

**PREVALENCE AND DETERMINANTS OF UPTAKE OF EMERGENCY
CONTRACEPTIVE PILLS AMONG THE YOUTH IN KIKAMBALA,
KILIFI COUNTY**

KEVINA ADIKINYI BWIRE

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DECLARATION

I hereby declare that this research work is my original work and has not been presented in any other university/institution for consideration.

Signature _____ **Date** _____

Kevina Adikinyi Bwire
H57/80529/2012

This dissertation has been submitted for appraisal with our approval as university supervisors.

Signature _____ **Date** _____

Elisha K. Muchunga- B.A, MPH, PhD
Associate Professor,
School of Public Health, University of Nairobi

Signature _____ **Date:** _____

Mr Lambert O. Nyabola- B.Sc, M.Sc, M.S
Senior Lecturer,
School of Public Health, University of Nairobi

Signature _____ **Date** _____

Dr. Dismas Ongore- MBChB, MPH, PhD
Director, School of Public Health,
University of Nairobi

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ABBREVIATIONS AND ACRONYMS

CHW	Community Health Worker
CI	Confidence Interval
COR	Crude Odds Ratio
ECP	Emergency Contraceptive Pill
FHI	Family Health International
HIV/AIDS	Human Immunodeficiency Virus/ Acquired Immunodeficiency Syndrome
ICEC	International Consortium for Emergency Contraception
IUD	Intrauterine Devices
KDHS	Kenya Demographic and Health Survey
KIHBS	Kenya Integrated Household Budget Survey
KNH/UON-ERC	Kenyatta National Hospital/University of Nairobi- Ethics and Research Committee
MDG	Millennium Development Goal
MOPHS	Ministry of Public Health and Sanitation
SPSS	Statistical Products and Service Solutions
TB	Tuberculosis
WHO	World Health Organisation

OPERATIONAL DEFINITION OF TERMS

Adolescents- WHO defines adolescents as young people between the ages of 10 and 19 years.

Community Unit- Kenya Essential Package for Health defines it as approximately 1000 households or 5000 people who live in the same geographical area, sharing resources and challenges.

Knowledge- Possession of information about the reasons for use of ECPS, timing of use, source of ECP's and perceived health effects associated with use of emergency contraceptives.

Practice- Trend of use of emergency contraceptives among the youth

Youth- This study defines youth as females aged between 15 and 29 years.

Emergency Contraception- WHO defines emergency contraception as a method of contraception that can be used to prevent pregnancy in the first 120 hours after sexual intercourse.

ABSTRACT

In Kenya maternal mortality rate is very high. The Kenya Demographic and Health Survey (2008-2009) reported a maternal mortality ratio of 488 per 100,000 live births. The use of contraceptives to prevent unwanted pregnancies and unsafe abortion is an important strategy to minimize maternal mortality ratio. Among various forms of contraception, emergency contraceptives are the only ones that can be used within 120 hours after unprotected sexual intercourse to prevent unintended pregnancy. The aim of this study was to identify the determinants and prevalence rate of uptake emergency contraceptive pills among female youth in Kikambala division, Kilifi County, Kenya. To achieve the above goal, a cross-sectional survey was carried out and data on the socio-demographic characteristics of the respondents, sexual and reproductive health behaviour, the knowledge and uptake of emergency contraceptive pills was obtained. A sample of 402 female youth aged between 15 and 29 years living within Kikambala division were randomly selected. Data was collected using questionnaires and analysis of the data was conducted using SPSS version 22. Chi-square test of significance was used to establish the association between the outcome variable and the predictor variables. The average age of the female youth was 22.3 years with a standard deviation of 4.09. Slightly above a half 55.7% of the respondents were married. The level of education was low with only 17.6% of the respondents with secondary and tertiary education levels. Almost a half of the study population 45% had no occupation. Nearly all the respondents 87.1% reported to be in a sexual relationship. The prevalence of use of emergency contraceptive pills was 13.4% and only 34.3% of the study population had knowledge on emergency contraception. Determinants of usage of ECPs were age, educational level, history of induced abortion, alcohol use and the level of knowledge on emergency contraceptives. There is need for increased awareness on emergency contraception so as to increase the uptake of the pills. This will be instrumental in reducing the occurrence of unintended pregnancies and consequences of abortion. The Ministry of Health in partnership with other stakeholders should enhance the school health policy so that the pupils/students, both boys and girls, are properly guided on sexual and reproductive health issues which they may encounter as they grow up.

CHAPTER 1

1.1 INTRODUCTION

1.1.1 Background Information

Unintended pregnancy leading to unsafe abortion is one of the most important causes of maternal morbidity and mortality. The new Constitution of Kenya (2010), chapter 4 on the Bill of Rights, Part II, article 26, on the Right to Life, clearly states that ‘abortion is not permitted unless, in the opinion of a trained health professional, there is need for emergency treatment, or the life or health of the mother is in danger, or if permitted by any other written law.’ However, unsafe abortion is a major medical and public health problem in Kenya. The country has a high incidence of unwanted pregnancies and incomplete and unsafe/septic abortions, particularly among adolescents. According to the World Health Organisation (WHO), unsafe abortion is a procedure for terminating an unintended pregnancy either by persons lacking the necessary skills or in an environment lacking the minimal medical standards or both. Consequences of unprotected sex, such as unintended pregnancy and unsafe abortion, can be prevented by access to contraceptive services including emergency contraception.

Emergency contraception (EC) refers to the use of certain contraceptive methods by girls and women to prevent pregnancy after unprotected sexual intercourse. There are two methods of emergency contraception: emergency contraceptive pills (ECPs) and copper-bearing intrauterine devices (IUDs). The World Health Organisation defines emergency contraception or post-coital contraception, as a method of contraception that can be used to prevent pregnancy in the first few days after intercourse. It is intended for emergency use following unprotected intercourse, contraceptive failure or misuse (such as forgotten pills or condom accident), rape or coerced sex. Emergency

contraception is effective only in the first 120 hours following intercourse before the ovum is released from the ovary and before the sperm fertilizes the ovum. The sooner the ECPs are started, the more effective they are. According to FHI report on adolescents and emergency contraceptive pills in developing countries (2005), it is stated that the hormonal only pills can prevent 95% of expected pregnancies when started within 24 hours of unprotected intercourse, 85% in the 25th through 48th hour, and 58% in the 49th through 72nd hour. Technically, ECPs are not considered a family planning method but a back-up contraceptive in the event of unprotected sex. The most frequently used method of emergency contraception in Kenya is the use of the hormonal Emergency Contraceptive Pill (ECP), which contains a higher dose of the same active ingredients than regular birth control pills contain.

1.1.2 Trends on Issues Surrounding Emergency Contraceptives

The use of emergency contraceptives is limited in many countries including Kenya. In many low income countries, the lack of sufficient knowledge and access to the services has resulted in many women having unplanned pregnancies and quite often unsafe abortions. The World Health Organisation report on unsafe abortion estimates that just over 40% of pregnancies worldwide are unplanned as a result of non-use of contraception, ineffective contraceptive use or method failure. In Kenya, 43% of births are unwanted or mistimed (KDHS 2008-2009). In 2008, 21.6 million unsafe abortions took place worldwide, almost all occurring in developing countries with 47,000 women dying from complications of unsafe abortion. Deaths due to unsafe abortions account for about 13% of all maternal deaths in the world. Within the African region there were 6.19 million cases of unsafe abortion in 2008, translating to 28 per 1000 live births. Eastern Africa had the highest proportion- 36 per 1000 live births compared to Southern

Africa at 9 per 1000 live births. In Kenya, a report on the Incidence and Complications of Unsafe Abortions (2013) indicate that approximately 464,690 abortions occurred in the year 2012 and about 157,652 women sought treatment for complications arising from induced abortion. The report indicates that 266 Kenyan women die per 100,000 unsafe abortions. This indicates a public health challenge.

