWALO**

Dikarabo tsa gago ke sephiri, ebile gape di a go dirisiwa fela mo patlisisong e, ka jalo ga o na go kopiwa go kwala maina gope.

**TSEO KAROLO KA BOITHAOPPO**

Go tsaya karolo mo tshekatshekong e ke ka boithaopo.Fo a tsaya tshwetso ya go sa tseye karolo tshwetso ya gago ga e na go ama tirisano ya gago le ba University ya Botswana mo isagong le babereki ba yone .Fa o tsaya tshwetso ya go tsaya karolo o na le tshwanelo ya go ka emisa go tsaya karolo kgotsa wa boela morago tshwetso ya gago.

**TESELETSO**

O dira tshwetso ya go tsaya karolo kgotsa go sa tseye karolo mo ithutong e.Monwana waga ago o supa fa o badile ebile o tlhalogantse molaetsa o o filweng fa godimo, ebile o tsere tshwetso ya go tsaya karolo.

---

 Monwana wa mokopa Tetla

---

 Letsatsi

---

 Monwana wa yoo dumalanang go tsenelela ditlhotlhomiso

---

 Letsatsi

**O TLA FIWA MORITI WA LEKWALO LE LA TETLA**

Fa o na le dipotso mabapi le ithuto kgotsa lekwalo le la tetla, kontle ga tse di arabilweng ke motlhotlhomisi mogologo akaretsa dipotso ka tlhotlhomiso, ditshwanelo tsa gago o le motsaya karolo: kana fa o dumela o sa tshwara sentle ebile o batla go bua le mongwe kontle ga motlhotlhomisi, ka tswee tswee gololosega go bua le ba ofisi ya ditlhotlhomisi le kgodiso ya Mmadikolo wa Botswana, leletsa;

**Mme Dimpho Njadingwe ko 355-2900,**

letloa:research@mopipi.ub.bw, fekese :( 395-7573)

Kgotsa ba lephata la botsogo ko go ba ba tsamaisang dipatlisiso tsa botsogo jwa setshaba, o ka ikgolaganya le,

**Rre, P. Khulumani**  
Health Research Unit

Ministry of Health

Gaborone, Botswana

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Appendix B.1

**Screening Form**

**Please answer the following questions**

What is your date of birth? \_\_\_\_\_

What is your age to the nearest birthday? \_\_\_\_\_

Are you sexually active? \_\_\_\_\_

Have you ever been sexually active? \_\_\_\_\_

Would you like to participate in the study? \_\_\_\_\_

Appendix B.2

**Formo ya tshkatsheko ya go tsenelela patlo maikutlo**

Bolela dingwaga go re o tshotswe leng? (Letsatsi, kgwedi le ngwaga ya matsalo)

-----

Dingwaga tsa gago di kae? -----

A o setse o inakantse le tlhakanelo dikobo? -----

A o ikile wa tsena mo tlhakanelong dikobo? -----

A o dumela go tsenelela patlo maikutlo e? -----

**The Relationship between Knowledge, Intention and Self-Reported Use of Safer Sex Practices among Youth in Botswana: A Case of Gaborone and Molepolole**

**Appendix: C: Socio-demographic Factors**

Please select the most appropriate option and indicate your answer with a tick (√) in the space provide.

**Table 1: Background variables/ Socio demographic factors**

<b>Question No.</b>	<b>Question</b>	<b>Response</b>
1	In which of the 2 district do you reside?	Gaborone <input type="checkbox"/> Molepolole <input type="checkbox"/>
2.	How old are you? (please state your age to the nearest birthday)	<input type="text"/>
3.	What is your gender	Male <input type="checkbox"/> Female <input type="checkbox"/>
4.	What is your educational attainment?( please tick the most highest level attained)	Primary <input type="checkbox"/> Secondary <input type="checkbox"/> Tertiary <input type="checkbox"/> Other (specify)----- <input type="checkbox"/>
<b>Question No.</b>	<b>Question</b>	<b>Response</b>
5.	What is the educational attainment of your parents?(please tick the most highest level attained)	Primary <input type="checkbox"/>

		<p><b>Mother</b></p> <p>Secondary <input type="checkbox"/></p> <p>Tertiary <input type="checkbox"/></p> <p>Other (specify)----- <input type="checkbox"/></p> <p>Primary <input type="checkbox"/></p> <p><b>Father</b></p> <p>Secondary <input type="checkbox"/></p> <p>Tertiary <input type="checkbox"/></p> <p>Other (specify)----- <input type="checkbox"/></p>	
6.	What is the educational attainment of your main sex partner	<p>Primary <input type="checkbox"/></p> <p>Secondary <input type="checkbox"/></p> <p>Tertiary <input type="checkbox"/></p> <p>Other (specify)----- <input type="checkbox"/></p>	
7.	What is your occupation?	<p>Self Employed <input type="checkbox"/></p> <p>Student <input type="checkbox"/></p> <p>Employed <input type="checkbox"/></p> <p>Nil <input type="checkbox"/></p> <p>Other(Specify) ----- <input type="checkbox"/></p>	
8.	What is your source of income?	<p>Salary <input type="checkbox"/></p> <p>School allowance <input type="checkbox"/></p> <p>Parents <input type="checkbox"/></p> <p>Business <input type="checkbox"/></p> <p>Sexual Partner <input type="checkbox"/></p> <p>Other(Specify)----- <input type="checkbox"/></p>	

9.	Do you consider this income adequate to meet your basic needs?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
10.	How many sexual partners do you have?	1 <input type="checkbox"/> 2 <input type="checkbox"/> More than 2 <input type="checkbox"/>	
Question No.	Question	Response	Skip Pattern
11.	How old is your main sex partner?	Please write your main sexual partner's age to the nearest year _____	
12.	How old are your other sexual partners?	State for each partner below if you have more than 1 1. _____ 2. _____ 3. _____ N/A _____ (tick if relevant)	
13.	What is your current marital status?	Married <input type="checkbox"/> Cohabiting <input type="checkbox"/> Casual <input type="checkbox"/> One night stands <input type="checkbox"/> Single <input type="checkbox"/>	
14.	For how long have you been in this/these relationships?	Less than 1 year <input type="checkbox"/> Less than 2years <input type="checkbox"/> More than 2 years <input type="checkbox"/> On and off briefly <input type="checkbox"/>	
15.	Have you everbeen pregnant?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	

16.	How old were you when you became pregnant for the first time?	Write age in years _____	
17.	Have you ever impregnated someone?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	
Question No.	Question	Response	Skip Pattern
18.	How old were you when you impregnated someone for the first time?	Write age in years _____	
19.	Was the pregnancy planned?	Yes. <input type="checkbox"/> No. <input type="checkbox"/> N/A <input type="checkbox"/>	
20.	How many pregnancies have you had?	Write the number of pregnancies _____ N/A <input type="checkbox"/>	
21.	How many pregnancies has your partner had?	Write the number of pregnancies _____ N/A <input type="checkbox"/>	
22.	How many children were born alive to you?	Write the number of pregnancies _____ N/A <input type="checkbox"/>	
23.	Do you drink alcohol?	Yes. <input type="checkbox"/> No. <input type="checkbox"/>	
24.	Do you take drugs?	Yes. <input type="checkbox"/> No. <input type="checkbox"/>	
25.	Do you attend church?	Yes. <input type="checkbox"/> No. <input type="checkbox"/>	
26.	Does your church allow you to use condoms?	Yes. <input type="checkbox"/> No. <input type="checkbox"/>	

		N/A	<input type="checkbox"/>	
--	--	-----	--------------------------	--

Question No.	Question	Response	Skip Pattern
27.	Does your church allow you to use other contraceptives?	Yes. <input type="checkbox"/> No. <input type="checkbox"/> Not Applicable <input type="checkbox"/>	
28.	Do you experience any problems accessing condoms at your local health facility?	Yes. <input type="checkbox"/> No <input type="checkbox"/> Not Applicable <input type="checkbox"/>	
29.	Do you experience any problems accessing other contraceptive methods at your local health facility?	Yes. <input type="checkbox"/> No <input type="checkbox"/> Not Applicable <input type="checkbox"/>	

## Appendix D

**Part 1**

The following questions relate to your knowledge of contraceptive methods. Please indicate whether the statement is true or false by making a tick under the relevant column in the table

Table 2: Knowledge of Safer Sex Practices

Question No.	Category of Question	Question	Response	
			True	False
1.	<b>General Knowledge</b>	It is possible for Someone to fall pregnant while using contraceptives		
2.		It is necessary for someone to always use a condom and another method of contraception for every sexual activity		
3.		A person can still get infected with an STI while faithful to only one partner		
4.		It is necessary for someone with only one sexual partner to use a new condom with every sexual activity all the time		
5.		The use of condoms always protect against unintended pregnancy and possibility of contracting STIs?		

