

UNIVERSITY OF NAIROBI

FACULTY OF ARTS

DEPARTMENT OF SOCIOLOGY AND SOCIAL WORK

**USE OF CONTRACEPTIVES AMONG ADOLESCENTS AND THEIR EFFECTS
IN PREVENTING PREGNANCY: A CASE OF KAWANGWARE SLUM AREA
IN NAIROBI CITY COUNTY**

BY

EILEEN WAMBUI

C50/8603/2003

**A Research Project Submitted in partial fulfillment of the requirements for the
award of the degree of Master of Arts in Sociology (Medical Sociology),
University of Nairobi.**

2019

DECLARATION

I declare that this research project is my original work and has not been submitted for degree award in any other university or college.

Signature..... Date.....

Eileen Wambui

C50/8603/2003

This research project has been submitted for examination with my approval as University Supervisor.

Signature..... Date.....

Prof. Edward K. Mburugu,
Department of Sociology
University of Nairobi

DEDICATION

This work is dedicated to my loving parents Mr. Samwuel Thie and Mrs. Mary Wacu Thie whose love for education saw them struggle beating all odds to keep me in school. Giving me the exposure I so much enjoy today. To my brother Charles Gichuki for cheering me on when it looked impossible to carry on. To my husband Julius and children Lorraine, Derrick and Nazarene who had to endure my absence in their lives. Their moral support during the period of struggle for this degree is highly appreciated. Their contribution towards my success is invaluable. To my son Derrick in particular who has been my inspiration throughout my period of study and last but not least to my supervisor Prof. Edward Mburugu for his consistent guidance and mentorship.

ACKNOWLEDGEMENTS

I am most grateful to the Almighty God for His faithfulness, provision and unfailing love, His divine presence and intervention as I did the course. I sincerely appreciate everybody who made this research project possible. My gratitude goes to my supervisor professor Edward Mburugu for his professional advice and guidance throughout the project period. His continuous communication and availability throughout the study period enabled me finish the project. I am also indebted to all the lecturers of Medical sociology, my friends and class mates for their support and encouragement during the study.

TABLE OF CONTENTS

DECLARATION.....	ii
DEDICATION.....	iii
ACKNOWLEDGEMENTS	iv
TABLE OF CONTENTS	v
LIST OF TABLES	ix
LIST OF FIGURES	x
ACRONYMS AND ABBREVIATIONS.....	xi
ABSTRACT.....	xii
CHAPTER ONE	1
1.0 INTRODUCTION.....	1
1.1 Background of the Study	1
1.2 Problem Statement.....	5
1.3 Research Questions.....	6
1.4 Objectives of the Study.....	7
1.4.1 General Objective	7
1.4.2 Specific Objectives	7
1.5 Significance of the Study	7
1.6 Scope and Limitations of the Study	8
CHAPTER TWO	10
LITERATURE REVIEW	10
2.0 Introduction.....	10
2.1 Empirical Literature	10
2.1.1 Level of Knowledge and use of contraceptives among Adolescents	10
2.1.2 Aims in use of contraceptives among adolescents	13
2.1.3 Factors Affecting Usage of Contraceptives among Adolescents	14
2.1.4 Use of Contraceptives and Prevention of Pregnancies Among Adolescents ...	18
2.1.5 Knowledge Gap	20
2.2 Theoretical Framework.....	21

2.2.1 The Health Belief Theory.....	21
2.2.2 The Health Promotion Theory.....	22
2.2.3 Theory of Reasoned Action.....	22
2.3 Conceptual Framework.....	24
CHAPTER THREE	27
3.0 RESESARCH METHODOLOGY	27
3.1 Introduction.....	27
3.2 Site Description.....	27
3.3 Research Design.....	27
3.4 Unit of Analysis and Units of Observation.....	28
3.5 Target Population.....	28
3.6 Sample Size and Sampling Procedure	29
3.7 Methods of Data Collection	30
3.8 Ethical Considerations	31
3.9 Data Analysis	32
CHAPTER FOUR.....	33
DATA ANALYSIS, PRESENTATION AND INTERPRETATION	33
4.1 Introduction.....	33
4.2 Response Rate.....	33
4.3 Background Information.....	34
4.3.1 Distribution of Respondents by Age.....	34
4.3.2 Distribution of Respondents by Marital Status.....	35
4.3.3 Distribution of Respondents by Educational Level	36
4.3.4 Distribution of Respondents by Religion.....	37
4.3.5 Whether the Respondents had Conceived.....	37
4.4. Pregnancy Rates Among Adolescents	38
4.4.1 Pregnancy Rates in Among Adolescents in Kawangware Area.....	38
4.4.2 Reasons for High Pregnancy Rates	40
4.4.3 Use of Protection During Last Sexual Encounter	41

4.5 Level of knowledge on Contraceptives Among Adolescents	42
4.5.1 Contraceptives Use Among Adolescent Girls.....	42
4.5.2 Source of Information on Contraceptives by the Adolescents	43
4.5.3 Age at Which the Respondents First Used Contraceptives	44
4.5.4 Access to Contraceptives by the Adolescents	45
4.5.5 Contraceptive Methods Used by the Adolescent	46
4.5.6 Reasons for Adolescents Use of Contraceptives	47
4.5.7 Extent to Which the Level of Knowledge Influence the Use of Contraceptives Among Adolescent Girls	48
4.6 Aims of Contraceptives Among Adolescents	49
4.6.1 Frequency in Contraceptive Use Among Adolescence	49
4.6.1 Reasons for Contraceptive Use	49
4.7 Factors Influencing Usage of Contraceptives among Adolescence.....	50
4.7.1 Factors Influencing Choice of Contraceptives to Use.....	50
4.7.2 Factors Influencing the Use of Contraceptives among Adolescents	51
4.8 Relationship between Uptake Rates and Adolescents Pregnancies	52
4.8.1 Use of Contraceptives by Adolescents and Rate of Pregnancies.....	52
4.8.2 Whether the Un-intended Pregnancies are Associated with the Use of Contraceptives in the Area.....	53
 CHAPTER FIVE	55
SUMMARY, CONCLUSION AND RECOMMENDATIONS	55
5.1. Introduction.....	55
5.2 Summary of Findings.....	55
5.2.1 Pregnancy Rates Among Adolescence	55
5.2.2 Level of Knowledge on Contraceptives Among Adolescence	56
5.2.3 Aims of Contraceptive Use Among the Adolescence.....	56
5.2.4 Factors Influencing Usage of Contraceptives among Adolescence.....	57
5.2.5 Relationship between Uptake Rates and Adolescents Pregnancies	57
5.3 Conclusions.....	58
5.4 Recommendations.....	59

REFERENCES.....	62
APPENDICES	70
APPENDIX I: INTRODUCTORY LETTER.....	70
APPENDIX II: QUESTIONNAIRE.....	71
APPENDIX III: INTERVIEW GUIDE FOR SOCIAL AND HEALTH WORKERS.....	77

LIST OF TABLES

Table 3.1 : Target Population.....	28
Table 3.2: Sample Size	29
Table 4.1: Response Rate.....	33
Table 4.2: Distribution of Respondents by Marital Status.....	35
Table 4.3: Distribution of Respondents by Educational Level	36
Table 4.4: Distribution of Respondents by Religion	37
Table 4.5: Use of Protection During Last Sexual Encounter	41
Table 4.6: Source of Information on Contraceptives by the Adolescents	43
Table 4.7: Age at Which the Respondents First Used Contraceptives	45
Table 4.8: Contraceptive Methods Used by the Adolescent.....	47
Table 4.9: Reasons for Adolescents Use of Contraceptives	47
Table 4.10 : Extent to Which the Level of Knowledge Influence the Use of Contraceptives Among Adolescent Girls.....	48
Table 4.11 : Frequency in Contraceptive Use Among Adolescence	49
Table 4.12: Influence of Choice to Use Contraceptives (N=98)	50
Table 4.13: Factors Influencing the Use of Contraceptives among Adolescents	51
Table 4. 14: Use of Contraceptives by Adolescents and Rate of Pregnancies	52

LIST OF FIGURES

Figure 2.1: Conceptual Framework.....	26
Figure 4.1 Distribution of Respondents by Age.....	34
Figure 4.2 Whether the Respondents had Conceived	38
Figure 4.3 Pregnancy Rates Among Adolescence	39
Figure 4.4 Reasons for High Pregnancy Rates.....	40
Figure 4.5 Contraceptives Use Among Adolescent Girls	42
Figure 4.6 Access to Contraceptives by the Adolescents.....	46
Figure 4.7 Reasons for Contraceptive Use Among Adolescents	49
Figure 4.8: Relationship Between Unintended Pregnancies and the Use of Contraceptives	53

ACRONYMS AND ABBREVIATIONS

AIDs:	Acquired Immune Deficiency Syndrome
ESP	Essential Service Package
HIV	Human Immunodeficiency Virus
IUD:	The intrauterine device
IUS:	Intrauterine system
KDHS	Kenya Demographic and Health Survey
OCP	Oral Contraceptive Pill
RH	Reproductive Health
SES	Socio-Economic Status
SPSS	Statistical Package for Social Sciences
SRH	Sexual and Reproductive Health
STD	Sexually transmitted disease
STD:	Sexually Transmitted Diseases
TFR	Total Fertility Rate
UN	United Nations
UNFPA	United Nations Population Fund
USAID	United States Agency for International Development
SCT	Social Cognitive Theory
SLT	Social Learning Theory
TRA	Theory of Reasoned Action

ABSTRACT

The study sought to investigate the use of contraceptives and its effect on adolescent pregnancy among poor urban communities. In so doing, the study was guided by five objectives; to establish the prevalence of pregnancy among adolescents in poor urban communities, to assess the level of contraceptives knowledge among adolescents in poor urban communities. To establish the aims of using contraceptives among adolescents in poor urban communities, to investigate the factors influencing the usage of contraceptives among adolescents in poor urban communities, to establish the relationship between pregnancy and contraceptives among adolescents in poor urban communities and to establish the aims of using contraceptives among adolescents in poor urban communities. The study employed a descriptive research design. A total of 138 adolescents were sampled using stratified and random sampling procedure and their views, which were collected by use of questionnaires, analysed descriptively with the help of SPSS software. The findings of the study reveals that high pregnancy rates were as result of peer pressure, poverty levels of the families of adolescent girls which push the girls to look for security and they get lured in relationships, risky sexual behavior and lack of sexual awareness among the adolescent girls, the finding also reveals that the unintended pregnancies were associated with the rate of use of contraceptives by adolescents. The study concludes that the pregnancy rates among adolescent girls in poor urban communities are high. The study concludes that there is high use of contraceptives among adolescent in poor urban communities. The study recommends that there is need to come up with policies or programmes that address the contraceptive needs of adolescents and remove barriers to services. Channels should be created where adolescents can get accurate information on the use of contraceptives. This should be coupled with provision of adolescent-friendly health care services.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

In the recent years the number of adolescents using contraceptives has increased significantly. For instance, between 1991 and 2005 high school students that were sexually active used a condom the last sexual intercourse increased from 46.2% to 62.8% in 2005. Regardless, Potts & Fotso (2007) states that the consistent use of modern family planning is still a challenge for most adolescents. Informing teenagers about modern family planning use does not lead to increased sexual activity rates, higher number of partners or earlier age of first intercourse.

Based on the World Health Organization (WHO), adolescents between ten to nineteen years. This age bracket concurs with WHO's definition of young people, which focuses on persons between 10 and 24 years. In this research, the term adolescent and teenagers will be used interchangeably. This is because in most societies adolescence is often equated with puberty; which is characterized by physical changes that result in reproductive maturity. As such, adolescence can refer to the period between 12 and 20 years. Sexual activity among this group of males and females, especially in urban areas, is becoming increasingly common. The upsurge of interest in pursuing higher education on the part of the adolescent and the decline in the age of reproductive maturity has created a large bio-social gap. The adolescents are biologically mature much before they are socially mature. At the same time adolescents begin having sexual experiences much earlier: with more sexual partners and at a high frequency (Liran *et al.*, 2012). These liberal and sexual

lifestyles have contributed to the increase and spread of adolescent pregnancies among other problems.

These adolescents barely use any method of contraception. The choice of contraceptives is often determined by age, education, marital status, income, ethnicity, age, race, fertility intentions and requirements for confidential care. Condoms and oral contraceptive pills are some of the modern family planning methods that have gained popularity among teenagers in the past twenty years. Based on recent research, the number of adolescents using OCPs has remained stable at around 18% to 20%. The number of teenagers between 15 and 19 years using injectable contraception has increased from 0% to 13% from 1988 to 1995.

Adolescents are sexually active; hence, it's necessary for them to be informed about contraceptives. Notably, teenagers must obtain insights on the different family planning methods, the pros and cons of using specific methods and where to obtain the contraceptives. To raise the comfort levels of adolescents with contraceptives, it's necessary for the media and peers to support them. Notably, teenagers must have total access to safe, convenient and confidential family planning services. According to Shah and Ahman (2004) parents, health practitioners, pharmacy staff and educators can officially enable adolescents to obtain, learn about and use family planning methods effectively.

Internationally, some countries are making slow but steady progress in terms of minimizing the unmet need using modern family planning methods. For example, Bangladesh recently registered a rise in use of contraceptives among married women between 10 and 49 years from 49% in 1996/97 to 61% in 2011. Nonetheless, the rise was slightly smaller among married adolescents; from around 33% in 1996/97 to 47% in 2011.

Adolescents face numerous barriers in accessing and using contraceptives. Cost, legal factors, erratic availability and policies hinder unmarried teenagers in emerging economies from getting contraceptives. In the absence of legal restrictions, unmarried adolescents still cannot access contraceptives because most health workers cannot approve premarital sex. In situations where the contraceptives are provided, unmarried teenagers can only obtain condoms with the health workers presuming that intra-uterine devices and long-acting hormonal methods are unsuitable among childless young women (Shah & Ahman, 2004).

In recent years, stakeholders and scholars have recognized the necessity of preventing early pregnancy among Sub-Saharan region adolescents. According to Phillips & Mbizvo (2016) the highest rates of teenage pregnancies are registered in African countries. From the Kenya Demographic Health Survey of 1989 at least 90.1% of adolescent participants had knowledge about on birth control method and women that were never married were more informed about at least one contraceptive in comparison to the ones that are currently married. Sex education programs were initiated to inform members of the public about available contraceptives (Murigi, 2015).

