UTILIZATION OF CONTRACEPTIVES AND THE ASSOCIATED FACTORS AMONG STUDENTS OF KAMPALA INTERNATIONAL UNIVERSITY-WESTERN CAMPUS ISHAKA – BUSENYI DISTRICT UGANDA

BY

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DECLARATION

I, **Nakyeyune Lillian Monica** declare that I am the sole author of this work and it has never been submitted for the award of a degree in any university. Any material which is not my original work has been clearly referenced

Sign …………………………………   **Date 15th/11/2018**

APPROVAL

This work has been submitted to university examiners with my approval as university supervisor.

………………….…………………………..

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DEDICATION

This work is dedicated to Jehovah, God Almighty for his grace that was sufficient for me throughout the period of my study.

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LIST OF ACRONYMS AND ABBREVIATION

AIC   AIDS Information Center

AIDS   Acquired Immune Deficiency Syndrome

ANC   Antenatal Care

ART   Antiretroviral therapy

COC   Combined oral Contraceptive

EC   Emergency Contraception

ECPs   Emergency Contraceptive Pills

FBC   Family Based Care

FDA   Food Drug Association

FGDs   Focus Group Discussions

FP   Family Planning

HIV   Human Immuno-deficiency Virus

IUDs   Intrauterine Devices

KI   Key Informants

KIU-WC   Kampala International University Western Campus

MTCT   Mother to Child Transmission

PMTCT   Prevention of mother to child transmission

TRF   Total fertility Rate

UDHS   Uganda Demographic Health Survey

UHSBS   Uganda HIV/AIDS Sero-Behavioral Survey

UHSR   Uganda HIV Status Report

VCT   Voluntary Counseling and Testing

WHO   World Health Organisation.

OPERATIONAL DEFINITIONS

Contraception: Birth control, also known as contraception and fertility control, is a method or device used to prevent pregnancy.

Contraceptive Utilization: Use of any modern or traditional method by women to delay or avoid pregnancy for the past 30 days.

Emergency contraception (EC): birth control used after unprotected sex to help prevent pregnancy.

Modern methods: Female and male Sterilization, Pills, IUD, Injectables, Implants, Male condom, female condom and LAM intentional for contraception

Traditional methods: Periodic abstinence, withdrawal

Fertility preferences: Desire to have a child

Condom: A flexible sleeve made of latex or other impermeable material.

Prevalence: Refers to the occurrence of both new and old cases of a particular condition among a given population at a specified time.

Family planning: Ability of individuals and couples to anticipate and attain their desired number of children and the spacing and timing for their births. It is achieved through use of contraceptive methods and the treatment of involuntary infertility.

Adolescence: The period of transition from childhood to adulthood, during which individuals reach sexual maturity.

Unmet need for family planning: women with unmet needs are those who are fecund and sexually active but are not using any method of contraception, and report not wanting any more children or wanting to delay the next child (WHO 2013).

Acceptability: The services meet the expectations of users in terms of cultural and norms preference, skills of the staff, stigma and gender aspect.

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ABSTRACT

Background: Over 100 million acts of sexual intercourse take place each day in the world, resulting in around 3 million conceptions of which 50% are unplanned and 25% definitely unwanted. The proportion of young women reporting unintended pregnancy and unmet need for contraception remains high in developing countries. Unintended pregnancies are associated with increased risk of unsafe abortions, maternal morbidity and mortality. According to World Health Organization (WHO), the lifetime risk of death due to pregnancy is 1:22 in sub- Saharan Africa, with adolescents facing a higher risk of morbidity and mortality than older women.

Objectives: the objectives of this study was to determine the prevalence of contraceptives use, socio-demographic factors and individual factors and their associated among KIU students from selected faculties/schools.

Methods: This study employed a descriptive, cross sectional study design with a sample size of 330 students from school of Allied Health sciences, faculty of Clinical Medicine and Dentistry, faculty of Education, and school of Nursing. Data was collected using a structured questionnaire. Data from the survey were statistically analyzed using the Statistical Package for Social Sciences (SPSS) (version 20.0).

Results: The Contraceptive Prevalence Rate (CPR) among post-secondary students was higher than national target of 50% by 2020 and it was associated with a couple of factors including; Student's age, sex/gender, marital status, academic year of study, religion, knowledge & awareness, preference for contraceptive, affordability, accessibility and availability, easy usability and safety of the a preferred contraceptive method. Better

informed students on sexual rights and reproductive health are empowered to use contraceptives more than others.

Conclusion: Stake holders should Design, launch and implement inclusive youth friendly services, adolescent sexual and reproductive health programs prioritizing use of contraceptives, students' empowerment in regard to sexual rights and reproductive health, behavioral change communications, and create enabling environment for contraceptive use.

CHAPTER ONE
INTRODUCTION

1.0 Background

Contraceptives are defined as methods or devices used to prevent pregnancy, is categorized into two types: modern and traditional methods. Modern methods include clinic and supply methods such as the pill, intrauterine device (IUD), condom and sterilization whereas traditional methods include periodic abstinence (rhythm), withdrawal and folk methods (Paul, Ayo, & Ayiga, 2016). Male condom is the most widely used barrier method, which creates a physical barrier to block sperm from reaching ovum and reduce the risk of sexually transmitted infections (Virtala, 2007). The hormonal oral contraceptives were introduced in 1960s and since then, the oral contraceptive pills have been used by over 200million ladies worldwide. They are either combined oral contraceptive pills (COCs) included high dose estrogen and progesterone or Progestin only pills which act mainly by alerting cervical mucus, to reduce sperm penetration and endometrium to reduce implantation(Virtala, 2007).Emergency contraception (EC), also called postcoital, is a method of prevention from unintended pregnancy after an unprotected intercourse. There are three types of ECPs: combined ECPs containing both estrogen and progestin, progestin-only ECPs, and ECPs containing an antiprogestin (either mifepristone or ulipristal acetate). Copper-bearing IUDs can be inserted up to 5 days after ovulation to prevent pregnancy (Trussell et al., 2018).

Over 100 million acts of sexual intercourse take place each day in the world, resulting in around 3 million conceptions of which 50% are unplanned and 25%definitely unwanted (Habitu, Yeshita, Dadi, & Galcha, 2018). The proportion of young women reporting unintended pregnancy and unmet need for contraception remains high in developing countries. Unintended pregnancies are associated with increased risk of unsafe abortions, maternal morbidity and mortality. According to World Health Organization (WHO), the lifetime risk of death due to pregnancy is 1:22 in sub- Saharan Africa, with adolescents facing a higher risk of morbidity and mortality than older women. Apart from various social and psychological challenges, unplanned pregnancies affect students' objectives of achieving academic success (Patrick, Aziken, & Okonta, n.d.). In order to avert the

unintended pregnancies and consequent adverse outcomes, contraceptive use has been prioritized as a key intervention. Improving the universal access to sexual and reproductive health services including contraceptives was a key target of the Millennium Development Goals (Nsubuga, Sekandi, Sempeera, & Makumbi, 2016). Unintended pregnancy poses a major challenge to the reproductive health of young adults in developing countries.

In Uganda, the government created its first national population policy with the aim, amongst others, to ensure that family planning services were accessible to people. However, Uganda still rates as one of the countries with the highest total fertility rates in the world (TFR = 6.2) and the median age at first sexual intercourse is 16.8 years, an age which is considered to be vulnerable to sexual and reproductive health challenges. Persistent high fertility levels have partly been attributed to high proportion of adolescents starting child bearing at an early age. In addition to the above, the population growth rate is very high at 3.4% (UDHS 2006) and the fertility rate is 6.7 which means that on average women give birth to 7 children in their whole reproductive life span(Kabagenyi et al., 2017). In 2015 Uganda had the world's fifth highest population growth rate (3.24%), the world's third highest crude birth rate.(Celik, 2016). In 2015, Uganda had the eleventh highest crude number of maternal deaths in the world, and in 2013, the second greatest leading cause of death for Ugandan women ages 15-49 were pregnancy-related issues (12.25%), following HIV. These statistics shows that the reproductive health needs of young people in Uganda are not being met(Kabagenyi et al., 2017).