6.		In case a person has problems with one contraceptive method, they can still freely choose from other available contraceptive methods.		
7.		It is always necessary for someone who had unprotected sex to take emergency contraception		
8.		People with STIs including HIV are entitled to all contraceptive methods of their choice.		
	<b>Oral Contraception Pills</b>	<b>Oral Contraception Pills</b>		
9.	Preventive Action	Oral contraceptives prevent pregnancy by suppressing ovulation		
10.	Correct and consistent use	Correct use means taking one pill per day every day Correct use means taking one pill at the same time everyday Correct use means taking one pill per day any time you remember during the day		
11.	Side Effects	The common side effect are:		
	<b>1. Combined oral contraceptive pill</b>	a) Headache		
		b) Pain behind the knee		
		c) Chest pain		
d) Shortness of breath				

		e) Absence of menses		
		f) Excessive menses		
		g) Facial blotches		
	<b>2. Progesterone only contraceptive pill</b>	The common side effects are:		
		a) Spotting		
		b) Absence of menses		
		c) Headaches		
		d) Weight gain		
		e) Nausea and vomiting		
<b>12.</b>	Managing Missed a Pill	a) Discontinue the method immediately		
		b) Take the missed pill as soon as you remember and take the next one at the usual time		
		c) If you miss more than 2, continue with the method, use a condom and inform your health care provider immediately.		
<b>13.</b>	Eligibility Criteria for Use: <b>1. Combined oral contraceptive pill</b>	a) absence of high blood pressure		
		b) No migraine headaches		
		c) Not pregnant		
	<b>2. Progesterone only</b>	a) Normal menstrual cycle\		

	<b>contraceptive pill</b>	b) Not pregnant		
		c) Breastfeeding		
<b>14.</b>	Precautions	a) Oral contraceptive pills do not protect against STIs		
		b) You can take too long to fall pregnant when you stop using progesterone pill.		
		c) it is necessary to give correct information about your menstrual cycle		
<b>15.</b>	Follow up visits	a) Health care provider will make a follow-up after three months from initial visit		
		b) Thereafter, you will be followed every six months for both the combined oral contraceptive pill and the progesterone only pill		
		c) Health care provider will make a follow-up monthly visits throughout use for both types		
<b>16.</b>	Where to get the method	a) All methods are available at all health facilities providing Sexual Reproductive Health Services or at pharmacies on prescription		
		b) In private pharmacies		

		c) At any street vendor		
	<b>Injectable Contraceptive</b>	<b>Injectable Contraceptive</b>		
17.	Preventive Action	It prevents pregnancy by suppression of ovulation		
18.	Use(Correct and Consistent)	Taking an injection every 3 months		
		Taking Injection after every six months		
19.	Eligibility Criteria for Use	It is suitable for people with irregular and heavy menses		
		Suitable for all sexually active people including youth		
20.	Side Effects:	Lack of menses or Heavy menses		
21.	Managing Side Effects	Discontinue method immediately		
		Inform your Family planning provider immediately		
22.	Precautions	It does not protect against STIs		
23.	Follow up Visits	Three months after initial visit and thereafter, every three months		
24.	Where to get the method?	All health facilities providing Sexual Reproductive Health Services or at pharmacies on		

		prescription		
	<b>Loop or Intra Uterine Contraceptive Device (IUCD)</b>	<b>Loop or Intra Uterine Contraceptive Device (IUCD)</b>		
<b>25.</b>	Preventive Action	Prevents pregnancy by creating a mechanical barrier in the vagina		
		It prevents pregnancy by causing chemical changes that damages sperm and egg before their union/ before they meet		
<b>26.</b>	Use(Correct and Consistent)	Insertion of one Loop once in 12months		
<b>27.</b>	Eligibility Criteria for Use	Suitable for use by any sexually active female including youth		
		Not suitable for use by youth		
<b>28.</b>	Side Effects	Heavy menstrual bleeding		
		Lack or absence of menses		
<b>29.</b>	Managing Side Effects	Remove the loop immediately		
		Inform your health care provider immediately		
<b>30.</b>	Precautions	It may predispose the user to pelvic inflammatory diseases and STIs		
		It has a protective effect against STIs		
<b>31.</b>	Follow up visits	Initial follow up visit of one month after insertion and		

		thereafter 12months		
		Initial follow up visit once in12months after insertion		
32.	Where to get the method?	All health facilities providing Sexual Reproductive Health Services or at pharmacies on prescription		
	<b>Emergency Contraception</b>	<b>Emergency Contraception</b>		
33.	Preventive Action	Depends on the method and varies on method used		
34.	Use ( correct and consistent)	Oral contraceptives be taken within three days (72 hours) by any female who have had unprotected sexual intercourse and is not ready for pregnancy		
		and varies with the type of method used e.g. combined oral contraceptive pill( 4 pills immediately and 4 pills after 12 hours), progesterone only pill( 50 pills all at once)		
.		Loop(IUCD) can be inserted within 5days following unprotected sexual intercourse if one is not ready for pregnancy		
35.	Eligibility Criteria for Use	Any female client who have had unprotected sexual intercourse (including youth)		

		and is not ready to fall pregnant.		
36.	Side Effects	Differs per various methods used		
37.	Managing Side Effects	Stop the method and never use it again		
		Get advice from your health care provider immediately		
38.	Precautions	Does not protect against STIs		
39.	Follow up visits	When need arise or when experiencing side effects		
	Where to get the method?	All health facilities providing Sexual Reproductive Health Services or at pharmacies on prescription		
	<b>Condoms</b>	<b>Condoms</b>		
40.	Preventive Action	It forms a barrier that prevents contact of penile secretions including semen and vaginal secretions		
41.	Use(correct and consistent)	Insert during foreplay, remove and discard immediately after		

		ejaculation		
<b>42.</b>	Eligibility Criteria for Use	It can be used by all sexually active people		
<b>43.</b>	Side Effects	Penile or vaginal irritation resulting in rash		
		Reduces sexual pleasure		
<b>44.</b>	Precautions	Allergy to material used, e.g. latex		
		Condom burst in case of improper handling and use		
<b>45.</b>	Managing Side Effects	Discontinue use immediately and never use again		
		Inform your health care provider and review more preventive options together.		
<b>46.</b>	Follow up visits	Any time you need resupply or when experiencing side effects		
<b>47.</b>	Where to get the method?	All health facilities providing Sexual Reproductive Health Services, at pharmacies and in public places		

Table 2: Knowledge of Safer Sex Practices

**Part 2**

**This Section is meant to allow you to elaborate on your Knowledge of Safer Sex Practices**

Please answer the following questions

**48.** Explain your understanding of safer sex practices

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**49.** Explain any situation or circumstances (**e.g.**, issues of access, health personnel, attitudes, cultural barriers, lack of knowledge, **etc**) that you think may prevent youth from using any of the contraceptive methods available in Botswana

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**50.** State any two methods of contraceptives that one can use together (at the same time) to prevent both pregnancy and STI.

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**51.** What do you understand by emergency contraception?

