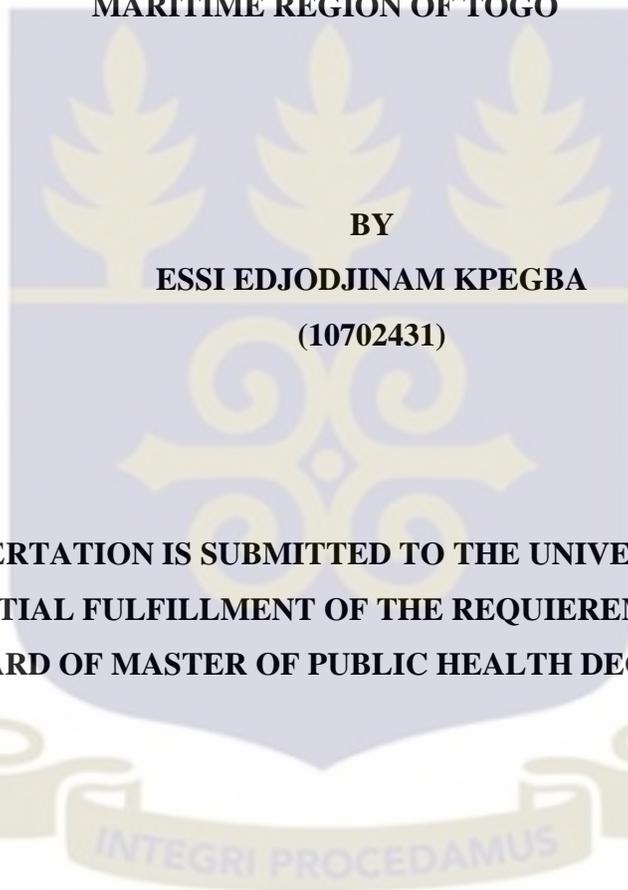


**SCHOOL OF PUBLIC HEALTH  
COLLEGE OF HEALTH SCIENCES  
UNIVERSITY OF GHANA, LEGON**

**FACTORS INFLUENCING MODERN CONTRACEPTIVE USE AMONG MEN IN  
MARITIME REGION OF TOGO**



**BY**

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**THIS DISSERTATION IS SUBMITTED TO THE UNIVERSITY OF GHANA,  
LEGON IN PARTIAL FULFILLMENT OF THE REQUIEREMENTS FOR THE  
AWARD OF MASTER OF PUBLIC HEALTH DEGREE.**

**JULY, 2019**

## DECLARATION

I hereby declare that this dissertation is the result of my independent field work, where materials other than mine were used, specific references were made.

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Date

**DEDICATION**

I dedicate this work to Yahweh and my beloved fiancé, Rodrigue Kokou Fiaboe for so much love and support throughout my education.

## ACKNOWLEDGMENTS

What a relief to finish this Master's Programme successfully!

My gratitude to the All-Powerful God, the Master of moment and situations for the breath of life he gave me and for the strength during the training.

I thank ARISE II for giving me the opportunity to take a step to achieve my goals by funding my training at the School of Public Health, University of Ghana, Legon. I cannot forget the Office of Research, Innovation, and Development for coordinating and satisfying my needs during the training.

My deep gratitude also goes, particularly to Professor Kwasi Torpey, Head of Population Family and Reproductive Health department of the School of Public Health, for leading and advising me. The criticisms, ideas, amendments and assistance of my supervisor Dr. Agnes M. Kotoh since the design of this present research topic, throughout the field work till the end of the dissertation are appreciated. A special thanks to all the staff of the School of Public Health who allowed me to acquire advanced knowledge to be counted among public health practitioners.

To all my classmates, especially, Timi, Nadine, Edem and Sharon, I extend my sincere thanks for the friendship and the time we spent together during the academic year in the School of Public Health. I would also like to convey my sincere thanks to Monde and Lea for their precious friendship that has sustained me throughout the course.

My deepest appreciation to my mother Mrs. Azuma Atsufe, my brother and sisters; and to Dr. K. M Fiaboe and his wife Taty Palouki and my entire family for their support, love, encouragement, and prayers throughout the study.

## ABSTRACT

**Background:** High birth rate is the main cause of dramatic demographic changes in Sub-Saharan African countries, including Togo. Due mainly to low contraceptive use, the fertility rate in Togo was 4.5 births per woman in 2016 and was deemed a public health issue. Only 37.2% of the demand for women modern contraceptives in Togo is fulfilled, resulting in prevalence of 20-40% of modern contraceptives and leading to illegal and risky abortions. Men's systematic use of contraceptive methods is less common than women's methods; with vasectomy being only adopted by less than one percent. This research aimed to explore factors related to modern contraceptives use among men in two southern districts of Togo.

**Method:** A community-based cross-sectional survey was conducted using a mixed-method approach among 311 men, aged 15-54 years, living in urban and rural areas of Togo. Quantitative data was collected using self-administrated questionnaire. To assess qualitative data, eight men grouped in two teams were involved in focus group discussions and in-depth interviews. These were audio-recorded and transcribed verbatim into English. QSR NVivo 12 Software was used to identify recurrent themes from the transcribed data. Stata software version 15.0 was used to analyze the quantitative data.

**Results:** The median age of the participants was 29 years old. Of the 311 respondents, 72.7% knew of at least one male contraceptive: 69.8% and 14.1% mentioned condom and vasectomy respectively, 46.6% were using condoms and 0.3% were under vasectomy. Marital status, educational level of sexual partners, number of sexual partners, perception of the utility of male contraceptives were found to be highly significant ( $p < 0.001$ ) factors for male contraceptive use. The study showed that men use contraceptives to prevent unwanted pregnancies and secure their partners' well-being.

**Conclusion:** Men in this study cited condoms as the only safe male contraceptive. They have limited knowledge on vasectomy and other male contraceptives. The results of this study could provide direction for policymaking and the design of interventions by policy makers and other stakeholders.

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## LIST OF ABBREVIATIONS

|        |  |
|--------|--|
| AIDS:  | Acquired Immuno Deficiency Syndrome                      |
| AOR:   | Adjusted Odds Ratio                                      |
| ATBEF: | Togolese Association for Family Well-Being               |
| CI:    | Confidence Interval                                      |
| DHS:   | Demographic Health Survey                                |
| FGD:   | Focus Group Discussion                                   |
| FHAP:  | Family Health and AIDS Prevention                        |
| FP:    | Family Planning  |
| GCPH:  | General Census of Population and Habitat                 |
| GDSNA: | General Directorate for Statistics and National Accounts |
| HF:    | Health Facility  |
| HIV:   | Human Immunodeficiency Virus                             |
| IDI:   | In-Depth Interview                                       |
| IPPF:  | International Planned Parenthood Federation              |
| MCM:   | Male Contraceptive Methods                               |
| MOH:   | Ministry of Health                                       |
| NGO:   | Non-Governmental Organization                            |
| NHAP:  | National HIV/AIDS Programme                              |
| PCU:   | Peripheral Care Units                                    |
| PO:    | Partnership of Ouagadougou                               |
| RH:    | Reproductive Health                                      |

|        |  |
|--------|--|
| STIs:  | Sexually Transmitted Infections                    |
| TDHS:  | Togo Demographic and Health Survey                 |
| UNFPA: | United Nations Population Fund                     |
| UOR:   | Unadjusted Odds Ratio                              |
| USAID: | United States Agency for International Development |
| WHO:   | World Health Organization                          |

## CHAPTER ONE

### 1.0. INTRODUCTION

#### 1.1. Background

The population explosion in Africa is at the center of its challenges these last decades. According to (Bloom & Luca, 2016), the African population alone will represent 26% of the global population by 2050. According to the authors, the Sub-Saharan Africa provides a worrisome instance of total fertility rate that staying high at 5.1 children per woman. Togo, like other Sub-Saharan African countries, is a fast-growing country with an estimated population of 8.08 million in 2019, compared to 6.2 million in 2010 and is distinguished by its extremely high rate of youth (MPDAT, MS, & ICF International, 2015). The dramatic change of demography in Africa is linked to several factors, including high birth rate (Bongaarts, 2009). This is due to lack of education on sexual and reproductive health resulting in unwanted and unplanned pregnancies (Yakubu & Salisu, 2018). As a socio-economic result, Africa is facing higher rates of maternal and infant mortality and morbidity, adolescents' failure to pursue their schooling and vocational training, declining living conditions, and deprivation among others (Aber, Bennett, Conley & Li, 1997).

Sexual and reproductive health programmes are at the epicenter of efforts to reduce the demographic explosion in Africa (Pretorius, Gibbs, Crankshaw & Willan, 2015). High use of contraceptives by men and women can be effective in reducing maternal and infant mortality and morbidity (Glasier, Gülmezoglu, Schmid, Moreno, & Look, 2006). However, donors, health organizations, researchers and health workers have paid more attention to women's contraceptive

needs, neglecting the important role that men can play in family planning (Chankapa, Pal & Tsering, 2010).

Interventions are made to include males in family planning (FP), resulting primarily in the use of modern methods of male contraception such as male condoms, vasectomy, and spermicides (Page, Amory & Bremner, 2008). However, the adoption rate of contraceptive methods is still insufficient to keep the fertility rate at an optimal level.

## **1.2. Problem statement**

The 2014 Togo Demographic and Health Survey reports the fertility rate has reduced from 6.4 in 1988 to 4.8 births per woman in reproductive age in 2014 (MPDAT et al., 2015). Though slightly decreasing, it remains high, like many African countries (Atake & Gnakou Ali, 2019). As in most African countries, the population of Togo is experiencing an exponential evolution. This is a demographic reality, carrying many challenges that affect the achievement of the economic growth of the country (Turner, 2009).

In Togo, the maternal mortality rate was 401 deaths per 100,000 live births in 2013 (MPDAT et al., 2015). Despite efforts from the governments and national and international organizations, maternal and neonatal mortality remain a major challenge with about 368 maternal deaths per 100,000 live births in 2015 (CIA World Factbook, 2017). Therefore, it is important to find a way to control the population growth, the high maternal and child mortality, and to reduce the prevalence of early and unwanted pregnancies.

Yet, several studies around the world have found that complications related to maternal and infant mortality, especially complications of pregnancy and death, could be avoided by proper use of contraceptives in family planning (Hossain, Khan, Ababneh & Shaw, 2018). While access

to quality FP services is a fundamental human right (UNFPA, 2014), access to modern methods of contraception is still very limited, with half of the world's couples being unable to benefit, resulting in pregnancies that are too near, too early or unexpected to endanger the lives of mothers and children (Ross & Hardee, 2013; Wang & Mallick, 2019). The lack of access to family planning forces many women to abort in clandestine and dangerous conditions (Guillaume & Rossier, 2018). In Togo, for instance, only 37.2% of the demand for women in modern contraceptives is fulfilled, putting the prevalence of modern contraceptives for women between 20-40% (Cahill et al., 2018). According to previous studies in Africa male contraceptives are less prevalent than those of women due to several factors (Deans et al., 2018; Mustafa et al., 2015; Ndenzako, 2001).

Indeed, since the last five decades, efforts have been made to control fertility in a global manner promoting family planning tools, but with more emphasis on contraceptive use in women (Ringheim, 2013). For instance, in women, there are a wide range of modern methods of contraception, including progestogen and/or pill based on estrogen, implant, intrauterine system (IUS), intrauterine device (IUD), and female condoms (Beson, Appiah & Adomah-Afari, 2018; Cahill et al., 2018). In men there are few available methods with the most used been condom, use also occasionally to prevent the risk of sexually transmitted diseases and vasectomy being the only advance male contraceptive in most of the developing countries (Haddad et al., 2018; Ringheim, 2013).

Apart from the disparity between contraceptive methods available to women and men, the lack of information, the availability, accessibility and affordability of services of contraception in developing countries are problematic (WHO & UNFPA, 2015). These limitations are mostly related to the residential area of male contraceptives needers, whether urban, peri-urban or rural

(Thummalachetty et al., 2017; Xu et al., 2018). In Togo, research dating back more than two decade emphasized that residing in urban or rural areas significantly affect the family planning approach (Anipah et al., 1998). The results of the Demographic Health Survey (DHS) 1998 show that contraceptive users are many in urban areas than in rural areas (Anipah et al., 1998). In contrast to this descriptive approach to family planning needs, no research in Togo discussed the factors affecting contraceptive use among men.

To address this gap, this study was conducted in two localities of Togo to provide valid factors that may make it difficult or easy for men to adopt contraceptive methods.

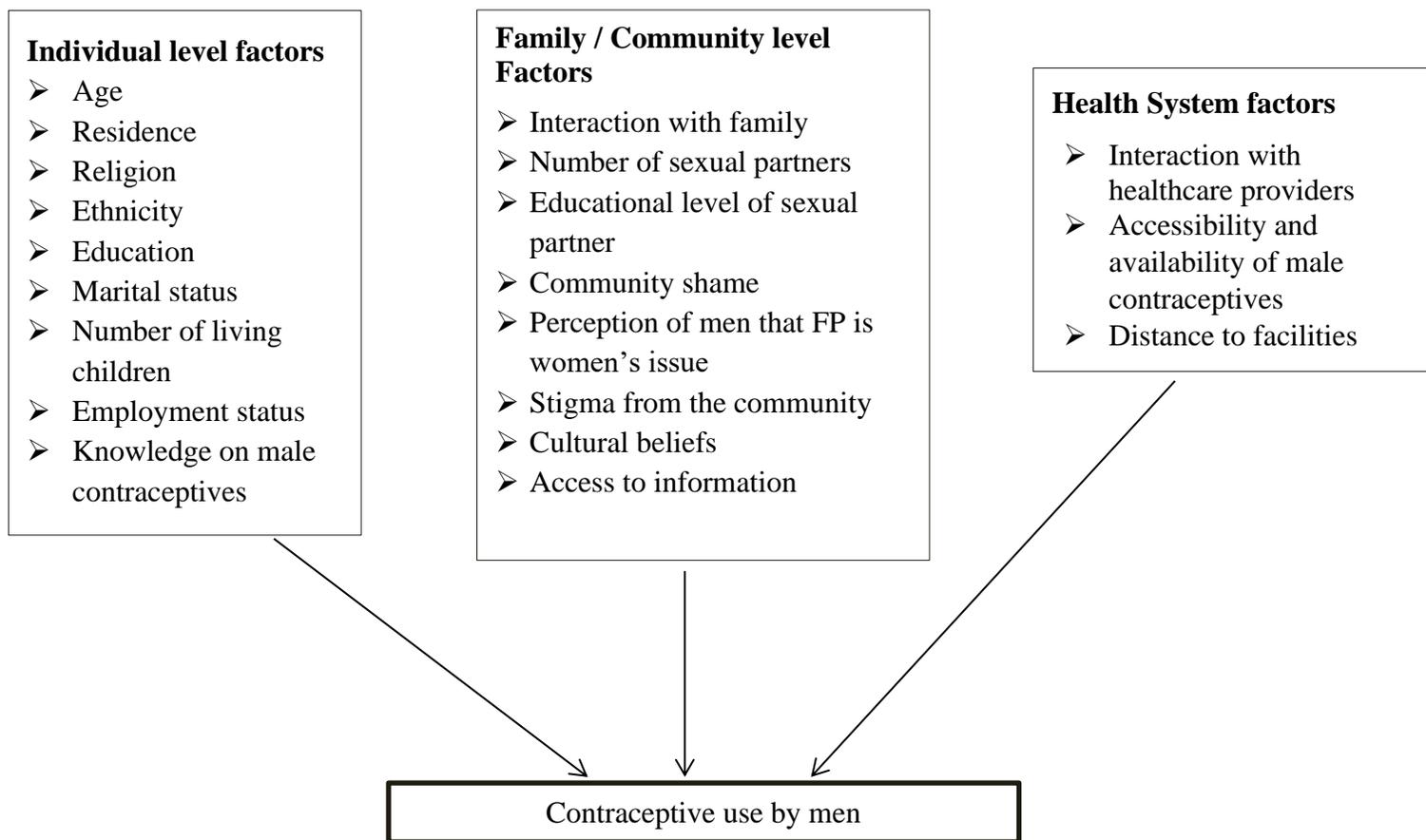
### **1.3. Objectives**

The aim of this study was to explore factors that influence modern contraceptive use by men in an urban and rural setting in Togo.