More than half of the world's population is less than 25 years old and approximately 85% of this demographic segment lives in low- or middle-income countries; this most of the university students who are at the age of adolescence and young adulthood. The sexual behavior of such young people has become a crucial social and public health concern, especially with regard to unintended pregnancies and sexually transmitted diseases (Mehra et al., 2012). The World Health Organization (WHO) estimated an annual total of 333 million new STD infections in adults. The World Health Organization also estimates that 110 million new cases of Chlamydia trachomatis, Neisseria gonorrheae, Treponema

pallidum (syphilis) and Trichomonas vaginalis occurred in the African region in 2005. Globally, it is estimated that; 34 million people are living with HIV worldwide with a greater burden in sub-Saharan Africa and especially in young women; Sub-Saharan African (SSA) with just 12% of the global population is home to about 68% of all people living with HIV/AIDS, and also accounts for 70% of new HIV infections (Tarkang, 2015); and An estimated 536 million (16.5%) sexually active adults between the ages of 15 and 49 years were infected with HSV-2 in 2003(Kabagenyi, Habaasa, & Rutaremwa, 2017)

Research studies conducted worldwide amongst university students, have shown several factors contributing to the non-utilization of contraceptives. These were, amongst others, lack of knowledge and awareness, age, culture, ethnicity, religion, poor access to contraceptive services, peer pressure, sources of information, alcohol and substance abuse and lack of partner support.(Coetzee et al., 2011)

1.1   Problem statement

The 2016 UDHS showed that despite massive investment in reproductive health services in the country to address unmet commitment as per MDG-5 by 2015, Ankole region still had 23.0% unmet need for family planning of 66.1% total demand for family planning, with a contraceptive prevalence rate (CPR) of 43.1% which is way below the national target of 50% by 2020 (just 2 year ahead). Besides, 7 in 10 sexually active young Ugandan women are not using any form of contraception, including 3 in 10 who express a desire to delay childbearing. Yet, a low contraceptive use is a major risk factor exposing the youth to STDs and unwanted pregnancies given the high sexual activity of 77% Uganda's population coupled with a fertility rate of Uganda at 6.7 (Kabagenyi et al., 2017). This has resulted in 1.2 million unintended pregnancies, representing more than half of the country's 2.2 million pregnancies (Nsubuga et al., 2016); most of which are among adolescents and contribute to 24% of maternal deaths due to pregnancy complications or in attempt to do unsafe abortion (Kabagenyi et al., 2017); It has also led to high risk of HIV/AIDS among girls in the university age group (Uganda AIDS commission, 2016), with an overwhelming incidence of 570 young Ugandan women aged between 15 and 24 years get infected with HIV per

week. Making Uganda second to South Africa where 2,363 people get infected with HIV weekly, compared to 468 for Kenya 491, for Tanzania, 25 for Rwanda and 2 for Burundi in Africa (UNAIDS, 2011). This has ultimately contributed to the overall HIV/AIDS burden in Uganda, with 7.3% HIV-positive adults age 15-49 years. If nothing, is done to address the unmet need for family planning, or address adolescent sexual and reproductive health needs, more Ugandan youth and students are still suffering the consequences. Hence need to conduct a study to determine the prevalence and associated factors of contraceptive use among KIU-WC students. Also, findings from this study will inform stakeholders of the problem and interventions needed.

1.2   STUDY OBJECTIVES

1.2.1 General objective

To assess the utilization of contraceptive and the associated factors among students of KIU-WC Ishaka-Bushenyi.

1.2.2   Specific objectives

i.   To determine the prevalence of contraceptive use among students of KIU-WC, Ishaka-Bushenyi

ii.   To identify the social demographic factors associated influencing contraceptive use among students of KIU-WC, Ishaka-Bushenyi.

iii.   To establish the individual factors affecting contraceptive use among students of KIU-WC Ishaka-Bushenyi.

1.3   Research questions

i.   What is the prevalence of contraceptive use among students of KIU-WC, Ishaka-Bushenyi?

ii.   What are the social- demographic factors associated influencing contraceptive use among students of KIU-WC, Ishaka-Bushenyi?

iii.   What are the individual factors affecting contraceptive use among students of KIU-WC Ishaka-Bushenyi?

1.4   Justification and significance of the study

Studies have shown that Low contraceptive use is a major risk factor exposing the youth with high sexual activity to STDs and unwanted pregnancies, which poses a major challenge to the reproductive health of young adults in developing countries. Earlier research conducted in variable resource settings, worldwide amongst university students have identified several factors contributing to the non-utilization of contraceptives in various resource setting. These were, amongst others, lack of knowledge and awareness, age, culture, ethnicity, religion, poor access to contraceptive services, peer pressure, sources of information, alcohol and substance abuse and lack of partner support. However, few comprehensive studies have been reported in poor resource settings to establish significant effects of these factors on use of contraceptives in various resources setting and populations. Hence this remains unknown to the prevailing data. The major objective of this case study was to unveil the prevalence and associated factors of contraceptive use among post secondary students (KIU-WC), so as to inform stakeholder devise evidence based problem solving interventions. This study was also done in partial fulfillment for awarded of Bachelors degree in clinical medicine and community health at Kampala International University.

1.5   Study Scope

1.5.1 Geographical scope

The study was conducted in Kampala International University- western campus, Ishaka. The university is located in the town of Ishaka in Bushenyi District, western Uganda, approximately 330 kilometer (210 mi), by road, southwest of Kampala, Uganda's largest city and capital. The campus is also referred to as Kampala International University western Campus, to distinguish it from Kampala International University Main campus, located in Kansanga, Makindye division, Kampala. The western campus of KIU comprise of school of health sciences, Pharmacy, Nursing, science and technology, Faculty of Education and management sciences.

1.5.2 Content scope

The study focused on the utilization of contraceptive and their associated factors among students of KIU-WC Ishaka-Bushenyi.

1.5.3 Time Scope

The study was conducted between February, 2018 to October, 2018.