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**52.** What situations make a person suitable for use of emergency contraception?

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**53.** Explain why some methods of contraception will be considered advantageous for a forgetful and busy person.

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**54.** Explain your understanding of proper use of contraception

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**55.** State at least **three or more** other other places (apart from government clinics) where youth can be able to access information on safer sex practices in Botswana

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**56.** Explain the type of services offered at the places you stated in question **55** above, please give an explanation for each place stated.

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Appendix: E

**Youth’s Intentions to use Safer Sex Practices**

Please select the most appropriate option and indicate your answer with a tick (✓) in the space provided.

Key or Guide:

**5: Strongly Agree**

**4: Agree**

**3: Not Sure**

**2: Disagree**

**1: Strongly Disagree**

Table 3

Intention to use safer sex practices in the next three months.

**In the next three months I intend to;**

Intentions	5	4	3	2	1
	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
1. Invite my partner to visit the health facility with me so that we receive services on safer sex practices together					
2. Choose a contraceptive method that is suitable for me					
3. Use a contraceptive method that will protect me from both pregnancy, STI or both every time I have sexual intercourse					
4. Always have condoms available with me					
5. Initiate condom use every time we have sex					

<b>6.</b> Be faithful to one sexual partner					
<b>7.</b> Always follow the health care provider's advice on correct and consistent use of the contraceptive method I use.					
<b>8.</b> Abstain from sexual intercourse until I am old enough to make appropriate sexual and reproductive health decisions					
<b>9.</b> Insist on the use of safer sex practices with my sexual partner					
<b>10.</b> Initiate discussions about use of safer sex practices with my sexual partner					

Table 3: Intentions to use safer sex practices in the next three months

## Appendix F

**Self-Reported Use of Safer Sex Practices**

Please answer the following questions by placing a tick (✓) in the appropriate box and for some elaborate accordingly

**1.** Are you or your partner currently on any method/methods of contraception?

Yes  No.

**2.** If Yes? What contraceptive method are you currently using using ( Please tick all that is relevant)

a. Condom  Male  Female

b. Pill

c. Injectable (Depo)

e. Intra-uterine device( IUCD or Loop)

f. None

g. Other (Please specify)

---

**3.** If you answered Yes to question 1 above, what was the reason for choosing this method or these methods?, If you answered No, please move to the next question

---

**4.** If you answered Yes to question 1 above, Do you use this method consistently and correctly?, If you answered No, please move to the next question

---

5. Do you use a new condom every time you have sex? Yes  No

6. Have you or your partner ever been treated for STI in the past three months?

Yes, I was treated  Yes, my partner was treated

Yes, we were both treated  No , none of us was treated

7.State and explain factors that you think encourage or motivate you( **e.g** personal, social, family, cultural, religious, access, cost, people’s attitudes, **etc**) to

Consistently and correctly use safer sex practices. Please explain how each factor you stated motivates you.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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8.State and explain factors that you think discourage or demotivate you( **e.g** personal, social, family, cultural, religious, access, cost,people’s attitudes, **etc**) to

consistently and correctly use safer sex practices. Please explain how each factor you stated demotivates you.

\_\_\_\_\_

\_\_\_\_\_

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**Thank You for Your Participation**

**Appendix G:Potsolotso ka teme ya Setswana**

**KAMANO GARE GA KITSO ,MAIKAELELO LE GO IPONAGATSA GA TIRISO YA  
MANANEO A TLHAKANELO DIKOBO EE BABABLESEGILENG GARE GA  
BANANA MO DIKGAOLONG DINGWE TSA BOTSWANA:**

**Appendix: C: Dintlha ka tsa matshelo a gago le ba o tshelang le bone**

Tlhopha Karabo e maleba o bo o tshwaya ka letshwao la (√) mo bokosong e eo filweng.

**Table 1: Dintlha ka tsa matshelo a gago le ba o tshelang le bone**

NOMORO YA	POTSO	KARABO
	<b>POTSO</b>	
1.	O nna mo kgaolong efe	Gaborone <input type="checkbox"/>
		Molepolole <input type="checkbox"/>
2.	O ngwaga tse kae (kwala dingwaga tsa gago go ya ka bogautshwane jwa matsalo a gago)	<input type="checkbox"/>
3.	Tlhopha bong jwa gago	Monna <input type="checkbox"/>
		Mosadi <input type="checkbox"/>

4. O feletse kae ka dithuto tsa gago

Dithuto tse di potlana

Dithuto tse di kgolwanyane

Dithuto tse di kgolwane

Tse dingwe (Tlhalosa)

**NOMORO YA POTSO      POTSO      KARABO      TSHWAYA FA**

5. Batsadi bag ago ba feletse fa kae mo dithutong

**Mme** Dithuto tse di potlana

Dithuto tse di kgolwanyane

Dithuto tse di kgolwane

Tse dingwe (tlhalosa)-----

Dithuto tse di potlana

Dithuto tse di kgolwane

**Rre** Dithuto tse dikgolwane

Tse dingwe (tlhalosa)

6. Mokapelo wa ago o feletse fa kae ka dithuto tsa gagwe

Dithuto tse di potlana

Dithuto tse di kgolwanyane

Dithuto tse di kgolwane

Tse dingwe (tlhalosa)

- |            |   |                       |                          |
|------------|---|-----------------------|--------------------------|
| <b>7.</b>  | O wela mo seelong sefe                    | Wa ipereka            | <input type="checkbox"/> |
|            |   | Moithuti              | <input type="checkbox"/> |
|            |   | Mmerekhi              | <input type="checkbox"/> |
|            |   | Ga gona               | <input type="checkbox"/> |
|            |   | Tse dingwe(Tlhalosa)  | <input type="checkbox"/> |
| <b>8.</b>  | Letseno la gago ke lefe                   | letseno la kgwedi     | <input type="checkbox"/> |
|            |   | letseno la sekolo     | <input type="checkbox"/> |
|            |   | Batsadi               | <input type="checkbox"/> |
|            |   | Dikgwebo              | <input type="checkbox"/> |
|            |   | Mokapelo              | <input type="checkbox"/> |
|            |   | Tse dingwe (tlhalosa) | <input type="checkbox"/> |
| <b>9.</b>  | A o bona letseno la gago le ka go tshetsa | Ee                    | <input type="checkbox"/> |
|            |   | Nnyaa                 | <input type="checkbox"/> |
| <b>10.</b> | O na le bakapelo ba le kae                | 1                     | <input type="checkbox"/> |
|            |   | 2                     | <input type="checkbox"/> |
|            |   | Go feta bobedi        | <input type="checkbox"/> |

**NOMORO YA POTSO**

**KARABO**

**TSHWAYA**

**POTSO**

**FA/KWALA FA**

- |            |   |   |  |
|------------|---|---|--|
| <b>11.</b> | Mokapelo wa gago tota tota o na le ngwaga tse kae             | Kwala dingwaga tsa mokapelo wa gago o bapisetse ngwaga o gaufi  | <input type="checkbox"/>   |
| <b>12.</b> | Bakapelo ba gago ba bangwe ba na na le ngwaga tse kae         | Supa fa tlase ga o na le bakapelo ba feta bongwe<br>4. _____<br>5. _____<br>6. _____<br>N/A _____ (tshwaya fa go tlhokega)  | <input type="checkbox"/>   |
| <b>13.</b> | O wela mo seelong sefe  | banyalani<br><br>le nna mmogo mme le sa nyalana<br><br>kgolagano e senang maitlamo le maikisetso a go tswelala<br><br>Kgolagano ya nakwana fela<br><br>ga ke a mo kgolaganong | <input type="checkbox"/><br><br><input type="checkbox"/><br><br><input type="checkbox"/><br><br><input type="checkbox"/> |
| <b>14.</b> | O na le lebaka le le kae o le mo tsalanong e,kana botalano jo | Ko tlase ga ngwaga<br><br>Ko tlase ga ngwaga tse pedi<br><br>Ngwaga tse di fetang bobedi<br><br>Re tla re kgaogana re boelana   | <input type="checkbox"/><br><br><input type="checkbox"/><br><br><input type="checkbox"/><br><br><input type="checkbox"/> |