The specific objectives of this study were to:

1. Assess the level of knowledge of existing male contraceptives in the study areas.
2. Identify male modern contraceptives available in Togo.
3. Examine the attitude and perception of men toward the use of contraceptives.
4. Determine the prevalence of male contraceptive use.
5. Examine factors that affect male contraceptive use in the study areas.

#### 1.4. Conceptual framework



**Figure 1: Conceptual framework of explanatory factors of male modern contraceptives use**

The determinants of contraceptive use among men have been studied by several researchers.

The customized conceptual framework (Figure 1), was constructed on existing knowledge to understand the individual-level factors, family and community-level factors, and health system-level factors associated with contraceptive use among men in Togo. These factors are considered as the key possible determinants in the use modern male contraceptive use. The variables are hypothesized to directly influence men in the decision to use modern contraceptives.

### **1.5. Justification**

In Togo, the unmet need for FP is high. High fertility increases maternal and infant mortality. Low contraceptive prevalence increases the risk of early, close, late, unwanted pregnancy and induced abortion. The lack of information on contraceptive methods to control fertility affects the health system programmes and severely handicaps all sectors of socio-economic development. Family planning positively affects women's and children's health. FP advantages cannot be profitable if both men and women are not involved. Many studies focus on the prevalence of contraceptive use among women. This study, therefore, will provide information on the use and non-use of contraceptives among men. Furthermore, this information will help to understand the different patterns in Lomé and Tabligbo. Since FP data about male contraceptive use in Togo is less available, this study can serve as a database for future research on contraceptive use in Togo.

## CHAPTER TWO

### 2.0. LITERATURE REVIEW

The outcome variable of this study is male contraceptive use. This section looks at the history of family planning in Togo, contraceptive methods (modern and traditional) available, attitude and perception toward male contraceptive use, the prevalence of contraceptives in Togo, and Togo implementation of male involvement in contraceptive use.

#### 2.1. History of family planning in Togo

According to (Pekele, Adzodo & Kouassi, 2004), Togo is one of the African countries with a high annual growth rate (2.8%) characterized by a drastic rise in fertility these last decades. Most of the population is young with 42% under 15 years old and 60% under 25 years. As in most countries in sub-Saharan Africa, pro-natalist behaviors are observed among the Togolese population, most of who live in rural areas (62%).

In order to deal with the demographic scenario, family planning (FP) is regarded as a means of intervention or combating the implications of population explosion, decreasing infant mortality, preventing pregnancy-related complications in females, contributing to the prevention of HIV / AIDS and decreasing teenage pregnancies, as well as allowing individuals to make informed decisions about sexual and reproductive health (UNFPA, 2014).

In 1975, with technical and financial assistance from the International Planned Parenthood Federation (IPPF), the Togolese government established the Togolese Association for Family Welfare (ATBEF). With the assistance of the United Nations Population Fund (UNFPA). The strengthening of family planning (FP) has been efficient within the Ministry of Health through the family planning section of the National Program for Family Well-being (PNBEF). These two organizations, whose aim is to encourage FP in Togo, share the tasks included in the Togolese programme of FP (MPDAT et al., 2015).

Apart from UNFPA and the Ministry of Health, ATBEF works with non-governmental organizations (NGOs) including FORUM-SIDA and FONGTO to establish and maintain strong links with organizations working in Sexual and Reproductive Health. Its donors include Plan-Togo, the PMLS, UNICEF, and the Global Fund. CARE International, Population Services International (PSI), Family Health and AIDS Prevention (FHAP) and the National HIV / AIDS Programme (NHAP) have also provided FP services to the Togolese population (ATBEF, 2015; Pekele et al., 2004). In addition to these institutions, FP units are increasingly integrated into many health facilities. The establishment of these institutions testifies to the interest that Togo and its international partners now give to FP (Pekele et al., 2004).

This interest in FP led to the decrease of fecundity , which fell from 7 children per female in 1960 to 5 children per female in 2010; However, the reduction in fecundity, did not result in a significant rise in the percentage of females of childbearing age using modern methods of contraception and the population is still growing (MPDAT et al., 2015)

Modern contraceptive prevalence increased in childbearing age women to 7% in 1998 (EDST-II, 1998), and in 2013 the rate was estimated at 19% in urban areas and 16% in rural areas (MPDAT et al., 2015) . Despite this improvement in contraceptive prevalence, less than 20% of sexually active women use modern contraception while the population is still growing at 2.8%. It is noted that few adolescents and young people attend FP clinics as they constitute a large target group in which early and unwanted pregnancies are common. Moreover, if men often use condoms during sexual intercourse, it is mainly to protect themselves from Sexually Transmitted Infections and HIV / AIDS and not with the intention of spacing or delaying births. As a result, their participation in family planning programs remains low.

Considering this observation, we can see that many challenges remain in the field of FP in Togo. The country has been actively engaged in the process of repositioning family planning. In 2011, Togo participated in the high-level conference on "Population, Family Planning, and Development: The Urgency to Act" in Ouagadougou, Burkina Faso and at the London summit on family planning where the country has made commitments to repositioning family planning. This led to the development of a budgeted action plan for the repositioning of FP for the 2013-2017 period.

Since 2012, vasectomy has been implemented in Togo by the ATBEF in collaboration with UNFPA. This technique has enabled the country to make available various contraceptive methods and to allow men also to make a contraceptive choice (ATBEF, 2015).

## **2.2. Male Contraception: Traditional and Modern Methods**

Contraception is the set of natural or artificial methods available to a couple or an individual to temporarily or permanently prevent the occurrence of a pregnancy. The ideal spacing of pregnancies through contraceptive use is one of the strategies that can significantly reduce the number of pregnancies that are too early, too late, too close together and too many (commonly called the 4 T) (Starbird, Norton, & Marcus, 2016). According to Chacko et al. (2007) contraceptive methods equally, reduce clandestine abortions and new Sexual Transmitted Infections (STI) / HIV / AIDS. Contraceptive methods are increasingly used solely to prevent unwanted pregnancies. In other words, contraceptive methods enable individuals and couples to ensure responsible sexuality.

### **2.2.1. Male traditional methods**

The male traditional techniques of contraception include coitus interruptus also known as withdrawal or pulling out, and periodic abstinence.

### **2.2.1.1. *Withdrawal (Pulling out)***

It is an old and millenarian method of contraception which consists of removing the penis from the vagina before ejaculation (Rogow & Horowitz, 2006; Genesis 38:9). Since ejaculation occurs outside the vagina, sperm does not come into contact with the ovule; then theoretically, insemination cannot occur (Woods, Hensel & Fortenberry, 2009).

Data on the effectiveness of this method are rare. However, for this method to be efficient, the users must be able to recognize the warning signs of ejaculation and withdraw before. Ejaculation should be done outside the vagina and far enough away from the vulva to avoid any possible contact between the sperm and the vagina. Moreover, after removal, avoid partners' genitals touching and second penetration. Sperm still presents in the urethra could be released, even without further ejaculation.

The study of Woods et al. (2009) on the use of this method in adolescents revealed 25% of 1632 interviewees to have used withdrawal method, compared to 32.4% condoms users. The theoretical efficiency rate corresponding to systematic use of coitus interruptus is 96%, and the effective rate of effectiveness is that corresponding to occasional use, lack of regularity is 78%. The effectiveness of this method is very much related to the maturity, experience, and practice of the partners.

According to Santow (2006), if complete withdrawal occurs before ejaculation, then the efficiency of the method should be 100% effective. According to some assumptions, the pre-ejaculatory fluid may contain certain spermatozoa and cause pregnancy although the timely retraction of the penis from the vagina might occur (Hatcher et al., 1990 cited by Santow, 2006). This assumption is supported by Killick, Leary, Trussell, & Guthrie (2011) who have found 41% of pre-ejaculation fluid samples to contain spermatozoa.

Controversial study of Zukerman, Weiss, & Orvieto (2003) revealed no sperm in the pre-ejaculation fluid which is according to them a pure alkaline fluid containing numerous

enzymes and mucus but no sperm; therefore cannot be responsible for pregnancies during coitus interruptus.

#### **2.2.1.2. Periodic abstinence**

Also known as fertility awareness, this method is a natural family planning method, which consists of non-practicing sexual intercourse on the fertile days of a woman when she could become pregnant (Mansour, Inki, & Gemzell-Danielsson, 2010). This method needs co-operation from the couple (both husband and wife) and rather does not practice sex at all, use other alternative methods, namely condoms (Trussell & Grummer-Strawn, 1990). In periodic abstinence method, two primary techniques are frequently used to predict the fertile days. These are namely:

➤ Calendar method

A calendar method is a calculation-based approach where previous menstrual cycles are used to predict the first and last fertile days of future menstrual cycles. Though this technique proves to be the most used of periodic abstinence techniques, it requires a good understanding of the fertile and sterile phases of the woman's menstrual cycle. Moreover, it is based on the regularity of the menstrual cycle and the fact that an ovule cannot be fertilized after 24 hours of ovulation (Burkhart, De Mazariegos, Salazar, & Lamprecht, 2000).

➤ Basal body temperature (BBT) method

This technique is based on the woman body temperature. It consists of the woman taking her body temperature at the same time each morning before eating anything (Burkhart et al., 2000; Marston & Church, 2016). When the woman is in the process of ovulation (the most fertile days of the woman) the body temperature usually increases sharply, since it goes from a low level to a high level.

### **2.2.2. Male Modern Contraceptive Methods**

Modern male contraceptive methods can be grouped mainly 2: non-hormonal and hormonal contraceptive.

#### **2.2.2.1. Non-hormonal male contraception**

While modern methods of contraception in women are essentially based on the use of hormones, those of men are mostly based on the use of physical means to prevent fertilization (Long, Lee, & Bliethe, 2019). The most used of these methods are condoms and vasectomy.

##### ➤ Condoms

The condom is the most used method in the world to prevent unwanted pregnancies and/or sexually transmitted diseases. Over 45 million couples use condoms for family planning worldwide with the majority in more economically developed countries (Ndenzako, 2001).

The first condoms were made from intestinal tubes of small ruminants. Nowadays most of the condoms are made from natural or synthetic latex and are presented in a wide range of sizes, thickness, shapes, textures, and colors.

A survey performed in Burundi revealed that 38% of non-married men used condoms. In fact, over 92% of the young people surveyed in this study said they are adopting condom use to reduce the risk of getting HIV (Hausser, 1993).

The results of a recent study conducted among a group of men having sex with other men in Togo revealed 54.8% (374/683) using condoms for anal sex with a man during the last month (Ruiseñor-Escudero et al., 2019).

#### **2.2.2.2. Vasectomy**

Vasectomy is a surgical procedure on the male genital tract for permanent birth control (Shattuck, Perry, Packer, & Quee, 2016). This method which was rarely used in Africa has recently gained popularity over the past decade (Asare, Otupiri, Apenkwa, & Odotei-Adjei,

2017; Jacobstein, 2015). The method consists of the ligation and dissection of the seminal. The operation is simple and easy to tolerate by all people. The process is irreversible resulting in the man becoming sterile.

During the procedure, a man's vas deferens are cut and then tied or sealed in such a way that they prevent the sperm from entering the seminal flow (ejaculation). Research performed by Jamieson et al. (2004) has estimated the failure probability at 11‰ between 6 to 72 weeks after vasectomy. Usually, sperm is maintained after the surgical procedure beyond the blocked vasa deferens making vasectomies only take effect about three months after the surgery (Jamieson et al., 2004).

According to Belker, Thomas, Fuchs, Konnak, & Sharlip (1991), during a 9-year study, pregnancy occurred in 52% of 810 couples monitored after Vasectomy. The correlation between the number of years of vasectomy status and the chance of pregnancy occurrence was estimated during this research. The author discovered that pregnancy can happen in 76% of instances where the surgical interval was less than 3 years, between 3 and 8 years 53%, 9 to 14 years 44% and 15 years or more 30%.

Wespes (2014), stated that for multiple reasons, up to 6% of men who have undergone vasectomy will require inversion in the form of vasovasostomy or vasoepididymostomy. According to the author, Vasectomy is not 100% accurate. This statement is supported by Hernandez & Sabanegh, (1999) who found that one of the factors influencing the failure of Vasectomy is the history of conception with the current partner. The author stated that couples who have already had children together have 80% of chance to have again after Vasectomy compared with couples with new partners, in whom the pregnancy rate found was only 17%. Nowadays, the constraints of vasectomy lead us to search for fresh contraceptive methods for men. One of the alternatives is the ingestion of RISUG / Vasal Gel into the vas

deferens with effect to block the sperm to continue. Unlike the female contraceptive, this method has no hormones and has the effect easily reversed.

### **2.3. Factors influencing male involvement in contraceptive use**

In the last decades, the participation of men in the reproductive health scene in Sub-Saharan Africa has been observed, and slight progress has been noticed (Cleland, Ndugwa, & Zulu, 2011). Despite growing evidence in men involvement in contraceptive use, fertility rates and related issues remain high in many countries in sub-Saharan Africa (Kabagenyi et al., 2014). Studies have shown that men are still uncomfortable with contraception in developing countries (Chankapa et al., 2010) due to many influential factors.

Despite efforts to increase the use of contraceptive by men, there is inadequate availability of contraceptive methods for them, restricting condom and vasectomy options as the only modern methods (Kabagenyi et al., 2014; Ringheim, 2013). Male modern contraceptive methods are limited to only two (vasectomy and condoms) in most Africa countries (Cahill et al., 2018; Ntambue et al., 2017; Ringheim, 2013). Many studies, instance of that of Thummalachetty et al. (2017) have demonstrated that condoms are the most used modern contraceptive among men in Africa. Thummalachetty et al. (2017) found that 22% of participants use condoms in their in-depth interviews on factors influencing the use of contraceptive methods in men, while 59% did not use any form of contraceptive and 19% relied on methods already used by their sexual partners. Due to the fear of irreversibility surrounding vasectomy, men tend to prefer condoms when confronted to both offers of male contraceptives, while vasectomy is still the most effective permanent form of male contraceptive with a failure rate lower than 1% (Cahill et al., 2018; Frankiewicz, Połom, & Matuszewski, 2018; Ochako, Temmerman, Mbondo, & Askew, 2017). According to men interviewed in the study conducted by Nair et al. (2017), women are best suited for

sterilization procedure for the reasons that vasectomy can make men impotent or leads to general weakness and blood loss.

The problem of refusing to adopt a modern contraceptive in developing countries is likely not to be associated to the lack of knowledge about it. Most of studies on modern contraceptive use among men in Africa revealed that most men known at least a modern contraceptive method but information on overall contraceptive use seems to be very low. Oyediran et al. (2002) for instance, found in their study that the level of contraceptive awareness among men is very high (90%) in the areas of their study when evaluating the level of knowledge based only on the ability of participants to mention at least one male contraceptive. Nevertheless, the findings of the study revealed that participants in the study were more aware about condoms.

Religion factor in some communities is revealed to be a key element in the decision towards the adoption of contraceptives. It was noticed from Ohn Mar et al.'s (2019) recent study (2019) that a high proportion of male respondents believed that vasectomy was religiously prohibited and would give a bad impression. Koffi et al. (2018) reported that Vasectomy goes against God's will, according to the respondents surveyed in their study, and is therefore regarded as bad.