1.6   CONCEPTUAL FRAME WORK

INDEPENDENT VARIABLES

DEPENDENT VARIABLE

SOCIO- DEMOGRAPHIC

Age,
Gender,
Religion and
 Culture,

INDIVIDUAL FACTORS

Knowledge and Awareness
Accessibility and Availability
Perception
Preference

CONTRACEPTIVE USE

OUTCOMES

CONFOUNDING FACTORS

Peer pressure
Side effects

POSITIVE

Childs pacing
Protection
against STDs

NEGATIVE

Unwanted
pregnancies
HIV/AIDS
STDS
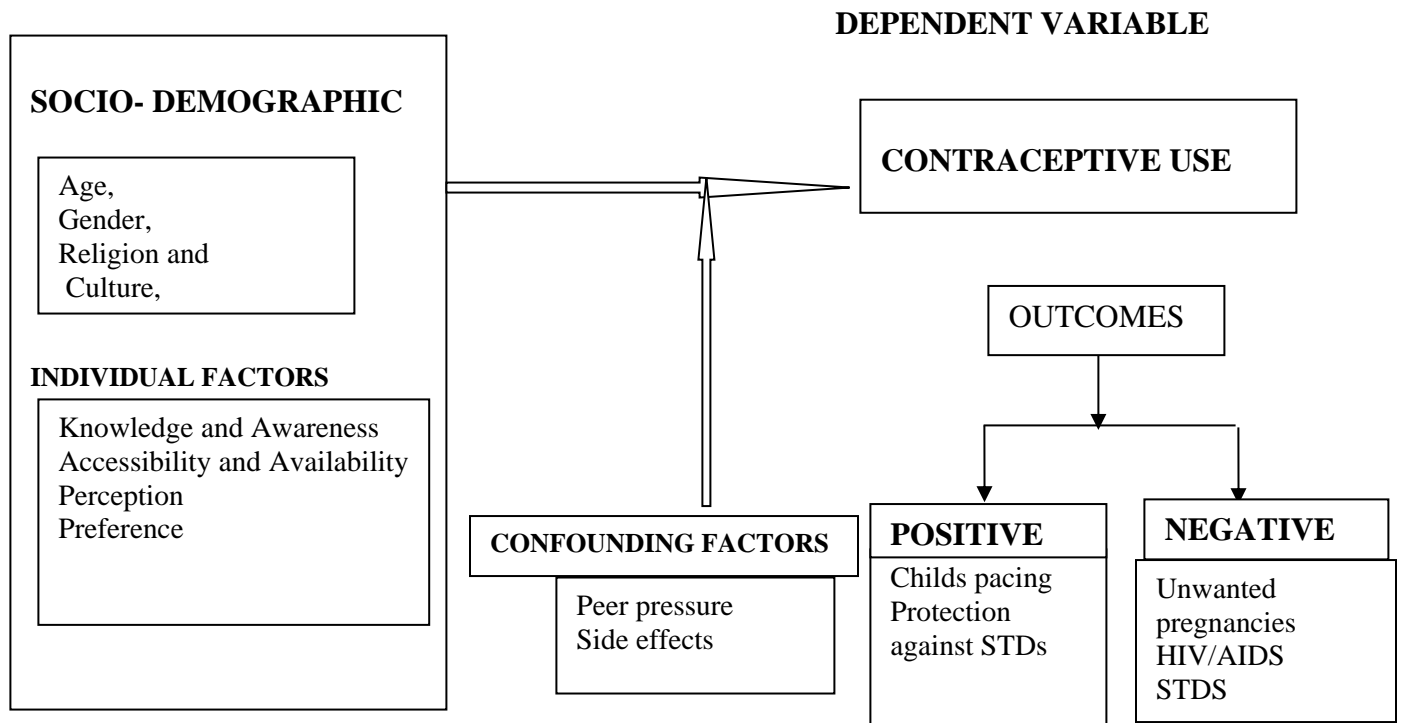
CHAPTER TWO
LITERATURE REVIEW

2.1.Prevalence of contraceptive use

Contraceptive use prevalence in the world was estimated at 63% in 2000, with higher levels of use in developed countries at 70%, and in less developed countries at 61%. It was estimated that Africa had the lowest rate of contraceptive use in the world at only 28%. In sub-Saharan Africa, approximately 14 million unplanned pregnancies occur and a fairly large proportion of unplanned pregnancies are because of poor use of short-term hormonal methods(Coetzee et al., 2011)

Globally, modern contraceptive utilization has increased in the recent past – from 54% in 1990 to 57% in 2012(Andi, Wamala, Ocaya, & Kabagenyi, 2014) There is wide variation in contraception prevalence worldwide ranging from 8% of women aged 15-49 years in western Africa up to 78% in northern Europe (Mitchell et al, 2004). Female sterilization (32%), Intrauterine Device (22%) and the oral contraceptive pill (14%) account for more than two thirds of all contraceptive practice worldwide. In less-developing countries, 70% of contraception users rely on female sterilization and IUD in part because they are advocated by healthcare services as a result of cost effectiveness in terms of pregnancy prevention and service provision(Isabella, 2009).

In research conducted amongst female students at the National University of Lesotho, it was revealed that at the age of 24 over two thirds of young South African girls were sexually active, wherein 50% had fallen pregnant and only half have ever used contraceptives.

Studies found that the overall prevalence of contraceptive use in South Africa, during the 2003 Demographic Health Survey, was 65%(Coetzee et al., 2011).

In a study conducted in Gauteng- South Africa, about assessing the use of contraceptives by female undergraduate students in a selected higher educational institution, a total of 74% females indicated they were sexually active, 79% of whom reported using contraceptives. The most common used methods were oral contraceptives at 38%, and 25% for male condoms. The most commonly known methods were condoms at 84%, and the oral contraceptive at 68%(Coetzee et al., 2011).

A study conducted on students' perception of contraceptives in the University of Ghana, the male and female condoms were the main contraceptive types reported out of the many modern and traditional methods of contraceptives. Only two (11.1%) participants reported emergency contraceptive Pills, Intra-uterine device (IUD), withdrawal and spermicidal creams as other forms of contraceptives. This suggests that participants may not be adequately informed about several modern methods of contraception or perhaps, information sources are not effective(Appiah-agyekum & Kayi, 2013).

In a study conducted in Ethiopia, The prevalence of contraceptive use among the student was 123 (20.9 %). From contraceptive methods used by ever users, 55 (44.4%) of respondents have used condoms, 34 (27.4%) emergency contraceptive pill and 25 (21%) oral contraceptive pills. From the respondents who had sex in the past one year, 115 (64.6%) of them have used contraceptives and 63 (35.4%) did not use contraceptive during last time they had sex. The findings revealed that from the respondents who have reported that they used contraceptives last time they had sex, 45 (38.8%) of them have used condom, 43 (37.1%) used emergency contraceptive pill and 14 (12.1%) used oral contraceptive pill(Students & Soressa, 2016).

Uganda's contraceptive prevalence rate (30%), is lower than figures among neighboring countries namely Kenya (46%), Tanzania (34%) and Rwanda. With regards to the use of modern contraceptive methods, the country lags behind in comparison with the global estimates and those among the neighboring countries(Andi et al., 2014)

In a survey conducted in Uganda about Low Contraceptive Use among Young Females, the findings show that only 12% of the adolescents were using contraception at the time of the survey. The odds of contraceptive use were least among adolescents from Northern region compared to those from central region of Uganda. Use of contraception and improving access to the services is highly recommended to avert some of the unplanned births among these females(Kabagenyi et al., 2017)

2.2. Socio-demographic factors

Religion

Worldwide, religion has played a leading role in discouraging dissemination of information on FP use(Andi et al., 2014). Religious leaders are mentioned as leading "de-campaigners" of contraceptives. Catholics and Muslims are the religious groups to be least inclined to encourage contraceptive use. Religious leaders' unfavorable attitudes towards contraceptive use were directed to adolescents and married couples alike. Religious leaders consider contraceptive use to be an insubordination to divine predetermination. Religious leaders had been observed to consider contraceptive use "an immorality", "a sin", "murder", and "killing the gift of life"(Celik, 2016).

In countries that are predominantly Catholic (for example Brazil), the Catholic church is at the forefront of influencing government policies particularly in the area of limiting FP services available and discouraging fertility limiting behavior. The influence of religion has stiffened the transmission of adequate and accessible information via radios and televisions as well as in schools(Andi et al., 2014)

Gender

Societal assumptions concerning gender affect the access that adolescents have to contraception. This may be due to the assumption that contraception is a "female" issue, thus excluding men from the responsibility or participation. Consequently, while some women may have little power and choice regarding contraceptives, they end up bearing most of the responsibility for their use.

Gender empowerment has been identified as a barrier to women accessing reproductive health services, and, in turn, leading to low rates of contraceptive use and high fertility rates. For example, the contraceptive prevalence rate in DR Congo is only 7%, although the knowledge of contraceptives is 82% . Due to patriarchal family units many women do not feel empowered to seek family planning services. Some feel they do not have the sexual autonomy to make reproductive choices; rather their husbands and family members take on that role. Sexual self-efficacy is a construct being studied to measure and conceptualize the power women feel over their reproductive health. It is clear that improving access to and

knowledge of family planning services, although helpful, may not enable women in sub-Saharan Africa to seek service.

Certain focus groups in Mityana and Mubende revealed gender inequalities in terms of power, roles, decision making, and negotiation for contraceptive use. The women reported lack of power in decision making as a key obstacle to use. The women recounted partner disapproval, verbal or physical abuse or even getting abandoned if found using contraceptives In some male groups, the participants commented that women also oppose contraceptive use and react negatively when men rise(Nalwadda, Mirembe, Byamugisha, & Faxelid, 2010).