Issues linked to adolescent development including the presumption that one is immune from the consequences or problems associated with pregnancy or sexual intercourse and failure to accept one's sexual activity are some of the factors leading to inconsistent or lack of contraceptive use among adolescents. Misunderstandings about FP methods and low information on contraceptive methods lack contribute to low contraceptive use. Nonetheless, the level of knowledge among adolescents on contraceptive use does not correlate with consistent use. Despite having the knowledge, most teenagers are likely to delay or fail to use contraceptives because of various reasons including fear of parents, lack

of parental guidance and ambivalence and the perception that birth control is perilous and can lead to negative effects like weight gain (Tsui, McDonald-Mosley & Burke, 2010).

Several researchers have conducted comprehensive research on the impact of low use of contraceptives and the unmet unintended births needs and pregnancies extensively researched on (Tsui *et al.*, 2010). One of the significant issues among young women and adolescents is discontinuation because their access to birth control methods is more limited in comparison to older women. Equally, have more irregular and sexual activities that are less predictable and little information on FP method use. Based on a research done in six emerging nations, women that were less than 25 years were more likely to stop using contraceptives after twenty four months in comparison to others (Shah & Ahman, 2004).

Most adolescents still experience unplanned pregnancies in spite of the best intentions on contraceptive use and the effectiveness of prevention of pregnancy programs among adolescents is still below the desired levels. The success of teenagers in avoiding pregnancies still depends on availability of information focusing on contraceptives services and methods (Tsui *et al.*, 2010). Based on estimates from 2000, around 25% or more than eleven million married women between fifteen and nineteen years the former USSR and the developing world have unmet contraception need. Notably, the persons have desire to delay or avoid pregnancies but are not using any family planning methods. However, the statistics do not capture unmet need among women that are sexually active but are never married. There is also sufficient evidence on the adverse effects of unplanned fertility and pregnancy on teenager's health (Moreland & Talbird, 2006).

Like most sub-Saharan countries, Kenya is witnessing an urban explosion. While rural to urban migration is persistent, available data indicates that around 75% of growth in urban centres in Sub-Sahara Africa is caused by natural population growth while migration accounts for around 25% of urban growth (Singh, Sedgh & Hussain, 2010). Another dominant trend among adolescents in Kenya is the deteriorating health outcomes because of rising urban poverty. In Nairobi city, for example, around 60% of the population lives in informal settlements and slums (Central Bureau of Statistics, 2005), which are predominated by early sexual debut among other behaviors that are sexually risky (Zulu, Dodoo & Ezeh, 2002). Admittedly, a critical aspect of urban fertility dynamics that is often neglected is reproductive outcomes of teenagers living in poverty (Ezeh et al., 2010).

1.2 Problem Statement

(Yakubu & Salisu, 2018) points out that high levels of unwanted pregnancy are common in Sub-Saharan Africa. Unwanted and mistimed pregnancy is relatively high among young women in comparison to older women (Ochako *et al.*, 2015). The risk of sexually transmitted diseases and unplanned pregnancy including AIDS is high. At younger ages, most adolescents are involved with higher probability of numerous sexual partners and unprotected sex, which exposes the teenagers with the high risk of being infected with STD/HIV/AIDS. The period of exposure in early sexual activity initiation is often prolongs the exposure period of the pregnancy risk in the adolescents reproductive span. Teenagers are exposed to early child bearing and marriage, which in turn makes children and mothers vulnerable to substantial health risks. Young parents are vulnerable to pregnancy complications and are unable to deal with them; hence, they are exposed to maternal death (Fotso, 2006).

The extent to which improved knowledge and information can unplanned pregnancies is uncertain. Given the youths knowledge on the level of prevention and control risks of unwanted pregnancies, there is concern about teenagers associated morbidity and continued unsafe sexual practices. While a variety of programs are quite effective at increasing youths 'level of knowledge of contraceptives and contraception, they have little impact on their behavior. The relationship between what youths know and how they behave is perhaps the most salient issue.

Concerning this issue, little is known about the extent of contraceptive use and its effect in averting adolescent pregnancies in poor urban communities of Africa in general, and Kenya in particular.

1.3 Research Questions

The study sought to answer the following research questions:

- i. What is the prevalence of pregnancy among adolescents in poor urban settings?
- ii. What is the level of contraceptives knowledge among adolescents in poor urban settings?
- iii. What are the aims of using contraceptives among adolescents in poor urban settings?
- iv. Which factors influence the usage of contraceptives among adolescents in poor urban settings?
- v. What is the relationship between pregnancy and contraceptives among adolescents in poor urban settings?

1.4 Objectives of the Study

1.4.1 General Objective

The main objective of this study was to examine the effects of contraceptives usage on adolescents' pregnancy among poor urban settings in Kenya

1.4.2 Specific Objectives

The study was guided by the following specific objectives

- i. To establish the prevalence of pregnancy among adolescents in poor urban settings
- ii. To assess the level of contraceptives knowledge among adolescents in poor urban settings
- iii. To establish the aims of using contraceptives among adolescents in poor urban settings.
- iv. To investigate the factors influencing the usage of contraceptives among adolescents in poor urban settings.
- v. To establish the relationship between pregnancy and contraceptives among adolescents in poor urban settings.

1.5 Significance of the Study

These study findings may be significant to adolescence as they may be able to know the factors that hinder them from the use of contraceptives. Also, the findings from the study may be of great importance to other teenagers aspiring to undertake contraceptive methods as they might be able to know the factors that influence uptake of contraceptives.

The study findings may be of great significance to family planning specialists. This is because they may be able to know the factors that hinder that hinder people from the use of contraceptives and contraceptive methods especially among the youth. Also they may obtain information on how to overcome barriers to uptake of contraceptives by poor urban residents.

Moreover, the study findings may be of great significance to the government as they may have relevant information to be used in enhancing high uptake of contraceptives among teenagers in an effort to reduce unwanted pregnancies among them.

1.6 Scope and Limitations of the Study

The study was conducted in Kawangware slums of Nairobi County. This slum is characterized by high poverty levels, low levels of education, large household sizes that affect access to basic health services including family planning services. The target population was adolescent girls in Kawangware. The unit of analysis will be households of adolescent girls in Kawangware slums, Nairobi County, while the unit of observation were adolescent girls who have ever conceived at age 18-24 years. This study took a duration of six months.

According to Best (2008) limitations are conditions beyond the control of the research that may place restrictions on the conclusion of the study and their application. One of the main limitations is brought about by the topic of the research itself. Pregnancy is about sexual behavior and due to secretive nature of people's sexual behavior it may be challenging and threatening to ask people questions touching on their sexuality which is a very private affair. The researcher did everything possible to make informants at ease and ensured that

the researcher creates a rapport before asking questions. Another limitation of the study was that it was difficult to get valid responses about the sexual lives of the respondents/informants.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter reviewed the relevant literature for the study. According to Oso (2005), literature review is central to any scientific work because of its information collected from different areas by different people. In this chapter the researcher is going to look at the related literature of the problem under study.

2.1 Empirical Literature

2.1.1 Level of Knowledge and use of contraceptives among Adolescents

The main cause of low use and method uptake of modern contraceptives is because of incorrect and inadequate knowledge (Campbell, Sahin-Hodoglugil & Potts, 2006). Notably, the knowledge characteristic of women influences the adoption of modern health care including maternal health services in developing countries (Michael, 2012). In a research undertaken in Yemen, the level of education among woman, parity husbands' education level and occupation as well as women's occupation and the monthly income of the family are highly linked with the use of contraceptive methods (Almualm, 2008).

Based on a research conducted by Ibnouf *et al.* (2007) among married Sudanese women over the family planning services utilization; knowledge, socioeconomic status and mother's education are some of the enabling and principal predisposing factors determining contraceptive use methods. Therefore, poverty, ignorance and illiteracy are the main factors limiting the use of contraceptives. Despite education being linked with rise in the adoption of modern family contraceptive use methods women with higher and university

education registered a low use of modern family planning methods. The main reason for low contraceptive use among women with university and high education is because such person often start families after completing education; hence, they seek to have the most children possible before reaching menopause (Ibnouf *et al.*, 2007).

In Singapore, a research conducted by Gosavi (2016) demonstrates that increased use of contraceptive use is highly linked with good knowledge of modern family planning methods. From the research on contraceptive use among Singaporean women it is clear that more effective approaches must be used to inform women about modern family planning methods so as to raise adoption of contraceptive methods. These findings are in line with Gizaw and Regassa (2011) who explores the utilization of family planning service utilization in Mojo town, Ethiopia. Based on the findings the adoption of contraceptives is high among literate and persons with higher parity.

In the Kenya, the rate of unintended pregnancy is still high. The Kenya Demographic and Health survey (2003) shows that the pregnancies of around 50% of unmarried women between 15 and 19 years and 45% of women that are married was either unwanted or mistimed. Based on KDHS report in 2008 and 2009 approximately 43% of Kenya's married women posit that their current pregnancies were unintended. In Kenya, high school girl dropout is caused by unintended pregnancy, with the phenomenon causing a dropout rate of around 13,000 girls each year (Best, 2008). To address the issue of unwanted pregnancies most women resort to unsafe abortions; which contribute to around 488 fatalities for every 100, 000 live births.

In Kenya, it is difficult to identify the determinants of prevalence and unintended pregnancies among teenagers in diverse economic and social situations, especially in urban areas because of lack of adequate data (Oso, 2005).

Research on teenagers living in slums in Brazil, Bangladesh and Kenya demonstrate the challenges associated with reproductive health that adolescent's experience. Based on these studies it is clear that low education levels, insecurity and poverty expose most teenagers in such societies to unplanned pregnancies (Ochako *et al.*, 2011). From data from groups in Nairobi's informal settlements, adolescents living such areas engage in riskier sexual behavior such as transactional sex, numerous sexual partners and early sexual debut in comparison to their colleagues in non-slum areas of the city (Olukoya, 2004). Additionally, most teenagers living in slums have an inadequate understanding on and limited access to modern family planning methods; hence, most adolescents are unable to control their reproductive life (Ojwang, 2006). The use of knowledge in addressing contraceptives is having repercussion on the information about family planning being released to the public.

Gupta, Katende and Bessinger (2003), for example, state that awareness of FP methods and changing social norms on contraceptive use can be enhanced through traditional and modern media. Programs that seek to support contraceptive use among adolescents can advocate for modern family planning methods through counseling and education as well as providing supplies. Whereas school-linked health centers can continue providing such services, community agencies are still a significant source adolescent-directed contraceptive services (Gribble & Haffey, 2008).

Nonetheless, other studies demonstrate that the use of contraceptives is not affected by knowledge. Notably, Ochako *et al.* (2015) did a research in Coast, Central and Nyanza region to evaluate factors that prevent young Kenyan women from using contraceptives. To undertake the research, Ochako *et al.* (2015) conducted an in depth interview involving a sample of women between 15 and 24 years that are sexually active; with both users and non-users being obtained from households that were selected randomly. Based on the research, most respondents were acquainted with modern family planning methods and could provide a general mechanism of action. Resultantly, awareness and knowledge on birth control methods must not translate to use. Misconceptions and myths as well as fear of side effects and adverse reactions were a major barrier to use.

2.1.2 Aims in use of contraceptives among adolescents

The family planning package consists of contraceptive methods. Globally, an empirically and large certified demand for use of contraceptives to limit childbearing is available worldwide (Singh *et al.*, 2010). Presently, approximately one-hundred million female students that are active sexually and desire to stop or delay childbearing have unmet need of contraceptives (Singh & Darroch, 2012). Globally over forty million mistimed, unwanted or unintended pregnancies occur globally each year, raising the number of abortions that are induced and maternal mortality and morbidity. The cost of avoiding unwanted births is minimal in comparison to those of unwanted births at the family as well as the national level. Few public health interventions are as effective as contraceptive and family planning programs at minimizing the morbidity and the mortality of infants and mothers and have such a breadth of positive impacts (Ochako *et al.*, 2011).

Furthermore, the need for using birth control methods is high in societies with high illiteracy, poverty and gender inequality levels. In such communities women are unable to engage in self-development as well as economic development programs because of repeated and unintended pregnancies (UN, 2010). Generally, rate of contraceptive use in country is strongly linked with education, wealth, location, ethnicity and strength of FR programs at the national level. In the past ten years, the use of contraceptive has risen drastically; however, most developing countries including those in Africa are still experiencing a high unmet need for contraceptives with over 25% of couples and women in sub-Saharan Africa failing to use contraceptives to limit the number of births (Ulukol *et al.*, 2012).

2.1.3 Factors Affecting Usage of Contraceptives among Adolescents

A woman's attitude towards the need for and use of contraceptives is determined by various converging factors. Ambivalence on pregnancy is one of the main influencing factor on contraceptive use. A recent research revealed that 62% of women felt that it was highly significant to avoid pregnancy while 20% felt it was fairly was important to avoid pregnancy and 18% argued that it was insignificant or of little importance to consider the issue. Use of contraception is slightly low among ambivalent women; thus, they are at the risk of unplanned for pregnancy.

Through a research conducted by Yakubu and Salisu (2018) in sub-Saharan Africa the environmental, economic and social-cultural determinants of teenage pregnancy was examined. The determinants that were identified include peer influence, coercive sexual relations, adult males making unwanted sexual advances, uneven gender power relations, religion, poverty, early marriage, parental neglect, lack of parental guidance and

counseling, absence of free or affordable education, non-use of contraceptives, lack of comprehensive sexuality education, early sexual debut, male's responsibility to buy condoms and incorrect forms of recreation. Individual factors include substance abuse, excessive alcohol use, low self-esteem, education status, curiosity failure to resist sexual temptation and cell phone usage. Factors related to health service such as unskilled and inadequate health workers, cost of contraceptives, lack of privacy at health facilities, long waiting times, misconceptions about family planning methods and non-friendly adolescent reproductive services contribute towards high pregnancy rates of adolescents in Sub-Saharan Africa.