## CHAPTER THREE

### 3.0. METHODOLOGY

#### 3.1. Introduction

This chapter is devoted to the methods used in the study. It presents detailed description of the study sites, study design, study population and participants, sample size and sampling procedure, community entry procedures, data collection techniques, training of field research assistants, confidentiality and ethical considerations.

#### 3.2. Study sites

The study was carried out in Lomé and Tabligbo both in the maritime region of Togo. Lomé (6° 8' 0" N, 1° 12' 0" E) is the most populated city in Togo with 1,570,283 inhabitants. Lomé is also the administrative capital and the largest city in Togo. Apart from the official language (French), languages spoken are predominantly Ewe and Mina, but also immigrant dialects as Kabye and Dagomba (Afeli et al., 2017). The population density was estimated at 4,000/km<sup>2</sup> in 2017 (Population Census, 2010). Lomé has two University hospitals, one Regional hospital, private community clinics and 128 pharmacies. Almost 70% of facilities offer FP services (EQUIPOP, 2014).

Tabligbo (6° 35' 00" N, 1° 30' 00") is the seat of Yoto prefecture. In 2010, Tabligbo had 22,304 inhabitants (Population 2010 Census). The main activity in the area is agriculture. It is also known as a cement production zone in Togo with 2 large plants specialized in the extraction and supply of clinker to other cement manufacturing plants in the ECOWAS sub-region. Languages spoken in the area are mainly Ewe and Mina. Tabligbo is a rural area with only one public hospital offering FP services. Reproductive health services in the prefecture are provided by UNFPA and ATBEF through the implementation of SR projects in the Area.

### **3.3. Study design**

A cross-sectional descriptive study was used in this study to meet the established objectives. This design was used to evaluate the determinants of contraceptive use among men. The study adopted a concurrent mixed method design, where both quantitative data and qualitative data were simultaneously collected. The mixed method combined inductive and deductive thinking and reasoning to perfectly answer the research questions that could not have been absolutely elucidated through qualitative or quantitative research alone (Schoonenboom & Johnson, 2017).

### **3.4. Study population**

The study population was men aged 15 to 54 years living in Lomé and Tabligbo.

### **3.5. Variables**

#### **3.5.1. Dependent variable**

Dependent variable, the main variable of interest in this study was modern contraceptive use. The variable was measured as a categorical and binary outcome- “Yes” (use) or “No” (non-use). Modern male contraceptives refer to legal methods to prevent pregnancy such as male condoms, vasectomy and spermicides.

#### **3.5.2. Independents variables**

The explanatory (independent) variables in the study are men’s age, residence (urban or rural), education, marital status, number of sexual partners, education of sexual partners, number of children, employment status, knowledge level, male contraceptives are useful, ever attended FP facility, ever discussed contraceptives with partner and accessibility of contraceptives.

The age of respondent was measured as a continuous variable and age in completed years at the time of the study. Derived variable for age was treated as a categorical variable comparing ages within these groups 15-24, 25-34, 35-44 and 45-54 years. Employment status

of men was categorical variables: assessed as public sector (1), private sector (2), self-employed (3), student (4) and unemployed (5). Place of residence was either urban or rural. Religion was categorical variable comprising Traditional (1), Christian (2), Islam (3), none (4) and other with specification (5). Participants were classified into three groups of marital status: single (1), currently married (2), cohabiting (3). Education was categorized into five categories: no education (1), primary (2), junior high school (JHS), senior high school (SHS), and university education. Number of children was a continuous variable from none to five or more.

The level of knowledge of family planning methods was assessed from three questions as having heard of contraceptive methods – “yes” or “no” and be able to cite at least one method; Agree that a woman can get pregnant even if she is using contraceptives – “yes” or “no”; and Agree that a man can impregnate a woman while using contraceptives – “yes” or “no”. Thus, the knowledge on contraceptives was categorized into three level: “low” for participants who found one correct answer, “moderate” for two correct responses and “high” for three correct answers and ability to mention at least one contraceptive.

### **3.6. Sample size and Sample size calculation**

The sample size for the study was calculated using the Cochran (1977) formula:

$$n = \frac{Z^2pq}{d^2}$$

Where:

$n$  is the sample size required

$Z$  is the 95% confidence interval with a standard value of 1.96

$p$  the proportion of males in the target population estimated susceptible to use modern contraceptive. The  $p$  was determined based on the mean of the prevalence of modern contraceptives rate in Sub-Saharan Africa which has been increased from 23.9% to 28.5%

between 2012 and 2017 (Ahmed et al., 2019; Cahill et al., 2018). Thus, based on the mean calculated, the estimated prevalence of male contraceptive rate used in this study has been taken as 26%.

$$q = 1 - p.$$

d= degree of accuracy, d= 0.05. Non-respondent rate of 5 % was considered.

$$n = \frac{1.96^2(0.26 \times 0.74)}{0.05^2} = 296$$

Adding 5% of the calculated sample size as security for non-responsive participants

$$n = 296 + (0.05 \times 296) = 311$$

### **3.7. Sampling procedure for selecting respondents for the quantitative data collection**

The quantitative component was a household survey. Two strata were first created: the stratum of urban and rural areas. Thus, the study sample draw was done using a two-stage stratified sampling technique. At the first stage, 24 clusters were drawn from the list of Enumeration Areas (EAs) established during the General Census of Population and Habitat (GCPH) carried out in 2010 by the General Directorate for Statistics and National Accounts (GDSNA), proceeding to a systematic draw with probability proportional to size. To get the sampling interval, the number of households within each cluster was determined then divided by the sample size. At the second stage, a sample of 13 households per cluster was drawn with a systematic probability. One male within the age group of 15 – 54 was interviewed in each household in the selected houses. If the household has more than one candidate, then one has been selected randomly and if there is no potential respondent in the house, the next house has been used and the survey session has continued.

### **3.8. Selection of participants for qualitative data collection**

Participants were selected from the same EAs in which quantitative sample was drawn. In the communities, the participants were identified first based on the recommendations of the Chief; then the participants themselves were informed about the goal of the study and permission was sought from them to participate in the In-depth interviews (IDIs) and focus group discussion (FGDs). In total, two FGDs (one in each area) and eight IDIs (four per area) were done. In each of the study areas, the FGDs were done grouping two married and two unmarried men making it four participants per FGD. Participants selected for the IDIs were not eligible for the FGDs and vice versa. The IDIs and FGDs were conducted concurrently. After having two successful FGDs and eight IDIs, data saturation was reached and qualitative data collection ended.

#### **Criteria for participants selection:**

➤ *Inclusion criteria*

- Men aged between 15-54 years, and live in the selected communities, Lome and Tabligbo.
- Men able to understand and provide responses to the questions.

➤ *Exclusion criteria*

- Men below 15 years and above 54 years, not sexually active
- Men who are not actual residents (example: visitors) of the listed households
- Mentally unfit men were excluded from answering questions.
- Men reluctant to give consent to be interviewed.

### **3.9. Data collection technique**

The data collected related knowledge of male modern contraceptives, factors associated to male modern contraceptive use, reason for contraceptive use and attitude of men toward male

contraceptives. Data were derived from primary source. This involve field data collection using a structured questionnaire and interview guide. One semi-structured interview guide was used for this study. In the field, a wordfile sheet was designed to write down memos. An audio recorder was used to record all the interviews (IDIs and FDGs) during the data collection. Both interviews and questionnaire were conducted in Ewe and French.

### **3.10. Study instruments**

The structured questionnaire including both close-ended and open-ended was developed using a review of articles published on the same topic (Kabagenyi et al., 2014; Schuler, Rottach, & Mukiri, 2011). The questionnaire covered socio-demographic variables such as age, ethnicity, religion, educational level, marital status, number of wives of the respondent, level of education of the wives, number of children and the occupation of the respondent; the knowledge; attitude and perception; then practice. The questionnaire was administrated in French and the focus group was in Ewe since these were the commonly spoken languages in those communities.

In addition, an interview guide (Appendix 3) was administrated to two groups of males: focus groups of unmarried men (n = 4) and married men (n = 4). For the individual interviews, eight other males were also randomly chosen. The discussions were recorded in Ewe and French using a Dictaphone and later translated into English.

The questions were about knowledge, perceptions, advantages, disadvantages, reasons for using and not using contraceptive methods, the attitude of their neighbors and health care professional regarding contraceptive methods and practitioners; the availability, accessibility, and affordability of the methods and their suggestions.

#### **3.10.1. Type of data collected**

The questionnaire was structured in four parts:

- The first part concerns the demographic and background information of the participant: age, residential area, level of education (no education, primary school, Junior High school, Senior High school, University) ethnicity, marital status (single, married, cohabiting), number of sexual partner, partner's level of education paternity (number of children), employment status (public sector, private sector, self-employed, student, unemployed).
- The second section covered the level of knowledge, and the way to acquire more knowledge of male contraceptives. The level of knowledge was assessed with four questions (the participant is described as having low level of knowledge if he scores 0 and 1/4, middle 2/4 and 3/4; and high with 4/4). The quiz was developed from the literature, after consulting various self-questionnaires of knowledge assessment of contraceptive methods already carried out.
- The third section covered the perception of the decision to use contraception in a couple and point of view related to men who use contraceptive methods.
- The fourth assessed the contraceptive route: current and past methods of contraceptives, communication about contraception with sexual partners, siblings, parents and healthcare professionals.

### **3.11. Pre-data collection activities**

The following activities were undertaken prior to actual field data collection to ensure the validity and reliability of data.

#### **3.11.1. Translation of the questionnaire**

The questionnaire and interview guide were translated from English into French. Another translation was done from French into Ewe to ensure that the right French and health

terminologies were appropriately translated for the comprehension in order to elicit the right responses from respondents.

### **3.11.2. Training of field research assistants and data collectors**

Two sociologists experienced in Survey Management were recruited as research assistants in the study. In addition, three data collectors with a good knowledge of the study areas were recruited to assist with data collection. A short training on how to ask questions about sexual behavior and how to establish relationships with participants was performed. The research assistants were highly educated and had a good background concerning family planning. Similarly, the data collectors are members of “Ecole de Mari” on ATBEF projects in the areas of study.

### **3.12. Pilot study**

A pilot study was carried out in Adidogome, a community with similar characteristics as Lomé and Tabligbo. This helped to identify issues that were not clear in the questionnaire. After the pre-test, the questionnaire was finalized before the data collection on the field. The pre-test allowed making corrections for a good data collection. 156 questionnaires were administered in Lomé (urban area) and 155 at Tabligbo (rural area).

### **3.13. Actual Data Collection**

Data collection took place from April 2019 to May 2019. In all, 311 questionnaires were administered; 156 in Lomé (urban area) and 155 at Tabligbo (rural area). Both quantitative and qualitative data were gathered concurrently.

### **3.14. Anonymity, privacy, and confidentiality**

The study involved collecting primary data from respondents. Study participants were assured that any information given during the study will be used only for the purposes of

research. Furthermore, any information given has been treated with the utmost confidentiality. Apart from the researcher, no other person will have access to the data. Data collected were entered into a computer software with a password that is only known by the principal investigator. The data will be stored for five years and all records will be deleted when the five-year period passes.

### **3.15. Ethical considerations**

The following ethical issues have been considered in the study:

1. Ethical clearance obtained from DSMI-PF, a branch of the Ministry of Health, Togo
2. Additionally, permission was sought from the selected communities' chiefs and elders.
3. Informed consent was sought from the respondents before they participated in the study.

### **3.16. Quantitative data analysis**

The data was entered Excel software and analyzed using Stata software version 15.0. The cross-tabulation was used to generate frequencies and percentages in table and charts.

Afterwards, bivariate analysis was done using the Chi-square test to test the association between the dependent and independent variables. The association was significant when the p-value is less than 0.05. In order to identify the variables that influence the outcome, multiple logistic regressions were performed to examine the predictors of male contraceptives use. The Logistic model has been constructed with variables that are significant in the bivariate result. A 95% confidence interval has been used to assess the strength of association.

### **3.17. Analysis of qualitative data**

Tape-recorded data from IDIs and FGDs were transcribed verbatim and analyzed using thematic content analysis. The transcripts were read several times to identify recurring sentences or phrases. The results from the qualitative data analysis were used to support the quantitative findings. NVivo12 software served for the coding and the identification of the themes. A codebook was created based on the objectives of the study and the subject areas explored during the interviews. Each transcript was opened in the NVivo software and line-by-line reading and coding into nodes of all the statements were done. The coding was reviewed, where some nodes were rearranged and others merged to develop themes. As coding continued, codebook developed initially was revised.

### **3.18. Quality control of data**

Good data quality assures completeness, consistency, validity, and reliability of information generated. Since men contraceptive use is a sensitive topic, strict professionalism, especially confidentiality and respect, was ensured during data collection. Research assistants (data collectors) were trained by health professionals (monitoring and evaluation agents working in family planning) to collect the data and provide effective information. The researcher equipped the data collection agents with the necessary knowledge and skills needed to collect the data. The data collectors were oriented and trained with information on the study population, the study area, ethical interactions with participants, and the research objectives. After data collection, the data was cleaned using Stata 15.0 and all the missing values and errors were taken out before the analysis.

## CHAPTER FOUR

### 4.0. RESULTS

This chapter presents the results on the factors that influence contraceptive use among men. It provides findings of both quantitative and qualitative data. The chapter covers the socio-demographic characteristics, level of knowledge on contraceptives, perceptions and contraceptive use. The chapter shows as well the statistically significant factors and the reasons for use and non-use of contraceptives.

#### 4.1. Quantitative Data

##### 4.1.1. Socio-demographic characteristics of the participants.

The results on the socio-demographic characteristics of respondents are presented in Table 1. The findings revealed that 47.6% of participants were in the age group of 25-34. The mean age of participants was 29.23 with the standard deviation of 7.94. The minimum and maximum ages were 15 and 50 years, respectively. Majority (63.3%) of participants was Christian, with 54.6% belonging to Ewe speaking ethnic group. Some of the respondents (9.32%) had no formal education, while 33.12% were above secondary school. Almost 75% of participants were married or cohabiting, while 25.08% were singles. Less than half (35.8%) were students with respect to the employment status of the respondents; 14.8%, 9.03% and 38.7% were students in the public, private and self-employed sectors respectively. The proportion of men with no child was predominant (61.74%), while 13.5% of the participants have more than three children. Out of 311 respondents, 233 had a sexual partner, 4.2% of whom had no formal education, 16.8% and 30.42% attended primary and secondary school, and 23.3% attended university.