Decision making to use contraceptives by female university students involves a complex interaction of individual, social, family and peer factors. It was also depicted that respondents' attitude towards responsibility in using contraceptives also showed a significant association with contraceptive use. Respondents who believe both partners should take responsibility in deciding whether to take contraceptive were four times likely to use contraceptive than respondents who believed one (female) partner should take responsibility. Likewise, respondents who believed that the male partner should take responsibility were 99% more likely to use contraceptives than respondents who believed that the female partner should take responsibility(Students & Soressa, 2016)

Culture

The societal pressures on young women also play a role in barriers to uptake of services in sub-Saharan Africa. Cultural norms that restrict contraceptive use include a women's main role of bearing children. Young women, 15-24, reported partner disapproval and fear of verbal/physical abuse from their family members or husband as barriers to contraceptive use. In contrast, men felt that having unprotected sex enhanced their reputation among their peers. Furthermore culture norms prevented parents from discussing sex and contraceptive use with their children, leading to the high level of reported misconceptions regarding contraceptives among youth(" Street, 2," 2012.). Parents discussing sexual and reproductive health with their children are still a taboo in many sub-Saharan Africa countries. Because adults oppose youth sexuality, many sexually active teens do not seek family planning and contraceptive services for fear of punishment from adults and family members, including the use of

violence. As a result, only 25% of Kenyan youth, ages 15-19 were reported to be using condoms in 2009 and one quarter of the pregnancies in Uganda is contributed to teens, ages 15-19 while 41% have another child in less than 24 months(" Street, 2," 2012.)

2.3 INDIVIDUAL FACTORS

Accessibility and availability

Direct access to the modern methods of contraception is important for all types of contraception and especially for emergency contraceptives, since they are most effective within 72 hours after unprotected intercourse – the earlier it is used the more effective the result.

Common barriers to full access and utilization of underutilized contraceptives includes: insufficient supply and deficient quality; deficient regulatory practices; and knowledge gaps in both end users and service providers. As patients tend to not request contraceptives which they do not know of, providers are less likely to prescribe these contraceptives, perpetuating low awareness and demand. Low demand for contraceptives also creates low incentives for supply, research, development, and promotion of contraceptives(Celik, 2016)

Studies show that women tend to seek long lasting family planning methods such as intrauterine devices, injectables and implants which are often not readily available. A 2013 WHO study revealed that , an estimated 222 million women in developing countries who want to space or prevent child bearing lack access to modern contraceptive methods(Andi et al., 2014). The high rates of unmet need for family planning and contraception in developing countries can lead to high fertility rates and maternal mortality; due to unsafe abortions and pregnancy in young girls. International funding has helped support family planning service access in sub-Saharan Africa, for approximately 50% of the couples seeking it, but there are still a number of barriers preventing the remaining couples from accessing services (" Street, 2," 2012.)

In a study with a public family planning clinic in Lusaka, Zambia, 1031 women were randomly chosen to receive a voucher guaranteeing free and immediate access to a range of modern contraceptives through a private appointment with a family planning nurse. A

randomized control group of 768 women received nothing. This amounted to a sudden and unexpected increase in access to long-term and relatively concealable forms of contraception, including injectables and contraceptive implants, for the women who received the vouchers.

In 1995, the Ugandan government created its first national population policy with the aim, amongst others, to ensure that family planning services were accessible to people. According to the 2011 Uganda Demographic Health Survey (UDHS), the country's contraceptive uptake (any method) was estimated at 30%. This figure doubled over a span of sixteen years – the contraceptive uptake in 1995 was about 15%(Andi et al., 2014).

In 2016, a research in Uganda showed that Contraceptive availability in the public health system was reported to be limited, irregular, and unequally distributed throughout the country. Some respondents indicated that the private sector had fewer stock-outs and expiries, as contraceptive counseling opportunities were plenty, and availability of contraceptives was high. However, respondents indicated that of-out-of-pocket-payments also made the private sector inaccessible to a large part of the population(Celik, 2016)

Knowledge and awareness

Knowledge and awareness about contraceptives is thought to shape users' abilities to perceive unmet contraceptive needs. Research shows that the most popular sources of information about contraceptives, in descending order, are health-workers, peers, and media channels(Celik, 2016).

A study in a government college, Gangtok, Sikkim, in India indicated that, 98% (153/156) of the students had knowledge about family Planning and 86% (134/156) of them had heard about contraceptives. Most of them knew about condoms (85%) and contraceptive pills (40%) but knowledge about permanent methods and Cu-T was poor (average 12%). 11% of students had used some form of contraceptive in the past and 7% were currently users. The most commonly used contraceptives were condoms, followed by combined use of OCP and condom(Investigation, 2010).

Among undergraduate students in South Africa, studies found out that the most commonly known methods were condoms at 84%, and the oral contraceptive at 68% and the knowledge of condom use to prevent sexually transmitted diseases was high at 91%. However,

inadequate knowledge and awareness on some contraceptive methods was found(Coetzee et al., 2011).

Among female Nigerian undergraduate students, 58% of respondents reported knowing about emergency contraception; sexually active respondents were significantly more likely than those who were not sexually active, and those who had ever practiced contraception were more likely than those who had never practiced contraception to be aware of emergency contraceptives. However, only 18% of respondents who reported knowing about emergency contraception knew the correct time frame in which emergency contraceptives must be used to be effective. Of the women who were aware of emergency contraception, fewer than half had received their information on the method from trained health providers—31% from doctors, 13% from pharmacists and 5% from nurses. However, 33% had received their information about emergency contraceptives from female friends, 5% from their boyfriends and 14% from patent medicine dealers(Patrick et al., 2015.).

Knowledge and awareness of contraceptives was found high in sub-Saharan. For example; 90.9% of the participants (women, 18-49) in East Batu Zone, Ethiopia could mention at least two long lasting and permanent methods of contraception. A study in Ghana East District of Ghana also reported that 99.7% of women participants expressed awareness of at least one method of contraception and 55% had heard of more than three methods(" Street, 2," 2012.)

According to the 2006 Uganda Demographic health Survey, knowledge on family planning has remained consistently high in Uganda over the past 5 years with 97% of all women 15-49 having heard at least one method of contraception(Isabella, 2009).

A cross sectional study in Uganda showed that Knowledge of contraceptives was nearly universal (99.6 %).The most commonly known modern methods were pills (86.7 %) and male condoms (88.4 %), followed by injectables (50.3 %), IUDs (35 %) and implants (26.7 %), female condom (22.1 %), while withdraw (34.2 %) was the most commonly mentioned traditional method. The level of knowledge was also very high regarding sexually transmitted infections (98.7 %), HIV/AIDS (99.3 %) and prevention of HIV/AIDs (98.8 %) as well as its treatment (96 %)(Nsubuga et al., 2016).

Preferences

It's characteristic of any consumer to want a good product or service of his choice. Contraceptive methods are quite a number and users tend to make choices of one that best works for them. This, depends on past experience, cost, side effects, influence be circumstances and conditions.

Most respondents in a research done in Ethiopia including male respondents stated their preference for pills as the main contraceptive methods to use other than condoms, vasectomy, IUD and Norplant. About six out of 54 participants preferred a combination of two contraceptive methods, for instance, pills and condoms(Appiah-agyekum & Kayi, 2013).

Perception

Concerning attitude towards contraceptive users, focus group discussions in the university of Ghana showed that respondents held negative, if not bad attitudes about contraceptive users especially if the user was unmarried. Generally, participants stated that contraceptive users were not stigmatized but rather perceived as bad people. While some participants were negative, other participants viewed contraceptive users as enlightened individuals and knowledgeable of risky healthy behaviors. Others were of the view that the socio-cultural environment of Ghanaians allowed for such individuals to be branded as bad persons but not necessarily stigmatized(Appiah-agyekum & Kayi, 2013).

In a study in Uganda, nearly a quarter of the participants perceived that modern contraceptive services and commodities were not accessible, or that it was not easy to discuss sexual matters with partner (24.4 %). About one in five students perceived that contraceptives were not for poor people (21.3 %) or that it is wrong to use contraceptives (20.1 %). However, only 6 % believed that contraceptives were for females only.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter describes the methodology which was used to conduct the study. It presents the procedures that were implemented during the collection of data from respondents, its processing and analysis. It includes study design, study area, study population, sample size, sampling technique, data collection and research instruments and data processing and analysis methods, quality control, study limitations and ethical considerations.

3.1 Study design

The study design was descriptive cross sectional which used both quantitative and qualitative methods for data collection.