According to Singh *et al.* (2010) cultural taboos is one of the primary obstacles that hinders informed discussions on reproductive and sexual health issues among young people. Most participants mentioned how cultural norms linked to sexual health issues create a hindrance to open discussions on sexual health as well as contraception. Silent disapproval on contraceptive use among teenagers is common in rural areas; hence, most parents are not aware that adolescents are using contraceptives. Since most of the young person conceal the pills from parents, they often forget use them, which in turn results in unplanned for and unwanted pregnancy. Moreover, Klein (2005) argues that parents who discussion with children about use of contraceptives are regarded to be promoting promiscuity.

Besides cultural taboos, myths and misconceptions on contraceptives have been addressed in several studies including (Gueye *et al.*, 2015, Ankomah *et al.*, 2011). Even among families that are highly informed on the use of contraceptives misconceptions and myths are still associated with low usage of birth control methods (Campbell *et al.*, 2006). Gueye *et al.* (2015), for instance, undertook a research on contraceptive use myths at the

community and individual levels in urban Africa. The information was obtained between 2010 and 2011 among women between fifteen and forty nine years living in Nigerian, Senegalese and Kenyan cities. The most common myth associated with family planning use as outlined in the study is that persons using contraceptives are likely to suffer from health issues. The myths contend that besides being dangerous to the health of women contraceptives are likely to harm peoples' womb. On average, Kenyan and Nigerian women believed 4.6 and 2.7 out of the eight myths that were selected. From the research it is clear that the prevalence of misconceptions and myths is hindering the adoption of family planning methods. One of the recommendations made in the research is that it is necessary to have education programs to dispel the misconceptions and myths on modern family planning methods. Notably, the myths and misconceptions ought to be dispelled through programs that encourage community-level discussions.

The level of satisfaction obtained from a preferred method is another factor that determines the contraceptive that women choose. Based on a recent research, 38% of women opted for the current method because they were dissatisfied with other options. Almost 40% of women were dissatisfied with their present family planning methods because of expected side effects, reduced sexual pleasure as well as worry about effectiveness. Consequently, women that were not fully satisfied with the current method were exposed to the risk for unintended pregnancy. Knowledge about cultural, historical and religious beliefs enabled practitioners to provide factual details that deal with the concerns and beliefs of women (Hindin *et al.*, 2008).

Supply and demand factors also have profound effect in the use of contraceptive methods. The main focus of the supply side of contraceptives focuses on maintain the accessibility of family planning methods to clients. For instance, suppliers ensure that various affordable birth control methods are available; hence, the services are accessible through numerous delivery avenues. Equally, suppliers create awareness of available services, and provide services that prioritize the needs of clients. The interventions from the supply side ensure that couples and women can use contraceptive method services effectively (Potts & Fotso, 2007).

Based on a research conducted in Lesotho, it is clear that the type of health facilities where women receive services including clinic and hospitals have a significant effect on contraceptive use. Fosto et al. (2011) examines the socio-economic factors that are linked with the use of contraceptive among women including rural urban residence, age, religion, present work status, marital status and education. From the findings it is clear that the socio-economic status of women is positively linked with the use of modern family planning methods.

A research conducted by Okech, Wawire, Mburu (2011) focused on the use of contraceptive by women in Kenyan slums. The main respondents of the structured interviews were women in slums based in Kenyan cities who were selected using the multistage random sampling method. From the research, a low usage of contraceptives in the slums was demonstrated in comparison to the national level. The women's socioeconomic and demographic factors as well as the perception of the provider/facility including staff promotion and friendliness, as well as quality influence the type of service that women choose. Factors such as service quality, the approval by partners, and

awareness about family planning services are some of the factors that lead to low use of contraceptive use. The income level of women, women's religious background and nearness to service providers also contribute to low usage of birth control methods.

2.1.4 Use of Contraceptives and Prevention of Pregnancies Among Adolescents

38% of pregnancies at the global level are either unplanned or unwanted (Ojwang, 2006). Unwanted pregnancies in Africa are major challenge in terms of development, social and health issues. Unwanted pregnancies, which accounts for over ten million of the 40 million that occur in the region annually are caused by lack of using FP methods, failure of contraceptives or rape (Gribble & Haffey, 2008).

Based on the 2008/09 DHS report around 43% of births in Kenya are unintended (Moreland & Talbird, 2006). FP method failure, low continuation rates and high unmet contraceptives need (Singh, 2008). Mothers with unintended births suffer from non-psychotic depression, high time pressure, and low overall physical health. Consequently, it is necessary to reduce the occurrence of unintended pregnancy so as to enhance women and their children's well-being (Emina, 2010).

Despite research demonstrating that the outcomes of reproductive health can be enhanced through contraceptive use (Olukoya, 2004), Kenyan women still experience high risks of unwanted pregnancies as unmet need for contraceptive use. Based on the Alan Guttmacher Institute (1999), women from the developing world account for around 56% of unintended pregnancies; hence, high abortion rates in the emerging economies which raises maternal mortality rates. In 2003, the East Africa region experienced a high maternal mortality because of unsafe abortions with one in five women seeking to terminate unwanted

pregnancies succumbing. In Kenya, the maternal mortality rate is approximately 560 deaths per 100,000 live births. Most of the maternal deaths are caused by unsafe abortion as mothers seek to terminate unwanted pregnancies. Overall, unwanted pregnancies among Kenyan women is caused by low or lack of contraceptive use, which is associated with religious or personal beliefs and inadequate information over pregnancy risks emanating from unprotected limited decision making ability, sexual relations, rape and incest (Fotso et al., 2011).

Socioeconomic and demographic factors are some of the causes of disparities that are common in unintended pregnancies (Hindin et al, 2008). Based on a research conducted in Japan, women that have previous incidents of unplanned pregnancies are vulnerable to pregnancies that are not wanted. Regardless of rise in contraceptive use globally, women with a parity of 4-6 still register a low contraceptive use. These women are also highly exposed to abortion and other life threatening risks associated with unwanted pregnancies. Women over 35 years and teenagers are the most vulnerable groups (Ganata et al, 2006).

While the first pregnancy among most teenagers is unintended, most unwanted pregnancies among older women occurs after having the preferred number of kids. Besides challenges with hormonal contraceptives, older women experience unwanted pregnancies because of the assumption that they are past the risk of becoming pregnant (Klein, 2005). Research demonstrates that most pregnancies among women that are never married or the ones that are not married formally are unintended and probably lead to abortion. This demonstrates the pregnancy outcome is determined by marital status, particularly male partners fail to accept responsibility of the pregnancy (Beguy, 2011). At the global level almost half of maternal deaths are caused by unintended pregnancies. Developed nations

have legalized abortion; hence, women from such countries can procure safe abortion. On the contrary, in most developing nations such as Kenya abortion is illegal and most women procure the exercise from quacks and thus are more exposed to maternal deaths (Magadi, 2000).

Despite numerous studies exploring the unintended pregnancy issue, it is unclear how the use of contraceptives is influenced by unwanted pregnancies. McBride et al, points out health events that encourage people to adopt health behaviours that reducing risks. One such health event is an unintended pregnancy that encourages women to use contraceptives and thus avoid the occurrence of unwanted pregnancies in the future (Emina, 2010). In spite of this information, unplanned pregnancy history is not linked with use of contraceptives as demonstrated in study conducted in the US among women between fifteen and twenty five years (Fotso, 2006).

2.1.5 Knowledge Gap

Most of the existing research on contraceptive use in Kenya focuses on existing literature obtained from surveys involving demographic health (Njogu, 1991; Kyalo, 1996; and Aquanda, 2005). Country based research on contraceptive use like the ones conducted by Korir and Mwabu (2004), Obonyo and Muga (2005), Korir *et al.* (2004) focused on policy issues, particularly user fees. However, the current research beyond the and examines levels of contraceptive use and pregnancy among adolescents so as to evaluate how these variables influence each other in city slums. For example, Clements and Nyovani (2004) examines numerous variables including level of education for women and their partners, the approval of partners, religion, age and marital status. However, the study does not incorporate tests or models. Nonetheless, the current research eliminates the double

causality economic challenge by focusing on the variables from the demand side. This research will examine some variables on a limited basis to evaluate the impact of demand for the services amongst the urban poor in the slums. It is worth noting that none of the studies reviewed targeted respondents in the city slums.

2.2 Theoretical Framework

This section discusses the theories that inform the study. They are:

2.2.1 The Health Belief Theory

The study was also based on the Health Belief theory (HBM) which is a psychological model that attempts to explain and predict health behaviours. The model was developed in the 1950s by Hochbaum (1958). The main tenets of the model is that health behavior is a function of individuals' socio-demographic characteristics, knowledge and attitudes. The demographic characteristic alongside psychological characteristics such as personality, peer pressure among others may influence an adolescents' health behavior (Rosenstock, 1974). The interplay between the demographic and the psychological characteristics would influence an adolescents' judgment on the perceived susceptibility and severity; health motivation perceived benefits and barriers all which will culminate in a particular behavior. The Model can be used to explain the behavior of the adolescent in either using or not using contraceptives while engaging in sexual activities. Depending on the choice of the adolescent, there will be an effect on the overall adolescent pregnancy. This model is a framework for motivating the adolescents to adopt positive health actions using the desire to avoid a negative health consequence as the prime motivation (Kegeles, 1963). For

instance, unintended adolescent pregnancy is seen as a negative health consequence, and the desire to avoid such pregnancy can be used to motivate sexually active adolescent girls into practicing safe sex or adopting contraception.

2.2.2 The Health Promotion Theory

This theory helps in identifying the factors that inform an individual's choice of using available health services. While the model provides a framework for the understanding of the influencers of individual choices towards usage of health services, it only examines the factors at the individual and not beyond. The decision to use contraceptives in this case will not result from factors such as family or community support (Stephenson & Tsui, 2002; Glover et al., 2003). Instead, this theory treats the external influencers as modifying factors. The present study has highlighted a number of modifying factors in the propensity of adolescents to use contraceptives. The factors identified by the study include socio-economic, demographic, culture and health experiences as the modifying influencers of an adolescents' choice to use contraceptives. The degree of these factors to influence the decisions have also been established to vary with the socio-economic factors being of greater influence. The study has shown that cost is a barrier to usage of contraceptives among adolescence in poor urban communities.

2.2.3 Theory of Reasoned Action

The Theory of Reasoned Action (TRA) is a model that finds its origins in the field of social psychology. This model developed by Fishbein and Ajzen (1975) defines the links between beliefs, attitudes, norms, intentions, and behaviors of individuals. According to this model, a person's behavior is determined by its behavioral intention to perform it. This intention

is itself determined by the person's attitudes and his subjective norms towards the behavior. Fishbein and Ajzen (1975) define the subjective norms as "the person's perception that most people who are important to him think he should or should not perform the behavior in question" (p.302).

According to TRA, the attitude of a person towards a behavior is determined by his beliefs on the consequences of this behavior, multiplied by his evaluation of these consequences. Beliefs are defined by the person's subjective probability that performing a particular behavior will produce specific results. This model therefore suggests that external stimuli influence attitudes by modifying the structure of the person's beliefs. Moreover, behavioral intention is also determined by the subjective norms that are themselves determined by the normative beliefs of an individual and by his motivation to comply to the norms. TRA also claims that all other factors which influence the behavior only do so in an indirect way by influencing the attitude or subjective norms (Davis, Bagozzi & Warshaw, on 1989).

In 2011, Doswell, Braxter, Cha, and Kim examined sexual behavior in African American teenage girls and applied the theory as a framework for understanding this behavior. The theory of reasoned action can explain these behaviors in that teens' behavioral intentions to engage in early sexual behavior are influenced by their pre-existing attitudes and subjective norms of their peers. Attitudes in this context are favorable or unfavorable dispositions towards teenage sexual behavior (Doswell *et al.*, 2011). Subjective norms are the perceived social pressure teenagers feel from their friends, classmates, and other peer groups to engage in sexual behavior. As a framework, the TRA suggests that adolescents will participate in early behavior because of their own attitudes towards the behavior and

the subjective norms of their peers. In this case, intention is the willful plan to perform early sexual behavior (Doswell *et al.*, 2011).

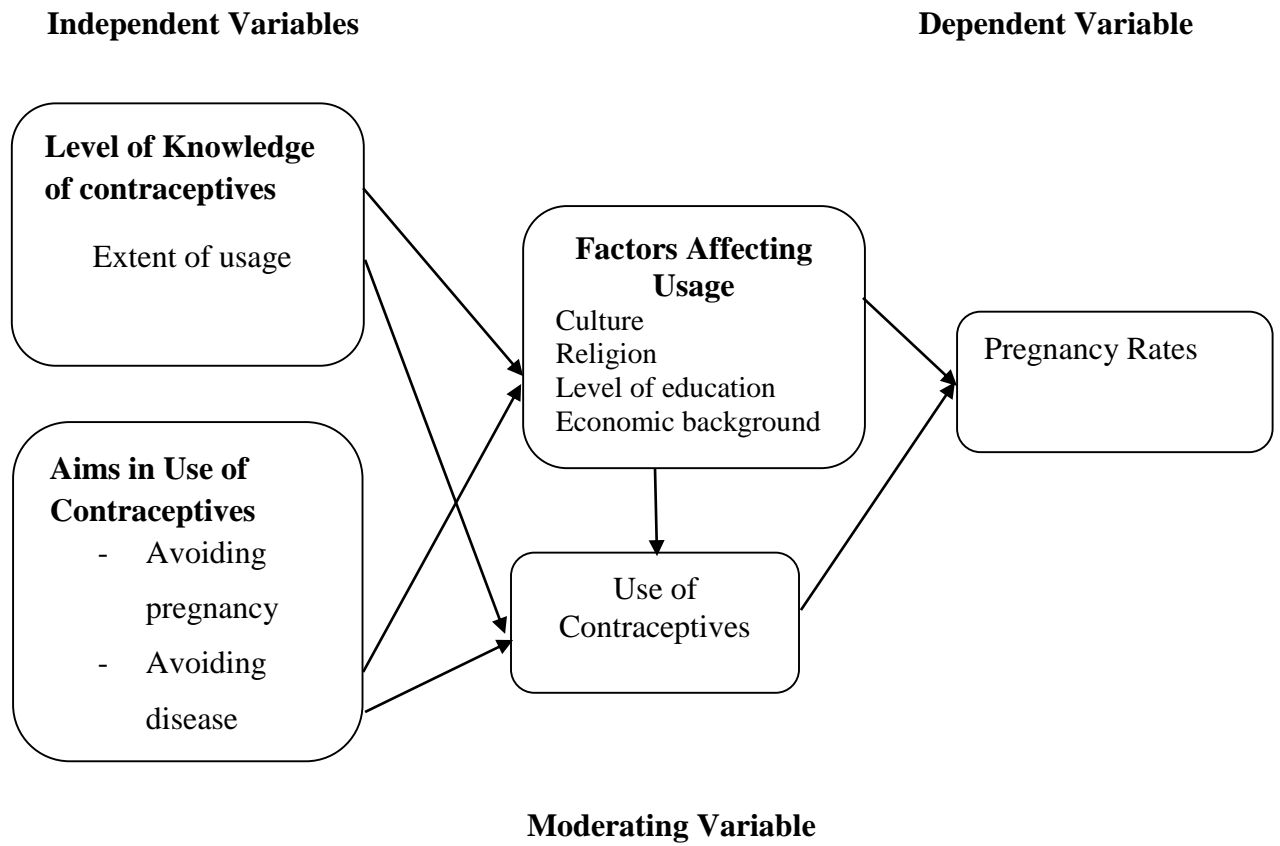
The theory of reasoned action suggests that stronger intentions lead to increased effort to perform the behavior, which also increases the likelihood for the behavior to be performed. Theory of Reasoned Action can be applied in this study to explain pregnancies among the adolescents.