**Table 1: Distribution of participants by sociodemographic characteristics**

| Variables                                       | Frequency | Percentage |
|---|-----------|------------|
| <b><i>Age group (n=311)</i></b>                 |           |            |
| 15-24   | 81        | 26.05      |
| 25-34   | 148       | 47.59      |
| 35-44   | 61        | 19.61      |
| 45-54   | 21        | 6.75       |
| <b><i>Ethnicity (n=311)</i></b>                 |           |            |
| Ewe   | 229       | 73.36      |
| Moba  | 21        | 6.75       |
| Kabye   | 12        | 3.86       |
| Mossi   | 9         | 2.89       |
| Watchi  | 8         | 2.57       |
| Fon   | 5         | 1.61       |
| Temberman                                       | 5         | 1.61       |
| Tchokossi                                       | 5         | 1.61       |
| Ana   | 3         | 0.96       |
| Kotokoli  | 4         | 1.29       |
| Others  | 10        | 3.21       |
| <b><i>Religion (n=311)</i></b>                  |           |            |
| Traditional                                     | 50        | 16.08      |
| Christian                                       | 197       | 63.34      |
| Islam   | 22        | 7.07       |
| None  | 42        | 13.5       |
| <b><i>Education (n=311)</i></b>                 |           |            |
| No education                                    | 29        | 9.32       |
| Primary   | 56        | 18.01      |
| Secondary                                       | 123       | 39.55      |
| University                                      | 103       | 33.12      |
| <b><i>Residence</i></b>                         |           |            |
| Urban   | 155       | 49.84      |
| Rural   | 156       | 50.16      |
| <b><i>Marital status (n=311)</i></b>            |           |            |
| Single  | 78        | 25.08      |
| Married   | 137       | 44.05      |
| Cohabiting                                      | 96        | 30.87      |
| <b><i>Number of sexual partners (n=311)</i></b> |           |            |
| 0   | 78        | 25.08      |
| 1   | 215       | 69.13      |
| 2   | 15        | 4.82       |
| 3   | 3         | 0.96       |

**Partner's level of education(n=233)**

|              |    |       |
|--------------|----|-------|
| No education | 13 | 4.21  |
| Primary      | 52 | 16.83 |
| Secondary    | 94 | 30.42 |
| University   | 72 | 23.30 |

**Number of living children(n=311)**

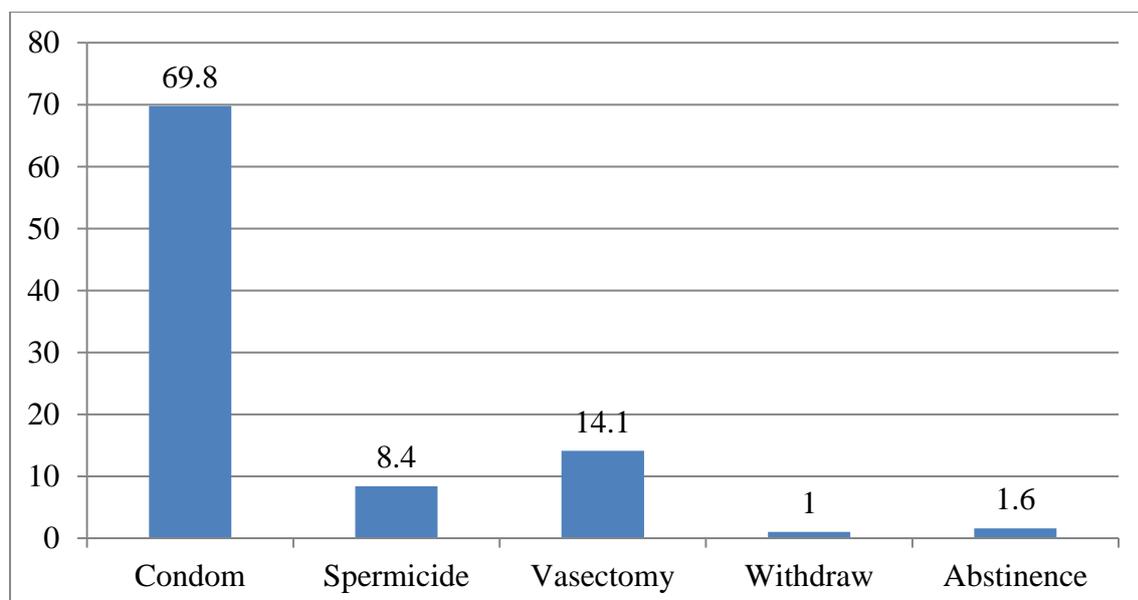
|         |     |       |
|---------|-----|-------|
| 0       | 192 | 61.74 |
| 1       | 33  | 10.61 |
| 2       | 44  | 14.15 |
| 3 above | 42  | 13.50 |

**Employment status (n=310)**

|                |     |       |
|----------------|-----|-------|
| Public sector  | 46  | 14.84 |
| Private sector | 28  | 9.03  |
| Self-employed  | 120 | 38.71 |
| Student        | 111 | 35.81 |
| Unemployed     | 5   | 1.61  |

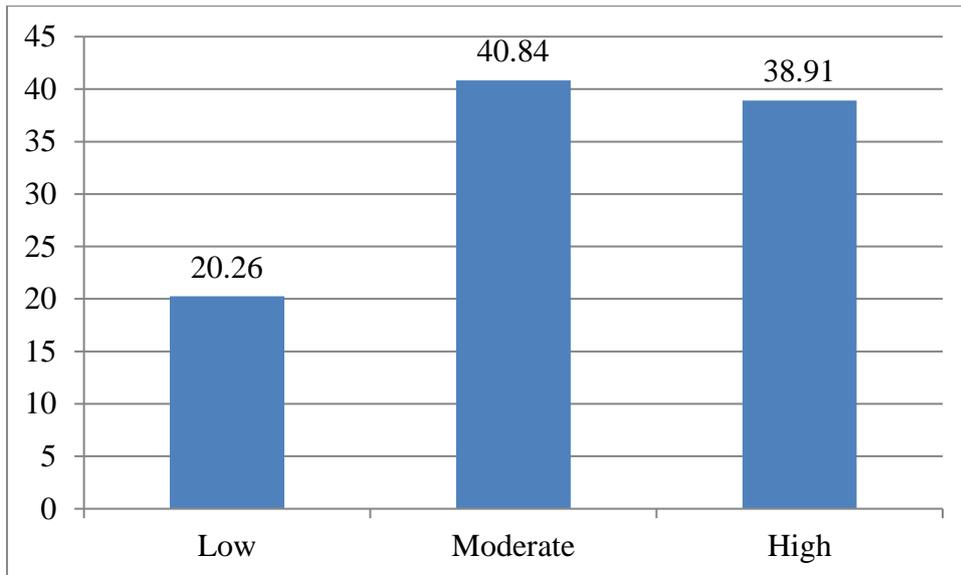
**4.1.2. Level of knowledge of male contraceptives**

The study revealed that 27.3% were unable to mention at least one method of male contraception. A contrast view of those that have mentioned at least one method, revealed condoms and vasectomy to be the most mentioned methods with the proportion of about 70% and 14.1% (Figure 2).



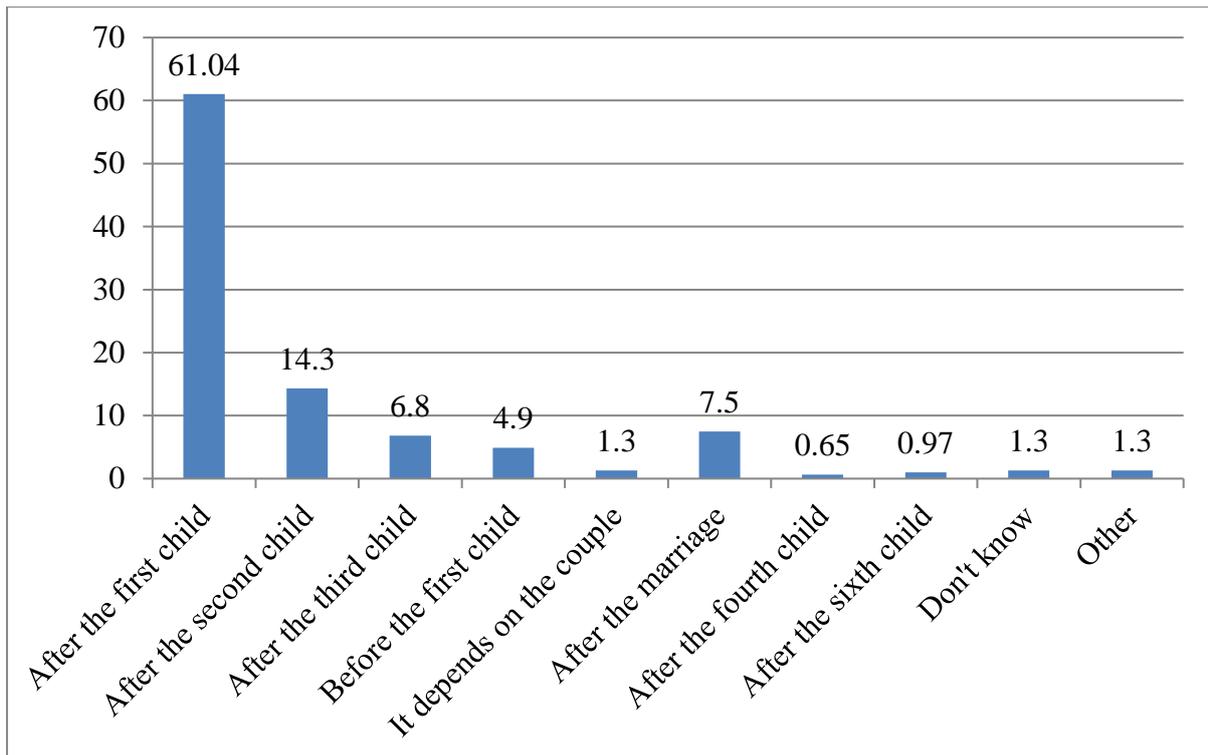
**Figure 2: Male contraceptives known**

The level of knowledge was determined based on the results on the number of male contraceptive methods cited by participants (Table 5). The Figure 3 shows that less than half (40.8%) of men interviewed have a moderate level of knowledge about the male contraceptive methods, 38.9% were highly aware of male methods of contraception, while 20.3% had low knowledge.



**Figure 3: Level of knowledge of modern contraceptives**

When questioned on when to start planning birth, more than half (61.1%) participants responded after the first birth (Figure 4). However, 7.5% of participants thought that a couple should start planning birth after marriage, while 4.9% assumed that the planning of birth must started before the first birth.



**Figure 4: Time to start planning births (n=311)**

#### 4.1.3. Perception

For 78.5% of the respondents, perceived men who use contraceptive as responsible in term of FP decision, while 10.6% stated that such men are irresponsible.

**Table 2: Perception of men who use contraceptive methods**

| Variables                         | Frequency(n=311) | Percentage |
|-----------------------------------|------------------|------------|
| Responsible men                   | 244              | 78.45      |
| Irresponsible men                 | 33               | 10.61      |
| Controlled by their wives         | 9                | 2.90       |
| Don't have authority in the house | 20               | 6.43       |
| Addicted to sex                   | 2                | 0.64       |
| No idea                           | 3                | 0.96       |

**4.1.4. Contraceptive use**

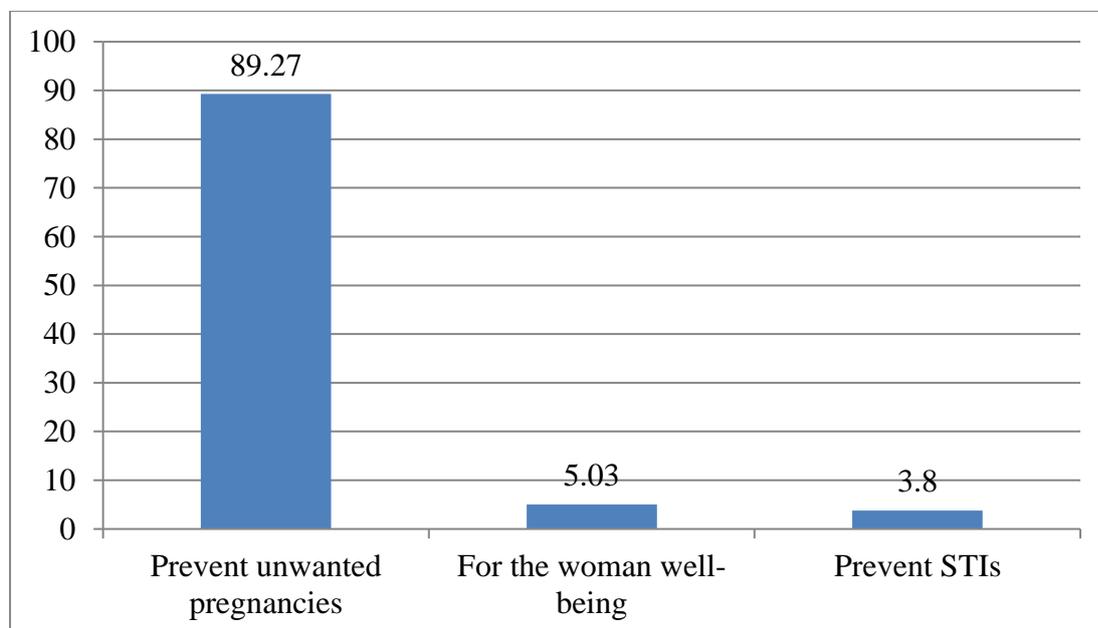
Among the participants, the proportion of those who have ever used contraceptives were 66.2%. The Table 3 shows that 46.6% were using condoms and 0.3% were under vasectomy.

**Table 3: Current use of contraceptives among males**

| Contraceptives | Frequency = 311 | Percentage |
|----------------|-----------------|------------|
| Condoms        | 145             | 46.6       |
| Vasectomy      | 1               | 0.3        |
| None           | 165             | 53.1       |

The Figure 5 shows majority of men preventing unwanted pregnancies as the reason why men use contraceptive methods (89.3%). A small percentage (3.8%) of participants stated the need to protect themselves against sexually transmitted infections. Other reason was to assure their partners' well-being (5.03%).

**Figure 5: Reasons for contraceptives use**



The Table 4 shows that 35.7% of the participants discussed issues about contraceptive use with healthcare professionals, 5.5% of them discuss with family members while 20.6% with friends.

**Table 4: People males discuss contraceptives with**

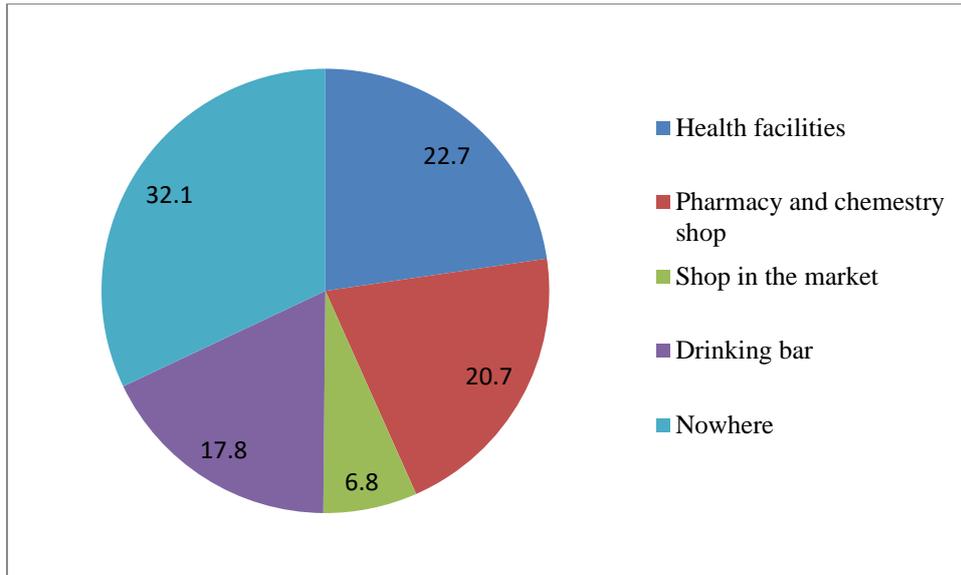
| Persons              | Frequency (311) | Percentage |
|----------------------|-----------------|------------|
| Family               | 17              | 5.46       |
| Friends              | 64              | 20.57      |
| Healthcare providers | 111             | 35.69      |
| Don't discuss        | 119             | 38.26      |

Table 5 shows 28.3% of the participants were not using contraceptives because of the high cost of available methods, while, 22.2% attributed the non-use of male modern contraceptive to the distance to the facilities. Shame is the main reason for 17.2% of participants to not adopt any modern contraceptive. A small proportion (3.03%) mentioned cultural beliefs as the reason for not using contraceptive methods.