The availability of emergency contraceptive pills has increased over the years in developing countries, including Kenya. Despite the fact that several contraceptive methods including emergency contraception are available at public health facilities across the country, there are high rates of teenage and unintended pregnancies in Kenya. Statistics from the Kenya Demographic and Health Survey (2008-2009) show that the use of any method of contraceptive in Coast Province, Kenya, is among the lowest; 34.3% of women of reproductive age reported to have used any method of contraceptives. Regarding knowledge of emergency contraceptives, only 40.2% of all women were aware and 49.7% were aware among the sexually active but unmarried women. Further statistics revealed that 10.9% of sexually active unmarried women reported to have ever used emergency contraceptives. Among all women, 1.7% reported ever use of EC and 1.3% among married women.

The report on unsafe abortions by WHO in 2008 indicated that it is likely that the number of unsafe abortions will continue to increase unless women's access to safe abortion and contraception, and support to empower women (including their freedom to decide whether and when to have a child) are put in place and further strengthened.

1.2 Statement of the Problem

Adolescents and youth are more likely than older women to have an unplanned pregnancy, despite the fact that modern methods of contraceptives are available in public health facilities. More often than not, these young women engage in unplanned sexual activity, and lack sufficient knowledge on effective use of contraceptives. Often they are poorly informed about sexuality and reproductive health.

Similar to other communities in Kenya and sub-Saharan Africa, the young women in Kikambala are at risk of consequences that arise due to early sexual onset. Living in a community with 57.8% of the population being classified as poor (KIHBS 2005-2006) and a low literacy level of 67.5%, the girls face a myriad of sexual and reproductive health challenges. Cases of early marriages in Kikambala and the larger Kilifi County are a norm. For example, many girls eventually end up dropping out of school to cater for their young families. The high poverty levels have also pushed many young women into seeking alternative sources of income. Prostitution is very common in Kikambala, especially around Mtwapa area, which is a cosmopolitan area and a tourist destination. Media reports in the recent past have indicated that parents are driving their young girls to search for tourists so as to get money and subsequently improve their socio-economic status.

Several issues surround unintended pregnancies and unsafe abortions among the adolescents and youth. The health of the young women is endangered as unsafe abortions more often than not results in complications and fatalities. Women who procure abortions also face stigma from the family members and community. Some end up being chased away from their homes or they keep away for fear of punishment. Another major issue that affects the young women is school drop-out. Many girls in

Kilifi who conceive while still in school often drop out. Despite the school health policy that advocates for retention of pregnant girls in schools, the retention rates are still low.

The former Kenyan Ministry of Public Health and Sanitation (MOPHS), Population Council and Population Services International (PSI) launched an initiative to mainstream emergency contraception in Kenya in 2006. This was an effort of improving overall awareness of emergency contraception across the country and strengthening the quality of the services in both the public and private health sectors. This back up method of contraception was intended to benefit the youth who engage in unprotected sex often. Studies have shown that making ECPs easily accessible and available to adolescents and youths results in reduced cases of unintended pregnancies. The prevention of unintended pregnancy in turn prevents the risks that adolescents face due to early pregnancy including abortions.

These issues prompted the basis of this research which sought to establish the prevalence and determinants of the uptake of emergency contraceptives pills in Kikambala.

1.3 Justification of the Study

This study is in line with the achievement of MDG 5, whose goal is to reduce maternal mortality by $\frac{3}{4}$ by the year 2015 and to increase universal access to reproductive health services. One of the indicators for the MDG is the contraceptive prevalence rate. This study will be useful in informing and supporting Government efforts in the implementation of the constitution that entitles every citizen to the right to health. Besides this, the study will contribute to the achievement of Kenya's vision 2030, which aims to revitalize and integrate community health centres to promote preventive health care.

The results from the study will be important in addressing the gaps that exist in sexual and reproductive health. It will help inform policy and promote synergy within stakeholders on the status of sexual and reproductive health in the community.

1.4 Research Questions

This study intended to answer the following questions:

1. How do the youth cope with the challenge of unintended pregnancies and unsafe abortions?
2. What knowledge and perceptions do the youth have regarding safe sex and the use of emergency contraceptives?
3. What is the extent of use and who are the main users of emergency contraceptives?
4. Which socio-demographic factors contribute to the uptake of emergency contraceptive pills?
5. What are the health risks of emergency contraceptive pills among the users?

1.5 General Objective

The general objective of the study was to establish the prevalence and determinants of uptake of emergency contraceptive pills among the youth in Kikambala division, Kilifi County, Kenya.

1.5.1 Specific Objectives

1. To establish the practices of female youth on dealing with unintended pregnancies.
2. To establish the knowledge and perceptions of female youth on safe sex and ECP's
3. To determine the level of uptake of emergency contraceptives among the youth.

4. To determine the socio-demographic factors which influence the uptake of emergency contraceptives among the female youth in Kikambala division, Kilifi County.
5. To determine the health risks of uptake of emergency contraceptive pills.

1.6 Hypotheses

1. There is no relationship between knowledge, perceptions and use of emergency contraceptives.
2. There is no relationship between level of education and use of emergency contraceptive pills.
3. There is no relationship between socio-economic status and use of emergency contraceptive pills.

CHAPTER 2

2. LITERATURE REVIEW

2.0 Introduction

The literature provided in this chapter focuses on selected public health studies conducted around topical areas of ECP's. Among the areas this section covers are: adolescents and youth knowledge, attitude and perception of ECP's, trends and determinants of uptake of emergency contraceptives, role of public and private institutions in the provision of emergency contraceptive services and the health risks associated with use of ECPs.

2.1 Concept of Emergency Contraception

Emergency contraceptive pills provide an opportunity to prevent unintended pregnancies in the event that the regular method of contraception has failed, rape, coerced sex or unprotected sex. Many projects and programs have been implemented in developing countries including Kenya that focus on sexual and reproductive health among adolescents and youth, most of them encouraging delayed sexual debut and abstinence. Despite this, teenagers and youth continue to have sex, and less often they neither use protection nor contraceptives.

2.2 Determinants of Use of ECPs

2.2.1 Availability and Accessibility of Services

Emergency contraceptives are available in many countries in the world today but the level of usage is still low. According to KDHS (2008-2009), the prevalence rate of emergency contraceptive ever use among all women was 1.7%, way below the contraceptive prevalence rate, which was 46%. This indicates that a gap exists either in

the access and availability of the services in health facilities or a gap in knowledge on ECP's. Okwemba (2013) in an article published in the Saturday Nation on 19th January revealed that the Ministry of Public Health and Sanitation, Kenya, had cut down the orders of ECPs due to high wastage. It was reported that the government had whittled down the annual requirement of emergency contraceptive pills from the 5 million doses it had procured in 2009 to 300,000 doses annually. This clearly illustrates that the uptake of the services in public health facilities, which serve the greater part of the population, is far much less than is expected. The youth who are expected to be the major users prefer to purchase their doses from private health facilities, mostly pharmacies. The main reason for this could be that seeking emergency contraceptive services from pharmacies may be more confidential and therefore some youth will feel less stigmatised. The situation in Kenya relates to findings from a survey by Myers et al (2007) in Western Cape Province, South Africa. In their research, they found out that despite the availability of emergency contraceptives free of charge at public health facilities and strong promotion in the national contraception policy guidelines, very few women in the study reported ever use of the pills, that is, 4% of 831 participants.

2.2.2 Awareness

The level of awareness on ECPs has been found to be relatively high in many areas. However, this does not translate to the usage in some cases. Studies have demonstrated this occurrence. Mir and Malik (2010) in a study conducted in Pakistan on Community Health Workers, revealed that that the level of knowledge on ECPs was high (75.5%, n= 40) but the practical use was low (17%, n= 9).