The theory was used in this study to understand the potential influences of adolescents' health behavior regarding use of contraceptives (Ensminger, 1990). The theory further helped in highlighting the relationship between the influencing factors. With the application of the theory, the study has determined that the belief about pregnancy, support from the family, and the adolescents' cognitive development are the significant factors influencing the choice of the usage of contraceptives or otherwise (Franklin, 1988).

2.3 Conceptual Framework

Conceptual framework is a hypothesized model showing the relationship dependent and independent variables. It aims at explaining relationship between variables and it synthesizes the idea in a systematic way to provide direction (Jabareen, 2009). In the conceptual framework presented in Figure 2.1, the independent variables between independent are level of knowledge and aims in use of contraceptives, the moderating variable is the factors affecting usage of contraceptives while the dependent variable is pregnancy rates among the adolescent girls.

Figure 2.1: Conceptual Framework



CHAPTER THREE

3.0 RESESARCH METHODOLOGY

3.1 Introduction

This chapter discusses the research design, the target population and sampling techniques, data collection methods and instruments to be used to collect the data. The chapter also discusses how the validity of the data collection instruments will be tested and the method to be used to analyze the data.

3.2 Site Description

The research was undertaken in Kawangware slums of Nairobi. High levels of poverty, low education levels and large sizes of households that influence accessibility of health services including contraceptive services are common in Kawagware. Based on the USAID (2007) report contraceptive use is low among women with low socio-economic status (SES). For example, in 2003 only 12% of women associated with low SES groups used modern contraceptives while 45% of their counterparts from high SES groups used the same (Republic of Kenya, 2003). For contraceptive use unmet needs, women from informal sectors register the highest unmet need levels for contraceptive use, which is around 30% in comparison to only 17% in high SES groups. This not only exposes them to the risk of STIs including HIV infection, but also the risk of unwanted pregnancies, especially if they do not use family planning methods. It is this reality, which will motivate the researcher to carry out this study.

3.3 Research Design

Researchers use the research design as guide to different stages of a study as well as to determine the solution the identified problems. This research relies on the descriptive

research design (DRD). The DRD is appropriate to the research, which explores a social phenomenon, because it depicts contemporary facts more accurately through collection of data required to develop an adequate conclusion of a study. Creswell (2014) points out that DRD focuses on the “where”, “what” and “how” of a phenomenon. Therefore, the DRD was appropriate for this research because it facilitated collection of data so as to answer questions focusing on the existing status of contraceptive use. The designs was also helpful during the collection of primary data through interviews and questionnaires.

3.4 Unit of Analysis and Units of Observation

The unit of analysis were the households in five villages in Kawangware slums, Dagoretti Sub-County, Nairobi County, with adolescent girls. The unit of observation was adolescent girls who were aged between 18-24 years.

3.5 Target Population

A target population, according to Mugenda and Mugenda (2003) refers to the larger population used by investigator to generalize the research outcome. Therefore, the target population involves all the individuals or groups, objects or events with observable characteristics that are common. In this research, the target population was around 1,378 adolescent girls aged between 18-24 years in This population was distributed in five villages in Kawangware; namely, Kandutu, Kamwanya, Kaburi, Githarani, and Gachui, as shown in Table 3.1. The study also targeted health workers in the health centres in the area as well as social workers working in NGOs and dealing with adolescent girls’ health matters in Kawangware slums.

Table 3. 1 : Target Population

Villages	Population Size
----------	-----------------

Kandutu	326
Kamwanya	283
Kaburi	359
Githarani	192
Gachui	218
Total	1,378

3.6 Sample Size and Sampling Procedure

This section describes how the sample size for the study was determined. It also outlines the sample size of the study and the sampling technique to show how the sample was picked.

3.6.1 Determination of Sample Size

The study targeted an estimated 1,378 adolescent girls in five villages in Kawangware. The study was grouped into five strata, consisting five villages namely Kandutu, Kamwanya, Kaburi, Githarani, and Gachui. From each section the research took a 10% sample. This approach is outlined by Mugenda and Mugenda (2003), who contends that for a population of one-thousand and above, it is necessary to sample 10% of the population, while when the population is below 1000, a 30% sample should be taken. The sample size for the study was 138 teenage girls in Kawangware Slums as shown in Table 3.2.

Table 3. 2: Sample Size

Villages	Population Size	Sample	Sample Size
Kandutu	326	10%	33
Kamwanya	283	10%	28
Kaburi	359	10%	36
Githarani	192	10%	19
Gachui	218	10%	22
Total	1,378		138

3.6.2 Sampling Procedure

Sampling refers to the process that researchers use to obtain units such as organizations and people from the population with the study characteristics. The study used two sampling methods: the random and stratified techniques. Stratification was used to identify the five villages in Kawangware slum area. Random selection (i.e, probability sampling) of the adolescent girls aged 18-24 years was within each of the five villages.

The probability sampling entailed that from the approximate central place in each village, adolescent girls were identified using the four compass directions in the households at intervals of three households.

To be able to undertake this work, the researcher was assisted by social workers and health workers in Kawangware slums

3.7 Methods of Data Collection

Primary data, which was collected using interviews and questionnaires, was used to collect raw information for the study.

3.7.1 Collection of Quantitative Data

The quantitative data was collected through a questionnaire, which will have closed questions. The questionnaire, which were subdivided into 5 subsections, were administered to the teenagers at Kawangware area. Questionnaire is preferred because it is efficient, cheap and easy to administer, they are relatively easy to analyze, and they are simple and quick for the respondent to complete and collect data in a standardised way (Zikmund, 2010). Research assistants administered the questionnaires through personal administration so that they could explain each question to the respondents.

3.7.2 Collection of Qualitative Data

The qualitative data was obtained using an interview guide from social workers and health workers working in NGOs dealing with adolescent girls' health matters in Kawangware slums. The interview guide helped probe deeper from these respondents to get deeper information on the subject matter. Interviews give a researcher the opportunity to elicit information and to observe the subject and the situation to which the subject is responding to (Mugenda, 2008).

3.8 Ethical Considerations

The research adhered to several ethical issues that relate to social, professional and legal issues related to the study. Notably, the all participants in the research were allowed to informed consent on whether they should participate in the study or not. Consequently, all respondents participated in the research voluntarily. The researcher also protected the confidentiality and privacy of the respondents. In particular, all participants were regarded as synonymous and all personal information was generalized. In turn, it was not necessary for respondents to give personal details such as names when answering questionnaires.

Confidentiality was also facilitated by ensuring that all the information provided was only used to draw conclusion for research. Finally, the research maintained legal responsibility by seeking consent from the relevant authorities. When undertaking the research, the investigator obtained consent letter from the National Commission for Science, Technology and Innovation (NACOSTI and the University of Nairobi before undertaking the process of data collection.

3.9 Data Analysis

The data obtained from questionnaires was analyzed using the Statistical Package for Social Sciences (SPSS). The research focused on both quantitative and qualitative data. To analyze the quantitative data, the descriptive statistics was used and included measures of means, frequencies, standard deviation and percentages. The thematic approach was used to analyze qualitative data obtained using open-ended questions. Data that was analyzed was presented through tables, graphs and pie charts.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This section focuses on the findings of the research through an analysis of the collected data as outlined in the objectives of the study. The research purpose was to evaluate the use of contraceptives and effect on adolescents Pregnancy among poor urban communities, with a focus on Kawangware, which is situated in the city of Nairobi. The study's main aim is to determine: the level knowledge and FP method use among teenagers in poor urban communities, to establish the purposes in birth control methods use among young people in poor urban communities, to investigate the factors affecting usage of contraceptives among adolescents in poor urban communities, and lastly to determine the extent to which use of contraceptives prevents pregnancies among adolescents in poor urban communities. The data was analyzed through descriptive statistics and presented in pie charts, tables and bar graphs.

4.2 Response Rate

The purpose of this portion is to identify the study's response rate and thus establish its sufficiency in providing consistent that will guide the investigator in making the study's inference.

Table 4. 1: Response Rate

Respondents	Frequency (n)	Percent (%)
Responded	98	71.0
Not Responded	40	29.0
Total Sample Size	138	100.0

The sample of 138 adolescent girls from the slum of Kawangware was involved in the research. From the target population, response rate of 71%, which represents 98 successful response was registered. Mugenda and Mugenda (2003) posits that a response rate of 50% is sufficient, while that of 60% is good and the one beyond 70% is highly rated. The 71% rate was thus regarded as suitable to develop inferences on the research objectives.

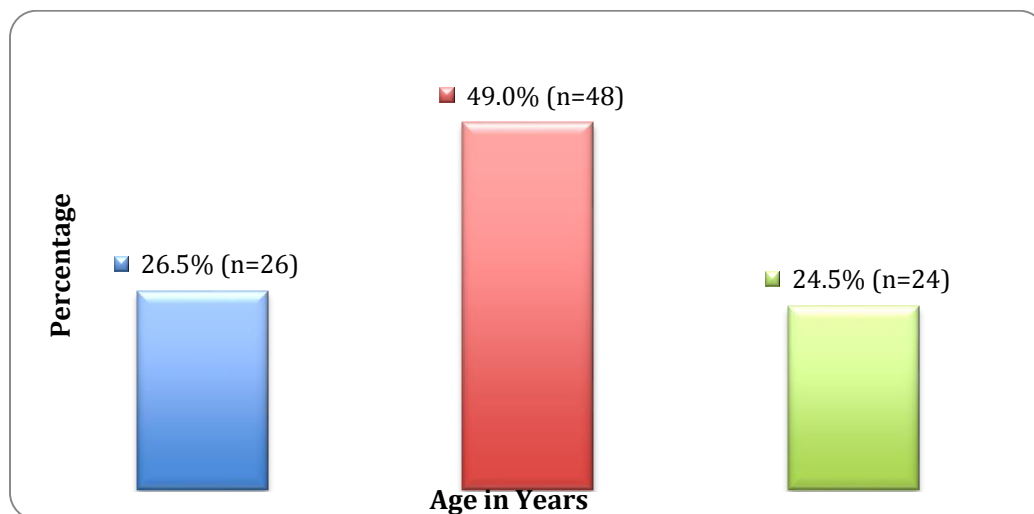
4.3 Background Information

This portion focuses on the respondents' demographic information. The information shows the research population's relevant attributes. Some of the demographic data includes marital status, respondent's age, academic achievement and the respondent's religion.

4.3.1 Distribution of Respondents by Age

It was necessary for participants to indicate their age. This study targeted adolescent girls aged between 18-24 years.

Figure 4. 1 Distribution of Respondents by Age



The findings of the research in Figure 4.1 shows that most of the participants (77.6%) were aged between fifteen and nineteen years. 13.3% of the respondents registered and age of 15 years and below while 9.2% were aged 19 years and above years of age.

4.3.2 Distribution of Respondents by Marital Status

The participants were supposed to mention their marital status. The information on the marital status of the respondents would help us form an opinion on the usage of contraceptives among the teenagers. Table 4.2 presents the findings.

Table 4. 2: Distribution of Respondents by Marital Status

Marital Status	Frequency (n)	Percent (%)
Single	54	55.1
Married	34	34.7
Separated	10	10.2
Total	98	100.0

The study results in Table 4.2 shows that majority of the respondents (55.1%) were single while 34.7% reported that they were married. 10.2% of the participants indicated that they were separated. This means that they were married, but left their marriages.

From the findings, around 44.9% of the teenage girls are either married or have been married. This demonstrates a high early marriages level in poor urban communities in Kenya. These findings concur with Matheka (2011) and Mumah et al. (2014) who found out that socio-economic challenge in poor urban communities in Nairobi, such as poverty, insecurity, low educational attainment, unemployment, and uncertainties that characterize their everyday life had led to a considerable number of young girls getting married. These

findings are also supported by Fotso (2006) who revealed that beginning sexual activities early often leads to early marriage and child bearing.

4.3.3 Distribution of Respondents by Educational Level

It was necessary for the participants to mention the highest educational level they had reached or attained. This information was necessary since it would help understand determine the existence of a connection between level of education and aspects such as usage of contraceptives and pregnancy rates among the adolescent girls.

Table 4. 3: Distribution of Respondents by Educational Level

Educational Level	Frequency (n)	Percent (%)
Primary	47	48.0
Secondary	49	50.0
College/University	2	2.0
Total	98	100.0

The research findings shows that secondary school was the highest academic achievement of 50% of the participants while 48% had reached primary school level. 2% of the respondents, on the other hand, had attained college or university education.

From the findings it is clear that only 2% of the teenage girls had attained high level of education (college or university education level). Based on Mumah *et al.* (2014) the limited educational opportunities, low education, ignorance and illiteracy were strongly linked with unplanned for pregnancies in Nairobi slums. These views are also supported Kenya demographic and health survey (KDHS) 2014 report also supports this views and demonstrates that 30% of women between fifteen and nineteen years that lack any form of

education begun bearing children in comparison to 12% of those with higher education including secondary level.