**Table 5: Reasons for not using contraceptive methods**

| Reasons                                     | Frequency | Percent |
|---|-----------|---------|
| Lack of information about contraception     | 11        | 11.11   |
| Stigma from the community                   | 5         | 5.05    |
| Social beliefs that FP is only women issues | 7         | 7.07    |
| Expensive                                   | 28        | 28.28   |
| Distance to facilities                      | 22        | 22.22   |
| Lack of source of supply                    | 6         | 6.06    |
| Shame                                       | 17        | 17.17   |
| Cultural belief                             | 3         | 3.03    |

As shown in Figure 6, 22.7% of the participants get their contraceptive methods from health facilities while 20.7% reported getting the methods at the pharmacy and chemist shop Figure 6.



**Figure 6: Source of contraceptive supply**

#### 4.1.5. Determinants of male contraceptive use

The Pearson’s chi-square test of association was used to assess the characteristics of the study men associated with the contraceptive use. Among the observed characteristics, nine (age, residence area, educational level, marital status, number of sexual partner, level of knowledge, discussion with sexual partner on contraceptive use, perception that contraception is useful for men and male attendance to family planning centers showed significant association with contraceptive use (p-value <0.05) (Table 6).

**Table 6: Factors that influence contraceptive use by males**

| Variables        | N=311 | Contraceptive use |          | X <sup>2</sup> (P-value)  |
|------------------|-------|-------------------|----------|---------------------------|
|                  |       | Yes (%)           | No (%)   |                           |
| <b>Age</b>       |       |                   |          |                           |
| 15-24            | 81    | 39(48.1)          | 42(51.8) | <b>16.6(0.001***)</b>     |
| 25-34            | 148   | 110(74.3)         | 38(25.6) |                           |
| 35-44            | 61    | 42(68.8)          | 19(31.1) |                           |
| 45-54            | 21    | 15(71.4)          | 6(28.6)  |                           |
| <b>Residence</b> |       |                   |          |                           |
| Urban            | 155   | 118(76.1)         | 37(23.8) | <b>13.5(&lt;0.001***)</b> |
| Rural            | 156   | 88(56.4)          | 68(43.6) |                           |

|   |     |           |          |                           |
|---|-----|-----------|----------|---------------------------|
| <b>Education</b>                                  |     |           |          |                           |
| No ed   | 29  | 16(55.2)  | 13(44.8) | <b>18.4(&lt;0.001***)</b> |
| Primary   | 56  | 32(57.1)  | 24(42.8) |                           |
| Secondary   | 123 | 73(59.3)  | 50(40.6) |                           |
| University  | 103 | 85(82.5)  | 18(17.5) |                           |
| <b>Marital status</b>                             |     |           |          |                           |
| Single  | 78  | 29(37.2)  | 49(62.8) | <b>45.8(&lt;0.001***)</b> |
| Married   | 137 | 95(69.3)  | 42(30.6) |                           |
| Cohabiting  | 96  | 82(85.4)  | 14(14.6) |                           |
| <b>Number of sexual partners</b>                  |     |           |          |                           |
| 0   | 78  | 29(37.2)  | 48(62.8) | <b>41.8(&lt;0.001***)</b> |
| 1   | 215 | 165(76.7) | 50(23.3) |                           |
| 2   | 15  | 11(73.3)  | 4(26.7)  |                           |
| 3   | 3   | 1(33.3)   | 2(66.6)  |                           |
| <b>Number of children</b>                         |     |           |          |                           |
| 0 - 4   | 296 | 199(67.2) | 97(32.7) | <b>2.7(0.100)</b>         |
| 5-7   | 15  | 7(46.6)   | 8(53.3)  |                           |
| <b>Employment status</b>                          |     |           |          |                           |
| Public sector                                     | 46  | 35(76.1)  | 11(23.9) | <b>6.2(0.184)</b>         |
| Private sector                                    | 28  | 20(71.4)  | 8(28.6)  |                           |
| Self-employed                                     | 120 | 78(65.0)  | 42(35.0) |                           |
| Student   | 111 | 68(61.2)  | 43(38.7) |                           |
| Unemployed  | 5   | 5(100.0)  | 0(0.00)  |                           |
| <b>Knowledge level</b>                            |     |           |          |                           |
| Low   | 63  | 28(44.4)  | 35(55.5) | <b>24.2(&lt;0.001***)</b> |
| Moderate  | 127 | 81(63.7)  | 46(36.2) |                           |
| High  | 121 | 97(80.2)  | 24(19.8) |                           |
| <b>Male contraceptives are useful</b>             |     |           |          |                           |
| Yes   | 270 | 195(72.2) | 75(27.7) | <b>32.7(&lt;0.001***)</b> |
| No  | 41  | 11(26.8)  | 30(73.2) |                           |
| <b>Ever attended FP facility</b>                  |     |           |          |                           |
| Yes   | 101 | 75(74.2)  | 26(25.7) | <b>4.5(0.033*)</b>        |
| No  | 208 | 129(62.0) | 79(37.9) |                           |
| <b>Ever discussed contraceptives with partner</b> |     |           |          |                           |
| Yes   | 157 | 129(82.2) | 28(17.8) | <b>30.6(&lt;0.001***)</b> |
| No  | 140 | 73(52.1)  | 67(47.8) |                           |
| <b>Accessibility of contraceptives</b>            |     |           |          |                           |
| Easy access                                       | 172 | 121(70.3) | 51(29.6) | <b>2.3(0.124)</b>         |
| Difficult access                                  | 137 | 85(62.0)  | 52(37.9) |                           |

\*: p-value<0.05. \*\*: p-value <0.01. \*\*\*: p-value <0.001.

The binary logistic regression model was used to assess the odds of contraceptive use among the characteristics of the study participants and presented in Table 7. The contraceptive use was categorized into a binary variable as “yes” and “no”.

From the adjusted binary logistic regression model, age of the participants, perception that contraception is useful for men, discussion with sexual partner and level of knowledge were the factors that showed significant influence on current used contraceptives (p-value <0.05).

The adjusted odds of contraceptive use were significantly lower for those participants living in the rural area (AOR: 0.3, 95% CI: 0.2-0.8) when compared to those living in the urban area.

The adjusted odds of contraceptive use were significantly higher for those with high level of knowledge (AOR: 3.1, 95% CI: 0.2-8.1) when compared to those living in the urban area. However, the adjusted odds of contraceptive use were not significant for those with moderate level of knowledge (AOR: 1.7, 95% CI: 0.7-3.9) compared to those with low level of knowledge.

The adjusted odds of no contraceptive use were significantly higher for males who have never attended family planning centers (AOR: 0.7, 95% CI: 0.33-1.62) when compared to those who have attended family planning centers.

The adjusted odds of contraceptive use were significantly lower in men who do not think contraception is useful for men compared to those in communities that accept male contraceptive use (AOR: 0.1, 95% CI: 0.02-0.31).

**Table 7: Multivariate analysis of the determinants of modern contraceptive use among men**

| Variables  | UOR (95% CI)  | P-value   | AOR (95% CI)   | P-value   |
|--|---------------|-----------|----------------|-----------|
| <b>Area</b>  |               |           |                |           |
| Urban  | 1             |           | 1              |           |
| Rural  | 0.4(0.2-0.6)  | <0.001*** | 0.3(0.2-0.8)   | 0.02*     |
| <b>Age</b>   |               |           |                |           |
| 15-24  | 1             |           | 1              |           |
| 25-34  | 3.1(1.7-5.5)  | <0.001*** | 2.1(0.7-6.4)   | 0.175     |
| 35-44  | 2.4(1.1-4.7)  | 0.015*    | 1.9(0.4-8.1)   | 0.366     |
| 45-54  | 2.6(0.9-7.6)  | 0.063     | 4.6(0.6-34.8)  | 0.133     |
| <b>Marital status</b>                                      |               |           |                |           |
| Single   | 1             |           | 1              |           |
| Married  | 0.2(0.1-0.4)  | <0.001*** | 0.9(0.01-53.4) | 0.976     |
| Cohabiting   | 0.1(0.04-0.2) | <0.001*** | 4.9(0.08-27.4) |           |
| <b>Education</b>   |               |           |                |           |
| No formal education  | 1             |           | 1              |           |
| Primary  | 0.9(0.3-2.3)  | 0.862     | 1.0(0.3-3.8)   | 0.965     |
| Secondary  | 0.8(0.3-1.9)  | 0.681     | 1.4(0.4-5.1)   | 0.547     |
| University   | 0.2(0.1-0.6)  | 0.003**   | 1.2(0.3-5.2)   |           |
| <b>Employment status</b>                                   |               |           |                |           |
| Public sector  | 1             |           | 1              |           |
| Private sector   | 1.2(0.4-3.6)  | 0.657     | 2.0(0.4-8.8)   | 0.355     |
| Self employed  | 1.7(0.7-3.7)  | 0.173     | 1.3(0.4-4.4)   | 0.669     |
| Student  | 2.0(0.9-4.3)  | 0.078     | 1.1(0.3-4.5)   | 0.872     |
| Unemployed   | empty         |           | empty          |           |
| <b>Number of children</b>                                  |               |           |                |           |
| 0-4  | 1             |           | 1              |           |
| 5-7  | 2.3(0.8-6.6)  | 0.109     | 0.2(0.1-1.2)   | 0.089     |
| <b>Level of knowledge</b>                                  |               |           |                |           |
| Low  | 1             |           | 1              |           |
| Moderate   | 0.4(0.2-0.8)  | 0.012*    | 1.7(0.7-3.9)   | 0.203     |
| High   | 0.2(0.1-0.3)  | <0.001*** | 3.1(1.2-8.1)   | 0.016*    |
| <b>The perception that contraceptive is useful for men</b> |               |           |                |           |
| Yes  | 1             |           | 1              |           |
| No   | 7.1(3.3-14.8) | <0.001*** | 0.1(0.02-0.3)  | <0.001*** |
| <b>Ever attended FP center</b>                             |               |           |                |           |
| Yes  | 1             |           |                |           |

|                                  |              |           |                |         |
|----------------------------------|--------------|-----------|----------------|---------|
| No                               | 1.7(1.0-2.9) | 0.034*    | 0.7(0.33-1.62) | 0.453   |
| <b>Ever discuss with partner</b> |              |           |                |         |
| Yes                              | 1            |           | 1              |         |
| No                               | 4.2(2.5-7.1) | <0.001*** | 0.3(0.15-0.74) | 0.007** |

UOR: unadjusted odds ratio. AOR: adjusted odds ratio. CI: confidence interval. \*p-value<0.05. \*\*p-value <0.01. \*\*\* p-value <0.001. Empty: All members in that category were not highly involved in contraceptive use.

## 4.2. Qualitative data

A total of two FGDs were carried out in addition to eight IDIs in order to well understand the phenomenon being studied from the perspectives of the participants. The findings are focused on the knowledge of modern contraceptives, attitudes, and perception, discussion with the sexual partner, the reasons for the use and the non-use of contraceptives.

### 4.2.1. Major Themes and Sub-Themes

Thematic content analysis of the data generated from the study yielded six major themes and eleven sub-themes. The major themes were knowledge about contraceptives, attitudes towards contraceptives, perception about contraceptives, contraceptives use and non-use, availability, and accessibility to contraceptives, and discussion with the partner about contraceptives (Table 8). The sub-themes were: knowledge of natural methods, knowledge of modern methods, positive attitudes towards contraception, negative attitudes towards contraception, personal perceptions about contraceptives, community perceptions about contraceptives, reasons for using contraceptives, reasons for not using contraceptives, sources of contraceptives, barriers to access, acceptability of contraceptives by the sexual partners, sexual partners' perception towards contraceptives.

**Table 8: Major themes and their sub-themes**

| Number | Themes   | Sub-themes  |
|--------|--|---|
| 1      | Knowledge  | <ul style="list-style-type: none"> <li>▪ Knowledge of natural methods</li> <li>▪ Knowledge of modern methods</li> </ul>                             |
| 2      | Attitude towards contraceptives                  | <ul style="list-style-type: none"> <li>▪ Positive attitudes toward contraception</li> <li>▪ Negative attitudes towards contraception</li> </ul>     |
| 3      | Perception about contraceptives                  | <ul style="list-style-type: none"> <li>▪ Personal perceptions about contraceptives</li> <li>▪ Community perceptions about contraceptives</li> </ul> |
| 4      | Contraceptive use and non-use                    | <ul style="list-style-type: none"> <li>▪ Reasons for using contraceptives</li> <li>▪ Reasons for not using contraceptives</li> </ul>                |
| 5      | Availability and accessibility to contraceptives | <ul style="list-style-type: none"> <li>▪ Sources of contraceptives</li> <li>▪ Barriers to access</li> </ul>   |
| 6      | Discussion with the partner about contraceptives | <ul style="list-style-type: none"> <li>▪ Acceptability of contraceptives by the sexual partners.</li> </ul>   |

#### **4.2.2. Knowledge**

##### **4.2.2.1. Knowledge of modern contraceptives**

Participants showed that they understand how contraception approaches should be used. Almost all the men who took part in the group discussions and the in-depth interviews showed that they were aware of contraceptive methods.

A young participant explains what contraceptives are as follows:

*“I know the condom is used if the guy doesn't want to impregnate the girl and she doesn't want to get pregnant as well.” (IDI 3, 26 years)*

The finding was that condoms are well known, omitting other methods. Vasectomy was slightly mentioned. But most of participant call it “castration”. A participant said:

*“Humm male contraceptive methods, I think don’t know much. My knowledge is limited to condom and castration; it’s only what I know... Is there any other apart from these two? I don’t know.” (IDI 4, 40 years)*

#### **4.2.3. Knowledge of natural contraceptives**

Some of the participants have mentioned natural contraceptives. They expressed their knowledge as follow:

*“I tried to know the menstrual cycle of my wife. Together, we avoid sex at the time of danger (ovulation). Sometimes I use pull-out method. When ejaculation moment arrives, I remove my penis from her vagina and ejaculate outside. (FGD 2, Participant 3; 40 years)*

#### **4.2.4. The attitude of men toward men who use contraceptives**

##### **4.2.4.1. Positive attitudes toward contraceptives**

Many participants shared a positive attitude towards contraceptives due in general to their benefit in preventing unwanted pregnancies and sexually transmitted diseases. A 34 years old participant said:

*“If your bae does not use any method of contraception and you do not use any method, you will face accidental pregnancy” (IDI 1, 34 years)*

Other participants added in these words:

*“It is best not to have many children with this very difficult economic condition. That’s why I started using condoms after my wife had her fourth pregnancy contracted. Honestly, this fourth child had come too early after the third, we didn’t expect that.” (FGD 2, Participant 2; 37 years)*

*“...Mostly, if the children are already 4 or 5 years old, the family burden is heavy; and worse, when one person is the only source of income for the family. So, I started using*

*condom to prevent my wife from becoming pregnant after our second child.” (IDI 1, 34 years)*

#### **4.2.4.2. Negative attitudes toward contraceptives**

Some participants' reactions toward contraceptive use were negative. It was clear that a lot of importance was given to their manhood by some participants. Their reluctance is based on what they have learned or experienced about the use of contraceptive methods.

*“My main fear is about castration; I cannot, never accept that... I do not wish it but if my kids die in the prime of their lives for instance, what will I do? Who will take care of me?”*

**(FGD2, Participant)**

#### **4.2.5. Perception**

##### **4.2.5.1. Personal perception about contraceptives**

Many men held the view that contraceptive use helped them to plan and space children and improve the economic state of their family. These men emphasized that they know what happens when there are many children in the family, since they are the heads of their families. Especially when the children start school, the expenses the family needs become rude. A participant expressed his view in the in-depth interview:

*“I think the use of contraceptives, particularly condoms, is a good thing. Those who are using condoms are the ones who are doing well. The advantage of using contraceptives is that you're not going to pregnant accidentally; you will decide the best moment to have a child.” (IDI 3, 26 years)*

Participants have also underlined others importance of using condoms. They mentioned the use of condoms for self-protection against sexually transmitted infections. According to a participant,

*“... First, it will help you space and control births. But also protect you against HIV or STIs.” (FGD 2, Participant 1, 30 years)*

Some even stated that it is not just for women to use contraceptive methods.