A similar survey conducted in Kibera had 74% of the respondents aware. Lower levels of awareness were established among university students in Kwa Zulu Natal, South

Africa and in South East Nigeria, that is, 49.8% and 38.1% respectively. Similar findings were realised in a rapid assessment conducted by International Consortium for Emergency Contraception (2006), on EC use among three hundred secondary, university, and out-of-school girls in Nairobi. The results demonstrated that while 74% knew about EC, less than 9% had actually used it.

Difference in knowledge on EC among urban and rural communities was reflected in a study conducted among 831 sexually active women in Western Cape Province, South Africa. The level of awareness was found to be 17% among women from the rural areas as compared to 35% among those in the urban areas. The most common source of information on emergency contraceptives is from friends and peers. In this study at Western Cape Province, 40% of the respondents reported to have known about the pills from this source, as compared to 27% from clinics and 9% from mass media. Adeniji et al (2013) in their cross-sectional study on the knowledge and determinants of emergency contraceptive use among students in tertiary institutions in Osun State, Nigeria, also established similar findings whereby 37.8% of the respondents got information on ECP's from friends.

Despite having knowledge on emergency contraceptives, there seems to be little information on the usage of the pills. This poses a great challenge in the intended purpose of the contraceptives, that is, to prevent unintended pregnancies within the first 120 hours after unprotected sexual intercourse. Various studies have elaborated limited knowledge by the respondents on how best to use the pills. This could be attributed to the fact that the most common source of information is from friends, who may provide information that is wrong, misguided or have some misconceptions, thereby negatively affecting the choices that one can make while considering ECP's. For instance, in the survey carried out in Western Cape Province, 75% of the participants who were aware

of EC did not know about the appropriate interval for efficacy between unprotected sex and taking EC, and only 26% had been told about EC by a health care provider. Nworah et al (2010), in a study among 600 students in tertiary schools in Anambra State, South East Nigeria, found that 30.1% of the respondents who knew about EC, had correct knowledge on the timing of their use; 4.6% had incorrect knowledge while 65.3% had no knowledge of time as relates to the use of EC. The skewed level of knowledge on emergency contraceptives has been attributed to the attitude of healthcare personnel towards adolescents and youth seeking reproductive health services. Failure by parents to actively engage their children in sexual and reproductive health matters is partly to blame too for the gap in knowledge. If these barriers are sealed, it is expected that more youth, who often engage in sexual activities, would have correct information on the importance of ECP's and will consequently reduce the risk of unintended pregnancies and its consequences.

2.2.3 Perceptions and Beliefs

Numerous theories surround the uptake of emergency contraceptives. Many communities believe that ECPs cause abortion, promote promiscuity, increase prevalence of sexually transmitted infections, can cause cancers, can lead to ectopic pregnancies, and can lead to increased sexual activity among teenagers. A study by Mutie et al (2012), in Kibera slums, found that 37% of the women who were against ECP cited fear of possible interference with health as their reasons for disapproval and lack of use, 18% of the women cited fertility as a major concern.

2.2.4 Socio-Demographic Determinants

The socio- demographic characteristics of individuals for example, age, marital status, education level and economic status are important in understanding the factors that influence their reproductive behavior and contraceptive uptake. Various studies have illustrated that younger women have less information regarding the use of emergency contraceptives as compared with their older counterparts. For instance, findings from Kenya Demographic and Health Survey (2008-2009) indicate that the use of emergency contraceptives increased with age. Only 0.5% of all women aged 15-19 years had ever used ECPs compared to 3.3% of those between the age of 24 and 29 years. These findings are consistent with results from a study among 660 female students at Adama University in Central Ethiopia whereby girls aged more than 20 years were found to be 3.48 times more likely to use ECPs than those aged 15- 19 years. Falah-Hassani et al (2007), in their study on emergency contraception among Finnish adolescents, established that in 2% of girls aged 14 years had used ECPs. Among those aged 16 and 18 years, the proportion that had ever used was 15% and 29% respectively.

Educated women are most often able to make informed decisions on her sexual and reproductive health needs. Through education, an individual is exposed to health messages as compared to one who is not adequately educated. In this case, they are likely to know about emergency contraceptives and consequently use them. In a study by Adeniji et al (2013), there was a significant association between formal family life education and the use of emergency contraceptive pills ($p= 0.01$). A higher proportion 59.8% of women in Kenya knew of a method of contraception as compared to those with no education 14.1% (KDHS 2008-2009). This illustrates that education plays an important role in the level of knowledge that a woman has with regard to contraceptive choices. The use of emergency contraceptives can as well be influenced by a woman's

marital status. Dejene, T et al (2011) established that participants who were married were 15.39 times more likely to use EC compared to the women who were never married/single. According to KDHS (2008-2009) sexually active unmarried women were more likely to have used emergency contraceptive pills as compared to married women, that is, 10.9% and 1.3%, respectively.

2.2.5 Alcohol and Emergency Contraceptive Use

The uptake of emergency contraceptives can be influenced by behavioral factors such as the consumption of alcoholic drinks. Harper and Ellertson (1995) conducted a qualitative study on knowledge and perceptions of emergency contraceptive pills among a college-age population in United States. From the focus group discussions on alcohol and sexuality, it emerged that alcohol was highly connected to unplanned, unprotected intercourse. The students expressed that drinking alcohol decreases the likelihood of contraceptive use. A quantitative study by Falah-Hassani et al (2007) found that the use of EC among girls aged 14–18 years increased with alcohol consumption. Furthermore, alcohol consumption was related to higher level of awareness on emergency contraceptives.

2.2.6 Health Risks Associated with Repeated Use of Emergency Contraceptive Pills

Emergency contraception provides a backup option especially for the youth in the event of unprotected sex. The efficacy of the method is reliant on the time of a woman's menstrual cycle, when intercourse occurred, and when the ECPs were taken. However, these emergency contraceptive pills have been shown to cause nausea, vomiting, headache, fatigue, breast tenderness or irregular bleeding. An ECP handbook by the Population Council on introducing and mainstreaming the provision of emergency

contraceptive pills in developing countries, reports that most of the side effects generally disappear within 24 hours after taking the pill. According to a clinical summary by ICEC (2013), there is no evidence that supports the theory that ECPs interfere with the implantation of a fertilised egg and neither do they cause abortion of an existing pregnancy. Regular use of modern family planning methods is often advised to the sexually active women of reproductive age. This is because repeated use of the ECPs may expose the women to greater health risks of unintended pregnancies as well as the common side effects associated with the pills.

The American College of Paediatricians in a paper ‘Emergency Contraception – Not the Best for Adolescents (2014)’ opposes the plan by some medical organisations to promote the prescription of EC to all adolescent patients for use in case they have unprotected sexual activity. They cited health risks associated with this plan including the risk of increased rates of sexually transmitted infections as a result of increased harmful sexual behaviour prompted by provision of ECPs.

2.3 Conceptual Framework

One of the ways to improve maternal health and to reduce cases of maternal mortality due unintended pregnancies leading to unsafe abortions is the use of modern methods of contraception. Provision of emergency contraception is among the interventions which have been put in place in Kenya. Various factors contribute to the uptake of emergency contraceptive services. The conceptual framework below highlights factors which are likely to influence the uptake of emergency contraceptives among the youth. These include socio-demographic factors like age, education level, parity, marital status, economic status and residence; health service related factors like availability and

accessibility of health services; individual factors like knowledge, attitudes and beliefs towards contraception; and cultural and traditional factors.