4.3.4 Distribution of Respondents by Religion

In this portion, the research focused on the respondents' religion. This information was necessary since religious affiliation is said to have a significant effect FP method use and plays a critical role in Kenya's reproductive activities. Table 4.4 shows the findings.

Table 4. 4: Distribution of Respondents by Religion

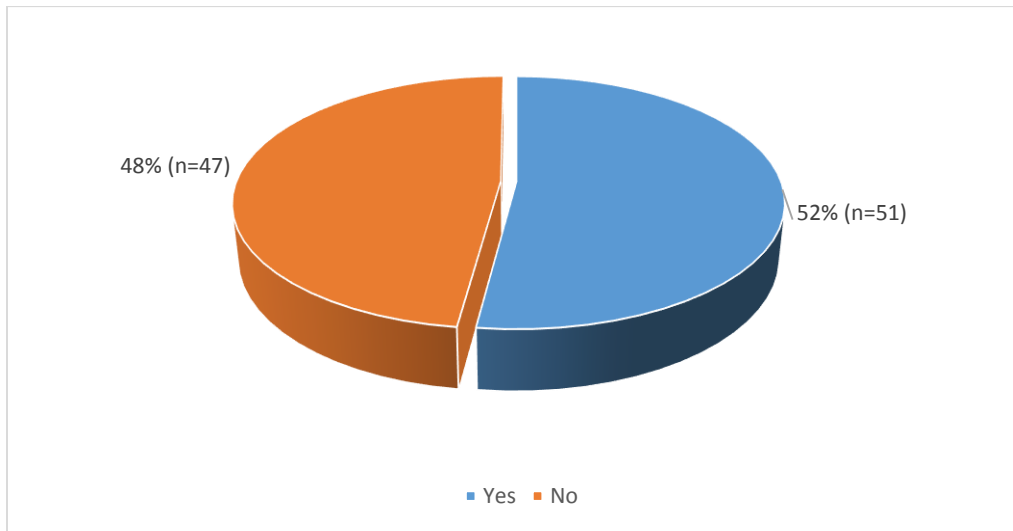
Religion	Frequency (n)	Percent (%)
Christian	95	96.9
Muslim	3	3.1
Total	98	100.0

The study findings in Table 4.4 shows that Majority of the participants (96.9%) were Christians, that is, Catholics, Protestants etc., while 3.1% of the respondents were Muslims. Based on Abdulla (2014) religious affiliation is a major determinant of acceptance of FP methods in the country. Notably, Muslims are 51% less likely embrace current birth control approaches in comparison to Christians, thus affecting their reproductive behavioural outcomes.

4.3.5 Whether the Respondents had Conceived

The adolescent girls were asked whether they had conceived. This was necessary since it would inform the subsequent questions on FP methods use among teenage girls. Figure 4.2 shows the findings.

Figure 4.2 Whether the Respondents had Conceived



The outcomes of the research indicate that most participants (52%) had not conceived. However, 48% of the respondents revealed that they had conceived or rather they had given birth.

4.4. Pregnancy Rates Among Adolescents

This portion explores the study's first objective which seeks to examine the rates of pregnancy among adolescence in poor urban communities. To realize this aim, the participants were required to rate the pregnancy in Kawangware area and the reasons for pregnancy rates.

4.4.1 Pregnancy Rates in Among Adolescents in Kawangware Area

The respondents were asked to indicate the rates of pregnancy among adolescent girls in Kawagware area. Figure 4.3 shows the findings.

Figure 4. 3 Pregnancy Rates Among Adolescence

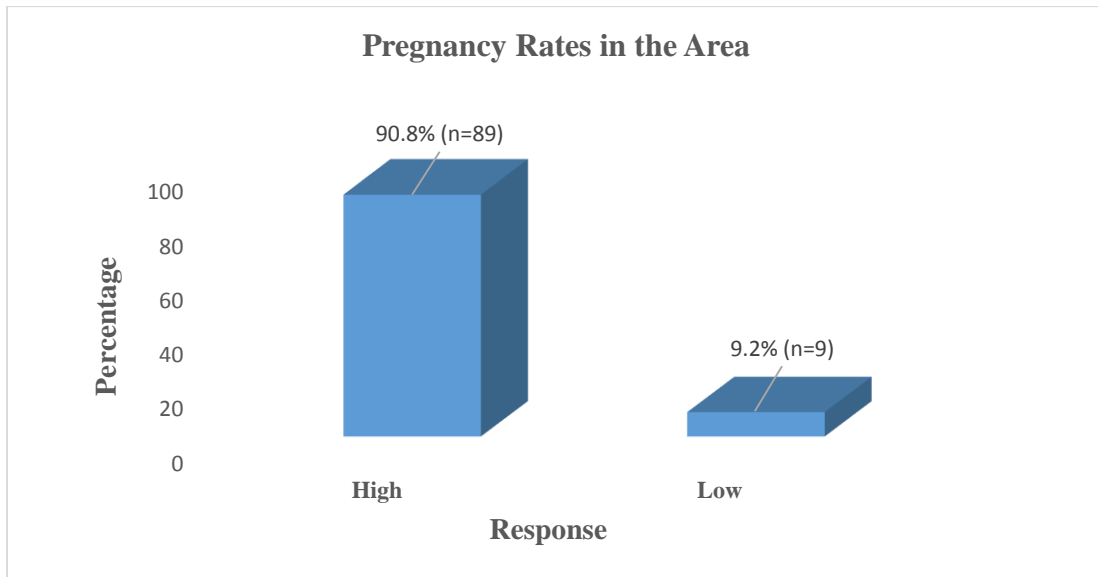


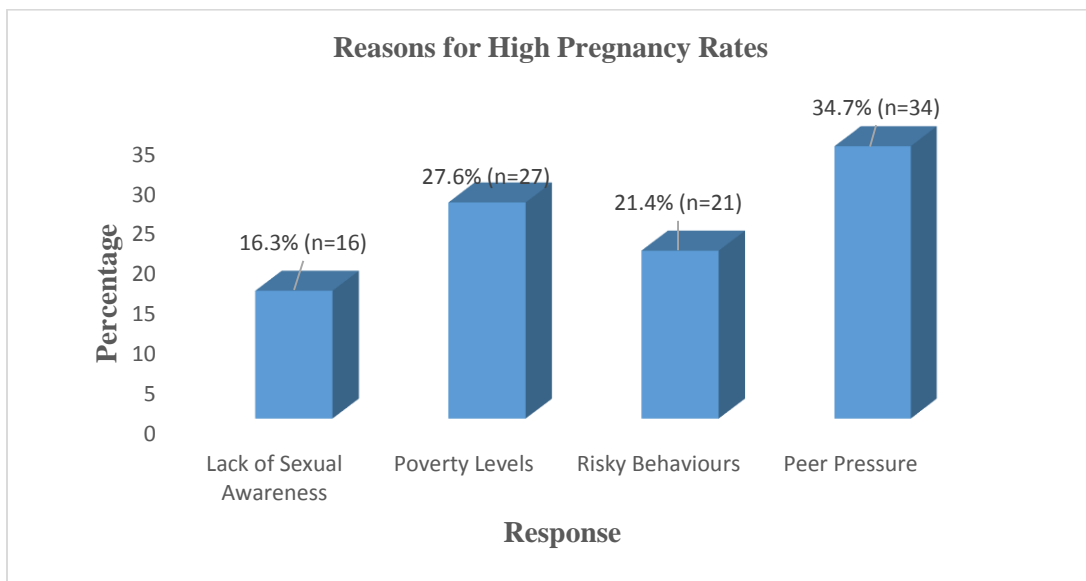
Figure 4.3 shows the findings that reveal most of the participants (91.3%) revealed that pregnancy rates in Kawangware area were high. Only 8.7% of the respondents were of the opinion that the pregnancy rates were low.

These findings corroborates with a report by United Nations Population Fund (UNFPA) (2017), which revealed that there was high rate of pregnancies among teenage girls between ten and nineteen years in Kenya, with highest prevalence rate of teenage pregnancies in Nairobi being witnessed in poor urban communities and slums areas such as Kawangware. These findings are also supported by KDHS report (2014) which revealed that fifteen percent of aged 15-19 years had experienced at least on birth. The child bearing rate rises rapidly with age. Based on the African Population and Health Research Center (2014) the poor urban regions of Nairobi register around 49% of unintended pregnancies among adolescents between fifteen and nineteen years. Becoming mothers limits the education and economic opportunities for teenage girls.

4.4.2 Reasons for High Pregnancy Rates

The participants were further requested to mention the reasons for the pregnancy rates established above, among adolescent girls in poor urban communities. Figure 4.4 shows the findings.

Figure 4. 4 Reasons for High Pregnancy Rates



The research findings in Figure 4.4 demonstrate that 34.7% of the participants cited peer pressure a contributor of high pregnancy rates among adolescent girls in poor urban communities while 27.6% indicated that poverty levels had led to the high rate of pregnancies among adolescent girls. A further 21.4% of the respondents cited risky sexual behavior as a contributor to high pregnancy rates among adolescent girls while 16.3% cited lack of sexual awareness.

The respondents further stated that increase in adolescent pregnancies in poor urban communities caused by disintegrated families and unstable family structures, which coerce

the girls to seek for security; hence, they get enticed in relationships. Other causes were rape and sexual abuse, cultural practices, and alcohol and drugs abuse among the teenagers.

4.4.3 Use of Protection During Last Sexual Encounter

The participants were requested to mention whether any protection during their last sexual encounter. This would help us understand and interpret the pregnancy rates. The findings are presented in Table 4.5.

Table 4. 5: Use of Protection During Last Sexual Encounter

Use of Protection	Frequency (n)	Percent (%)
Yes	34	34.7
No	47	48.0
Not engaged in Sexual Encounter	17	17.3
Total	98	100.0

Table 4.5 show the findings which reveal that 48% of the participants did not use protection during the last time they had a sexual encounter. However, 34.7% of the respondents reported that they used protection while 17.3% indicated that they had not engaged in sexual encounter. Through the findings an assumption can be made that most of the adolescent girls in slums are sexually active or engaging in sexual encounters. Whereby, some are using protection while others are not.

The study further asked the respondents who used protection to indicate the contraceptive(s) they used. The respondents indicated that they used pills and condoms. A few also indicated that they used injections.

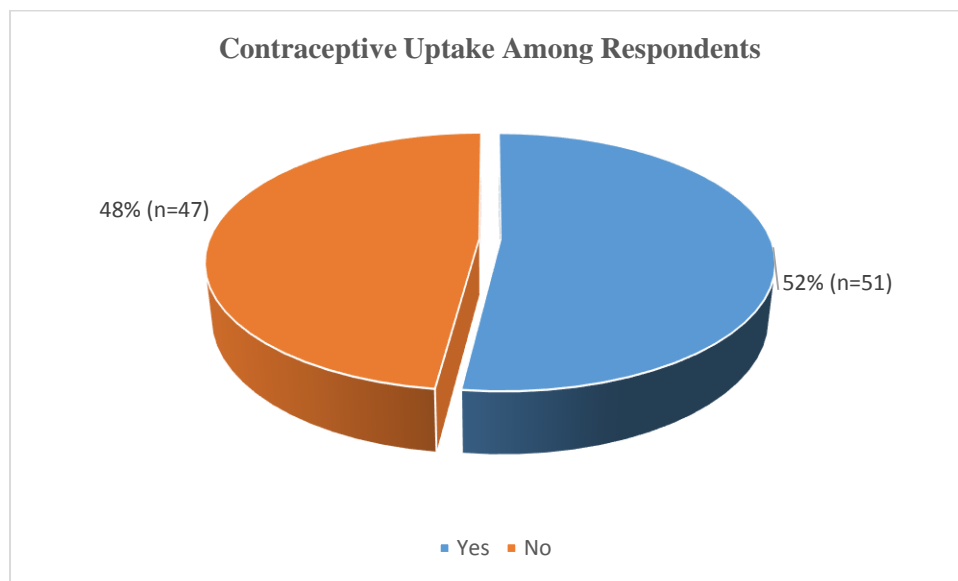
4.5 Level of knowledge on Contraceptives Among Adolescents

In this portion, the research sought to determine the level of knowledge among adolescence girls in regards to contraceptive in poor urban communities. To realize this objective, the research inquired from the respondents on whether they use contraceptives, how they learnt about contraceptives, the contraceptives they use, the frequency of usage and reasons behind the use of contraceptives.

4.5.1 Contraceptives Use Among Adolescent Girls

The participants were required to mention if they had ever used contraceptives. The findings are presented in Figure 4.5.

Figure 4.5 Contraceptives Use Among Adolescent Girls



Based on Figure 4.5, which shows the findings most participants (52%) reported that they had used contraceptives. However, 48% of the participants indicated that they had not used FP methods.

A countrywide survey by KDHS in (2014) showed that, nationally 40% of adolescents (among 15-19 year olds) use or have access to contraceptives. And the usage was prevalent with the increase in education among the users. This may explain why the use of contraceptives use among the poor urban girls is a little bit high (52.4%) as compared to the nationally statistics, since urban girls are more informed, educated and exposed.

All in all, it is logical to presume that contraceptive use among teenage girls in Kawangware is relatively lower (52%) as compared to number of teenagers that were found to be sexually active (in in Table 4.5). This means that there is a substantial number of teenagers who are not using contraceptives despite being sexually active.

4.5.2 Source of Information on Contraceptives by the Adolescents

The respondents were asked to indicate where they first heard the information on contraceptives. The results are presented in Table 4.6.

Table 4. 6: Source of Information on Contraceptives by the Adolescents

Source of Information	Frequency (n)	Percent (%)
A friend/ Peer	31	31.6
Mass Media	19	19.4
Health provider	6	6.1
Parent	2	2.0
Spouse	4	4.1
Social (NGO) worker	10	10.2
School teacher	26	26.5
Total	98	100.0

The study results in Table 4.6 shows that 31.6% of the respondents got information on contraceptives from a friend or peer, 26.5% got information from a teacher in school while 19.4% got information mass media, that is, from Radio, TV and newspaper/ magazines.

These three seems to be the major sources of information for the adolescents. A further 10.2% of the respondents indicated that they got information on contraceptives from a social worker, 6.1% got information from a health provider, 4.1% got information from a spouse while 2.0% indicated that they got information on contraceptives from a parent.