*“Men who use contraceptive methods I think it's a very normal thing because you cannot just force women to use contraceptive methods. Men and women can use contraceptive methods; that's what I see. Many advantages are in the contraceptive use...” (IDI 4, 40 years)*

*“I think that men, who use contraceptive method, do so to space or limit births and I see this as a good thing.” (IDI 1, 34 years)*

#### **4.2.5.2. Community perception about contraceptives**

Some of the participants think the community believes that contraceptives are important. This is because some of their neighbors encourage them to use contraceptives.

A focus group discussion participant told us how his friend is impressed about his use of contraceptive.

*“A friend of mine use to compliment us (wife and husband) about how my madam (wife) looks good even after she gives birth. I use to tell him that our secret is to know how to plan birth in the family... using condom.” (FGD 2, Participant 2, 35 years)*

On the other hand, other participants do not think the community is not flexible about contraceptives. A participant said:

*“The community members see you like a bandit, a womanizer if you seek to borrow or paid condom for use.” (FGD 1, Participant 1, 24 years)*

Another participant mentioned that:

*“The fact is that we use to take the condoms at the hospital. And if you go there to take it, people consider you as a paddler. And, because of the frequency with which*

*we go there the agent ask me one day if I am collecting the condoms to fornicate of I am reselling them?” (FGD 2, Participant 1, 30 years)*

#### **4.2.6. Contraceptive use and non-use**

##### **4.2.6.1. Reasons for using contraceptives**

Many participants in the in-depth interviews indicated that contraceptive methods are useful to avoid unwanted pregnancy. Others talked about the well-being of their wife and children as follows:

*“I use condom to avoid unwanted pregnancies. I also use it so that after birth, my wife can rest and recover... she must be healthy to take care of the baby.” (IDI 8, 45 years)*

*“Family planning is use to limited number of children. ...It is good to give birth to the number of children whose needs can be met. To be honest, I rarely use condoms; but my wife helps me telling me when I shouldn't approach her.” (IDI 1, 34 years)*

Another reason for using condoms have been said during the focus group discussions:

*“...Thus, you can use it (condom) to slow down ejaculation if you suffer from precious ejaculation.” (FGD1, Participant 2, 20 years)*

##### **4.2.6.2. Reasons for not using contraceptives**

Some of the participants do not use contraceptives because of geographical and financial access. Where they live, is very far from the sources of supply. Also, they find that the price of condoms is too high for them.

*“I live at... Not easy going to town for condom. I must walk like 4 to 5 km before you can find one condom. This makes us lazy sometimes.” (IDI 3, 26 years)*

*“... The pharmacy one is good quality but access is especially difficult... It's also too expensive there.” (IDI 4, 40 years)*

Because some of them do not have any partner, they do not use any method.

*“Oh! No! I don't use ooh! I am not yet old...” (IDI 6, 18 years)*

Some have shown that they are ashamed to point out to the suppliers or sellers of condoms.

They expressed themselves in these terms:

*“Me, how to go to the pharmacy and say I want to pay condom, I'm ashamed.” (IDI 3, 26 years)*

Others are ashamed because of the reaction of their sexual partners.

*“... Even with my wife at home, when I want to use a condom, she says it is like I did something outside, that's why I want to use it. And, outside, my girlfriend said I do not trust her that is why I want to protect myself. (FGD 2, Participant 2, 35 years)*

A minority raised the point that if they do not use contraceptive methods it is because they are not aware that there is such a thing.

*“Hum, vasectomy, ... never hear about”. (IDI 5, 52 years)*

#### **4.2.7. Availability and accessibility of the contraceptives**

##### **4.2.7.1. Source of supply**

The findings from the study showed pharmacy shops, clinics, friends and health workers to be the main sources of contraceptives for the community members. These are the responses of the participants when asked about the source of supply.

*“What is available as a method in our area is only condom. If you are looking for, you can go to the pharmacy you will be served... You can even call one of your friends and ask him condom he will give you.” (FGD 2, Participant 2, 35 years)*

*“Condom is available; when you look for it you will find it. There are people who distribute it in the street, school and market.” (IDI 8, 45 years)*

#### **4.2.7.2. Barriers to access**

Factors that influence the access to contraceptives are mostly the lack of finance, distances to healthcare facilities and attitude of healthcare providers. Participants stated:

*“...I think it's the distance, not the financial aspect since financially there are some NGOs that help. Since we are in remote areas, people are not interested in providing us condoms, that's it. That's the problem. Sometimes, you will straggle and go there, they will tell you that condoms are finished.” (IDI 4, 40 years)*

*“Those are the condoms that are available for us, especially in the shops. But to get there you must waste a lot of time on the road. That is why some people do not even bother themselves even though they are in need. We are also aware that some health workers are distributing it, but since we are in an isolated area, we find it difficult to benefit from these free distributions.” (IDI 1, 34 years)*

#### **4.2.8. Discussion with partner**

##### **4.2.8.1. Acceptability of contraceptives by the partners**

Some participant said that there is always dialogue with their wives when the time comes to have sex. Most of them reported having a frank and cordial discussion about contraceptive methods. According to some of them, men use condoms when their wives refuse to use a contraceptive method. However, if they respect the agreement after the discussion, everything goes well otherwise they fight.

*“I discuss with my wife; I asked her first how many children she thinks we should have. I then suggest if she uses a contraceptive method like pill or injectable to space*

*the births, it will not be good? If she agrees, then we adopt one.” (FGD2, Participant 1, 30 years)*

## CHAPTER FIVE

### 5.0. DISCUSSION

#### 5.1. Individual-level factors influencing male contraceptive use

The study involved 49.8% of urban and 50.1% rural men. The study sampled participants in both urban and rural settings to determine which methods of contraception are mostly used. This choice also seeks to compare the prevalence of contraceptive in the two areas. Many studies (Afriyie & Tarkang, 2019; Beson et al., 2018; Damian, George, Martin, Temba, & Msuya, 2018) have targeted women in the assessment of factors influencing their contraceptive use. Even though men have not been involved too much in family planning issues, our study demonstrated that men in the study areas were not novices about male contraceptives.

#### 5.2. Knowledge and use of male contraceptives

Male knowledge of contraceptive methods is a determinant in his decision and choice in contraceptive use (Sternberg & Hubley, 2004; Thummalachetty et al., 2017). In this research, it was found that contraceptive use by men significantly rhymed with their level of contraceptive knowledge. Condoms was the most known male methods of contraception. Consequently participants were less familiar with vasectomy, as found in the study of Thummalachetty et al. (2017). The explanation for this finding may be the lack of information and inadequate promotion of male contraceptives (Dominick et al., 2016; Arwen et al., 2007). Condom use among men was 66.2% in this present study, while 54.8% of users were found among anal sex men in a study conducted in the urban area of Lomé and Kara in Togo (Ruiseñor-Escudero et al., 2019). These results can be associated to the role of health facilities who provides about 23% of contraceptives use. Even though this result associated to

health facilities looks encouraging, it shows any change compare to the results from the demographic and health survey in 2014 (MPDAT et al., 2015).

The study found that men mostly discuss contraception issues with healthcare providers. Men also had reported that they discuss issues around contraceptive use with their sexual partner. The percentage who do not discuss at all is more than half. This can be explained by the fact that men, in general, don't perceive contraception as their issue (Mandiwa et al., 2018; Koffi et al., 2018; Allen et al., 2014).

Vasectomy, a method of male contraception, was only known by 14.1% of the men interviewed. Furthermore among men surveyed, none of them had used this method . Practiced for medical purposes at the end of the 19th century, vasectomy has been legalized in Togo as a contraceptive method since 2012 and is offered at the main clinic of ATBEF. It is associated with negative perceptions of castration, and there is inadequate information available about this method (M'bortche et al., 2015, Khalifa, et al 1982) . However, while the condom is often perceived as constraining and uncomfortable, the vasectomy has shown its positive impact on the sexual satisfaction of couples.

The results show that vasectomy was the least known among male methods. Participants who had heard about the method had misconceptions, as they associated the method with castration as has been observed in other studies (Khalifa, et al 1982, M'bortche et al., 2015). The fact that vasectomy is not widely practiced in Africa may explain this difference. This low compliance reflects the low male involvement in birth control and creates many myths among men. Therefore, the promotion of vasectomy is required so that men can widely use it (Owusu-Asubonteng G et al, 2012, Khalifa, et al 1982, M'bortche et al., 2015).

### **5.3. Attitude toward contraception**

Attitude covers several meanings according to the disciplinary field. However, social psychology to whom we own the origins of attitude, has made it his privileged field. Introduced for the first time by two sociologists in 1918 through their study of how polish peasants were integrated in the United States or Europe, Thomas and Znaniecki define the notion of attitude as a state of mind that determines an individual to formulate an opinion, to act in a certain way with regard to a social object. Attitude is essential to the use and the no-use of contraceptives. The provision of accurate and complete information promotes the active involvement of men as partners, advocates and users of contraceptives. In this study, only 13.2 % disagreed with the statement that contraception is also useful for men.

Our results show 87.7% of the participants at Lomé and Tabligbo disagree with the assertion that contraception is only an issue for women. The high acceptance by men to use contraceptives to avoid pregnancy and STIs show that men are interested by contraceptive use. Qualitative information obtained from interviews with participants show that birth spacing is accompanied by good health for the mother and the child. Other arguments in contraceptive use rely on the well-being of the family. Furthermore, this group of men were aware that high fertility leads to the impoverishment of households and finds the motivation to allow their women and themselves to use contraceptives. A similar result was shown in other studies (Macquarrie, 2015; Andre, 2017).

The evidence is that increasingly, in our societies, individualism is taking over communities, the spirit of sharing that strengthened social bonds has lost much of its intensity. The practice where families housed their brother's child have considerably eroded. This can be explained by the fact that men in this study are knowledgeable on the importance of using contraceptives. However, misinformation and negative attitudes or beliefs, such as thinking that using contraceptives reduces men's "manhood" or causes infertility, can create barriers to

access and use contraceptives. These beliefs may reduce the use of condoms or vasectomy in men, as well as their support for other contraceptives.

#### **5.4. Intention to use contraceptive**

Men cohabiting were more likely to use condoms compared to married men. A similar result was found by other articles (Calverton, 1994; Fabian, 2001; Justin & Ilene, 2007). This may be related to the perception of fidelity in a couple. Many married men cannot use contraceptives, especially condoms because they want their wives to trust them. As stated by Gallen et al, 1996, our study highlighted that men were aware of the double role that the condom plays (prevent pregnancy and STIs).

Considering the place of residence, men living in the urban setting were likely to use contraceptives compared to those living in the rural area. The same disparity was observed at the regional level. This positive condition may be related to the easy access to information and methods, occupation, discussion with sexual partner and interaction with FP providers.

We found that marital status, number of sexual partners, sexual partner's level of knowledge, ever attended family planning clinic, ever discuss with the partner are factors associated with male contraceptive use in Togo (Mandiwa et al, 2018; Hossain et al, 2018).

#### **5.5. Male contraceptive use**

Both quantitative and qualitative evidence confirmed that the need to prevent unwanted pregnancy and STIs, as well as to plan births were mostly reasons why men are using contraceptives as found in the USA by (Macquarrie, 2015).

However, while the condom is often perceived as constraining and uncomfortable, the vasectomy has shown its positive impact on the sexual satisfaction of couples.

Wanting more children was not found to be a reason for not using contraceptives as found by (Fabian, 2001) but their main reasons were the high cost of the methods and the distance

from home to facilities. The qualitative findings revealed that men do not use contraceptives because of the limited choice of methods. Condom is the only contraceptive used by both married and unmarried men. However, it was shown that married men sometimes find it difficult to use condoms because of the fidelity they want to prove to their sexual partners although they are in the need (Fabian, 2001).

### **5.6. Strengths**

This study focused on a population little explored so far. Most contraceptive studies done are directed toward women. The use of a self-questionnaire eliminated the influence of a third party when filling out the form. The use of a mix-methods approach served as axes of reflection for our work.

### **5.7. Limitation**

The intimate nature of the research topic may partly explain the spontaneous participation of men in completing questionnaires. It may be that the men who answered the questionnaires are certainly the ones who feel most concerned about contraception. There is, therefore, an important selection bias in our sample.

The use of the self-questionnaire could induce a response bias related to the misunderstanding of certain questions.

## CHAPTER SIX

### 6.0. CONCLUSION AND RECOMMENDATIONS

This chapter is based on the findings of this study and makes specific suggestions for further research and recommendations for relevant stakeholders and actors.

#### 6.1. Conclusion

The findings of this study show that age, marital status, employment status, and the perception that contraceptive is useful for men influence contraceptive use among males in Togo. Both young and adult men, married and unmarried, have approximately the same level of contraceptive use. Men, commonly use condoms as a form of contraception and they consider it as the only birth control they can use without many complications since their choice is limited to condom and vasectomy. Some of them have never used a condom before because of perceived side effects such as suffocation and delayed ejaculation. Also, geographic and financial accessibility prevent them from using contraceptives. Even though most of the men are knowledgeable about contraceptives, the rate of use is still low. Other problems faced by men who use contraceptives are shame, social constraint, and stigmatization. Their main goal of using contraceptive methods was to prevent unwanted pregnancies and sexually transmitted infections.

#### 6.2. Recommendations

Based on findings of this study, the following recommendations are made for the actors involved in the promotion of contraception. They are presented in the form of strategic axes and priority actions.

➤ **To the policy makers**

- Develop a partnership with all NGOs and other private stakeholders in the domain of family planning to organize and coordinate awareness campaigns;

- Advocate with the political and administrative authorities, customary and religious leaders, men, women and young people, and teens to develop a communication plan in FP considering the values of the communities;
- Supply FP centers with technical equipment and FP communication materials
- **Healthcare providers:**
  - Create and train FP community relays within men's groups to strengthen communication on contraception through mass family planning sensitization campaigns targeting key sectors of the population where uptake in modern contraceptive is low.
  - Interaction with client through mass media can facilitate the dissemination of information and potentially increase knowledge and uptake of modern contraceptives.
- **To the political authorities:**
  - Formulate a policy that considers the determinants of using family planning services;
  - Use appropriate strategies to improve the use of contraceptives at the community level;
  - Ensure the availability and accessibility of contraceptives by promoting condoms;
- **Researchers**
  - Improve and promote new hormonal methods for men.