Socio-Demographic Factors

A higher level of education increases the contraceptive use of an individual. Results from KDHS (2008-2009) indicate that the proportion of women who had ever used emergency contraception increased with age, that is, 0.5% between 15 and 19 years, 3% between 20 and 24 years and 3.5 % for those aged 25 to 29. The number of children one has also influences their decision to use emergency contraceptives. The residence also plays a role in uptake of ECPs. Rural areas are often disadvantaged in terms of access to IEC messages on sexual and reproductive health as compared to urban areas where information is more readily available. Economic status of a person will greatly determine their uptake of emergency contraceptives.

Health Service Factors

Uptake of emergency contraceptives is dependent on the health services available in an area. ECPs can be obtained from public health facilities, private health facilities and pharmacies. Easy access to these places will increase the uptake of the contraceptives. Inadequate supplies of these commodities will negatively influence the uptake among those who require it.

Cultural Factors

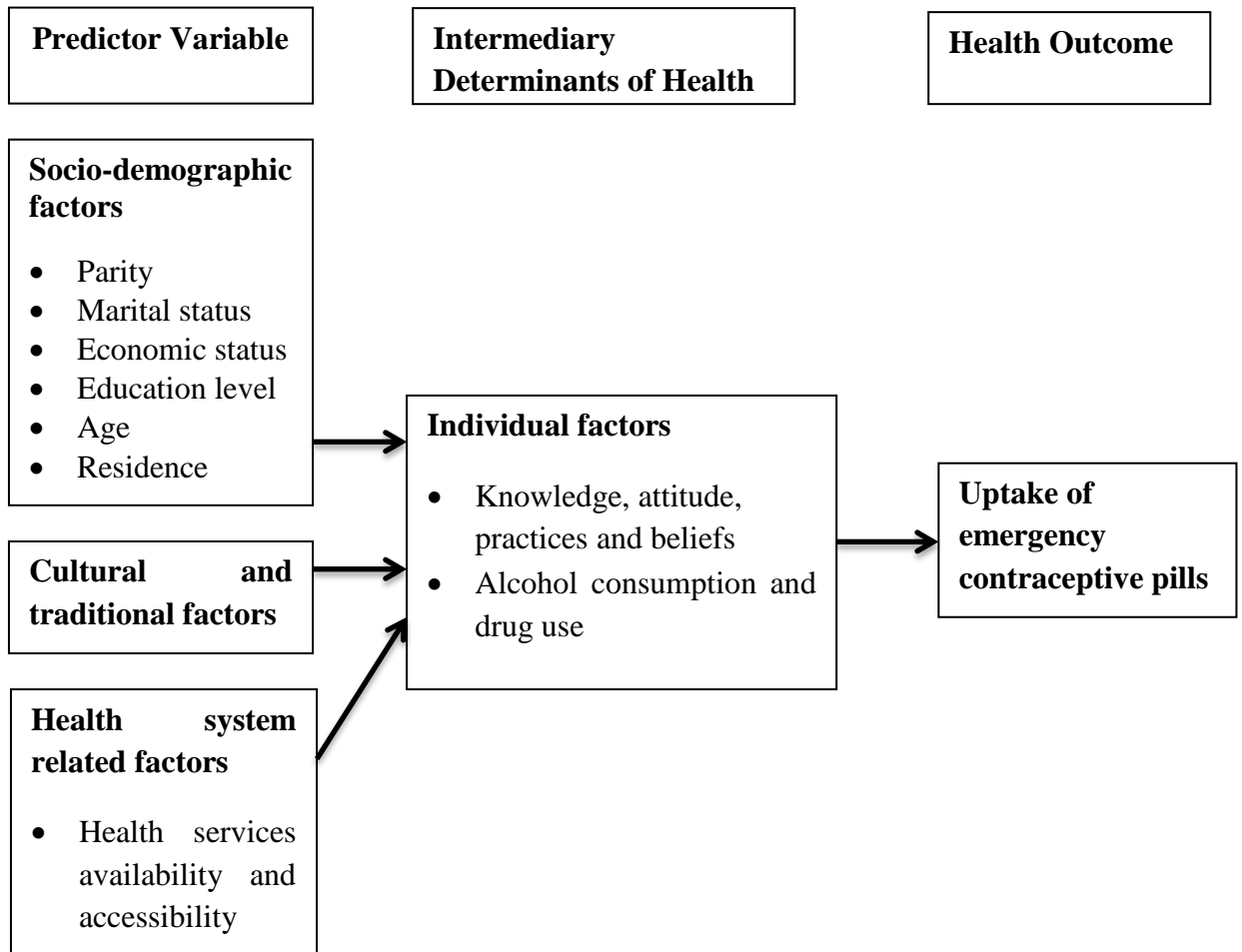
Cultural practices play a critical role in shaping a woman's perception about emergency contraceptive use. Religion is also a factor that may influence the decision to use ECPs. An individual's religious beliefs could play an important role in determining their social practices. For instance, the Catholic Church in Kenya has been against the use of any contraceptive method. Some cultural beliefs abhor the tendency of women giving birth

out of wedlock therefore this may make an individual opt for emergency contraception to avoid pregnancy and being castigated by the community.

Individual Factors

Poor knowledge on emergency contraceptive usage and negative beliefs on ECPs will inhibit the uptake of the services. Behavioural factors also contribute the uptake of ECPs. Excessive alcohol consumption may negatively influence the ability of an individual to make proper decisions regarding involvement in safe sex and the use of emergency contraceptives incase they engage in unprotected sex while in a drunken state.

Figure 1: Conceptual Framework Illustrating Factors Influencing Emergency Contraceptive Use among Female Youth



CHAPTER 3

3. METHODOLOGY

3.1 Study Area

Kilifi County is located in the Coastal region of Kenya. The county has 5 constituencies, namely: Bahari, Kaloleni, Ganze, Malindi and Magarini. According to the Kenya Population and Housing Census (2009), the population of the county was 1,109,735 with 535,526 males and 574,209 females. The study area was Kikambala division in Bahari constituency. It borders Mombasa and Kilifi town and the Indian Ocean. Bahari constituency has a total population of 323,609: males 157,741, females 165,868. Kikambala division has an estimated population of 143,224: males 70,918 and females 72,306. The projected population size for Kikambala Division for the period ending December 2013 was 168,861. This projection was derived at using the division's total population obtained from the Population and Housing Census of 2009. The division has three locations, namely: Takaungu, Junju and Mtwapa, 11 sub-locations and eighty two villages. Table 1 shows the population distribution per location and sub-location.

The predominant ethnic group in the study area is MijiKenda. However, one of the sub-locations is highly cosmopolitan with ethnic groups from various parts of Kenya including foreign nationals. The area is both rural and peri-urban. The two predominant religions are Islam and Christianity.

Table 1: Population Distribution in Kikambala Division, Kilifi County.

Name of Location	Name of Sub-location	Male	Female	Total
Mtwapa	Shimo la Tewa	25242	25604	50864
	Kijipwa	4886	4802	9668
	Kanamai	7604	7785	15389
	KidutaniMawamba	4892	4694	9586
	Total	42604	42885	85489
Junju	Junju	5160	5397	10557
	Kuruwitu	4204	4535	8739
	Vipingo	6228	6228	12456
	Total	15592	16160	31752
Takaungu	Mavueni/Majajani	3869	4136	8005
	Takaungu	3283	3373	6656
	Kiriba	1870	2025	3875
	Mkomani/Mkwajuni	3700	3727	7427
	Total	12722	13261	25983
Kikambala Division		70,918	72,306	143,224

Source: The 2009 Kenya Population and Housing Census

Bahari constituency is ranked among the poorest in Kenya- number 144 out of 210. Further, results from the Kenya Integrated Household Budget Survey (2005-2006) indicated that 57.8% of the population in the constituency lived below the poverty line. The main economic activities within Kikambala are tourism, agriculture, fishing and manufacturing. The main economic activities take place within Mtwapa area, which borders Mombasa.