The study results show that the respondents did not have one designated source of information on contraceptives. They got information from various sources, some which would give some misleading information. A study by WHO (2016) titled “Selected Practice Recommendations for Contraceptive Use” revealed that adolescents lack adequate access to contraceptive information and services. As a result they make bad choices. The paper recommended that there is an urgent need to implement programmes that meet the contraceptive needs of adolescents and remove barriers to services.

4.5.3 Age at Which the Respondents First Used Contraceptives

The respondents were asked to indicate the age at which they first used contraceptives. The findings are presented in Table 4.7.

Table 4. 7: Age at Which the Respondents First Used Contraceptives

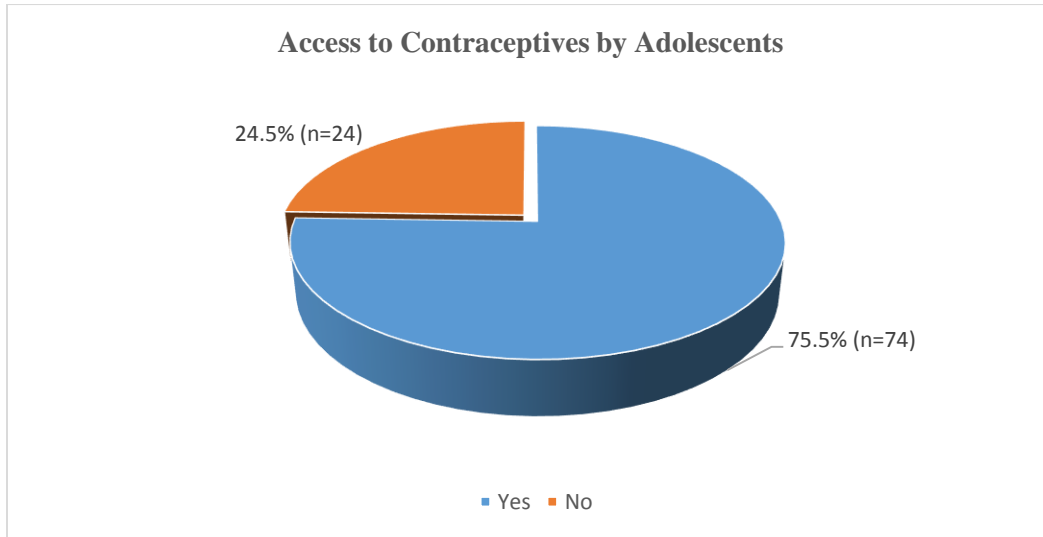
Age First Used Contraceptives	Frequency (n)	Percent (%)
13 – 15 years	20	20.4
16- 18 years	56	57.1
Above 18 years	22	22.5
Total	98	100.0

The study results show that a 20.4% of the respondents started using contraceptives at the age of 13 – 15 years while 57.1% indicated that they started using contraceptives at an age of 16- 18 years. From these findings, it shows that majority of adolescent girls in Kawangware started using contraceptives at an early age, below 18 years of age. This paints a picture that the adolescents were using contraceptives at early age, as early as 13 years. Only 22.5% of the respondents revealed that they started using contraceptives at an age of above 18 years.

4.5.4 Access to Contraceptives by the Adolescents

The respondents were asked to indicate whether they could get contraceptives for themselves whenever they wanted. The findings are presented in Figure 4.6.

Figure 4.6 Access to Contraceptives by the Adolescents



The study findings in Figure 4.6 shows that majority of the respondents (75.5%) revealed that they could get contraceptives for themselves. Only 24.5% of the respondents indicated that they could not get contraceptives for themselves.

A report by Ministry of Health (2015) on national adolescent sexual and reproductive health, revealed that over 77% of adolescent women aged 15-19 years were using contraceptives, whereby, 40 percent of them were using any method of contraception, while 37 percent were using a modern method. Notably, contraceptive use among adolescents varies by region, residence, education, household wealth and marital status.

4.5.5 Contraceptive Methods Used by the Adolescent

The respondents were asked to indicate the contraceptives methods that were being commonly used by the adolescents. The findings are presented in Table 4.8

Table 4.8: Contraceptive Methods Used by the Adolescent

Contraceptive Methods	Frequency (n)	Percent (%)
Condoms	63	64.3
Pills	25	25.5
Injections	5	5.1
Implants	3	3.1
Intra uterine devices (IUDs)	2	2.0
Total		100.0

As shown in Table 4.8, majority of the respondents (64.3%) revealed that they were using condoms while 25.5% indicated that they were using pills. Majority of the respondents used these two methods of contraceptives. Only 3.1% of the respondents indicated that they used implants and 2.0% indicated they used IUDs. From the findings, it can be deduced that condoms and pills are the commonly used contraceptives among the adolescent girls in Kawangware.

4.5.6 Reasons for Adolescents Use of Contraceptives

The study sought to establish the reasons why adolescent were widely using contraceptives in the area. The findings are presented in Table 4.10.

Table 4. 9: Reasons for Adolescents Use of Contraceptives

Reasons for Use of Contraceptives	Frequency (n)	Percent (%)
Prevent Pregnancies	94	95.9
Cost effective	30	30.6
Readily Availability	50	51.0
Ease of use	40	40.8

The study findings in Table 4.10 show that majority of the respondents (95.9%) revealed that the adolescent girls were widely using contraceptives to prevent pregnancies. On the

other hand, 51.0% of the respondent revealed that adolescent girls used contraceptives because they were readily availability, 40.8% were using contraceptives because they were easy to use, while 30.6% indicated that they were using contraceptives because they were cost effective.

4.5.7 Extent to Which the Level of Knowledge Influence the Use of Contraceptives Among Adolescent Girls

The respondents were further asked to indicate the extent to which the level of knowledge among the adolescent girls in Kawagware area influenced the use of contraceptives. The results are presented in Table 4.10.

Table 4. 10 : Extent to Which the Level of Knowledge Influence the Use of Contraceptives Among Adolescent Girls

Responses	Frequency (n)	Percentages (%)
Very great extent	51	52.0
Great Extent	37	37.8
Moderate Extent	10	10.2
Total	98	100

From the findings, majority of the respondents (52.0%) indicated that the level of knowledge influence the use of contraceptives among the adolescent while 37.8% of the respondents reported that the level of knowledge influences the use of contraceptives among the adolescent girls to a great extent. On the other hand, 10.2% of the respondents indicated that the level of knowledge influences the use of contraceptives among the adolescent girls to a moderate extent.

4.6 Aims of Contraceptives Among Adolescents

In this section, the study sought to establish the aims in use of contraceptives among adolescents in poor urban communities. To achieve this objective, the respondents were asked to indicate their frequency in contraceptive use and the reason behind the use of the contraceptives.

4.6.1 Frequency in Contraceptive Use Among Adolescence

The respondents were asked to indicate how often they used the contraceptives. The results are presented in Table 4.11.

Table 4. 11 : Frequency in Contraceptive Use Among Adolescence

Responses	Frequency (n)	Percentages (%)
Always	15	15.3
Often	31	31.6
Sometimes	42	42.9
Rarely	6	6.1
Never	4	1.1
Total	98	100

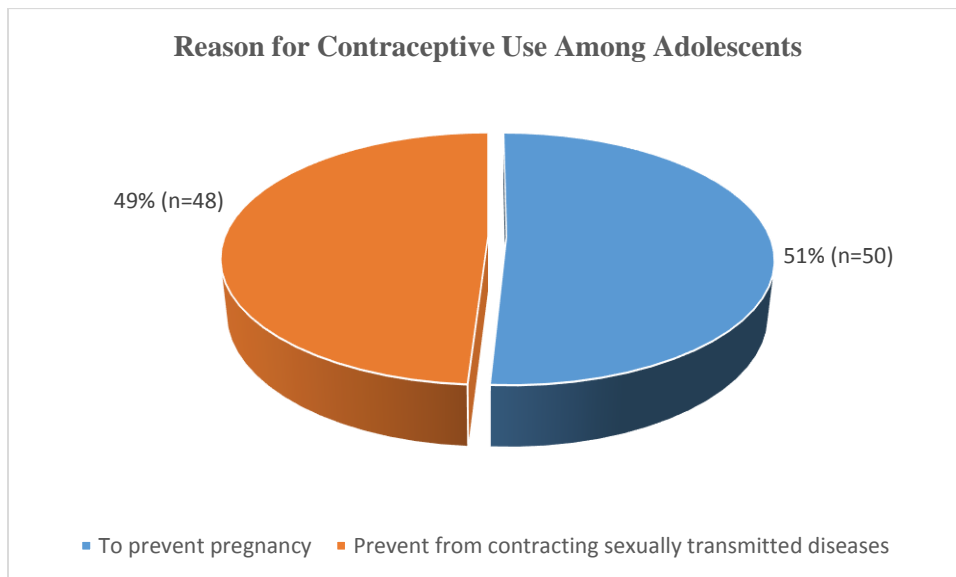
From the study findings, 42.9% of the respondents revealed to use the contraceptives sometimes, 31.6% indicated to often use the contraceptives while 15.3% of the respondents indicated to have always used the contraceptives. However, 10% of the respondents indicated to have rarely or never used the contraceptives.

4.6.1 Reasons for Contraceptive Use

The respondents were further asked to indicate the reason behind using the contraceptives.

The results are presented in Figure

Figure 4.7 Reasons for Contraceptive Use Among Adolescents



The study results show that most of the respondents (91%) used contraceptives in the attempt to prevent pregnancies while 49% of the respondents used the contraceptives to prevent from contracting sexually transmitted diseases.

4.7 Factors Influencing Usage of Contraceptives among Adolescence

In this section, the study sought to investigate the factors affecting usage of contraceptives among adolescence in poor urban communities. To achieve this objective, the respondents were asked to indicate what influences their choice of use of contraceptives, and rate the factors affecting the use of contraceptives among adolescents.

4.7.1 Factors Influencing Choice of Contraceptives to Use

The respondents were asked to indicate what influences the adolescent choice on the contraceptives to use. The findings are presented in Table 4.12.

Table 4. 12: Influence of Choice to Use Contraceptives (N=98)

Influencers	Frequency (n)	Percent (%)
Culture	28	28.6
Religion	51	52.0
Peer pressure	64	65.3
Parental support and control	24	24.5
Mass media	54	55.1
Access to information	44	44.9
Age factor	34	34.7
Socio-economic factors	48	49.0

The study results show that majority of the respondents (65.3%) indicated that peer pressure influenced greatly the adolescent choice of contraceptives to use. A further 55.1% of the respondents indicated that mass media influenced their choice of contraceptive while 52.0% indicated that religion influenced their choice of contraceptive. On the other hand, 49.0% indicated that socio-economic factors, 44.9% indicated access to information while 34.7% indicated that age factor influenced choice of contraceptive to use. Culture was cited by 28.6% of the respondents as one of the least factor that influences choice of contraceptive to use.

4.7.2 Factors Influencing the Use of Contraceptives among Adolescents

The respondents were asked to indicate the extent to which the various factors influence the use of contraceptives among adolescents in Kawangware. A five point likert scale was used to interpret the responses whereby the scores of “strongly disagree” and “disagree” were represented by mean score, equivalent to 1 to 2.5 on the continuous Likert scale ($1 \leq \text{disagree} \leq 2.5$). The scores of ‘neutral’ were equivalent to 2.6 to 3.5 on the Likert scale ($2.6 \leq \text{neutral} \leq 3.5$). The score of “agree” and “strongly agree” represented were equivalent to 3.6 to 5.0 on the likert scale. The results are presented in Table 4.12.

Table 4.13: Factors Influencing the Use of Contraceptives among Adolescents

Factors	Mean	Std. Deviation
To avoid early pregnancy	4.67	0.690
Enables become confident	3.49	1.294
Availability of the contraceptives	4.28	0.866
Usage of contraceptives enables one to prevent abortion	4.67	0.638
They are cheap and available	4.40	0.671
Religious background	4.24	1.279

As shown in Table 4.12, the respondents agreed to use contraceptives to avoid early pregnancies, prevent abortion and that the contraceptives were cheap and available among adolescent girls which made easy to access; as shown by mean score of 4.67, 4.40 and 4.28 respectively. The respondents also agreed that the religious backgrounds among the adolescent girl influenced the use of contraceptives to a great extent; as shown by a mean score of 4.24. However, respondents reported to be neutral on the statement the use of contraceptives enabled them become confident; as shown by a mean score of 3.49 on the likert scale.

4.8 Relationship between Uptake Rates and Adolescents Pregnancies

This section addresses the fourth objective of the study which sought to establish the relationship between the pregnancy rates and uptakes rates of contraceptives among adolescence in poor urban communities.

4.8.1 Use of Contraceptives by Adolescents and Rate of Pregnancies

The respondents were asked to indicate the extent to which use of the contraceptives by adolescents had helped reduce unintended pregnancies. The findings are presented in Table 4.13.

Table 4. 14: Use of Contraceptives by Adolescents and Rate of Pregnancies

Extent	Frequency (n)	Percent (%)
Very great extent	44	44.9
Great extent	50	51.0
Moderate extent	4	4.1
Total	98	100

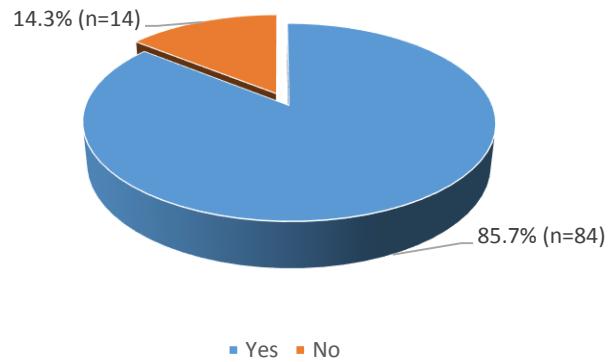
The study findings show that 51.0% of the respondents indicated that use of the contraceptives by adolescent girls had helped reduce unintended pregnancies to a great extent while 44.9% indicated that it had helped reduce the pregnancies to a very great extent. However, 4.1% reported that use of the contraceptives by adolescent girls had helped reduce unintended pregnancies to a moderate extent.