- |            |  |                |                          |
|------------|--|----------------|--------------------------|
| <b>15.</b> | A o kile wa itsholofela                            | Ee             |                          |
|            |  | Nnyaa          | <input type="checkbox"/> |
| <b>16.</b> | O ne o le ngwaga tse kae ga o itsholofela la ntlha | Kwala dingwaga | <input type="checkbox"/> |
|            |  |                | <input type="checkbox"/> |
| <b>17.</b> | A o kile wa imisa                                  | Ee             | <input type="checkbox"/> |
|            |  | Nnyaa          | <input type="checkbox"/> |

- | <b>NOMORO YA POTSO</b> | <b>POTSO</b>                                       | <b>KARABO</b>     | <b>TSHWAYA FA/KWALA FA</b> |
|------------------------|--|-------------------|----------------------------|
| <b>18.</b>             | O ne o le ngwaga tse kae ga o imisa motho la ntlha | Kwala ka dingwaga | <input type="checkbox"/>   |
| <b>19.</b>             | A boimana bo ne bo ipaakanyeditswe?                | Ee                | <input type="checkbox"/>   |
|                        |  | Nnyaa             | <input type="checkbox"/>   |
| <b>20..</b>            | Ke makgetlho a le kae a o itsholofetseng ka one    | Kwala palo        | <input type="checkbox"/>   |
| <b>21.</b>             | Mokapelo wa gago o itsolofetse ga kae?             | Kwala palo        | <input type="checkbox"/>   |
| <b>22.</b>             | Ke bana ba le kae ba o ba tshotseng ba tshela      | Kwala palo        | <input type="checkbox"/>   |
| <b>23.</b>             | A o nwa notagi?                                    | Ee                | <input type="checkbox"/>   |
|                        |  | Nnyaa             | <input type="checkbox"/>   |

24. A o dirisa diritibatsi Ee
- Nnyaa
25. A o tsena kereke Ee
- Nnyaa
26. A kereke ya gago e go letla go dirisa sekausu Ee
- Nnyaa

- | NOMORO YA<br>POTSO | POTSO   | KARABO         | TSHWAYI<br>FA/KWAL       |
|--------------------|---|----------------|--------------------------|
| 27.                | A kereke ya gogo e go letla go go dirisa mefuta e mengwe ya bo iphemelo   | Ee             | <input type="checkbox"/> |
|                    |   | Nnyaa          | <input type="checkbox"/> |
|                    |   | Ga gona karabo | <input type="checkbox"/> |
| 28.                | A o kopana le dikgwetlho dingwe fa o tswanetse o fitlhele dikausu kwa dikontorong tsa bongaka                         | Ee             | <input type="checkbox"/> |
|                    |   | Nnyaa          | <input type="checkbox"/> |
|                    |   | Ga gona karabo | <input type="checkbox"/> |
| 29.                | A o kopana le dikgwetlho dingwe fa o tswanetse o fitlhele mefuta mengwe ya tsa boiphemelo kwa dikontorong tsa bongaka | Ee             | <input type="checkbox"/> |
|                    |   | Nnyaa          | <input type="checkbox"/> |
|                    |   |                | <input type="checkbox"/> |

Ga gona karabo

## Appendix D

**KAROLO YA NTLHA YA GO SEKASEKA KITSO**

Dipotso tsemi latelang di amana le kitso ya gago ka tsa thibelo pelegi le malwetsi a tlhakanelo dikobo. Supa gore a ke boamaruri kana nyaa ka lotshwao la (√) fa go tshwanetseng teng.

Table 2 Kitso ka tlhakanelo dikobo e babalesegileng.

NOMORO YA POTSO	KAROLO YA DIPOTSO	POTSO	KARABO	
			EE	NNYAA
1.	<b>Ka kitso ya gago</b>	A go na le kgonagalo ya gore motho a nne moimana a dirisa mokgwa wa tsa boiphemelo		
2.		A ke tshwanelo ya gore motho a dirise sekausu (condom) le mofuta mongwe wa tsa boiphemelo lekgetho lengwe le lengwe fa a tlhakanela dikobo.		
3.		Go na le kgonagalo ya gore motho a tsenwe ke malwetsi a tlhakanelo dikobo a ntse a dirisa tsa boiphemelo		
4.		A ke tshwanelo ya gore nako ngwe le ngwe fa motho a tlhakanelo dikobo a dirise sekausu (condom) se sesha		
5.		Tiriso ya sekausu (condom) nako ngwe le ngwe e sireletsa mo boimaneng jo bo solofelwang le go thibela go tsenwa ke malwetsi a dikobo.		

6.		Mo seemong sa fa motho a na le bothata le mofuta mongwe wa tsa bo iphemelo, bana le tshono ya go ka tlhophla mofuta e mengwe ya bo iphemelo.		
7.		A mme ka nako tsotlhe go a tlhokafala go tsaya mofuta wa tsa iphemelo wa potlako fa o tsene mo tlhakanelo dikobo e sa sireletsegang		
8.		Batho ba ba nang le malwetsi a dikobo go akeretsa le HIV ba na le tshwanelo ya go ka itlhophela mofuta wa tsa bo iphemelo o ba batlang go o dirisa.		
	<b>MOFUTA WA PILISI(Oral contraception pills)</b>	<b>MOFUTA WA PILISI WA BOIPHELO</b>		
9.	Thibelo	Mofuta wa pilisi o thibela boimana ka go itsa kgolo ya lee la ga mme.....		
10.	Tiriso	Tiriso sentle ya pilisi ke fa o tsaya pilisi e le nngwe tsatsi le letsatsi.  Tiriso sentle ya pilisi ke fa o tsaya pilisi ka nako e tshwanang tsatsi le tsatsi.  Tiriso sentle ke f o tsaya pilisi e le nngwe nako ngwe le ngwe mo letsatsing fa o e gakologelwang teng		
11.	<b>Ditlamorago</b> <b>1. Mofuta wa pilisi wa metswako ee tlhakaneng</b>	Ditlamorago tse di tlwaelesegileng ke :  h) Tlhogo e opang i) Botlhiko ko morago ga lengole j) Botlhoko mo mafatlheng k) Go fela mowa		

		<p>l) Go tlolwa ke kgwedi/go sa bone setswalo</p> <p>m) Setswalo se se ntsi</p> <p>n) Go thunya ga se fatlhego</p>		
	<p><b>2. Pilisi ya motswako o le mongwe fela(Progesterone only contraceptive pill)</b></p>	<p>Ditlamorago tse di tlwaelesegileng:</p> <p>f) Spotting</p> <p>g) Go tlolwa ke kgwedi/o sa bone setswalo</p> <p>h) Tlhogo e opang</p> <p>i) Go oketsega ga mmele</p> <p>j) Go kgwa le go selelega</p>		
12.	<p>Se o ka se dirang fa o tlodisitse pilisi</p>	<p>(a) Emisa go dirisa mofuta oo wa boiphelo ka potlako.</p> <p>(b) Tsaya pilisi eo tlodisitseng ka bofefo nako eo gakologelwang o bo o gakologelwa go nwa e nngwe ka nako e tshwanetseng</p> <p>(c) Fa o tlodisitse gabedi kana go feta ,tswelala ka mofuta oo,dirisa sekausu,(condom)bo na ba bongaka ka potlako</p>		
13.	<p>E ka dirisiwa ke</p> <p><b>1.Mofuta wa pilisi wa metswako ee tlhakananeng</b></p>	<p>(a).O sa tshwengwe ke madi a matona (blood pressure)</p> <p>(b) O sena tlhogo ya migraine</p>		