Kikambala has 13 public health facilities, and 6 community units. The main health challenges experienced in the area are HIV/AIDS, TB, maternal and child health problems, poor sanitation, early marriages, risky behaviour such as multiple sexual partners, alcohol and drug abuse. The level of education within Kilifi County is low. According to Kenya Population and Housing Census (2009), 67.5% of the population had primary education and 7.1% had secondary education.

Reasons for Choice of Study Area

Kikambala division is a rural area. Studies of the same nature have been conducted in urban areas. Similar studies have been conducted among university students. The focus of this study was at the community level- within the households. The mixed nature of religion at the coast was also a reason for the choice. A majority of the residents in Kikambala either practice Islam or Christianity. Another reason for choice is that Kikambala division is lowly ranked in literacy levels in Kenya. Being a hub of one very vibrant suburban area- Mtwapa, famously referred to as '24 hour city,' there are risk factors for health, such as, early marriages, prostitution, alcohol and drug abuse, tobacco smoking.

3.2 Study Design

This was a descriptive cross-sectional study carried out at household level. This study design was useful in determining the proportion of the female youth that has ever used emergency contraceptives and attributed practices, knowledge and perceptions.

3.3 Population

The target population for this study were women of reproductive age, aged between 15 and 49 years. The estimated number in this group in Kikambala division was 17,787. The study population was specifically female youth aged between 15 and 29 years.

3.4 Sampling

3.4.1 Sample Size Determination

The sample size was derived from the formula of single populations using proportions as follows (Lwanga and Lemeshow 1991):

$$n = \frac{(z^2) * \{p(1-p)\}}{d^2}$$

Where:

n- is the required minimum sample size

z- is the critical value for the significance level (95% Confidence Interval), the value is 1.96

p- is the proportion of all women with knowledge on emergency contraceptive use in Kenya {i.e. 40.2% according to KDHS (2008-2009)}

d- is the margin of error (set at ± 0.05)

Thus the calculated sample size is:

$$\frac{\{(1.96)^2 * 0.402 * (1 - 0.402)\}}{0.05^2} = 362.16$$

The calculated sample size for the study was 362. This size was increased by 10% to cater for non-response therefore a total of 398 respondents were sampled.

3.4.2 Selection of Study Subjects

Multistage sampling technique was used to enlist participants for the study. This helped to cater for the diverse population and to ensure that sampled respondents were equally selected from the villages.

Respondents for the study were randomly selected from the three locations within Kikambala division. In the first stage of sampling, two sub-locations from each location were selected randomly thereby ensuring that the study population is equally

represented from all areas within the division. In the second stage, respondents were randomly selected from each of the selected sub-locations.

To find out the total number of eligible youth from each sub-location, proportionate sampling was used. In this case, an estimate of the proportion of women aged between 15 and 29 was utilised. This estimate was obtained from Kenya Population and Housing Census (2009) which was 14.9%. The proportion of eligible female youth from the selected sub-locations was obtained using the formula below:

x = total number of women in a sub-location

14.9% = estimated number of female youth aged between 15 and 29 years

n = required sample size

Formula: $n = 14.9/100 * x$

For example, in Takaungu sub-location, the proportion of eligible female youth aged between 15 and 29 years was:

$$14.9/100 * 3373 = 503$$

In order to generate the required sample size, the eligible proportion of female youth from each sub-location was divided by the total population of eligible female youth in the 6 randomly selected sub-locations. For example, in Takaungu sub-location, the sample size was calculated as follows:

$$n = 503/7237 * 398 = 28$$

The following table shows the number of eligible youth from each sub-location who were recruited in this study.

Table 2: Number of Sampled Respondents from Each Sub-Location

Sampled sub-location	Estimated proportion of females aged between 15 and 29 years	Number recruited
Shimo la Tewa	3815	210
Kidutani Mawamba	699	38
Vipingo	928	51
Kuruwitu	676	37
Takaungu	503	28
Mavueni/Majajani	616	34
Total	7237	398

3.4.3 Inclusion Criteria

The criteria for participating in the study included:

1. Individuals who consented to the take part in the study.
2. Females aged 15-29 years.
3. Residents of Kikambala division.

3.4.4 Exclusion Criteria

The study did not include:

1. Subjects who did not consent to participate.
2. Females who did not reside within Kikambala division.
3. Females who were aged below 15 and above 29 years.

3.4.5 Variables

The predictor (or independent) variables included:

1. Age
2. Marital status
3. Parity
4. Occupation

5. Cultural and traditional factors
6. Education level
7. Attitude
8. Residence
9. Availability and accessibility of services
10. Alcohol consumption and drug use

The outcome (or dependent variable) of the study was use of emergency contraceptive pills.

3.5 Data Collection

Data was collected using a questionnaire. The tool had provision for data on socio-demographic characteristics, sexual and reproductive behaviour, and knowledge on emergency contraceptive use. The questionnaire consisted of close-ended questions. In the initial phase, research assistants were recruited and trained for 1 day. They were selected based on their literacy levels and their familiarity with the study area. Three research assistants were involved in interviewing respondents and the other 8 provided guided walk for the researcher within the households. The questionnaire was pre-tested within the study area, in Kwa Goa village. A few questions that needed further answers from those that were already set, for example, education level, marital status were noted and modified. Collection of data lasted for 1 month, from 18th June 2014 to 10th July 2014. The interviews were mainly conducted in Kiswahili.

3.6 Data Management and Analysis

The questionnaires were coded using numbers for the purpose of confidentiality and ease of data entry. All filled questionnaires were cleaned on a daily basis to check for completeness, accuracy, clarity and consistency by the research assistants and researcher. Before data entry, the responses from each open-ended question were listed, given codes and labelled appropriately according to the content. SPSS Data Entry Builder version 3 was used to enter the cleaned data. Thereafter, analysis of the data was done using Statistical Products and Service Solutions (SPSS) program version 22. The results are presented using frequency tables, bar charts and pie charts. Chi-square test of significance and Fisher's exact test were used to investigate the association between the ever use of emergency contraceptives and the socio-demographic factors. All tests were two sided and the level of significance was $P < 0.05$. Variables identified to be significant during bivariate analysis were further subjected to multivariate analysis to determine predictors of uptake of emergency contraceptive pills using binary logistic regression method. To measure the knowledge of the respondents on emergency contraception, 1 score was given to each correct response. There were a total of 8 questions to test on the knowledge; a score between 5 and 8 were ranked as good knowledge and a score of 4 and below was ranked as inadequate knowledge. A score of zero was given to those with no knowledge.

3.7 Minimization of Errors & Biases

To minimise errors and biases in the study, the research assistants were trained on the objectives of the study, research methodology and on the research tool. After training, they participated in pre-testing the questionnaire so as to have them understand the questions and be able to identify gaps in the tool. The study participants were randomly

selected within their households and a standard questionnaire was used to obtain information from them. A large percentage of the interviews were conducted by the researcher and in areas where research assistants conducted the interviews, they were closely supervised by the researcher. This also helped to minimise errors and biases to a great extent.

3.8 Ethical Considerations

Permission to conduct the study was obtained from the Kenyatta National Hospital and University of Nairobi Ethics and Research Committee. Further approval was obtained from Kilifi County Research Coordinating Committee. During data collection, a good rapport had to be established with the selected respondent. They were then informed on the objectives of the study and thereafter a written informed consent was sought from those aged above 18 years. Parents/guardians to the respondents aged below 18 years were required to provide consent for the child to participate in the study and thereafter, the child provided assent. Their confidentiality was guaranteed by use of codes in the questionnaires. The interviews were done in private, away from other people so as to ensure utmost confidentiality of the information.