3.2 Study area

The study was conducted at Kampala international University western campus. Kampala International University's Western Campus [KIU-WC] is situated on about 70 acres of land in Ishaka, Bushenyi district, along Mbarara –Kasese Road in Western Uganda approximately 360 kilometers, by road, south-west of Kampala. This campus houses over 8,000 students supervised by over 200 academic staff. Certificate, diploma, undergraduate, and postgraduate programs are offered at this campus. It is predominantly a science-based institution. The school is one of Uganda's seven medical schools, and it was the first privately owned medical school in the country. The school offers programs in medicine, dentistry, nursing, medical laboratory technology, education, business, and management and information technology. The school has a teaching hospital with a bed capacity of 1,200. KIU is consistently ranked among Uganda's top universities in Uganda.

3.3 Study population

The study population consisted of students of Kampala international university-western campus. It also included the selected students who were currently on their academic programme and willing to participate in the study.

3.4. Sample size

Fifty percent (50%) of the 8 faculties in the university were sampled by simple random technique. The faculties were written on small pieces of paper and put in a container. Four faculties were randomly chosen; faculties of Allied, Clinical Medicine and Dentistry, Education, and Nursing were selected leaving out Science and Technology, Pharmacy, Biomedical and Management. Participants comprised of the students in these respective faculties.

The sample size was calculated using the sample formula below, (Aday and Cornelius 2006:36; Israel 2009)

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

Where:

n = sample size

d = acceptance error +/- 5%

Z = standard normal deviation corresponding to 95 % confidence interval which is 1.96

P = prevalence of contraceptive use was 43.1% in 2016 in Ankole region.(Kabagenyi et al., 2017).

Q= 1-P

Given that; Z = 1.96, P = 0.431, Q = 0.569 and d =0.05

Therefore

n = 376.8

Thus the sample size was 377 participants.

In the study we were able to sample 88% of the total calculated sample size. Therefore the sample size was 330 participants.

3.5 Sampling technique

The Participants were chosen according to the inclusion and exclusion criteria.

3.5.1 Inclusion criteria

All students, male and female, aged 15 and above who were in their second year and above in faculties of Allied Health, Clinical Medicine and Dentistry, Education, and Nursing of KIU western campus and have consented to participate in the study

3.5.2 Exclusion criteria

The research excluded all critically ill students, discontinued, those in dead semesters and those that are far away from the campus.

3.6 Data collection method

Questionnaires were the main tool of data collection. The questionnaires were pretested and self administered. It included both open ended and closed ended questions. Data collection facilitators were members of our group who are acquainted with the contents of the questionnaire, procedure for data collection, data accuracy and completeness.

3.7 Data analysis and presentation

Data was edited, coded and checked for consistency. It was then processed and analyzed to generate useful information using Microsoft office Excel and Statistical package for social sciences (SPSS).

3.8 Quality control

The questionnaires were reviewed over and over again to ensure that they collect the respective information without offending the respondents.

Respondents were guided on how they can correctly fill in their answers.

3.9 Study limitation

We predicted that some limitations may be met such as non-compliance from some respondents, inaccurate information, fear to say out some information and lack of adequate time from respondents.

3.10 Ethical consideration

A copy of an introductory letter from the faculty of clinical Medicine & Dentistry School, KIU western campus was collected and presented to the various Deans of the sampled faculties for permission to access the students. Respondents were first informed of the research before letting them consent. Confidentiality was maintained and the respondent's names were not captured. Respondents were also free to quit the interview at any time the wish.

CHAPTER FOUR

RESEARCH FINDINGS

4.0 Introduction

This chapter entails findings and interpretation of the study. Data was obtained from 330 students from four faculties (Allied health, Clinical medicine and dentistry, Nursing and Education).

4.1 SOCIO-DEMOGRAPHIC CHARACTERISTICS OF THE RESPONDENTS

Tab. 01: **Socio-Demographic characteristics and use of contraceptives**

	USE OF CONTRACEPTIVES			
	Yes **n (%)**	**No** **n (%)**	**Total** **N (%)**	**P – Value**
Age (yrs)				0.972
15 – 17	5(**71.4**)	2	7(2.1)	
18 – 20	68(68.7)	31	99 (30.0)	
>20	152(67.9)	72	224 (**67.9**)	
Sex				0.008
Male	150(**73.5**)	54	204 (**61.8**)	
Female	75 (59.5)	51	126(38.2)	
Marital Status				**0.001**
Single/Relationship	200(**72.5**)	76	276 (**83.6**)	
Married/Cohabiting	22(44.0)	28	50 (**15.2**)	
Widowed	1	1	2(0.6)	
Divorced/Separated	2	0	2(0.6)	
Faculty				0.061
Allied health	55	29	84 (25.5)	
Clinical medicine and dentistry	53	29	82 (24.8)	
Nursing	65	16	81(24.5)	
Education	52	31	83(25.2)	
Year of Study				0.009
Year 2	97(**78.9**)	26	123 (37.3)	
Year 3	89(64.5)	49	138 (**41.8**)	
Year 4	25(56.8)	19	44 (13.3)	
Year 5	14(56.0)	11	25 (7.6)	
Religion				0.021
Catholic	58	30	88 (**26.7**)	
Anglican	77	30	107 (**32.4**)	
Muslim	13	7	20 (6.1)	

Seventh Day Adventist (SDA)	36	6	42 (12.7)	
Born Again	35	30	65 **(19.7)**	
Others	6	2	8 (2.4)	
Total N (%)	**225(68.2)**	**105 (31.8)**	**330**	

The majority of respondents were aged above 20 years old (67.9%), male students (61.8%) and single/ in relationship (83.6%). Most (41.8%) of the students were in their 3rd Year of study and a great a proportion of Anglicans (32.4%) and Catholics (26.7%) were studied. Proportionally, Students aged 15 – 17 years use contraceptives more than older fellows. On the same n, male students use contraceptives more than female counterparts, and single or those in a relationship use contraceptives more than those who are married or cohabiting. Finally, use of contraceptives reduces proportionally with academic year of study as indicated above.

4.2 PREVALENCE OF CONTRACEPTIVES USE AMONG STUDENTS OF KIU-WC

Tab. 02: Use Of Contraceptives		
	Frequency (N)	**Percent (%)**
Yes	225	68.2
No	105	31.8
Total (N)	330	100.0

Source: Field data

Fig.01: Use of Contraceptives among Post Secondary Students
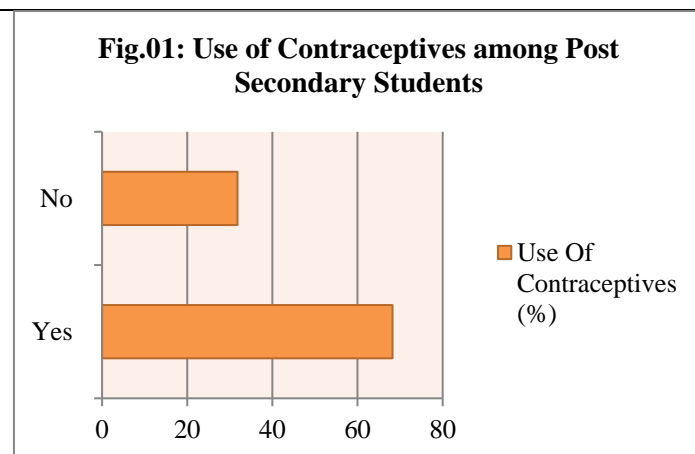
From the study, 225 (68.2%) of the students were found to use contraceptives and these had a range of compelling factors considered as highlighted in the findings below.

4.3 PREFERENCE, EFFECTIVENESS AND EFFICIENCY OF CONTRACEPTIVE METHODS

Tab.03: Preference, Effectiveness and Efficiency of Contraceptive Methods Used by students.