		(c) O sa itsholofela		
	<b>2.Pilisi ya motswako o le mongwe fela (Progesterone only contraceptive pill)</b>	(a) o bona setswalo sentle (b) O sa itsholofela (c) O amusa		
14	Tlhagiso	a) Mofuta wa pilisi ga o sireletse mo malwetsing a tlhakanelo dikobo		
		b)O ka nna lebaka le le leele o sa itsholofele ga o emisa go dirisa pilisi ya progesterone.  c) A go a tlhokofala go bua nnete ka fa o bonang setswalo ka teng		
15	Go etela lekalana la botsogo go o tsaya tsa boiphemelo fa o felelwa	a)Ba botsogo ba tla go latedisa morago ga kgwedi tse tharo o sa tswa go ba bona.  b) Go tloga foo, o tla latedisiwa morago ga kgwedi		
		Ba botsoga ba tla dira maeto a go boela kgwedi le kgwedi mabapi le mofuta e o e dirisang		
16	O ka tsaa kae mofuta ya tsa boiphemelo	Dikantoro tsothle tse di fang thusa ya tsa boiphemelo,mabentlele a tsa botsogo le gongwe le gongwe		
	<b>Mofuta wa iphemelo ka mokento</b>			
17	Tsela ya go ka thibela	E thibela pelegi kago emisa lee laga mme go tutela.		
18	Tiriso e e lolameng	a) Tsaya mokento mo kgweding tse tharo b) Tsaya mokento morago ga kgwedi tse tharo		
19	E ka dirisiwa ke	E siametse bo mme baba tsenang mo setswalong kgapetsakgapetsa		

20	Ditlamorago	Go tlhoka setswalo kana go tlelwa ke setswalo ka bokete		
21	Go laola ditlamorago	a) Emisa lenaneo ka potlako b) Etsise mothusi wag ago wa lenaneo la thulaganyo ya lelapa ka potlako		
22	Tlhagiso	E sireletsa kgatlhanong le malwetsi a tlhakanelo dikobo		
23	Maeto a go boela	Dikgwedi tse tharo morago ga loeto lantlha go latela loeto morago mo dikgweding tse tharo		
24	O ka bona kae mofuta wa tsa boiphemelo	Dikantoro tsoatlhe tse di fang thusa ya tsa boiphemelo, mabentlele a tsa botsogo le gongwe le gongwe		
	<b>Lupu kgotsa loop ka teme ya sekgoa</b>			
25	Tsela ya go ka thibela	a) E thibele boimana kago sireletsa bosadi jwa mme b) E thibela boimana ka go ntsha matute a senyang lee la re pele le ka kopana le la mma		
26	Tiriso e lolameng	Loop e tsenngwa ga ngwe fela mo kgweding tse lesome le bobedi		
27	E ka dirisiwa ke	E siametse go dirisiwa ke mme mongwe le mongwe ntlenga ga bomme baba botlana		
		Gaya siamela go dirisiwa ke basha		
28	Ditlamorago	Go tsena mo setswalong ka bokete jo bo sa tlwaesegang		
		Go fetwa ke setswalo		
29	Go laola ditlamorago	Ntsha lupu ka bofefo		
		Itsise ba boitekanelo ka bofefo		
30	Tlhagiso	E ka tsenya modirisi mo diphatsheng tsa malwetsi a tshelwanang a tlhakanelo		
		e thusa go itshireletsa mo malwatsing a tlhakanelo		

		dikobo		
31	Maeto a go boela	ketelo ya ntlha kgwedi ya ntlha gotswa foo e latelang e tshwanetse ya nna morago ga kgwedi tse lesome le bobedi(12months)		
		ketelo ya ntlha morago ga dikgwedi tse di lesome le bobedi		
32	O ka bona kae mofuta wa tsa boiphemelo	Dikantoro tsotlhe tse di fang thusa ya tsa boiphemelo,mabentlele a tsa botsogo le gongwe le gongwe		
	<b>Boiphemelo jwa potlako:</b>			
33	Tsela ya go ka thibela	Go tswa ka mofuta wa itshereletso yo dirisiwang		
34	Tiriso e lolameng	Pilisi ya iphemelo boimana e ka nowa malatsi a sa feteng boraro(72 hours) ke mme o tlhakanetseng dikobo a sa itshireletsa ebile a sa ikemisetsa go ka nna moimana.		
		E farolagana ka mofuta wa pilisi o dirisitsweng ,sekai mofuta wa pilisi o kopaneng(pilisi tse nne gone foo le tse nne gape morago ga oura tse lesome le bobedi)pilisi ya progesterone (pilisi tse masome a matlhano		
		Loop(IUCD)e ka didirisiwa mo malatsing aka nna matlhano ka maikaelelo ago tlhakanelo dikobo ntleng ga tiriso ya sekausu fa mme asa ipaakanyetsa go ima.		
35	E ka dirisiwa ke	Motho wa mme(monana) o tseneng mo tlhakanelo dikobo e sa sireletsegang mme a ise a nne mo seemong sa go ka ima		

36	Ditlamorago	Di a farologana go ya ka mofuta o o dirisitsweng.		
37	Go laola ditlamorago	Emisa mofuta wa bo iphemelo, o seka wa tlhola o o dirisa gape.		
		Kopa thuso mo go ba bongaka ka potlako		
38	Tlhagiso	Ga e sireletse mo malwetsing a tlhakanelo dikobo		
39	Go etela kokelwana ya botsogo fa o felelwa ke mohuta kgotsa go o fetola	Gao go tlhokafala kana ga o utlwa ditlamorago		
	O ka bona kae mofuta wa iphemelo	Ko dikantorong tsa bongako jwa boiphemelo kana mo mabenkeleng a rekisang dilwana tsa botsogo o tshotse pampiri e o kwaletsweng ke ba bongaka mo go yone.		
40	<b>Dikausu(Condoms)</b>	<b>Dikausu(Condoms)</b>		
	Tsela ya go ka thibela	E kganela bokopano jwa matute a bonna le a sesadi go ka kopana		
41	Tiriso e lolameng	Tsenya sekausu(condom) pele ga thobalano o bo o se ntsha morago ga thobalano		
42	E ka diriswa ke	E ka dirisiwa ke botlhe ba ba tlhaga mo go tsa tlhakanelo dikobo		
43	Ditlamorago	Go baba ga borre kana bosadi mo go bakang bogwata		
		E tswapola boleng jwa tlhakanelo dikobo		
44	Tlhagiso	O sa tsamaisane le mofuta o dirileng sekausu(condom),sekai Latex		
		Go thubega ga sekausu (condom)ga e sa dirisiwe sentle		
45	Go laola ditlamorago	Tlogela go e dirisa ka sone sebaka seo o se tlhole o e dirisa.		
		Itsise ba bongaka ba leke mofuta e mengwe ya tsa boiphemelo.		

46	Go etela kokelwana ya botsogo fa o felelwa ke mohuta kgotsa go o fetola	nako ngwe le ngwe ga o tlhokana le go di fiwa gape kana o ikutlwa o sa tsoge sentle		
47	O ka bona kae mofuta wa tsa boiphemelo.	Dikantoro tse di fang thuso ya tsa boiphemelo kgotsa gongwe le gongwe		

Table 2: Kitso ka tlhakanelo dikobo e babalesegileng.

**KAROLO YA BOBEDI**

**Araba dipotso tse di latelang go atolosa kitso ya gago ka tsa boiphemelo.**

Tswe Tswe araba potso tse di latelang

**48.** Tlhalosa kitso ya gago ka tlhakanelo dikobo e babalesegileng

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**49.**Bolela seemo kana kgwetlho e o akanyang e ka kgoreletsa banana mo go diriseng mofuta/mokgwa mongwe mo go tsa iphemelo mo Botswana.

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**50.** Kwala mofuta mengwe e le mebedi ya boiphemelo e e ka dirisiwang ka nako e le nngwe go thibela boimana le malwetsi a tlhakanelo dikobo.

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**51.** O tlhaloganyang ka boiphemelo jwa potlako?