3.9 Limitations of the Study

The respondents were made to feel comfortable answering questions on their sexual and reproductive health status and were further assured of their confidentiality. However, some respondents felt uneasy answering the questions, for example, question on abortion. A few respondents declined to participate after reading through the questionnaire and realising the questions were very personal. Another limitation of the

study is that data was collected during weekdays thus omitting some categories of the population like those who were at work or in school at the time of data collection.

Being a cross-sectional study, it was not possible to establish a cause-effect relationship between exposure to a predictor variable and the outcome variable. Besides this, no comparison group was used in the study, and as such causal relationships could not be determined.

CHAPTER 4

4. STUDY RESULTS

4.1 Introduction

This chapter presents results of the study from a total of 402 female youth. The findings are presented based on the study objectives, namely: socio-demographic characteristics of the respondents; sexual and reproductive health characteristics; youth practices on dealing with unintended pregnancies; perceptions on safe sex; knowledge, perceptions, prevalence of uptake of emergency contraceptive pills and health risks associated with use of ECPs. The last section will describe relationships between the proximate determinants and the outcome variable- ever use of emergency contraceptive pills among the youth.

4.2 Socio-Demographic Characteristics of the Respondents

The socio-demographic factors included age, marital status, level of education, number of children per respondent, occupation and religion and are presented in table 3.

Age

The ages of the respondents ranged between 15 and 29 years with a mean age of 22.3 years (SD: 4.09). A majority of the respondents 299 representing 67% were aged between 15 and 24 years. Five respondents (1.2%) did not know their age.

Marital Status

Slightly above a half 221 (55.7%) of those interviewed, were married/living with their partners, while 100 (24.9%) were single and 51 (12.7%) reported having a boyfriend/sexual partner.

Table 3: Socio-Demographic Characteristics of Study Participants (n = 402)

Study Population Characteristics	Frequency	Percentage
Age (years)		
15-19	114	28.4
20-24	155	38.6
25-29	128	31.8
Not known	5	1.2
Marital Status		
Married/living with partner	224	55.7
Single	100	24.9
With a boyfriend	51	12.7
Separated/widowed	27	6.7
Level of Education		
None	151	37.6
Primary	180	44.8
Secondary	52	12.9
Tertiary	19	4.7
Religion		
Protestant	195	48.5
Islam	110	27.4
Catholic	52	12.9
No religion	45	11.2
Number of Children		
None	154	38.3
One	101	25.1
Two	76	18.9
Three	40	10.0
More than 3	31	7.7
Occupation		
none	181	45.0
self employed	99	24.6
employed	66	16.4
student	56	13.9

Level of Education

Overall, 180 (44.8%) of the respondents reported to have completed primary school. Those who had no education at all or dropped out in primary school were 151 (37.6%) and only 19 (4.7%) had college/university education.

Religion

About a half of the study participants were Protestants 195 (48.5%), followed by Muslims and Catholics at 110 (27.4%) and 52 (12.9%) respectively. Some of the respondents, 45 (11.2%) did not have any religion.

Number of Children

Results indicate that 154 (38.3%) respondents had no children. Among those with children, a quarter of them, 101 (25.1%) had only one child, while 31 (7.7%) had more than three children.

Occupation

A large proportion of the respondents did not have any financially gainful occupation, 181 (45%). Among those with gainful occupation, 99 (24.6%) were self-employed and 66 (16.4%) were employed.

4.3 Alcohol Consumption and Cigarette Smoking

The study also sought to find out the risky health behaviour which the youth could be engaged in. It was established that 6 (1.5%) respondents were cigarette smokers and only 37 (9.2%) took alcohol. The most preferred alcoholic drink was beer 23 (62.2%) and 23 (62.2%) respondents said that they take alcohol occasionally. Table 4 presents the results.

Table 4: Alcohol and Tobacco Use among the Study Participants

Variable	Frequency	Percentage
Smoke cigarettes (n=402)		
Yes	6	1.5
No	396	98.5
Alcohol use (n=402)		
Yes	37	9.2
No	365	90.8
Preferred alcoholic drink (multiple response)		
Beer	23	62.2
Wines and Spirits	15	40.5
Mnazi	3	8.1
Frequency of consumption (n=37)		
During occasions	23	62.2
Weekly	7	18.9
Monthly	6	16.2
Daily	1	2.7

4.4 Sexual and Reproductive Health Characteristics

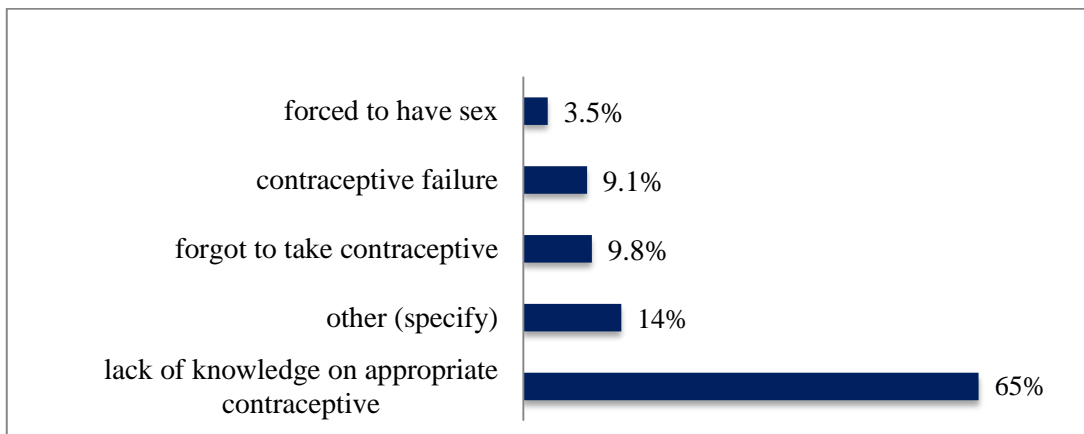
This study sought to establish the sexual and reproductive health characteristics of the respondents as shown in table 5. A large proportion of the youth reported to have had a history of a stable sexual relationship, 342 (85.1%). Those who had never engaged in sexual activity were 52 (12.9%), while 8 (2%) respondents had a casual sexual relationship history. The age at first intercourse was found to range between 9 and 27 years, with a mean of 17.5 years (SD: 2.6). A majority of the respondents with history of sexual relationship had their first sexual encounter between the age of 15 and 19 years, 233 (66.6%).

Table 5: Sexual and Reproductive Health Characteristics of Respondents

Variable	Frequency	Percentage
Sexual relationship history (n=402)		
Stable sexual relationship	342	85.1
Never had sexual relationship	52	12.9
Casual relationship	8	2.0
Age at first intercourse (n=350)		
Below 15 years	34	9.7
15-19 years	233	66.6
Over 19 years	77	22.0
Age not known	6	1.7
Ever been pregnant (n=350)		
Yes	280	80
No	70	20
Age at first pregnancy (n=280)		
Below 15 years	10	3.6
15-19 years	155	55.4
Over 19 years	111	39.6
Age not known	4	1.4
Unintended pregnancy (n=280)		
Yes	143	51.1
No	137	48.9
How they ended up with unintended pregnancy (n=143)		
Married, pregnancy continued	83	58.0
Pregnancy continued, did not marry	31	21.7
Went with my partner to have an abortion	10	7.0
Failed induced abortion, pregnancy continued	8	5.6
Went to have an abortion alone	5	3.5
Miscarriage/spontaneous abortion	5	3.5
Had an induced abortion together with a close friend	1	0.7
Number of induced abortions (n=143)		
None	125	87.4
One	18	12.6
Place of abortion (n=18)		
Private clinic	15	83.3
Self-infliction	2	11.1
Traditional healer	1	5.6

Two hundred and eighty (80%) of the sexually active females had ever been pregnant. The age at first pregnancy ranged between 12 and 28 years, with a mean age of 19.1 years (SD: 2.98). More than a half 155 (55.4%) of the youth who had ever been pregnant were aged between 15 and 19 years. Only 10 (3.6%) respondents had their first pregnancy aged less than 15 years. Further statistics indicate that almost a half of the pregnancies 143 (51.1%) were unintended. The main reasons given for the unintended pregnancies as shown in figure 2 included: lack of knowledge on appropriate contraceptives 93 (65%), forgetting to take contraceptive 14 (9.8%) and failure of the contraceptive 13 (9.1%), and other reasons 20 (14%) such as fear of side effects of contraceptives, some respondents thought they could not get pregnant, lack of interest in preventing pregnancy, irregular menstruation and some had stopped taking contraceptives.