	Use of Contraceptives			
	Yes	No	Total	P – value
	N (%)	N (%)	N (%)	
Preference in Contraceptives				**< 0.001**
Condoms	161	0	161 (**61.2**)	
Pills	26	0	26 (**9.9**)	
Injectables	4	0	4 (1.5)	
Safe Days	19	28	47 (**17.9**)	
Withdrawal	15	7	22 (8.4)	
Others	0	3	3 (1.1)	
Reason for above preference				**< 0.001**
Affordability	101	11	112(**42.6**)	
Effective	21	2	23 (9.0)	
Easy To Use	36	4	40(**15.2**)	
Accessible	11	1	12 (4.6)	
Convenient	7	2	9 (3.4)	
Safe/Less Side Effects	49	16	65 (**19.7**)	
Others	0	2	2(0.8)	
Most Effective Contraceptive				**< 0.001**
Condoms	131	32	163 (**49.4**)	
Pills	31	18	49 (**14.8**)	
Injectables	20	8	28 (8.5)	
IUDS	13	24	37 (**11.2**)	
Safe Days	15	17	32 (9.7)	
Withdrawal	12	3	15 (4.5)	
Others	3	3	6 (1.8)	
Importance of Contraceptives				0.367
Prevent Pregnancy	179	83	262 (**79.4**)	
Prevent STDs	16	4	20(6.1)	
Promote child spacing	30	18	48(14.5)	
All of the above				
Efficiency of Contraceptives To				**0.001**
1) Prevent Pregnancy (%)				
10-40	60	15	75 (22.7)	
50-80	89	65	154 (**47.7**)	
80-100	76	25	101 (30.6)	
2) Prevent STDs (%)				0.039
10-40	47	26	73(22.1)	
50-80	81	49	130(**39.4**)	
80-100	97	30	127(38.5)	

Source: Field Data

The three (3) most preferred contraceptive methods in use included Condoms (61.2%), followed by safe days (17.9%) and contraceptive Pills (9.0%); and the top three (3) reasons for their preference ranged from affordability (42.6%), safety/less side effects(19.7%) and easy to use (15.2%). However, though they prefer the above methods, in their option, the three (3) most effective methods were condoms (49.4%), pills (14.8%) and IUDs (11.2%). Most (79.4%) of the respondents know that contraceptives prevent pregnancies. In rating the efficiency of contraceptives, majority (47.7%) of respondents feels contraceptives can prevent pregnancy between 50 -80% and the other majority (39.4%), have it that, contraceptive can prevent STDs between 50 -80%.

Table 4.4 REASONS FOR THE TOP THREE PREFERRED CONTRACEPTIVE METHODS

	TOP THREE (3) PREFERRED CONTRACEPTIVE METHODS				
	Condom **n (%)**	**Pills** **n (%)**	**Safe Days** **n (%)**	**Total** **N (%)**	**P-Value**
Reason for preference					< 0.000
Affordability	**84(52.2)**	8	13(27.7)	105 (**44.9**)	
Effective	12	4	5	21	
Easy To Use	19	**11 (42.3)**	6	36(**15.4**)	
Accessible	7	1	4	12	
Convenient	3	2	2	7	
Safe/Less Side Effects	36(22.4)	0	**17 (36.2)**	53(**22.6**)	
Others	0	0	0	0	
Efficiency in					0.001
1) Prevention of Pregnancy					
10 – 40	53	3	6	62	
50 -80	53	**14(53.8)**	**25(53.2)**	92(**39.3**)	
80 – 100	**55(34.2)**	9	16	80	
2) Prevention of STDs					0.009
10 – 40	30	5	21	56	
50 -80	60	8	8	76	

22

80 – 100	**71(44.1)**	13	18	102**(43.6)**	
Side Effects					< 0.001
Yes	**32(19.9)**	**14(53.8)**	4	50**(21.1)**	
No	129(80.1)	12	**43(91.5)**	184	
Total N (%)	**161 (100%)**	**26(100%)**	**47 (100%)**	**234(100%)**	

Source: Field Data

From the preferred contraceptive methods, it was discovered that, students opt for condoms because of affordability (52.2%), efficiency (prevent 80 – 100% pregnancies and STDs), and safety/less side effects.

On the other hand, Pills were opted for easy usability (42.3%) , efficiency (53.8% prevent pregnancies); and Safe days are opted since they are naturally free, safe (91.5%) and can prevent 53.2% pregnancies if followed well.

4.5 FACTORS ASSOCIATED WITH USE OF CONTRACEPTIVES AMONG KIU STUDENTS

Tab.04: Factors Associated With Use of Contraceptives among KIU-WC Students

	USE OF CONTRACEPTIVES				
	Yes **n (%)**	**No** **n (%)**	**Total** **N (%)**	**Odds Ratio (OR)** **CI = 95%**	**P – Value**
Age (yrs)					**0.972**
15 – 17	5	2	7	1.049 (0.653 – 1.685)	0.852
18 – 20	68	31	99	1.011 (0.861 – 1.186)	0.897
>20	152	72	224	0.985 (0.843 – 1.152)	0.854
Sex					**0.008**
Male	150	54	204	1.235 (1.046 – 1.458)	
Female	75	51	126	0.654 (0.479 – 0.893)	
Marital Status					**0.001**
Single/Relationship	200	76	276 **(83.6)**	1.602 (1.182 – 2.173)	<0.001
Married/Cohabiting	22	28	50 **(15.2)**	0.607 (0.440 – 837)	<0.001
Widowed	1	1	2(0.6)		

Divorced/Separated	2	0	2(0.6)		
Year of Study					0.009
Year 2	97(**78.9**)	26	123 (37.3)		
Year 3	89(64.5)	49	138 (**41.8**)		
Year 4	25(56.8)	19	44 (13.3)		
Year 5	14(56.0)	11	25 (7.6)		
Religious Acceptance					**< 0.001**
Yes	152	42	194(**58.8**)	1.460 (1.228 – 1.735)	
No	73	63	136(41.2)	0.467 (0.338 – 0.646)	
<u>Knowledge & Awareness</u>					0.367
1) Importance of Contraceptives					
Prevent Pregnancy	179	83	262 (**79.4**)		
Prevent STDs	16	4	20(6.1)		
Promote child spacing	30	18	48(14.5		
2) Source of information					
Media	57(**75**)	19	76 (23.0)		0.034
School	138(64.5)	76	214(64.5)		
Magazine	4(**80**)	1	5		
Parents	1	3	4		
Friends	25(**83**)	5	30(9.1)		
Others	0	1	1		
<u>Perception /Option & Decision</u>					
1) Is it Students' Right to Use contraceptive?					**0.032**
Yes	181	73	254(**77.0**)	1.226 (0.995 – 1.511)	
No	43	31	74(22.4)	0.686 (0.493 – 0.955)	
2) Who decides in use of contraceptives?					0.587
Male	33 (**14.7**)	18	51	0.940 (0.756 – 1.169)	0.562
Female	14 (6.2)	9	23	0.886 (0.633 – 1.240)	0.435
Both	178 (**79.1**)	78	256	1.105 (0.911 – 1.341)	**0.283**
<u>Peer Influence/Pressure</u>					
1) Discuss contraceptive use with peers					< 0.001
Yes	204(**90.7**)	65	269(**81.5**)	2.203 (1.548 – 3.135)	
No	21(9.3)	40	61 (18.5)	0.368 (0.279 – 0.487)	
2) Nature of opinions from peers about contraceptive use					
Encouraging	164(**72.9**)	41	205	1.280 (1.046 – 1.566)	0.004
Discouraging	40(17.8)	24	64	0.533 (0.351 – 0.810)	

Source, Accessibility & Availability					
1) **Source**					
Hospital	107	N/A	107(**56.0**)		
Clinic	66	N/A	66(34.6)		
Home	2	N/A	2(1.0)		
Friend	16	N/A	16(**8.4**)		
			191		
2) **Accessibility to free Gov't contraceptives**					
Yes	137	N/A	137(**71.7**)		
No	54	N/A	54(28.3)		
			191		
3) **Shortage in contraceptives**					
Yes	125	N/A	125 (**65.4**)		
No	66	N/A	66(34.6)		
			191		
Preference in Contraceptives					**< 0.001**
Condoms	161	0	161 (**61.2**)	1.594 (1.372 – 1.851)	< 0.001
Pills	26	0	26 (**9.9**)	1.192 (1.127 – 1260)	0.024
Injectables	4	0	4 (1.5)		
Safe Days	19	28	47 (**17.9**)		
Withdrawal	15	7	22 (8.4)		
Others	0	3	3 (1.1)		
Reason for Preference					**< 0.001**
Affordability	101	11	112(**42.6**)	1.084 (0.984 – 1.194)	**0.114**
Effective	21	2	23 (9.0)		
Easy To Use	36	4	40(**15.2**)	1.054 (0.933 – 1.191)	0.457
Accessible	11	1	12 (4.6)		
Convenient	7	2	9 (3.4)		
Safe/Less Side Effects	49	16	65 (**24.7**)	0.843 (0.726 – 0.979)	0.006
Others	0	2	2(0.8)		
Get Side Effects while using contraceptives					0.007
Yes	57(25.3)	2(**3.3**)	59 (**22.5**)	1.167 (1.079 – 1.263)	
No	168(**74.7**)	31	203(77.5)	0.197 (0.049 – 0.793)	
		33	262		
Total N (%)	**225 (68.2)**	**105 (31.8)**	**330**		