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**52.** Ke diemo dife tse di ka letlang motho gore a dirise thuso ya potlako ya boiphemelo?

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**53.** Tlhalosa gore ke eng mekgwa mengwe ya boiphemelo gotwe e mosola mo mothong o lebalang ebile a tshwarega thata.

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**54.** Tlhalosa kitso ya gago ka tiriso sentle ya tsa boiphemelo

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**55.** Kwala mafelo mangwe (kontle ga dikokelwana tsa goramente) kwa o ka kgonang go bona dithuto ka tsa tlhakanelo dikobo e e babalesegileng mo Botswana.

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**56.** Tlhalosa dithuso tse o di bonang kwa lefelong le o le kwadileng mo potso (55) e fa godimo.

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Appendix: E

**Maikemisetso a banana a go tsenang motlhakanelong dikobo e e babaleseegileng.**

Araba potso tse di latelang ka letshwao (√) fa go tshwanetseng.

Kaedi:

**5: Ke dumelana tota**

**4: Ke a dumalana**

**3: Ga ke itse**

**2: Ga ke dumalane**

**1: Ga ke dumalane tota**

Table 3

MAIKEMISETSO KA TLHAKANELO DIKOB O E SIRELETSEGILENG MO

KGWEDING TSE THARO TSE DI TLANG

**Mo kgweding tse tharo tse di tlang ke ikaelela go ;**

Maikemisetso a me ke go;	5	4	3	2	1
	Ke dumelana tota	Ke a dumelana	Not Sure	Ga ke dumalane	Ga ke dumalane tota
1.Lalets a mokapelo wame gore re etele dikantoro tsa botsogo gore re amogele dithuso ka tsa tlhakanelo dikobo e sireletsegileng rotlhe					
2.Tlhopha mofuta wa tsa					

boiphemelo o ntshwanetseng					
<b>3.</b> Ke dirise mokgwa wa tsa boiphemelo o tla ntshireletsang mo boimaneng le malwetsi a tlhakanelo dikobo nako nngwe le nngwe fa ke tse na mo tlhakanelong dikobo					
<b>4.</b> Ke nne ke na le sekausu (condom)nako nngwe le nngwe					
<b>5.</b> Ikemisetse go dirisa sekausu (condom) nako nngwe le nngwe ya tlhakanelo dikobo					
<b>6.</b> Tshepha mokapelo a le mongwe					
<b>7.</b> Sala ditaelo tsa bongaka morago mabapi le tiriso sentle ya tsa boiphemelo					
<b>8.</b> ke ikgaphe mo go tsa tlhakanelo dikobo go fitlhela ke nna le maikarabelo go ka dira ditshwetso tse di maleba ka tsa boiphemelo					
<b>9.</b> Ke gatelele mo tirosong sentle ya sekausu(condom)					
<b>10.</b> ke gwetlhe dipuisano ka tlhakanelo dikobo e babalesegileng le mokapelo wame					

Table 3: Maikaelelo a go tse na mo tlhakanelo dikobo e babalesegileng mo kgweding the tharo tse di tlang.

## Appendix F:

**Iponagatso ya tlhakanelo dikobo e babalesegileng**

Araba potso tse di latelang ka lotshwao (lotshwao (√) fa go tshwanetseng tengtse dingwe o tthalose ka botlalo.

1. A wena kgotsa mokapelo wa gago mo mokgweng mongwe wa tsa iphemelo?

Ee

Nyaa



2. Fa o rile Ee? Ke mokgwa ofe o le o dirisang go iphemela ( Supa ka letshwao fa go

tlhokegang teng)

a. Sekausu  Rre  Mme

b. Pilisi

c. Mokento (Depo)

e. Lupu kgotsa ( Loop)

f. Ga gona

g. mofuta o mongwe ( o tthalose)

3. Ga o arabile ka Ee mo potsong ya ntlha kwa godimo, lebaka la go bo o dirisa mofuta o ke lefe , Ga o arabile ka Nnyaa , tswelala ka potso tse di latelang

4. Fa o arabile ka ee go potso 1 fa godimo, a okare o dirisa motlhale o gangwe le gape? Fa o

arabile ka Nnyaa fetela ko potsong e latelang

---

5. A o dirisa sekausu nako ngwe le ngwe ga o tlhakanela dikobo? Ee  Nyaa

6. A wena kgotsa mokapelo wa gago le kile la alefelwa malwetsi a tlhakanelo dikobo mo kgwedding tse tharo tse di fetileng?

Ee, ke bone kalafi  Ee, mokapelo wame o bone kalafi

Ee, rotlhe re bone kalafi  Nnyaa, ga go ope warona o boneng kalafi

7. Kwala o bo o tthalose mabaka a o akanyang a ka go rotloetsa mo tirisong ya mananeo a tlhakanelo dikobo e e babalesegileng.

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10. Kwala o bo o tthalose mabaka a o akanyang a ka go kgoreletsa mo tirisong ya mananeo a tlhakanelo dikobo e e babalesegileng.

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**KEALEBOG**

## Appendix H

### Budget

Table 4 Budget

ITEM AND JUSTIFICATION	Unit cost and Multiplying factor	Amount in BW Pula
Stationery: plain papers; for printing the research instruments,	4 reams plain paper @P40 each	P 1943.30
Envelopes for letters and copies of Consent forms	11 envelopes @ P5 each	
Pens for use by participants to complete instruments	146 pens @P2.00 each	
stapler and staplers for use in clipping together papers	1 Stapler @P55.30 1 box staples @P20.00	
files for filling completed research instruments and copies of consent forms	4 Files @ P55.00 each	
Bags for carrying research materials(lockable)	2 lockable Bags @P120.50 each	
Printing and photocopying	Toner@ P 900.00	P 900.00
Hiring 2 Research Assistants to assist with data collection, 1 in Gaborone and 1in Molepolole for 10days each	P200 per day X 2 research assistants x 20 days	P4000.00
Hiring 2 Research Assistants to assist with data entry and cleaning for 10 days each	P200 per day X 2research assistants x 20days	P 4000.00
Reimbursement for transport to and from data collection sites for participants	Reimbursement for transport at P50.00 per person for 146 participants	P 7300.00
Subsistence Allowancwe for the Principal Investigator	14 nights @ P 168.00 per night	P2352.00
Fuel cost from Gaborone to Molepolole and back to Gaborone	2 trips @ 60km for 20L/trip @P7.95/L	P 318.00
<b>TOTAL COSTS</b>		<b>P 19913.30</b>

## Appendix I

University of Botswana

P/Bag UB0022

Gaborone

Botswana

1<sup>st</sup> June, 2015**TO:**

The Director

Office of Research and Development

P/ Bag UB0022

Gaborone

**Subject: Request for Permission to Conduct a Research Study**

This letter serves to request for permission to conduct research. I'm Mophuthi Liwambano, a Master of Science Nursing student with the University of Botswana. I'm requested to carry out a research project as part of my programme requirements. The title of my research project is Knowledge, Intentions and Self – Reported Use of Safer Sex Practices by Youth aged 20 – 24 in selected Districts in Botswana. The selected Districts are Molepolole and Gaborone.

The purpose of this study is to explore and describe the relationship between knowledge and use of safer sex practices among youth aged 20-24 years in selected districts in Botswana. Though the general fertility rate in Botswana has dropped following implementation of the planned global strategies, an age specific fertility rate reflected increased fertility amongst age group 20-24 years (Abt Associates South Africa. Inc., 2002 and Central Statistics Office, 2009). This is despite reported 97% knowledge amongst the youth of at least one method of

contraception and where to get it (ASRH Implementation Strategy, 2012-2016). An assessment of knowledge and use of family planning also revealed knowledge of at least one method of contraception and use by participants across all age groups and gender. There was no data on dual protection or abstinence (Central Statistics Office, 2009).