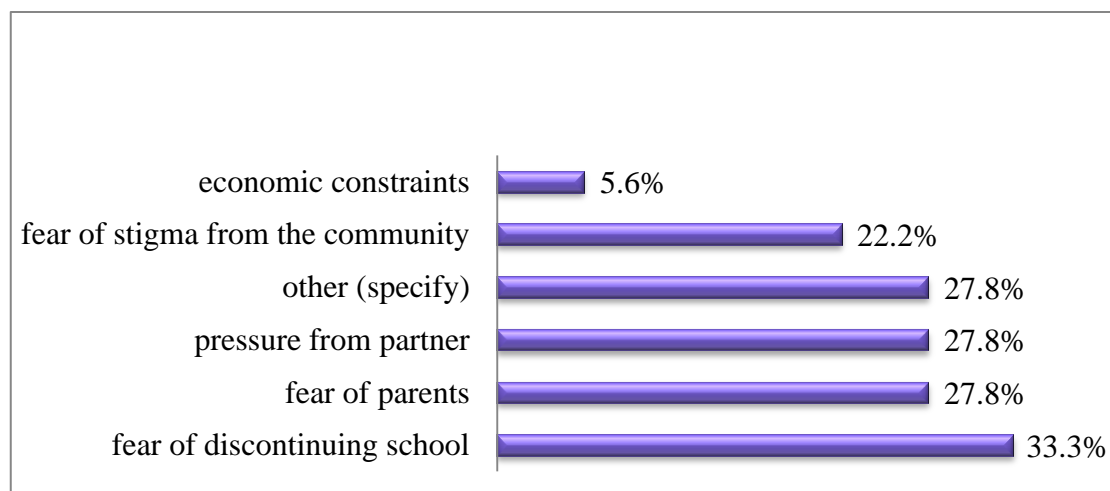
Figure 2: Reasons for Unintended Pregnancies (n=143)



The results from the study reveal varied ways of dealing with unintended pregnancies. Most of the respondents 113 (79.7%) ended up carrying the pregnancy to term and 18 (12.6%) had an induced abortion. One respondent with current case of unintended

pregnancy said that she was contemplating termination of pregnancy. Figure 3 illustrates different reasons given for termination. They included: fear of discontinuing school 33.3%, pressure from partner 27.8% and fear of parents 27.8%. Other reasons 27.8% given were pregnancy was a result of cheating on spouse, and respondent had young children. Nearly all, 15 (83.3%) of the induced abortions were conducted in a private clinic, and one (5.6%) was carried out by a traditional healer.

Figure 3: Reasons for Induced Abortion (n=18)



4.5 Perceptions on Sexual and Reproductive Health

This study aimed to establish the perception of female youth on sexual and reproductive health. The respondents were asked to express what they understood by the term safe sex. Two hundred and twenty five (56%) of them mentioned the use of condom as a way of ensuring safe sex, 135 (33.6%) felt that using contraceptive methods is a way of practising safe sex. A large proportion of the respondents 336 (83.6%) regarded HIV/AIDS as the most important risk during penetrative sexual intercourse. The findings are presented in table 6.

Table 6: Distribution of Respondents Opinion on Safe Sex and Most Important Risk during Sexual Intercourse

	Frequency	Percentage
Opinion on safe sex (n=402)		
using condom	225	56
using contraceptive methods	135	33.6
Monogamy	123	30.6
not having sex	45	11.2
protection from STI's	43	10.7
don't know	29	7.2
not becoming pregnant	27	6.7
Testing for HIV	21	5.2
Opinion on most important risk during sex (n=402)		
HIV/AIDS	336	83.6
Pregnancy	32	8.0
Sexually transmitted infections	19	4.7
don't know	11	2.7
other (specify)	3	0.7
losing virginity	1	0.2

4.6 Knowledge, Perceptions, Practices and Uptake of Emergency Contraceptives.

4.6.1 Knowledge on Emergency Contraception

The main purpose of the study was to establish the prevalence and determinants of uptake of emergency contraceptive pills among the youth. The study intended to find out if there is anything that a woman can do protect herself against pregnancy immediately after having unprotected sex. This question elicited varied responses as shown in table 7.

Table 7: Knowledge on What a Woman Can Do to Prevent Pregnancy after Unprotected Sex

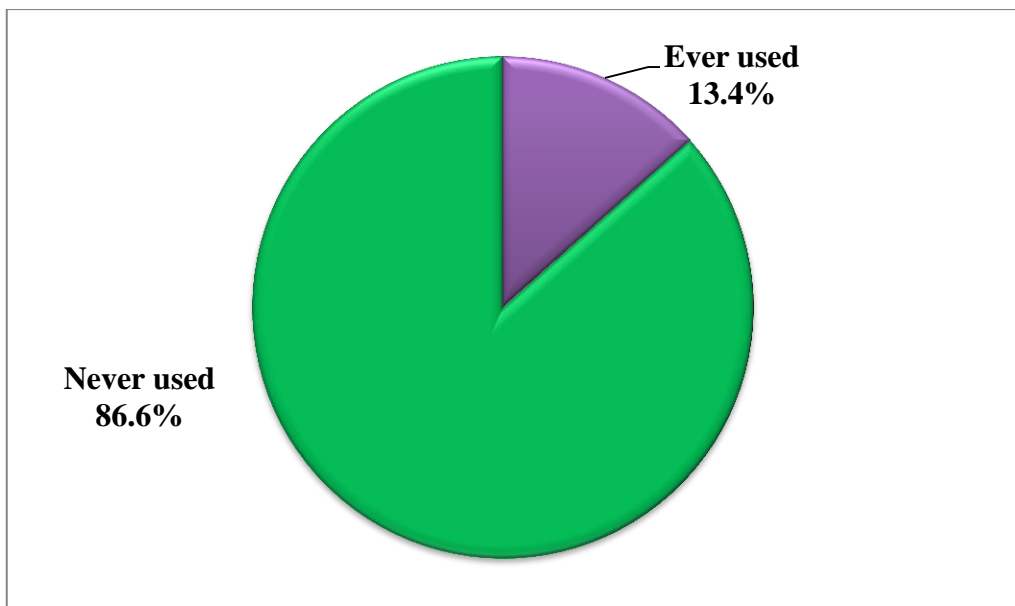
Variable	Frequency	Percentage
Can a woman do anything immediately after unprotected intercourse to prevent pregnancy? (n=402)		
Yes	170	42.3
Don't know	139	34.6
No	93	23.1
Opinion on some of the things a woman can do (n=163*)		
Can use emergency contraceptive pills	121	74.2
Can go to the hospital/pharmacy and get some drugs	18	11.0
Can use family planning	18	11.0
One can abort	4	2.5
Can use herbs, water to wash private parts, drinking one litre of water after sexual intercourse	2	1.2
*Of those who said yes, 7 did not give any opinion		

The results show that 170 (42.3%) of the interviewed youth know that something can be done by a woman immediately after unprotected intercourse to protect her against pregnancy. Those who did not know were 139 (34.6%). Further probing was done among those with knowledge to establish the ways in which the respondents thought could be used to prevent pregnancy. A large number of the respondents 121 (74.2%) spontaneously identified the use of emergency contraceptive pills as one of the methods of preventing pregnancy after unprotected sex. Eighteen (11%) respondents could not directly identify ECPs but they mentioned hospitals and pharmacies as places where a woman can seek help immediately and will be given some drugs. Two (1.2%) people explained that a woman can use herbs, drink plenty of water to flush down 'dirt' or wash her private part with water after unprotected sex.