4.8.2 Whether the Un-intended Pregnancies are Associated with the Use of Contraceptives in the Area

The respondents were further asked to indicate whether there existed a relationship between unintended pregnancies and the use of contraceptives in Kawangware area. The results are presented in Figure 4.7

Figure 4.8: Relationship Between Unintended Pregnancies and the Use of Contraceptives

Relationship Between Unintended Pregnancies and the Use of Contraceptives



From the study findings, majority of the respondents (85.7%) indicated there existed a relationship between unintended pregnancies and the use of contraceptives while 14.3% of the respondents indicated that there were no relationship between unintended pregnancies and the use of contraceptives. Those who supported this relationship indicated that there were minimal cases of unexpected pregnancies among the adolescent girls who used contraceptives in Kawagware area

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1. Introduction

The purpose of this chapter is to summarize the study's findings, conclusions and recommendations. This involves a fusion of significant issues of the study's objectives based on the entire research.

5.2 Summary of Findings

5.2.1 Pregnancy Rates Among Adolescence

The first objective sought to assess the pregnancy rates among adolescents in poor urban communities. The study found out that pregnancy rates were high among adolescent girls in Kawangware. The study established that high pregnancy rates were as result of peer pressure, poverty levels of the families of adolescent girls which push the girls to look for security and they get lured in relationships, risky sexual behavior and lack of sexual awareness among the adolescent girls. Other aspects that influenced the high rate of teenage pregnancies were broken families and lack of a stable family structure, rape and sexual abuse, as well as alcohol and drugs abuse among the teenagers. The study also found out that, even though majority of the teenage girls in Kawangware were sexually active or engaging in sexual encounters, a substantial number was not using protection. This increased the risk of pregnancies as well as sexually transmitted diseases. On those who used contraceptive or protection, majority reported that they used pills and condoms.

5.2.2 Level of Knowledge on Contraceptives Among Adolescence

The second objective was to establish the level of knowledge on contraceptives among adolescents girls in poor urban communities. The study found out that majority of adolescents girls in Kawangware reported that they had used contraceptives. The study found out that majority of the respondents got information on contraceptives from a friend or peer, from a teacher in school and got information mass media, that is, from Radio, TV and newspaper/ magazines. These three were found to be the major sources of information for the adolescents. However, a few also got information on contraceptives from a social worker, a health provider, and from a spouse or parent.

The study results show that the adolescents were using contraceptives as early as 13 years. This paints a picture that the adolescents were using contraceptives at early age. Majority of the respondents revealed that they could get contraceptives for themselves. Majority of the adolescents also revealed that they were majorly using condoms and pills. Most reported that they used contraceptives less than 2 times in a year, others used contraceptives between 2 to 4 times in a year while others indicated they used them for more than more than 4 times. It was found out that majority of the respondents indicated that they never sort advice from health provider or from a hospital on the use of contraceptives. Only a few revealed that they sort advice from health a health professional or hospital. On the reasons for using contraceptives, majority of the respondents revealed that the adolescent girls were using to prevent pregnancies.

5.2.3 Aims of Contraceptive Use Among the Adolescence

The objective of the study was to establish the aims in use of contraceptives among adolescents in poor urban communities. The study found out that most adolescents do not

use always use contraceptives. The study also revealed that most of the adolescent girls used the contraceptives to prevent pregnancies compared to prevention of sexually transmitted diseases such as the HIV/AIDS.

5.2.4 Factors Influencing Usage of Contraceptives among Adolescence

The objective was to investigate the factors influencing usage of contraceptives among adolescence in poor urban communities. The study found out majority of the respondents that peer pressure, mass media religion, and socio-economic factors influenced choice of contraceptive to use. Culture was cited as one of the least factor that influences choice of contraceptive to use. On the other hand, the respondents indicated that factors such as economic factors (for example poverty levels), knowledge on contraceptives, perceived side-effects, and sexual behavior influenced the use of contraceptives among adolescents to a great extent. However, factors such as demographic factors (for example age), partner/spouse choice and social/cultural norms for example religion, culture were found to influence the use of contraceptives among adolescents only to a moderate extent.

5.2.5 Relationship between Uptake Rates and Adolescents Pregnancies

The fourth objective was to establish the relationship between the pregnancy rates and uptakes rates of contraceptives among adolescence in poor urban communities. From the findings, majority of the respondents indicated that use of the contraceptives by adolescent girls had helped reduce unintended pregnancies to a great extent. They also revealed that the unintended pregnancies were associated with the rate of use of contraceptives by adolescents, to a great extent.

Majority of the respondents indicated that the adolescents should be allowed to use contraceptives to control unintended pregnancies. This is because some of the pregnancies among the adolescents were as result of rape and sexual harassment, which could be controlled if the girls were using contraceptives. The respondents also stated that control of pregnancies through use contraceptives in the adolescent girls, would allow them to go back to school and continue with their life normally, since unintended pregnancies made the girls to drop out of school, hence missing on the education opportunity.

5.3 Conclusions

The study concludes that the pregnancy rates among adolescent girls in poor urban communities are high. The high pregnancy rates were exacerbated by peer pressure, high poverty levels and risky sexual behavior. The high rate of teenage pregnancies was also as a result of broken families and lack of a stable family structure which push the girls to look for security and they get lured in relationships. Other causes were rape and sexual abuse, alcohol and drugs abuse among the teenagers.

The study concludes that there is high uptake of contraceptives among adolescent in poor urban communities. Condoms and pills were the commonly used contraceptives among the adolescent. The adolescents did not have one designated source of information on contraceptives. They got information from various sources, some which would give some misleading information. Majority of the adolescent got information on contraceptives from a friends or peers, or from the mass media, that is, from Radio, TV and newspaper/ magazines. There is no one to guide them on the use of contraceptives; they rarely sought advice from a medical practitioner or hospital, as a result they make bad choices.

The study concludes that there are some factors that influence usage of contraceptives among adolescence in poor urban communities. Some of the major factors were peer pressure, mass media, religion, and socio-economic factors influenced choice of contraceptive to use. The knowledge on contraceptives, perceived side-effects, and sexual behavior were also major factors that influenced the use of contraceptives among the adolescents.

The study concludes that there is a relationship between the pregnancy rates and uptakes rates of contraceptives among adolescence in poor urban communities. The use of the contraceptives by adolescent girls had helped reduce unintended pregnancies to a great extent. The adolescents felt that they should be allowed to use contraceptives to control unintended pregnancies. This is because some of the pregnancies among the adolescents were as result of rape and sexual harassment, which could be controlled if the girls were using contraceptives. Unintended pregnancies made the girls to drop out of school, hence missing on the education opportunity; this could however be addressed by allowing the adolescent to use contraceptives.

5.4 Recommendations

The recommendations below were made using the research findings:

First, it necessary for all stakeholders to comprehend the reproductive and sexual health issues as well as needs of teenagers. This should facilitate the prevention of pregnancies that are unintended and thus prevent teenagers from experiencing the poor outcomes of sexual and reproductive health. There is need to come up with policies or programmes that address the contraceptive needs of adolescents and remove barriers to services. For

instance, the adolescents lack adequate information on the use of contraceptives; they normally rely on information from friends or from the media, which may not be accurate. There is therefore need to create channels that adolescents can get accurate information on the use of contraceptives. Adolescents should be provided with enough information to be able to make concrete decisions and not just restrict them to some choices that to some extent they end up misusing or might mislead them.

The study also recommends for provision of adolescent-friendly services: The health system should offer confidential, accessible and acceptable services to adolescents. This way, they will not shy away from seeking services such as contraception. This can be done through the national government, County governments and through Community Health Workers, NGOs.

Education is one way of empowering the girl child. There is evidence that shows that limited educational opportunities, low education, ignorance and illiteracy are a major cause of unintended pregnancies in poor urban communities in Nairobi. Unintended pregnancies further makes the girls to drop out of school, hence missing on the education opportunity. Thus there is need to come with programmes to support the education especially of the girl child, so that they can have access to appropriate reproductive health education in situations where discussion of this is a taboo at their homes and community, instead of relying on the peers who are poorly informed.

REFERENCES

- Adeyinka, D.A., Oladimeji, O., Adekanbi, T.I., Adeyinka, F.E., Falope, Y. and Aimakhu, C. (2010). Outcome of adolescent pregnancies in southwestern Nigeria: A case-control study. *Journal of Maternal-Fetal & Neonatal Medicine*, 8, 785-789.
- African Population and Health Research Center (APHRC) (2002). *Population and Health Dynamics in Nairobi's Informal Settlements*. Nairobi (Kenya): African Population and Health Research Center.
- Almualm, Y.A. (2008). Knowledge, Attitude and Practise of Husbands towards Modern Family Planning In Mukalla. Yemen. *Malaysian J Med Sci*; 15(3), 76-77.
- Ankomah, A., Anyanti, J., & Oladosu, M. (2011) Myths, misinformation, and communication about family planning and contraceptive use in Nigeria. *Open Access Journal of Contraception*, 2(1), 95–105.
- Askew, I., Ezeh, A., Bongaarts, J. & Townsend, J. (2009). *Kenya's Fertility Transition: Trends, Determinants and Implications for Policy and Programmes*. Nairobi: Population Council.
- Bakibinga, P., Matanda, D.J., Ayiko, R., Rujumba, J., Muiruri, C., Amendah, D., Atela, M. (2016). Pregnancy history and current use of contraception among women of reproductive age in Burundi, Kenya, Rwanda, Tanzania and Uganda: analysis of demographic and health survey data. *BMJ Open.*, 6(3):e009991.
- Bandura, A. (2001). Social cognitive theory: An agentive perspective. *Annual Review of Psychology*, 52, 1-26.
- Bandura, A. (2004). Health Promotion by Social Cognitive Means. *Health Education & Behavior*, 31(2), 143-164.
- Beguy, D., Kabiru, C., Zulu, E. & Ezeh, A. (2011). Timing and Sequencing of Events Marking the Transition to Adulthood in Two Informal Settlements in Nairobi, Kenya. *Journal of Urban Health*, 88 (1), 318–340.
- Best, P. & Khan, M. (2008). *Reproductive health: New perspectives on men's participation*. *Population Reports*, Series J, Number 46. Baltimore,

Maryland USA: Johns Hopkins University School of Public Health,
Population Information Program.

Black, K. (2010). "*Business Statistics: Contemporary Decision Making*" (6th ed.). John
Wiley & Sons

Bongaarts, J., Cleland, J., Townsend, J. W., Bertrand, J.T. & Das Gupta, M. (2012). *Family
Planning Programs for the 21st Century: Rational and Design*. New York:
The Population Council.

Campbell, M., Sahin-Hodoglugil, N.N., & Potts, M. (2006). Barriers to fertility
regulation: a review of the literature. *Studies in Family Planning*; 37(2), 87–98.

Casterline, J. B. & Sinding, S. (2000). Unmet need for family planning in developing
countries and implications for population policy. *Population and
Development Review*, 26(4), 691–723.

Central Bureau of Statistics (CBS) (2005). *Welfare Monitoring Survey III: Government
Priorities*. Nairobi: Ministry of Planning and National Development.

Cleland, J., Bernstein, S., Ezeh, A., Faundes, A., Glasier, A. & Innis, J. (2006). Family
planning: the unfinished agenda. *The Lancet*, 368(9549), 1810–1827.

Corson, S. L. (2003) Oral contraceptives for the prevention of osteoporosis. *J Reprod
Med.* 38(12), 1015-20.

Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative and Mixed Methods
Approaches* (4th ed.). London: Sage Publications Ltd.

Davis, F., Bagozzi, R., & Warshaw, R. (1989). User Acceptance of Computer
Technology: A Comparison of Two Theoretical Models. *Management Science*, 35
(1), 982-1003.

Doswell, W; Braxter, B; Cha, E; & Kim, K. (2011). "Testing the Theory of Reasoned
Action in Explaining Sexual Behavior Among African American Young Teen
Girls". *Journal of Pediatric Nursing*.

- Ezeh, A., Kodzi, I. & Emina, J. (2010). Reaching the urban poor with family planning services. *Stud Fam Plann*; 41(2), 109–116.
- Fishbein, M. A. & Ajzen, I. (1975). *Belief, attitude, intention and behavior: an introduction to theory and research*. Reading, MA, Addison Wesley.
- Fotso J.C., Ajayi J.O., Idoko E.E, Speizer I., Fasiku D.A., Mberu B. & Mutua M. (2011). *Family Planning and Reproductive Health in Urban Nigeria: Levels, Trends and Differentials*. Chapel Hill, NC: Measurement, Learning & Evaluation (MLE) Project [UNC, USA] and National Population Commission (NPC) Nigeria
- Fotso, J. C. (2006). Child health inequities in developing countries: differences across urban and rural areas. *International Journal for Equity in Health*, 5(9), 1–10.
- Fotso, J. C., Kizito, P., Guilkey, D., Lumumba, V. & Wamukoya, M. (2011). *Levels, Trends and Differentials in Family Planning and Reproductive Health Indicators in Urban Kenya*. Chapel Hill, NC: Measurement, Learning and Evaluation (MLE) Project & National Coordinating Agency for Population and Development (NCAPD) [Kenya].
- Fotso, J.C. Izugbara, C., Saliku, T., & Ochako, R. (2014). Unintended pregnancy and subsequent use of modern contraceptive among slum and non-slum women in Nairobi, Kenya. *BMC Pregnancy Childbirth*; 14, 224. <https://doi.org/10.1186/1471-2393-14-224>
- Gage, A. J. (2008). Sexual activity and contraceptive use: The components of the decision making process. *Studies in Family Planning* 29, 154–166
- Gipson, J. D., Koenig, M. A. & Hindin, M. J. (2008). The Effects of Unintended Pregnancy on Infant, Child, and Parental Health: A Review of the Literature. *Studies in Family Planning*, 39, 18–38.
- Gipson, J. D., Koenig, M.A. & Hindin, M. (2008). The effects of unintended pregnancy on health outcomes: a review of the literature. *Stud Fam Plann*, 39(1), 18–38.
- Gizaw, A. & Regassa, N. (2011). Family planning service utilization in mojo town, Ethiopia: a population based study. *Journal of Geography and Regional Planning*, 4(6), 355-363.