The instrument is designed in a way that it will not request for participants' names but they will rather be identified by numbers. The data obtained will be kept confidential (shared) as only the principal investigator and her research team will have access to the data and this access will only be through the principal investigator's permission. There are no direct benefits to the participants for taking part in this study, but the findings of the study will be utilised to inform or guide the current strategies that are geared towards improvement of the Sexual and Reproductive Health and Rights of youth in Botswana.

The study will be conducted in Molepolole village and Gaborone city both in southern Botswana. Molepolole has been selected as the study site because it is in Kweneng District where knowledge about safer sex practices and use of safer sex practices was reportedly low (Central Statistics Office, 2009) while Gaborone, the capital city of Botswana, has the highest population of youth nationally.

Please find with this letter a copy of my abstract, the consent forms, my workplan and the research permits.

Yours Sincerely

-----

Mophuthi Liwambano (Mrs.)

Student ID No. 200300469

## Appendix J

University of Botswana

P/Bag UB0022

Gaborone

Botswana

1<sup>st</sup> June , 2015**TO:**

The Director

Office of Research and Development, Ministry of Health

P/Bag 0038

Gaborone

**Subject: Request for Permission to conduct aResearch Study**

This letter serves to request for permission to conduct research. I'm Mophuthi Liwambano, a Master of Science Nursing student with the University of Botswana. I'm requested to carry out a research project as part of my programme requirements. The title of my research project is Knowledge, Intensions and Self – Reported Use of Safer Sex Practices by Youth aged 20 – 24 in selected Districts in Botswana. Data will therefore be collected from youth in selected sites in Gaborone and Molepolole.

The purpose of this study is to explore and describe the relationship between knowledge and use of safer sex practices among youth aged 20-24years in selected districts in Botswana. Though the general fertility rate in Botswana has dropped following implementation of the planned global strategies, an age specific fertility rate reflected increased fertility amongst age group 20-24 years (Abt Associates South Africa. Inc., 2002 and Central Statistics Office, 2009).

This is despite reported 97% knowledge amongst the youth of at least one method of contraception and where to get it (ASRH Implementation Strategy, 2012-2016). An assessment of knowledge and use of family planning also revealed knowledge of at least one method of contraception and use by participants across all age groups and gender. There was no data on dual protection or abstinence (Central Statistics Office, 2009).

The instrument is designed in a way that it will not request for participants' names but they will rather be identified by numbers. The data obtained will be kept confidential(shared) as only the principal investigator and her research team will have access to the data and this access will only be through the principal investigator's permission. There are no direct benefits to the participants for taking part in this study, but the findings of the study will be utilised to inform or guide the current strategies that are geared towards improvement of the Sexual and Reproductive Health and Rights of youth in Botswana.

The study will be conducted in Molepolole village and Gaborone city both in southern Botswana. Molepolole has been selected as the study site because it is in Kweneng District where knowledge about safer sex practices and use of safer sex practices was reportedly low (Central Statistics Office, 2009) while Gaborone, the capital city of Botswana, has the highest population of youth nationally.

Please find with this letter a copy of my abstract, the consent forms, my workplan and the research permits.

Yours Sincerely

-----

Mophuthi Liwambano (Mrs.)

Student ID No. 200300469

## Appendix K

University of Botswana

P/Bag UB0022

Gaborone

Botswana

1<sup>st</sup> June, 2015**TO:**

The Director

District Health Management Team

Gaborone

**Subject: Request for Permission to Conduct a Research Study**

This letter serves to request for permission to conduct research. I'm Mophuthi Liwambano, a Master of Science Nursing student with the University of Botswana. I'm requested to carry out a research project as part of my programme requirements. The title of my research project is Knowledge, Intentions and Self – Reported Use of Safer Sex Practices by Youth aged 20 – 24 in selected Districts in Botswana. Data will therefore be collected from youth visiting selected Gaborone Government Health Facilities, youth centers and households.

The purpose of this study is to explore and describe the relationship between knowledge and use of safer sex practices among youth aged 20-24years in selected districts in Botswana. Though the general fertility rate in Botswana has dropped following implementation of the planned global strategies, an age specific fertility rate reflected increased fertility amongst age group 20-24 years (Abt Associates South Africa. Inc., 2002 and Central Statistics Office, 2009).

This is despite reported 97% knowledge amongst the youth of at least one method of contraception and where to get it (ASRH Implementation Strategy, 2012-2016). An assessment of knowledge and use of family planning also revealed knowledge of at least one method of contraception and use by participants across all age groups and gender. There was no data on dual protection or abstinence (Central Statistics Office, 2009).

The instrument is designed in a way that it will not request for participants' names but they will rather be identified by numbers. The data obtained will be kept confidential(shared) as only the principal investigator and her research team will have access to the data and this access will only be through the principal investigator's permission. There are no direct benefits to the participants for taking part in this study, but the findings of the study will be utilised to inform or guide the current strategies that are geared towards improvement of the Sexual and Reproductive Health and Rights of youth in Botswana.

The study will be conducted in Molepolole village and Gaborone city both in southern Botswana. Molepolole has been selected as the study site because it is in Kweneng District where knowledge about safer sex practices and use of safer sex practices was reportedly low (Central Statistics Office, 2009) while Gaborone, the capital city of Botswana, has the highest population of youth nationally.

Please find with this letter a copy of my abstract,the consent forms, my workplan and the research permits.

Yours Sincerely

-----

Mophuthi Liwambano (Mrs.)

Student ID No. 200300469

## Appendix L

University of Botswana

P/Bag UB0022

Gaborone

Botswana

1<sup>st</sup> June, 2015**TO:**

The Director

Botswana Family Welfare Association

Gaborone

**Subject: Request for Permission to Conduct a Research Study**

This letter serves to request for permission to conduct research in your facility. I'm Mophuthi Liwambano, a Master of Science Nursing student with the University of Botswana. I'm requested to carry out a research project as part of my programme requirements. The title of my research project is Knowledge, Intentions and Self – Reported Use of Safer Sex Practices by Youth aged 20 – 24 in selected Districts in Botswana. Data will therefore be collected from clients visiting your facility for services in Molepolole and Gaborone. This request is extended for both branches.

The purpose of this study is to explore and describe the relationship between knowledge and use of safer sex practices among youth aged 20-24years in selected districts in Botswana. Though the general fertility rate in Botswana has dropped following implementation of the planned global strategies, an age specific fertility rate reflected increased fertility amongst age group 20-24 years (Abt Associates South Africa. Inc., 2002 and Central Statistics Office, 2009).

This is despite reported 97% knowledge amongst the youth of at least one method of contraception and where to get it (ASRH Implementation Strategy, 2012-2016). An assessment of knowledge and use of family planning also revealed knowledge of at least one method of contraception and use by participants across all age groups and gender. There was no data on dual protection or abstinence (Central Statistics Office, 2009).

The instrument is designed in a way that it will not request for participants' names but they will rather be identified by numbers. The data obtained will be kept confidential(shared) as only the principal investigator and her research team will have access to the data and this access will only be through the principal investigator's permission. There are no direct benefits to the participants for taking part in this study, but the findings of the study will be utilised to inform or guide the current strategies that are geared towards improvement of the Sexual and Reproductive Health and Rights of youth in Botswana.

The study will be conducted in Molepolole village and Gaborone city both in southern Botswana. Molepolole has been selected as the study site because it is in Kweneng District where knowledge about safer sex practices and use of safer sex practices was reportedly low (Central Statistics Office, 2009) while Gaborone, the capital city of Botswana, has the highest population of youth nationally.

Please find with this letter a copy of my abstract, the consent forms, my workplan and the research permits.

Yours Sincerely

-----

Mophuthi Liwambano (Mrs.)