Source: Field data

Overall factors associated with use of contraceptives are provided in Tab.4. **Students < 20 years** were found to use contraceptive more than their older fellows. In fact, use of contraceptives in students 15 -17years was 1.049 times (95% CI: 0.653 – 1.685) more than their older students. Likewise, Use of contraceptives among **male students** was 1.235times (95% CI: 1.046 – 1.458) more than female colleagues; students who are **single/in relationship** were 1.602times (95% CI: 1.182 – 2.173) more likely to use contraceptives than cohabiting or married counterparts. Finally, use of contraceptives reduces proportionally with **academic year** of study as indicated above.

It was observed that, **religious acceptance** to use of contraceptives increase prevalence by 1.460 times (95% CI; 1.228 – 1.735) than when it restricts. In fact when religion of a student doesn't accept use of contraceptives it reduced prevalence to 0.467 times (0.338 – 0.646) than when it accepts. Respondents gave a number of religious reasons for not accepting use of contraceptives including; fear to disobey God as use of contraceptives is prohibited in holly books (Bible/Quran), is a sin since it encourages immorality and adultery/fornication, against the teaching of the religious leaders, contradicts with nature/procreation, among others. However, a significant percentage (67.6%) of respondents that use contraceptive reported that their religions accept their use due to a range of reasons including; prevent STDs, unwanted pregnancies, protect the lives of vulnerable women and girls, promote child spacing, avoid over population amidst limited resources, among others

Knowledge and level of awareness were key in use of contraceptives; Most (79.4%) of the respondents knew that contraceptives prevent pregnancies and this could compel them to use in fear of unwanted pregnancies and overwhelming early responsibilities. Though schools dominated (64.5%) in disseminating information on use of contraceptives, friends (83%), magazines (80%) and media (75%) proportionally proved more efficient in influencing use of contraceptives among post secondary students.

Perception & who influences Decision making in use of contraceptives were important; it was observed that students who knew that it is their sexual right to use contraceptives, were 1.226 times (95% CI; 0.995 – 1.511) more likely to use contraceptives than others. Male dominance in influencing decision to use contraceptives or not reduce contraceptive

use to 0.940 times (95% CI; 0.756 – 1.169) less than a mutually share decision. On the other hand, when both male and female students take part in decision making, contraceptive use increase 1.105times (95% CI; 0.911 – 1.341) than in single sex dominated decisions.

Peer influence in use of contraceptives; Positive peer pressure was found to increase contraceptive use 2.203times (1.548 – 3.135) than when a student is not influenced. More still, encouraging peers increase use of contraceptives 1.280 times (95% CI; 1.046 – 1.566) more than discouraging peers.

Accessibility & Availability of contraceptives influences their use; Most (90.6%) of respondents obtain artificial contraceptives from health facilities (Hospitals/clinics) as reliable sources. It was discovered that access to free government contraceptives enhance artificial contraceptive use by 71.7% and limited access denies 28.3% students chance to use contraceptives when in need. Despite, the high prevalence of contraceptive use (68.2%), majority (65.4%) of students reported frequent **shortage** in contraceptives when needed.

Preference of contraceptive method influence its use; For instance, students who prefer condoms were found to use contraceptives 1.594times (95% CI; 1.372 – 1.851) more than others; and female students who preferred contraceptive pills were1.192times (95%; 1.127 – 1.260) more likely to use them than others.

Other factors associated with contraceptive use ranged from **affordability** (OR 1.084 (0.984 – 1.194)95% CI), **Easy usability** (OR 1.054 (0.933 – 1.191); 95% CI) and **safety/less side effects** (0.843 (0.726 – 0.979); 95% CI).

Finally, Respondents' suggested a couple of side effects in using contraceptive including; abnormal vaginal bleeding, changes in menstrual cycles, dysmenorrhea, painful sex-intercourse, reduced sexual sensations, allergic reactions of latex condoms, infertility, among others.

CHAPTER FIVE
DISCUSSION

5.0 Introduction

This chapter gives a brief discussion of the findings of this study with reference to previous studies.

5.1 Use of contraceptives

From the study, the Contraceptive Prevalence Rate (CPR) among post secondary students was 68.2%, which was affected by a series of factors case highlighted in the findings below. This means CPR among post secondary increased by 1.58 times from the 2016 CPR of 4.31%. It also show a positive drift towards solving a 23.0% unmet need for family planning of 66.1% total demand in Ankole sub-region of Uganda and is way above the national CPR target of 50% by 2020 (UDHS, 2016). Thus, more concert efforts and informed decision should be directed towards improving adolescent sexual and reproductive health.

5.2 Factors associated with contraceptives among KIU-WC students

The study showed that Students < 20 years were found to use contraceptive more than their older fellows, this can be traced from the fact that, majority (>90%) of students < 20 years of age are single/in relationship, but not cohabiting/married and mostly in lower academic years of study. Thus, they are more likely to use contraceptives than older fellows.

Findings from this study show that male students were 1.235 times more likely to use contraceptives than female counterparts. This rhymes with findings of previous studies which have shown that gender inequalities in terms of power, roles, decision making, and negotiation for contraceptive use is a great barrier. In a survey conducted in Uganda about Low Contraceptive Use among Young Females, the findings show that only 12% of the adolescents were using contraception at the time of the survey ((Kabagenyi et al., 2017). Thus, efforts to gender equity and women empowerment, through improve access sexual and reproductive health services, bridge knowledge gap on contraceptive use, can definitely increase contraceptive use, avert some of the unplanned births among these females, and prevent STDs and better female health.

Students who are single/in relationship were 1.602 times more than married/cohabiting counterparts.

This in part due to the trust developed when married/cohabiting, and confidence to assume responsibility even when the female partner conceives. Contrary, students who are single fear unwanted pregnancies and overwhelming early responsibilities, and opt for dual contraceptives to prevent STDs.

Religious acceptance to use of contraceptives was found increase prevalence by 1.460 times. Otherwise, it reduced use of contraceptives if it discourages contraceptive use. This is in agreement with previous research where religion and Religious Leaders have played a leading role in discouraging dissemination of information on contraceptive use (Andi et al., 2014). Catholics and Muslims are the religious groups to be least inclined to encourage contraceptive use. This is so, since Religious Leaders consider contraceptive use to be an insubordination to divine predetermination, "an immorality", "a sin", "murder", and "killing the gift of life"(Celik, 2016). However, cases were religions lessen the weight on discouragement and resort to encouragement in use of contraceptives; there is remarkable increase in prevalence of contraceptive use as our study reveals.

Knowledge and awareness about contraceptives is thought to shape users' abilities to perceive unmet contraceptive needs. The study showed that most (79.4%) of the respondents knew that contraceptives prevent pregnancies and this could compel them to use in fear of unwanted pregnancies and overwhelming early responsibilities. The research discovered that schools dominated (64.5%) in disseminating information on use of contraceptives; however, students are proportionally compelled to use contraceptives basing on information from their friends (83%), visual-aided messages in magazines (80%) and modernized viral information on media (75%). The study showed that students who are empowered to know that it is their Sexual right to use contraceptives, were 1.226 times more likely to use contraceptives than others.