- Glanz, K., Rimer, B.K. & Lewis, F.M. (2002). *Health Behavior and Health Education. Theory, Research and Practice*. San Fransisco: Wiley & Sons.
- Gosavi, A., Ma, Y., Wong, H., & Singh, K. (2016). Knowledge and factors determining choice of contraception among Singaporean women. *Singapore Med J* 57:610-5.
- Gribble, J. & Haffey, J. (2008). *Reproductive Health in Sub-Saharan Africa*. Washington DC, USA: Population Reference Bureau.
- Gueye, A., Speizer, I.S., Corroon, M., & Okigbo, C.C. (2015). Belief in family planning myths at the individual and community levels and modern contraceptive use in urban Africa. *Int Perspect Sex Reprod Health*, 41(4), 191–199.
- Gupta, N., Katende, C., & Bessinger, R. (2003). Associations of mass media exposure with family planning attitudes and practices in Uganda. *Studies in Family Planning*; 34(1), 19–31.
- Guthrie, B.J., Billings, S., Martyn, K.K., Oakley, D., & Walker, D.S. (2001). Using cognitive theory to improve nurse practitioners' anticipatory guidance with contraceptive pill users. *J Community Health Nurs.*, 18(4), 223-34.
- Guttmacher Institute. (2010). *Facts on Satisfying the Need for Contraception in Developing Countries*. New York, USA: Guttmacher Institute.
- Ibnouf, H., van den Borne, H.W., & Maars, J.A.M. (2007). Utilization of Family Planning services by married Sudanese Women of Reproductive Age. *Eastern Mediterranean Health Journal*, 13(6), 1376 – 1380.
- Jabareen, Y. (2009). Building a conceptual framework: philosophy, definitions, and procedure. *Int J Qual Meth*; 8(1), 49–62.
- Judith, L. (2000). Oral contraceptive pill use and fractures in women: a prospective study. *Bone*, 14(1), 41-50.

- Kabakyenga J, Ostergren PO, Turyakira E, Mukasa P, Pettersson K (2011) Individual and health facility factors and the risk for obstructed labour and its adverse outcomes in south-western Uganda. *BMC Pregnancy and Childbirth* 11, 73.
- Klein, J. D. (2005) the Committee on Adolescence (2005) Adolescent Pregnancy: Current Trends and Issues. *Pediatrics* 116, 281–286.
- Kothari, C. R. (2009). "*Research Methodology: Methods & Techniques*" (2nd Revised Edition). New Age International Publishers, New Delhi.
- Liran D, Vardi IS, Sergienko R, Sheiner E (2012) Adverse perinatal outcome in teenage pregnancies: is it all due to lack of prenatal care and ethnicity? *Journal of Maternal-Fetal and Neonatal Medicine* 0: 1–4
- Magadi MA, Madise NJ, Rodrigues RN (2000) Frequency and timing of antenatal care in Kenya: explaining the variations between women of different communities. *Social Science & Medicine* 51: 551–561
- Marston, C. & Cleland, J. (2003). Do unintended pregnancies carried to term lead to adverse outcomes for mother and child? An assessment in five developing countries. *Population Studies (Camb)*, 57 (1), 77-93.
- Michael, E.J. (2012). *Use of Contraceptives Methods among Women in Stable Marital Relations Attending Health Facilities in Kahama District, Shinyanga Region, Tanzania*. Unpublished Masters Dissertation, Muhimbili University, Tanzania.
- Moreland, S. & Talbird S. (2006). *Achieving the Millennium Development Goals. The Contribution of Fulfilling the Unmet Need for Family Planning*. Washington DC, USA: Futures Group & USAID.
- Obure, B (2002). The effect of oral contraceptive use on vertebral bone mass in pre- and post-menopausal women. *Contraception*. Oct; 34(4), 333-40.
- Ochako, R., Fotso, J. C., Ikamari, L. & Khasakhala, A. (2011). *Utilization of maternal health services among young women in Kenya: Insights from the Kenya Demographic and Health Survey, 2003*. *BMC Pregnancy and Childbirth* 11: 1.
- Ochako, R., Mbondo, M., Aloo, S., Kaimenyi, S., Thompson, R., Temmerman, M., and Kays, M. (2015). Barriers to modern contraceptive methods uptake among young women in Kenya: a qualitative study. *BMC Public Health*; 15:118. doi: 10.1186/s12889-015-1483-1.

- Ojwang, J. (2006). The causes of unmet need for contraception and the social content of services. *Studies in Family Planning* 26(2): 57-75.
- Okech, T.C., Wawire, N.W., Mburu, T. K (2011) Contraceptive Use among Women of Reproductive Age in Kenya's City Slums. *International Journal of Business and Social Science*, 2(1), 22-43.
- Olukoya, P. (2004). Reducing Maternal Mortality from Unsafe Abortion among Adolescents in Africa. *African Journal of Reproductive Health/La Revue Africaine de la Santé Reproductive* 8: 57–62.
- Oso, C. (2005). The influence of spouses over each other's contraceptive attitude in Ghana. *Studies in Family Planning* 24(3), 163-174
- Oso, L. & Onen, P. (2009). Family Planning Can Reduce High Infant Mortality Levels,” Issues in Brief (New York: Guttmacher Institute,(2002), accessed at www.guttmacher.org, on.
- Oso, M. (2005). "Family planning and women's lives: The case of Malaysia." Paper presented at the annual meetings of the Population Association of America, San Francisco. April 6-8.
- Patton, G. C., Coffey, C., Sawyer, S.M., Viner, R.M., Haller, D.M., Bose, K., Vos, T., Ferguson J, Mathers, C. D. (2009). Global patterns of mortality in young people: a systematic analysis of population health data. *Lancet*, 12;374(9693), 881-892.
- Phillips. S. J., & Mbizvo, M. T. (2016). Empowering adolescent girls in sub-Saharan Africa to prevent unintended pregnancy and HIV: a critical research gap. *Int J Gynaecol Obstet*; 132(1), 1–3.
- Population Reference Bureau (2012) PRB World Population Data Sheet 2012. Population Reference Bureau [PRB].
- Potts, M. & Fotso, J. C. (2007). Population growth and the Millennium Development Goals. *The Lancet*, 369(9559):354–355.
- Ringheim, K., & Gribble, J. (2010). *Improving the reproductive health of sub-Saharan Africa's youth: a route to achieve the Millennium Development Goals*. Washington, D.C.: Population Reference Bureau [PRB].
- Shah, I. & Ahman, E. (2004). Age patterns of unsafe abortion in developing country regions. *Reproductive Health Matters*, 12 (24), 9–17.

- Singh, S. & Darroch, J. E. (2012). *Adding it Up: Costs and Benefits of Contraceptive Services - Estimates for 2012*. New York: Guttmacher Institute and United Nations Population Fund (UNFPA).
- Singh, S. (2008). Adolescent childbearing in Developing Countries: A Global Review. *Studies in Family Planning* 29: 117–136.
- Singh, S., Sedgh, G. & Hussain, R. (2010). Unintended pregnancy, worldwide levels, trends, and outcomes. *Studies in Family Planning*, 41 (1), 241–250.
- Snead, M.C., O’Leary, A.M., Mandel, M.G., Kourtis, A.P. (2014). Relationship between social cognitive theory constructs and self-reported condom use: assessment of behaviour in a subgroup of the Safe in the City trial. *BMJ Open*. 4(12), doi: 10.1136/bmjopen-2014-0093.
- Tavakol, M. & Dennick, R. (2011). Making sense of Cronbach’s alpha. *International Journal of Medical Education*, 2, 53-55
- Tsui, O.A., McDonald-Mosley, R. & Burke E. A. (2010). Family planning and the burden of unintended pregnancies. *Epidemiologic Reviews*, 32, 152–174
- UN (United Nations) (2010). *World Urbanization Prospects: The 2009 Revision*. New York: United Nations, Department of Economic and Social Affairs, Population Division.
- UNFPA (United Nations Population Fund) (2007). *State of World Population 2007: Unleashing the Potential of Urban Growth*. New York: UNFPA.
- Unumeri, G., Ishaku, S., Ahonsi, B., & Oginni, A. (2015). Contraceptive use and its socio-economic determinants among women in North-East and North-West Regions of Nigeria: a comparative analysis. *African Population Studies*, 29(2), 1851-1874.
- Van Wyk, B. (2012). “*Research design and methods Part 1*,” University of Western Cape. Retrieved 25 March, 2017, from https://www.uwc.ac.za/Students/Postgraduate/Documents/Research_and_Design_I.pdf

- World Health Organization (2011). *Unsafe abortion: global and regional estimates of the incidence of unsafe abortion and associated mortality in 2008*. Geneva: World Health Organization. 56 p.
- Yakubu, I. & Salisu, W. J. (2018). Determinants of adolescent pregnancy in sub-Saharan Africa: a systematic review. *Reprod Health*; 15(1), 15. DOI 10.1186/s12978-018-0460-4
- Zulu, E., Dodoo, F. & Ezeh, A. (2005). Sexual risk-taking in the slums of Nairobi, Kenya. *Popul Stud*, 56(3), 311–323.

APPENDICES

APPENDIX I: INTRODUCTORY LETTER

My name is Eileen Wambui I am collecting data on the level of use of contraceptives and adolescence pregnancies. You are being asked to take part in this study and to respond genuinely. This questionnaire focuses on assessing your feelings related to your work and your interaction with your clients at your work place. Your cooperation and willingness is greatly helpful in identifying problems related to burnout in your work area and proposing solutions. Your name will not be written in this form and will never be used in connection with any information you provide. This questionnaire may take 15 to 20 minutes to complete. There is no possible risk associated with participating in this study except the time spent for completing the questionnaire. All information given by you will be kept strictly confidential. Your participation is voluntary and you are not obligated to answer any question you do not wish to answer. If you feel discomfort with any of the questions, it is your right to drop it any time you want.

Yours faithfully;

APPENDIX II: QUESTIONNAIRE

Instruction: Please read the answer the questions as appropriately as possible. It is advisable that you answer or fill in each section as provided. Tick (✓) where appropriate.

Section A: Personal Information

1. Kindly indicate your Age

2. Highest educational level completed

Primary Secondary College/University

Other (Specify).....

3. What is your Religion?

Christian Muslim

Other (specify).....

4. Kindly indicate your marital status

Single Married

Other (Specify).....

5. Have you conceived?

Yes No

b). If yes, how many children have you conceived.....

Section B: Pregnancy Rates

6. In your own opinion how can you rate pregnancy rates in this area?

High Low

7. If your answer is high, what do you think contributes to this scenario?

High fertility []

Risky sexual behaviours []

Peer pressure []

Other reasons (specify).....

8. Did you use any protection during your last sexual encounter?

Yes [] No []

a). If yes which contraceptive(s) did you use.....

.....

b). If no why didn't you use.....

.....

Section C: Level of Knowledge and Use of contraceptives Among Adolescents

9. Have you ever used contraceptives?

Yes [] No []

b). If yes, from where/who did you hear first from?

A friend/ Peer []

Mass Media []

Health provider []

Parent []

Spouse []

Social (NGO) worker []

School teacher []

Other (Specify)

c). If you don't use contraceptives regularly, what is your reason?

Contraceptives are for married people []

Contraceptives are expensive []

I fear the side effects of using contraceptives []

I feel embarrassed to use []

I feel embarrassed to purchase []

Health care providers cannot []

10. At what age did you first use contraceptives

11. Which methods of family planning (contraceptives) do you commonly use?

Condoms []

Pills []

Injections []

Implants []

Intra uterine devices []

Do not use []

Other (Specify)

12. Why do you use the above mentioned contraceptive?

Cost effective []

Availability []

Ease of use []

No side effects []

Other (specify).....

13. To what extent do you think the level of knowledge influences use of contraceptives among adolescent girls?

Very great extent [] Great extent [] Moderate extent []
Small extent [] Not at all []

Section D: Aims of Contraceptives Among Adolescents

13. How often do you use contraceptives?

Always [] Often [] Sometimes [] Rarely [] Never []

15. Why do you use contraceptives?

To Prevent Pregnancy []

Prevent from contracting sexually transmitted diseases []

Other reason (specify).....

.....

Section E: Factors affecting usage of Contraceptives among Adolescence

16. What influences your choice to use contraceptives?

Culture [] Religion []

Peer pressure [] Parental support and control []

Mass media [] Access to information []

Age factor [] Socio-economic factors []

b). Other reasons (specify).....

17. To what extent do you agree with the following statements as the factors affecting the use of contraceptives among adolescence?

Key – SA – Strongly Agree, A- Agree, UD – Undecided, D – Disagree, SD – Strongly Disagree

Statement	SA	A	UD	D	SD
I use contraceptives to avoid early pregnancy					
It enables one become confident					
Availability of the contraceptives					
Usage of contraceptives enables one to prevent abortion					
I use contraceptives because they are cheap and available					
I use FPM because of my religious background					

Section E: Use of Contraceptives and Adolescent Pregnancy Rate

18. To what extent do you think the use of the contraceptives by adolescence have helped reduce pregnancies among them?

Very great extent []

Great extent []

Moderate extent []

Small extent []

Not at all []

19. Do you feel the unintended pregnancies are associated with the use of contraceptives in the area?

Yes [] No []

b). If Yes, why.....

.....

.....

20. What can you comment on the pregnancy rates and the use of contraceptives in Kawangware?

.....

.....

.....

.....

THANK YOU FOR YOUR PARTICIPATION

APPENDIX III: INTERVIEW GUIDE FOR SOCIAL AND HEALTH WORKERS

1. Indicate your designation and the nature of your work
2. Have you dealt with health care matters of adolescent girls?
3. How would you rate the pregnancy rates among the adolescent girls in Kawangware slums?
4. Which factors do you think contribute to pregnancy rates among the adolescent girls in Kawangware slums?
5. How would you rate contraceptive use among the adolescent girls in Kawangware slums? And what are the reasons for use of contraceptives among the adolescents girls?
6. Which contraceptives are highly used by the adolescent girls in Kawangware slums?
7. Does the level of knowledge influence use of contraceptives among adolescent girls in Kawangware slums? Explain
8. Which other factors affect or influence usage of contraceptives among adolescent girls in Kawangware slums?
9. To what extent do you think use of contraceptives prevents pregnancies among adolescent girls in Kawangware slums?