Student ID No. 200300469

## Appendix M

University of Botswana

P/Bag UB0022

Gaborone

Botswana

1<sup>st</sup> June, 2015**TO:**

The Director

Young Women's Christian Association

Gaborone

**Subject: Request for Permission to Conduct a Research Study**

This letter serves to request for permission to conduct research. I'm Mophuthi Liwambano, a Master of Science Nursing student with the University of Botswana. I'm requested to carry out a research project as part of my programme requirements. The title of my research project is Knowledge, Intentions and Self – Reported Use of Safer Sex Practices by Youth aged 20 – 24 in selected Districts in Botswana. Data will therefore be collected from your students.

The purpose of this study is to explore and describe the relationship between knowledge and use of safer sex practices among youth aged 20-24years in selected districts in Botswana. Though the general fertility rate in Botswana has dropped following implementation of the planned global strategies, an age specific fertility rate reflected increased fertility amongst age group 20-24 years (Abt Associates South Africa. Inc., 2002 and Central Statistics Office, 2009). This is despite reported 97% knowledge amongst the youth of at least one method of contraception and where to get it (ASRH Implementation Strategy, 2012-2016). An assessment

of knowledge and use of family planning also revealed knowledge of at least one method of contraception and use by participants across all age groups and gender. There was no data on dual protection or abstinence (Central Statistics Office, 2009).

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The study will be conducted in Molepolole village and Gaborone city both in southern Botswana. Molepolole has been selected as the study site because it is in Kweneng District where knowledge about safer sex practices and use of safer sex practices was reportedly low (Central Statistics Office, 2009) while Gaborone, the capital city of Botswana, has the highest population of youth nationally.

Please find with this letter a copy of my abstract,the consent forms, my workplan and the research permits.

Yours Sincerely

-----

Mophuthi Liwambano (Mrs.)

Student ID No. 200300469

## Appendix N

University of Botswana

P/Bag UB0022

Gaborone

Botswana

1<sup>st</sup> June, 2015**TO:**

The Director

Gaborone Institute of Professional Studies

Gaborone

**Subject: Request for Permission to Conduct a Research Study**

This letter serves to request for permission to conduct research. I'm Mophuthi Liwambano, a Master of Science Nursing student with the University of Botswana. I'm requested to carry out a research project as part of my programme requirements. The title of my research project is Knowledge, Intentions and Self – Reported Use of Safer Sex Practices by Youth aged 20 – 24 in selected Districts in Botswana. Data will therefore be collected from your students.

The purpose of this study is to explore and describe the relationship between knowledge and use of safer sex practices among youth aged 20-24 years in selected districts in Botswana. Though the general fertility rate in Botswana has dropped following implementation of the planned global strategies, an age specific fertility rate reflected increased fertility amongst age group 20-24 years (Abt Associates South Africa. Inc., 2002 and Central Statistics Office, 2009). This is despite reported 97% knowledge amongst the youth of at least one method of

contraception and where to get it (ASRH Implementation Strategy, 2012-2016). An assessment of knowledge and use of family planning also revealed knowledge of at least one method of contraception and use by participants across all age groups and gender. There was no data on dual protection or abstinence (Central Statistics Office, 2009).

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The study will be conducted in Molepolole village and Gaborone city both in southern Botswana. Molepolole has been selected as the study site because it is in Kweneng District where knowledge about safer sex practices and use of safer sex practices was reportedly low (Central Statistics Office, 2009) while Gaborone, the capital city of Botswana, has the highest population of youth nationally.

Please find with this letter a copy of my abstract,the consent forms, my workplan and the research permits.

Yours Sincerely

-----

Mophuthi Liwambano (Mrs.)

Student ID No. 200300469

## Appendix O

University of Botswana

P/Bag UB0022

Gaborone

Botswana

1<sup>st</sup> June, 2015**TO:**

The Principal

Molepolole College of Education

P/Bag 008

Molepolole

**Subject: Request for Permission to Conduct Research**

This letter serves to request for permission to conduct research. I'm Mophuthi Liwambano, a Master of Science Nursing student with the University of Botswana. I'm requested to carry out a research project as part of my programme requirements. The title of my research project is Knowledge, Intensions and Self – Reported Use of Safer Sex Practices by Youth aged 20 – 24 in selected Districts in Botswana. Data will therefore be collected from your students.

The purpose of this study is to explore and describe the relationship between knowledge and use of safer sex practices among youth aged 20-24years in selected districts in Botswana. Though the general fertility rate in Botswana has dropped following implementation of the planned global strategies, an age specific fertility rate reflected increased fertility amongst age group 20-24 years (Abt Associates South Africa. Inc., 2002 and Central Statistics Office, 2009). This is despite reported 97% knowledge amongst the youth of at least one method of

contraception and where to get it (ASRH Implementation Strategy, 2012-2016). An assessment of knowledge and use of family planning also revealed knowledge of at least one method of contraception and use by participants across all age groups and gender. There was no data on dual protection or abstinence (Central Statistics Office, 2009).

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Please find with this letter a copy of my abstract,the consent forms, my workplan and the research permits.

Yours Sincerely

-----

Mophuthi Liwambano (Mrs.)

Student ID No. 200300469

## Appendix P

University of Botswana

P/Bag UB0022

Gaborone

Botswana

1<sup>st</sup> May, 2014**TO:**

The Director

District Health Management Team

Molepolole

**Subject: Request for Permission to Conduct a Research Study**

This letter serves to request for permission to conduct research. I'm Mophuthi Liwambano, a Master of Science Nursing student with the University of Botswana. I'm requested to carry out a research project as part of my programme requirements. The title of my research project is Knowledge, Intentions and Self – Reported Use of Safer Sex Practices amongst Youth aged 20 – 24 in selected Districts in Botswana. Data will therefore be conducted from clients visiting Government Health Facility in Molepolole, youth centers and households.

The purpose of this study is to explore and describe the relationship between knowledge and use of safer sex practices among youth aged 20-24years in selected districts in Botswana. Though the general fertility rate in Botswana has dropped following implementation of the planned global strategies, an age specific fertility rate reflected increased fertility amongst age group 20-24 years (Abt Associates South Africa. Inc., 2002 and Central Statistics Office, 2009). This is despite reported 97% knowledge amongst the youth of at least one method of

contraception and where to get it (ASRH Implementation Strategy, 2012-2016). An assessment of knowledge and use of family planning also revealed knowledge of at least one method of contraception and use by participants across all age groups and gender. There was no data on dual protection or abstinence (Central Statistics Office, 2009).

The instrument is designed in a way that it will not request for participants' names but they will rather be identified by numbers. The data obtained will be kept confidential(shared) as only the principal investigator and her research team will have access to the data and this access will only be through the principal investigator's permission. There are no direct benefits to the participants for taking part in this study, but the findings of the study will be utilised to inform or guide the current strategies that are geared towards improvement of the Sexual and Reproductive Health and Rights of youth in Botswana.

The study will be conducted in Molepolole village and Gaborone city both in southern Botswana. Molepolole has been selected as the study site because it is in Kweneng District where knowledge about safer sex practices and use of safer sex practices was reportedly low (Central Statistics Office, 2009) while Gaborone, the capital city of Botswana, has the highest population of youth nationally.

Please find with this letter a copy of my abstract,the consent forms, my workplan and the research permits.

Yours Sincerely

-----

Mophuthi Liwambano (Mrs.)

Student ID No. 200300469

## Appendix Q

**Work Plan**

<b>ACTIVITY</b>	<b>DATE</b>
Approval	April 2015
Pilot Testing	May, 5 – 9 <sup>th</sup> , 2015
Data Collection	June 29 <sup>th</sup> – July 13 <sup>th</sup> , 2015: <b>Gaborone</b> July 14 <sup>th</sup> – 26 <sup>th</sup> : <b>Molepolole</b>
Data Capturing and Checking	August, 1 <sup>st</sup> - 9 <sup>th</sup> , 2015
Data Analysis	August 10 <sup>th</sup> – 23 <sup>rd</sup> , 2015
Report Writing	August 24 <sup>th</sup> – September, 6 <sup>th</sup> , 2015
Submission of Report	September 19 <sup>th</sup> , 2015
Dissemination of Results	October, 2015