Male dominance in influencing decision to use contraceptives or not remains a deterrent and thus, the study showed reduce contraceptive use to 0.940 times (95% CI; 0.756 – 1.169) less than a mutually share decision. On the other hand, when both male and female students take part in decision making, contraceptive use increase 1.105times (95% CI; 0.911 – 1.341) than in single sex dominated decisions. Other studies have shown that decision making to use contraceptives by female university students involves a complex interaction of individual, social, family and peer factors; and that single sex dominated decision leads to unhealthy sexual and reproductive health (Students & Soressa, 2016).

Positive peer pressure was found to increase contraceptive use 2.203times (1.548 – 3.135) than when a student is not influenced. More still, encouraging peers increase use of contraceptives 1.280 times (95% CI; 1.046 – 1.566) more than discouraging peers.

Accessibility & availability of contraceptives; Direct access to the modern methods of contraception is important in achieving designated importance of contraceptives, increasing efficiency and effectiveness. This study showed that most (90.6%) of respondents obtain artificial contraceptives from health facilities (Hospitals/clinics) as reliable sources; 28.3% students had limited access to free government contraceptives when in need. And despite of the high prevalence of contraceptive use (68.2%), majority (65.4%) of students reported frequent **shortage** in contraceptives when needed. This translates into irregularities in use of contraceptives and increased risk of unwanted pregnancies, unsafe abortions and contraction of STDs; thus, creating a gap in meeting sexual and reproductive health services. Preference of contraceptive method influences its use: Demand of sexual and reproductive health services and supplies is compelled by consumer preference/choice. Since Contraceptive methods are numerous and users opt for certain methods basing on experience, cost, side effects, influence of the circumstances and conditions. In this study, students who prefer condoms were found to use contraceptives 1.594times (95% CI; 1.372 – 1.851) more than others; and female students who preferred contraceptive pills were 1.192times (95%; 1.127 – 1260) more likely to use them than others. The compelling factors for their contraceptive preference were **affordability** (OR 1.084 (0.984 – 1.194)95% CI), **Easy usability** (OR 1.054 (0.933 – 1.191); 95% CI) and **safety/less side effects** (0.843 (0.726 – 0.979); 95% CI).

CHAPTER SIX
CONCLUSION & RECOMMENDATIONS

6.0 Introduction

This chapter comprises of the conclusion and recommendations of the study based on the set objectives.

6.1 Conclusion

The Contraceptive Prevalence Rate (CPR) among post secondary students was higher than national target of 50% by 2020 and it was associated with a couple of factors including; Student's age, sex/gender, marital status, academic year of study, religion, knowledge & awareness, preference for contraceptive, affordability, accessibility and availability, easy usability and safety of the a preferred contraceptive method. Better informed students on sexual rights and reproductive health are empowered to use contraceptives more than others.

6.2. Recommendations

The researcher proposes the following recommendations to the increase Contraceptive Prevalence Rate (CPR) among KIU students and other students of higher institution.

1. Stake holders should Design, launch and implement inclusive youth friendly services, adolescent sexual and reproductive health programs prioritizing use of contraceptives, students' empowerment in regard to sexual rights and reproductive health, behavioral change communications, and create enabling environment for contraceptive use.

2. Service providers should provide user friendly contraceptives that are preferred by users, at affordable prices, within reach and should ensure availability and safety of the a preferred contraceptive method.

3. The government and NGO/PNFPs should supplement private health sector in provision of youth friendly services, sexual and reproductive health care package within the context of their health care demand factors.

4. Knowledge & awareness creation programs should engage religious leaders, exploit peer groups, magazines, media and schools as suitable platforms to increase contraceptive use among post secondary students.

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APPENDICES

APPENDIX 1: CONSENT FORM

My name is **Nakyeyune Lillian Monica.** I am a student of Kampala International University currently in my last semester in the Faculty of Clinical Medicine & Dentistry. As part of the requirements for the fulfillment of the programme I am conducting a research study titled:

Utilization of contraceptives and the associated factors among students of Kampala international university-western campus

Ishaka – Bushenyi district, Uganda.

I hereby seek your consent to be part of this study. Your responses will be kept strictly confidential for all matters and it will only be used for the purpose of the study mentioned above. Your name will not be mentioned to protect your confidentiality.

If you consent to participate in this study, please indicate by signing below.

I voluntarily agree to take part in this study:

Signature………………………………………… Date ……………………

<p style="text-align:center">QUESTIONNAIRE</p>

Instructions: Please tick the appropriate answer and fill in the space provided where applicable.

SECTION I: SOCIO DEMOGRAPHICS

1. Sex : Male ☐ Female ☐

2. Age : 15-17 ☐   18-20 ☐   >20 ☐

3. Marital status: Single ☐   Married ☐   Widowed ☐   Divorced ☐

4. Faculty : Allied health ☐   Clinical medicine and dentistry ☐

   Nursing ☐   Education ☐

5. Year of study : Yr 2 ☐   Yr 3 ☐   Yr 4 ☐   Yr5 ☐

6. Religion: Catholic ☐ Anglican ☐ Muslim ☐ Seventh Day Adventist ☐   ☐

   Born again ☐   Others ………….

RELIGION

1. Does your religion accept contraceptive use? Yes ☐   No ☐

   a) If Yes, why? ……………………….

   b) If No, why? ....

SECTION II: KNOWLEDGE AND AWARENESS

1. Contraceptives are measures used to: Prevent pregnancy ☐

   Prevent sexually transmitted diseases ☐ Promoting child spacing ☐

2. How did you get to know about contraceptives? ☐

   Media ☐ School ☐ Magazine ☐ Parents ☐ Friends ☐ Others……… ☐

3. Which is the most effective contraceptive method you know? Condoms ☐ Pills ☐

   Injecta ☐   IUD ☐   Safe days ☐ Withdrawal ☐

   Others…………….

SECTION III: PREVALENCE

1. Do you use contraceptives? Yes ☐   No ☐

   ☐   ☐   ☐

2. Which contraceptives do you use;   Condoms   Pills   Injectables
   Natural methods ☐   Safe days ☐   Withdrawal   Others, specify……… ☐

3. The method above is preferred because it is;
   Affordable ☐   Effective ☐   Easy use ☐   Safe ☐   Accessible ☐
   Convenient   Less side effects   Others………….. ☐

SECTION IV: ACCESSIBILITY

1. Where do you get your contraceptives from?
   Hospital ☐   Friends ☐   Clinics ☐   Home ☐

2. Do you ever run short of contraceptives? Yes ☐   No ☐

3. Do you have access to the free government contraceptives?   Yes ☐   No ☐

SECTION V: PERCEPTION

1. Do you think it is right for students to use contraceptives? Yes ☐   No ☐

2. How would you rank the ;
   a)   Efficiency of contraceptives in preventing pregnancies? 10-40 ☐   50-80 ☐
        80-100 ☐
   b) Condoms in preventing sexually transmitted diseases?   10-40 ☐   50-80 ☐
        80-100

3. In a relationship, who do you think should be responsible to decide whether or not
   to use contraceptive?   ☐   ☐   ☐ Both

SECTION VI: PEER PRESSURE
1. Do you discuss about contraceptives with your peers? Yes ☐   No ☐

2. What are their opinions about using contraceptives? Encouraging ☐   ☐
   Discouraging

SECTION VII: SIDE EFFECTS
Do you get any side effects while using contraceptives?   Yes ☐   N o ☐

If yes, which one? ………………………………………………………………..

Thank you.

BUDGET ESTIMATION

ITEM	Unit cost	Amount
Labor	20000	240,000
Printing	30000	70,000
Type setting	1000	10,000
Internet	2000	10,000
Miscellaneous		100,000
Total		430,000/=

WORK PLAN

| ACTIVITY	MONTH					
	APR	SEP	SEP	SEP	SEP	OCT
PROPOSAL WRITING	███					
APPROVAL OF RESEARCH PROPOSAL	███					
DATA COLLECTION		███	███			
DATA ANALYSIS				███		
DISSERTATION WRITE UP					███	
REPORT ADMISSION						███

MAP OF UGANDA SHOWING STUDY AREA

Figure : ●EY: BUSHENYI DISTRICT

MAP OF STUDY AREA

KEY: BUSHENYI ISHAKA