## REFERENCES

- Aber, J. L., Bennett, N. G., Conley, D. C., & Li, J. (1997). The Effects of Poverty on Child Health and Development. *Annual Review of Public Health, 18*(1), 463–483. <https://doi.org/10.1146/annurev.publhealth.18.1.463>
- Afeli, A., Takassi, I., Bolouvi, L. P., Ansre, G., Ahadji, A. Y., & Igue, M. A. (2017). *Politique et Aménagement Linguistiques au Togo: Bilan et Perspectives*. <https://doi.org/10.13140/RG.2.2.30761.08803>
- Afriyie, P., & Tarkang, E. E. (2019). Factors influencing use of modern contraception among married women in Ho West district, Ghana: descriptive cross-sectional study. *Pan African Medical Journal, 33*, 1–11. <https://doi.org/10.11604/pamj.2019.33.15.17500>
- Ahmed, S., Choi, Y., Rimon, J. G., Alzouma, S., Gichangi, P., Guiella, G., ... Tsui, A. (2019). Trends in contraceptive prevalence rates in sub-Saharan Africa since the 2012 London Summit on Family Planning: results from repeated cross-sectional surveys. *The Lancet Global Health, 7*(7), e904–e911. [https://doi.org/10.1016/S2214-109X\(19\)30200-1](https://doi.org/10.1016/S2214-109X(19)30200-1)
- Anipah, K., Mboup, G., Ouro-Gnao, A. M., Boukpassi, B., Messan, P. A., & Salami-Odjo, R. (1998). *Enquete Demographique et de Sante, 1998*.
- Asare, O., Otupiri, E., Apenkwa, J., & Odotei-Adjei, R. (2017). Perspectives of urban Ghanaian women on vasectomy. *Reproductive Health, 14*(1), 1–6. <https://doi.org/10.1186/s12978-017-0286-5>
- Atake, E. H., & Gnakou Ali, P. (2019). Women’s empowerment and fertility preferences in high fertility countries in Sub-Saharan Africa. *BMC Women’s Health, 19*(1), 1–14. <https://doi.org/10.1186/s12905-019-0747-9>
- ATBEF. (2015). Pratique de la vasectomie sans bistouri au togo : l’experience de la clinique principale de l’ Association Togolaise pour le Bien- Etre Familial (ATBEF). Retrieved October 18, 2019, from <https://atbegtogo.org/atbef/page/qui-sommes-nous--1.html>
- Belker, A. M., Thomas, A. J., Fuchs, E. F., Konnak, J. W., & Sharlip, I. D. (1991). Results of 1,469 microsurgical vasectomy reversals by the vasovasostomy study group. *Journal of Urology, 145*(3), 505–511. [https://doi.org/10.1016/S0022-5347\(17\)38381-7](https://doi.org/10.1016/S0022-5347(17)38381-7)
- Beson, P., Appiah, R., & Adomah-Afari, A. (2018). Modern contraceptive use among reproductive-aged women in Ghana: Prevalence, predictors, and policy implications. *BMC Women’s Health, 18*(1), 1–8. <https://doi.org/10.1186/s12905-018-0649-2>
- Bloom, D. E., & Luca, D. L. (2016). *Program on the global demography of aging at Harvard University. Working Paper Series. The Global Demography of Aging: Facts, Explanations, Future*.
- Bongaarts, J. (2009). Human population growth and the demographic transition.

*Philosophical Transactions of the Royal Society of London. Series B, Biological Sciences*, 364(1532), 2985–2990. <https://doi.org/10.1098/rstb.2009.0137>

Burkhart, M. C., De Mazariegos, L., Salazar, S., & Lamprecht, V. M. (2000). Effectiveness of a Standard-Rule Method of Calendar Rhythm among Mayan Couples in Guatemala. *International Family Planning Perspectives*, 26(2), 131–136. <https://doi.org/10.2307/2648302>

Cahill, N., Sonneveldt, E., Stover, J., Weinberger, M., Williamson, J., Wei, C., ... Alkema, L. (2018). Modern contraceptive use, unmet need, and demand satisfied among women of reproductive age who are married or in a union in the focus countries of the Family Planning 2020 initiative: a systematic analysis using the Family Planning Estimation Tool. *The Lancet*, 391(10123), 870–882. [https://doi.org/10.1016/S0140-6736\(17\)33104-5](https://doi.org/10.1016/S0140-6736(17)33104-5)

Chankapa, Y. D., Pal, R., & Tsering, D. (2010). Male behavior toward reproductive responsibilities in sikkim. *Indian Journal of Community Medicine : Official Publication of Indian Association of Preventive & Social Medicine*, 35(1), 40–45. <https://doi.org/10.4103/0970-0218.62552>

CIA World Factbook. (2017). Togo Taux de mortalité maternelle - Population. Retrieved October 18, 2019, from [https://www.indexmundi.com/fr/togo/taux\\_de\\_mortalite\\_maternelle.html](https://www.indexmundi.com/fr/togo/taux_de_mortalite_maternelle.html)

Cleland, J. G., Ndugwa, R. P., & Zulu, E. M. (2011). Planning familial en Afrique subsaharienne: Progrès ou stagnation? *Bulletin of the World Health Organization*, 89(2), 137–143. <https://doi.org/10.2471/BLT.10.077925>

Damian, D. J., George, J. M., Martin, E., Temba, B., & Msuya, S. E. (2018). *Prevalence and factors influencing modern contraceptive use among HIV-positive women in Kilimanjaro region , northern Tanzania*. 1–9.

Deans, S. J., Dougherty, A., Kayongo, A., Mundaka, J., Heil, S., & Kalyesubula, R. (2018). Knowledge, Attitudes, and Use of Family Planning in Rural Uganda. *Obstetrics & Gynecology*, 131(2018), 88S. <https://doi.org/10.1097/01.aog.0000533395.36893.56>

EQUIPOP. (2014). *Santé et droits sexuels et de la procréation des adolescentes au Bénin*. Retrieved from <http://equipop.org/publications/rapport-ados-togo-UNFPA.pdf>

Frankiewicz, M., Połom, W., & Matuszewski, M. (2018). Can the evolution of male contraception lead to a revolution? Review of the current state of knowledge. *Central European Journal of Urology*, 71(1), 108–113. <https://doi.org/10.5173/cej.2017.1450>

Glasier, A., Gülmezoglu, M., Schmid, G. P., Moreno, C. G., & Look, P. F. Van. (2006). *Sexual and reproductive health: a matter of life and death. The Lancet Sexual and Reproductive Health Series*.

Guillaume, A., & Rossier, C. (2018). Abortion around the world an overview of legislation, measures, trends, and consequences. In *Population* (Vol. 73).

<https://doi.org/10.3917/pope.1802.0217>

- Haddad, L. B., Tang, J. H., Krashin, J., Ng'Ambi, W., Tweya, H., Samala, B., ... Phiri, S. (2018). Factors associated with condom use among men and women living with HIV in Lilongwe, Malawi: A cross-sectional study. *BMJ Sexual and Reproductive Health*, 44(1), 42–53. <https://doi.org/10.1136/bmjsex-2017-101825>
- Hatcher, R. ., Stewart, F., Trussell, J., Kowal, D., Guest, F., Stewart, G. ., & Cates, W. (1990). *Contraceptive technology 1990-1992 15th rev. edition*. Retrieved from <https://www.popline.org/node/371903>
- Hausser, D. (1993). Le Probleme Du Sida Au Burundi Et La Prevention Aupres Des Jeunes. *Sozial- Und Praventivmedizin*, 38(6), 398–400. <https://doi.org/10.1007/BF01359193>
- Hernandez, J., & Sabanegh, E. S. (1999). Repeat vasectomy reversal after initial failure: Overall results and predictors for success. *Journal of Urology*, 161(4), 1153–1156. [https://doi.org/10.1016/S0022-5347\(01\)61616-1](https://doi.org/10.1016/S0022-5347(01)61616-1)
- Hossain, M., Khan, M., Ababneh, F., & Shaw, J. (2018). Identifying factors influencing contraceptive use in Bangladesh: Evidence from BDHS 2014 data. *BMC Public Health*, 18(1), 1–14. <https://doi.org/10.1186/s12889-018-5098-1>
- Jacobstein, R. (2015). The kindest cut: Global need to increase vasectomy availability. *The Lancet Global Health*, 3(12), e733–e734. [https://doi.org/10.1016/S2214-109X\(15\)00168-0](https://doi.org/10.1016/S2214-109X(15)00168-0)
- Jamieson, D. J., Costello, C., Trussell, J., Hillis, S. D., Marchbanks, P. A., & Peterson, H. B. (2004). The risk of pregnancy after vasectomy. *Obstetrics and Gynecology*, 103(5 I), 848–850. <https://doi.org/10.1097/01.AOG.0000123246.11511.e4>
- Kabagenyi, A., Jennings, L., Reid, A., Nalwadda, G., Ntozi, J., & Atuyambe, L. (2014). Barriers to male involvement in contraceptive uptake and reproductive health services: A qualitative study of men and women's perceptions in two rural districts in Uganda. *Reproductive Health*, 11(1), 1–9. <https://doi.org/10.1186/1742-4755-11-21>
- Killick, S. R., Leary, C., Trussell, J., & Guthrie, K. A. (2011). Sperm content of pre-ejaculatory fluid. *Human Fertility*, 14(1), 48–52. <https://doi.org/10.3109/14647273.2010.520798>
- Koffi, T. B., Weidert, K., Ouro Bitasse, E., Mensah, M. A. E., Emina, J., Mensah, S., ... Prata, N. (2018). Engaging Men in Family Planning: Perspectives From Married Men in Lomé, Togo. *Global Health: Science and Practice*, 6(2), 316–327. <https://doi.org/10.9745/GHSP-D-17-00471>
- Long, J. E., Lee, M. S., & Blithe, D. L. (2019). Male contraceptive development: Update on novel hormonal and nonhormonal methods. *Clinical Chemistry*, 65(1), 153–160. <https://doi.org/10.1373/clinchem.2018.295089>
- Macquarrie, K. L. D. (2015). *Men and Contraception: Trends in Attitudes and Use DHS*

ANALYTICAL. (September).

- Mandiwa, C., Namondwe, B., Makwinja, A., & Zamawe, C. (2018). Factors associated with contraceptive use among young women in Malawi: analysis of the 2015–16 Malawi demographic and health survey data. *Contraception and Reproductive Medicine*, 3(1), 1–8. <https://doi.org/10.1186/s40834-018-0065-x>
- Mansour, D., Inki, P., & Gemzell-Danielsson, K. (2010). Efficacy of contraceptive methods: A review of the literature. *European Journal of Contraception and Reproductive Health Care*, 15(1), 4–16. <https://doi.org/10.3109/13625180903427675>
- Marston, C. A., & Church, K. (2016). Does the evidence support global promotion of the calendar-based Standard Days Method® of contraception? *Contraception*, 93(6), 492–497. <https://doi.org/10.1016/j.contraception.2016.01.006>
- MPDAT, MS, & ICF International. (2015). *Enquête Démographique et de Santé au Togo 2013-2014*. Rockville, Maryland, USA.
- Mustafa, G., Azmat, S. K., Hameed, W., Ali, S., Ishaque, M., Hussain, W., ... Munroe, E. (2015). Family Planning Knowledge, Attitude and Practices Among Married Men and Women in Rural Areas of Pakistan. *Internatoinal Journal of Reproductive Medicine*, 2015, 8. <https://doi.org/10.1155/2015/190520>
- Nair, G. R., Wadke, R., Relwani, N., Mahadik, V., & Anjenaya, S. (2017). Knowledge and attitude of married men towards vasectomy in an urban slum of Navi Mumbai. *International Journal Of Community Medicine And Public Health*, 4(12), 4563. <https://doi.org/10.18203/2394-6040.ijcmph20175331>
- Ndenzako, F. (2001). *Male Contraceptive Prevalence and Factors Associated With Contraceptive Use Among Men in Ngara, Tanzania*. (May). Retrieved from <https://www.duo.uio.no/handle/123456789/30089>
- Ntambue, A. M., Tshiala, R. N., Malonga, F. K., Ilunga, T. M., Kamonayi, J. M., Kazadi, S. T., ... Donnen, P. (2017). Utilisation des méthodes contraceptives modernes en République Démocratique du Congo: Prévalence et barrières dans la zone de santé de Dibindi à Mbuji-Mayi. *Pan African Medical Journal*, 26, 1–8. <https://doi.org/10.11604/pamj.2017.26.199.10897>
- Ochako, R., Temmerman, M., Mbondo, M., & Askew, I. (2017). Determinants of modern contraceptive use among sexually active men in Kenya. *Reproductive Health*, 14(1), 1–15. <https://doi.org/10.1186/s12978-017-0316-3>
- Ohn Mar, S., Ali, O., Sandheep, S., Husayni, Z., & Zuhri, M. (2019). Attitudes towards vasectomy and its acceptance as a method of contraception among clinical-year medical students in a malaysian private medical college. *Singapore Medical Journal*, 60(2), 97–103. <https://doi.org/10.11622/smedj.2018065>
- Oyediran, K. A., Ishola, G. P., & Feyisetan, B. J. (2002). Factors affecting ever-married men's contraceptive knowledge and use in Nigeria. *Journal of Biosocial Science*, 34(4),

497–510. <https://doi.org/10.1017/S0021932002004972>

- Page, S. T., Amory, J. K., & Bremner, W. J. (2008). Advances in male contraception. *Endocrine Reviews*, 29(4), 465–493. <https://doi.org/10.1210/er.2007-0041>
- Pekele, M., Adzodo, M., & Kouassi, K. (2004). *Profil de Système de Santé de Pays TOGO, 2004*. Retrieved from [https://www.who.int/countries/tgo/resources/MoHTogo\\_profil\\_sante.pdf](https://www.who.int/countries/tgo/resources/MoHTogo_profil_sante.pdf)
- Pretorius, L., Gibbs, A., Crankshaw, T., & Willan, S. (2015). Interventions targeting sexual and reproductive health and rights outcomes of young people living with HIV: a comprehensive review of current interventions from sub-Saharan Africa. *Global Health Action*, 8, 28454. <https://doi.org/10.3402/GHA.V8.28454>
- Ringheim, K. (2013). *Prevalence Determine that Factors Men for Methods Use of Contraceptive*. 24(2), 87–99.
- Rogow, D., & Horowitz, S. (2006). Withdrawal: A Review of the Literature and an Agenda for Research. *Studies in Family Planning*, 26(3), 140. <https://doi.org/10.2307/2137833>
- Ross, J., & Hardee, K. (2013). Access to contraceptive methods and prevalence of use. *Journal of Biosocial Science*, 45(6), 761–778. <https://doi.org/10.1017/S0021932012000715>
- Ruiseñor-Escudero, H., Lyons, C., Ketende, S., Pitche, V., Anato, S., Tcshalla, J., ... Baral, S. D. (2019). Consistent Condom Use Among Men Who Have Sex With Men in Lomé and Kara, Togo. *AIDS Research and Human Retroviruses*, 1–32. <https://doi.org/10.1089/aid.2018.0212>
- Santow, G. (2006). Coitus Interruptus in the Twentieth Century. *Population and Development Review*, 19(4), 767. <https://doi.org/10.2307/2938413>
- Schoonenboom, J., & Johnson, R. B. (2017). Wie man ein Mixed Methods-Forschungs-Design konstruiert. *Kolner Zeitschrift Fur Soziologie Und Sozialpsychologie*, 69, 107–131. <https://doi.org/10.1007/s11577-017-0454-1>
- Schuler, S. R., Rottach, E., & Mukiri, P. (2011). Gender norms and family planning decision-making in Tanzania: A qualitative study. *Journal of Public Health in Africa*, 2(2), 102–107. <https://doi.org/10.4081/jphia.2011.e25>
- Shattuck, D., Perry, B., Packer, C., & Quee, D. C. (2016). A review of 10 years of vasectomy programming and research in low-resource settings. *Global Health Science and Practice*, 4(4), 647–660. <https://doi.org/10.9745/GHSP-D-16-00235>
- Starbird, E., Norton, M., & Marcus, R. (n.d.). *Investing in Family Planning: Key to Achieving the Sustainable Development Goals*.
- Sternberg, P., & Hubley, J. (2004). Evaluating men's involvement as a strategy in sexual and reproductive health promotion. *Health Promotion International*, 19(3), 389–396.

<https://doi.org/10.1093/heapro/dah312>

- Thummalachetty, N., Mathur, S., Mullinax, M., Decosta, K., Nakyanjo, N., Lutalo, T., ... Santelli, J. S. (2017). Contraceptive knowledge, perceptions, and concerns among men in Uganda. *BMC Public Health*, *17*(1), 1–9. <https://doi.org/10.1186/s12889-017-4815-5>
- Trussell, J., & Grummer-Strawn, L. (1990). Contraceptive failure of the ovulation method of periodic abstinence. *International Family Planning Perspectives*, *16*(1), 5-15+28. <https://doi.org/10.2307/2135511>
- Turner, A. (2009). Population priorities: The challenge of continued rapid population growth. *Philosophical Transactions of the Royal Society B: Biological Sciences*, *364*(1532), 2977–2984. <https://doi.org/10.1098/rstb.2009.0183>
- UNFPA. (2014). Reproductive Rights are Human Rights. A Handbook. In *Human Rights Institutions*. Retrieved from <http://www.ohchr.org/Documents/Publications/NHRIHandbook.pdf>
- Wang, W., & Mallick, L. (2019). Understanding the relationship between family planning method choices and modern contraceptive use: an analysis of geographically linked population and health facilities data in Haiti. *BMJ Global Health*, *4*(Suppl 5), e000765. <https://doi.org/10.1136/bmjgh-2018-000765>
- Wespes, E. (2014). Vasectomy in male contraception and its reversal. *European Urology, Supplements*, *13*(4), 68–72. <https://doi.org/10.1016/j.eursup.2014.07.003>
- Woods, J. L., Hensel, D. J., & Fortenberry, J. D. (2009). Contraceptive Withdrawal in Adolescents: A Complex Picture of Usage. *Journal of Pediatric and Adolescent Gynecology*, *22*(4), 233–237. <https://doi.org/10.1016/j.jpag.2008.11.001>
- Xu, S. F., Wu, J. Q., Li, Y. Y., Yu, C. N., Zhao, R., Zhou, Y., ... Jin, M. H. (2018). Association between factors related to family planning/sexual and reproductive health and contraceptive use as well as consistent condom use among internal migrant population of reproductive ages in three cities in China, based on Heckprobit selection mod. *BMJ Open*, *8*(11). <https://doi.org/10.1136/bmjopen-2017-020351>
- Yakubu, I., & Salisu, W. J. (2018). Determinants of adolescent pregnancy in sub-Saharan Africa: a systematic review. *Reproductive Health*, *15*(1), 15. <https://doi.org/10.1186/s12978-018-0460-4>
- Zukerman, Z., Weiss, D. B., & Orvieto, R. (2003). Does preejaculatory penile secretion originating from Cowper's gland contain sperm? *Journal of Assisted Reproduction and Genetics*, *20*(4), 157–159. <https://doi.org/10.1023/A:1022933320700>

## APPENDICES

### Appendix 1: Inform consent form

Title: Factors influencing modern contraceptive use among men in Maritime Region of Togo

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#### General information about the research

This is a comprehensive study on the use of male contraceptives. The objective of this study is to access factors related to men contraceptive -use in your community. Collecting data for this research will lead us to better understand the real issues that will help address current and future family planning needs of men in Togo. For this, you are invited to participate in this study to provide us with reliable information. Your identification will be strictly anonymous. Any answers provided during the study will remain confidential, and your participation is voluntary.

You have the right to stop at any time if you wish.

If you agree, please continue.

Thank you!

### Appendix 2: List of contraceptive methods used by men in Togo

| Methods                        | Description  | How it works  | Effectiveness                    | Observation  |
|--------------------------------|--|---|----------------------------------|--|
| Modern methods                 |  |   |                                  |  |
| Male condoms                   | Hood or sheath designed to cover the man's erect penis | It forms an obstacle that prevents sperm from entering the vagina | 98% with correct and regular use | It also protects against sexually transmitted infections, including HIV. |
| Male sterilization (vasectomy) | Permanent contraception that closes or closes the      | Prevents sperm from mixing with                                   | 97-98% without sperm examination | 3 months of waiting before it is effective, that is to                   |

|                                  |  |   |  |   |
|----------------------------------|--|---|--|---|
|                                  | vas deferens that carry sperm from the testicles to the penis  | the semen that will be ejaculated   |  | say as long as the sperm continues to contain spermatozoa; it does not affect male sexual performance; it is essential that the choice of this method is voluntary and made in full knowledge of the facts                            |
| Traditional methods              |  |   |  |   |
| Calendar method or rhythm method | The man follows the evolution of the menstrual cycle of his wife over six months, subtracts 18 from the duration of its shortest cycle (estimate of the first fertile day) and subtracts 11 from the duration of its longest cycle (estimate of last fertile day). | The couple prevents pregnancy by avoiding unprotected sex with vaginal penetration between the first and last of the estimated fertile days, by abstinence or using a condom. | 91% efficiency when used correctly and regularly. 75% in current practice  | This method may require adaptations or should be used with caution when consuming medications (eg anxiolytics, antidepressants, nonsteroidal anti-inflammatory drugs or certain antibiotics) that may affect the timing of ovulation. |
| Withdrawal (coitus interruptus)  | The man removes his penis from his partner's vagina and ejaculates outside the vagina, preventing the sperm from meeting the woman's external genitalia.   | Prevents sperm from entering the woman's body and thus fertilization.   | 96% with correct and regular use, 73% in current practice (Trussell, 2009) | This is one of the least effective methods because it is often difficult to determine the right moment for withdrawal, which leads to a risk of ejaculation inside the vagina   |

**Appendix 1: Questionnaire**

| N*   | Questions and filters    | Modality   | Move to |
|--|--------------------------|--|---------|
|  | <b>Residential area:</b> |  |         |
| <b>SECTION I: Socio-demographic variables of respondents</b> |                          |  |         |
| Q 101  | Sex                      | M.....1  |         |
| Q 102  | Age group                | 15-24.....1<br>25-64.....2<br>35-44.....3<br>45-54.....4   |         |
| Q 103  | Ethnic                   | Fon.....1<br>Temberman.....2<br>Moba.....3<br>Ewe.....4<br>Mossi.....5<br>Tchokossi.....6<br>Kabye.....7<br>Watchi.....8<br>Other(specify).....9 |         |
| Q 104  | Religion                 | Traditional.....1<br>Christian.....2<br>Islam.....3<br>None.....4<br>Other (specify).....5   |         |
| Q 105  | Education level          | No education.....1   |         |

|       |   |   |  |
|-------|---|---|--|
|       |   | Primary.....2<br>JHS.....3<br>SHS.....4<br>University.....5                             |  |
| Q 106 | Marital status                              | Single .....1<br>Married.....2<br>Cohabiting.....3                                      |  |
| Q 107 | Number of the sexual partner of respondents | 1.....1<br>2.....2<br>3.....3<br>Other (specify).....4                                  |  |
| Q 108 | Partner's level of education                | No education.....1<br>Primary.....2<br>JHS.....3<br>SHS.....4<br>University.....5       |  |
| Q 109 | Number of children                          | 0.....1<br>1.....2<br>2.....3<br>3.....4<br>4.....5<br>5.....6<br>Other (specify).....7 |  |
| Q 110 | Occupation                                  | Public sector.....1   |  |

|  |   |   |                       |
|--|---|---|-----------------------|
|  |   | Private sector.....2<br>Self-employed.....3<br>Student.....4<br>Unemployed.....5  |                       |
| <b>SECTION II: Knowledge on the male contraceptive</b> |   |   |                       |
| Q 201  | Have you ever heard about male contraceptive?                                     | Yes.....1<br>No.....2   | If not, move to Q 203 |
| Q 202  | Please list all the forms of males' contraceptives you have heard of              |   |                       |
| Q 203  | Do you agree that a woman can get pregnant even if she is using contraceptives    | Yes.....1<br>No.....2<br>Don't know.....3   |                       |
| Q 204  | Do you agree that a man can impregnate a woman while using a condom during sex    | Yes.....1<br>No .....2<br>Don't know.....3  |                       |
| Q 205  | According to you, how knowledgeable are men about contraception in your community | Very knowledgeable.....1<br>Fairly knowledgeable.....2<br>Not very knowledgeable....3<br>Not at all knowledgeable...4<br>Don't know.....5 |                       |
| Q 206  | Would you like to know more about contraceptives?                                 | Yes.....1<br>No.....2   | If not, move to       |

|   |   |  |       |
|---|---|--|-------|
|   |   |  | Q 301 |
| Q 207   | How would you like to acquire knowledge?                          | Media.....1<br>TV.....2<br>Health facilities.....3<br>Magazine.....4<br>Public awareness.....5<br>Radio.....6<br>Phone.....7 |       |
| <b>SECTION III : Perception on males contraceptives</b> |   |  |       |
| Q 301   | According to you, is contraception also useful for men?           | Yes.....1<br>No.....2  |       |
| Q 302   | Why is it useful?   |  |       |
| Q 303   | Why is it not useful?   |  |       |
| Q 304   | In a family, who should make the decision to use contraception?   | Wife.....1<br>Husband.....2<br>Both.....3<br>Other (specify).....4   |       |
| Q 305   | Who should decide on the number of children a couple should have? | Wife.....1<br>Husband.....2<br>Both.....3<br>Other (specify).....4   |       |
| Q 306   | What is your thought about men who use contraceptives?            | Responsible.....1<br>Irresponsible.....2<br>Controlled by their wives....3   |       |

|   |  |   |                             |
|---|--|---|-----------------------------|
|   |  | Weak.....4<br>Other (specify).....5   |                             |
| Q 307   | Family Planning is only women's issue                  | Agree.....1<br>Don't agree.....2  |                             |
| Q 308   | When should a couple start planning their pregnancies? | After the first child.....1<br>After the second child .....2<br>After the third child .....3<br>Other (specify).....4 |                             |
| <b>SECTION IV : Practice of male contraceptives</b> |  |   |                             |
| Q 401   | Have you ever used contraception?                      | Yes.....1<br>No.....2   | If not,<br>move to Q<br>403 |
| Q 402   | If yes, which one?                                     | Condoms.....1<br>Vasectomy.....2<br>Spermicide.....3<br>Other (specify).....4   |                             |
| Q 403   | Has your partner ever used a contraceptive?            | Yes.....1<br>No.....2   | If not,<br>move to Q<br>405 |
| Q 404   | If yes, which one?                                     | Injectable.....1<br>Jadelle.....2<br>Intra Uterine Device.....3<br>Pills.....4<br>Female condom.....5                 |                             |

|       |   |  |                       |
|-------|---|--|-----------------------|
|       |   | Other (specify).....6  |                       |
| Q 405 | Have you ever attended Family planning clinics for counseling?  | Yes.....1<br>No.....2  |                       |
| Q 406 | Have you ever discussed with your partner about FP?   | Yes.....1<br>No.....2  |                       |
| Q 407 | Are you currently using contraceptives?   | Yes.....1<br>No.....2  | If not, move to Q 409 |
| Q 408 | Which type of Family Planning method do you use more?   | Condoms.....1<br>Vasectomy.....2<br>Spermicide.....3<br>Other (specify)..... |                       |
| Q 409 | Have you ever been involved in a sexual relationship where you were forced by your partner, to use a method of contraception? | Yes.....1<br>No.....2  |                       |
| Q 410 | Who do you go to for advice and/or to discuss issues around contraception?  | Mother.....1<br>Father.....2<br>Sister.....3<br>Brother.....4                |                       |

|       |   |   |  |
|-------|---|---|--|
|       |   | <p>Friend.....5</p> <p>Sexual partner.....6</p> <p>Private chemist.....7</p> <p>Health workers.....8</p> <p>Doctor.....9</p> <p>Other (specify).....10</p>  |  |
| Q 411 | What is/are your(s) source of supply?                                   | <p>Hospital.....1</p> <p>Pharmacy.....2</p> <p>Market.....3</p> <p>Shop.....4</p> <p>Other (specify).....5</p>  |  |
| Q 412 | How do you measure the availability of male methods in your community?  | <p>Available.....1</p> <p>Not available.....2</p>   |  |
| Q 413 | How do you measure the accessibility of male methods in your community? | <p>Easy access.....1</p> <p>Difficult access.....2</p>  |  |
| Q 414 | If difficult, why?  | <p>Lack of information.....1</p> <p>Lack of awareness.....2</p> <p>Stigma.....3</p> <p>Social constraints.....4</p> <p>Expensive.....5</p> <p>Geographical situation.....6</p> <p>Lack of source of supply....7</p> |  |

|       |  |   |  |
|-------|--|---|--|
|       |  | Shame.....8                               |  |
|       |  | Bad awareness.....9                       |  |
|       |  | Cultural belief.....10                    |  |
| Q 415 | Do you think men's access to contraceptive should be improved? | Yes.....1<br>No.....2<br>Don't know.....3 |  |

Thank you for your participation

## Appendix 2: Interview guide

- **Identity**

|                                |      |         |
|--------------------------------|------|---------|
| Date of focus group            |      |         |
| Start time                     |      |         |
| Name of the investigator       |      |         |
| Name of the person taking note |      |         |
| Type of men participant        |      |         |
| Number of participants         |      |         |
| Participants                   | Name | Village |
| 1                              |      |         |
| 2                              |      |         |
| 3                              |      |         |
| 4                              |      |         |
| End time                       |      |         |
| Result                         |      |         |

- **Focus group and interview questions**

### Knowledge and perception of men vis-a-vis of the male contraception

1. How readily available are contraceptives to men in your community?
2. Why can you describe your perception about men who use contraceptive methods?

### Attitude and Practice

1. How would you describe contraceptive usage among men and their partners in terms of gender relations?
2. Why are you using contraceptives?
3. Why are you not using contraceptives?

4. How would you describe the attitude of health care providers within and around the community towards men who use contraceptives?

**Availability and accessibility of male contraception**

1. How can you explain the availability of male contraceptive methods in your community?
2. How can you describe the access to contraceptive methods by men (geographic and financial)?

**Suggestion**

1. Do you think measures are needed to improve contraceptive use among men in Togo?  
If so, what might they be?

**Appendix 4: Ethical clearance**

|  |  |
|--|--|
| <p><b>MINISTÈRE DE LA SANTÉ ET<br/>DE L'HYGIÈNE PUBLIQUE</b></p> <p>-----<br/>CABINET<br/>-----<br/>SECRETARIAT GÉNÉRAL<br/>-----<br/>DIRECTION GÉNÉRALE DE L'ACTION SANITAIRE<br/>-----<br/>DIRECTION DE LA SANTÉ DE LA MÈRE ET DE L'ENFANT<br/>-----<br/>DIVISION SANTÉ MATERNELLE ET INFANTILE /PLANIFICATION<br/>FAMILIALE</p> <p>N° <u>119</u> /19/MSHP/CAB/SG/DGAS/DSME/DSMIPF</p> | <p><b>REPUBLIQUE TOGOLAISE</b><br/><i>Travail-Liberté-Patrie</i></p> <p>-----</p> <p>Lomé, le <b>26 AVR 2019</b></p> |
|--|--|

*Le Directeur par intérim de la DSME*

*A*

Monsieur le Directeur Régional de la Santé  
Maritime

Objet : Lettre d'information

Monsieur le Directeur Régional,

Dans le cadre de la collecte de données pour la rédaction de mémoire dont le thème porte sur « les facteurs influençant l'utilisation et la non-utilisation des méthodes contraceptives chez les hommes dans la région Maritime au Togo, **Mademoiselle Essi Edjodjinam KPEGBA**, étudiante en Master, Santé Publique/Université du Ghana, email : [essihonorine@gmail.com](mailto:essihonorine@gmail.com) se présentera durant le mois de mai 2019 dans certaines formations sanitaires de votre région pour s'entretenir avec les acteurs intervenant dans le processus de la mise en œuvre de la planification familiale.

A cet effet, je vous saurai gré des dispositions que vous voudriez bien faire prendre pour le bon déroulement de ladite collecte de données.

Tout en comptant sur votre habituelle collaboration, je vous prie de recevoir, Monsieur le Directeur Régional, l'assurance de ma considération distinguée.



**Dr AGOSSOU Abram Amétépé**

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