4.6.2 Prevalence of Uptake of Emergency Contraceptive Pills

Of the 402 youth who were interviewed, only 54 (13.4%) had ever used ECPs whereas 348 (86.6%) reported to have never used them. Figure 4 illustrates the prevalence.

Figure 4: Prevalence of Uptake of Emergency Contraceptive Pills (n=402)



4.6.3 Knowledge on Use of ECPS

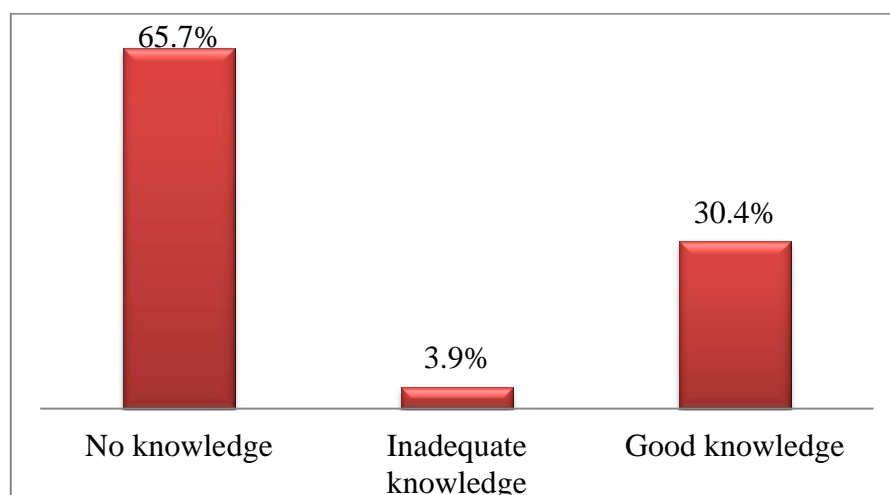
A total of 8 questions were asked to test on their knowledge. One score was given to a correct response. Overall, the level of knowledge on emergency contraceptive pills was low. Less than a half 138 (34.3%) of the respondents had knowledge on ECPs. Among them, 122 (30.4%) had good knowledge, 16 (3.9%) had inadequate knowledge. On asking the respondents to identify an ECP, only 69 (17.2%) were able to correctly identify Postinor 2. Slightly more than a quarter 107 (26.6%) of the respondents knew that ECPs can be used within 120 hours after unprotected intercourse. Only 142 (35.2%) were aware that emergency contraceptives were useful in preventing pregnancy after unprotected sexual intercourse. About a third 140 (34.8%) of respondents identified

pharmacies, government health facilities, private clinics and friends as some of the places where ECPs can be obtained. The findings are illustrated in table 8.

Table 8: Knowledge on Use of Emergency Contraceptive Pills (n=402)

Variable	Frequency	Percentage
Level of Knowledge on ECP		
No knowledge (0 score)	264	65.7
Inadequate knowledge (1-4 scores)	16	3.9
Good knowledge (5-8 scores)	122	30.4
Identification of ECP		
Correct identification (Postinor 2)	69	17.2
Don't know	333	82.8
Timing of use of ECP		
Correct response (Within 120 hours)	107	26.6
Don't know	295	73.4
Source of ECPs		
Pharmacy, Government health facility, Private clinic, Friend	140	34.8
Don't know	262	65.2
When should one take ECPs		
After unprotected sex, in case of rape, condom tear, coerced sex	142	35.3
Don't know	260	64.7
Are ECPs 95% effective in preventing pregnancy within 1st 24 hours after unprotected sexual intercourse?		
Yes	101	25.1
Don't know	301	74.9
Reasons for taking ECPs		
To prevent pregnancy	142	35.3
Don't know	260	64.7
Is EC a method of early abortion?		
No	73	18.2
Don't know	329	81.8
Can ECPs prevent STIs?		
No	112	27.9
Don't know	290	72.1

Figure 5: Knowledge Level of the Respondents on ECPs (n=402)



4.6.4 Source of Information on ECPs

Three-fifths of the respondents 83 (60.6%) learnt about emergency contraceptives from their friends. Twenty (14.6%) knew of them from a health care worker. Fifteen of the respondents (10.9%) obtained the information from mass media and only one person (0.7%) was informed of ECPs by her parent. Other sources of information, 7 (5.1%) on ECPs reported in the study were learning institutions and Non-Governmental Organisations, that is, ICRH and APHIA Plus. Table 9 provides a summary of the findings.

Table 9: Sources of Information on Emergency Contraceptives (n= 137)

Source of Information	Frequency	Percentage
Friends	83	60.6
Health Care Worker	20	14.6
TV/ Radio	15	10.9
Internet	6	4.4
CHW	3	2.2
Newspaper/Magazine	2	1.5
Parents	1	0.7
Other Sources	7	5.1

4.6.5 Health Effects of ECPs among Those Who Had Ever Used

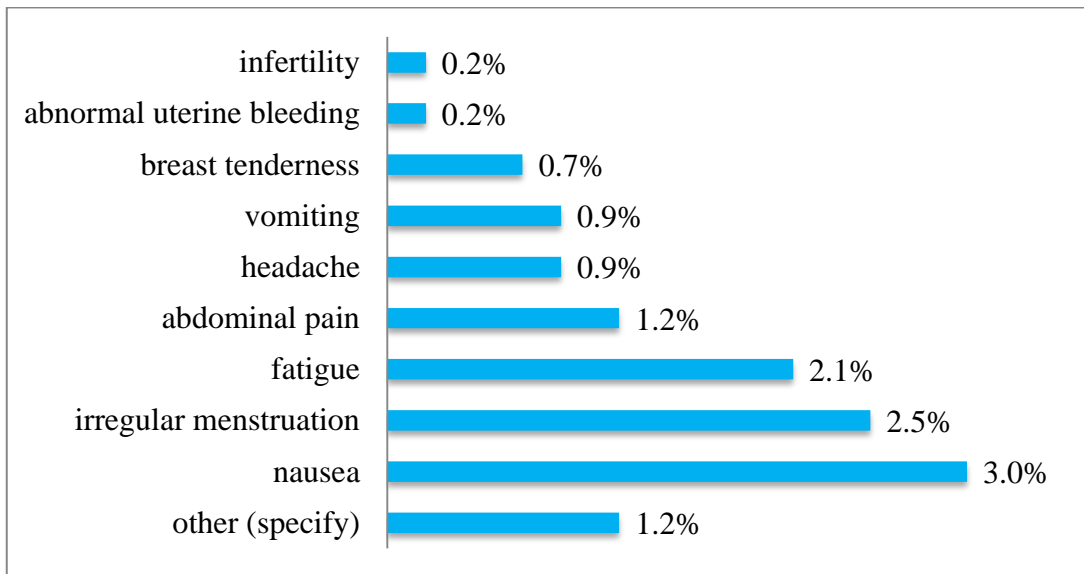
The respondents who had ever used ECPs (n= 54) were asked to state the number of times they had used them in the past 12 months. Among them, 12 (22.2%) stated had not used the commodity within the period. Slightly more than half of the respondents had used the pills between 1 and 2 times 28 (51.9%). A few of the respondents, 3 (5.6%) reported to have used the ECPs more than 5 times, that is, 6, 13 and 20 times in the past 12 months. Table 10 provides a summary of the findings.

Table 10: Health Effects of ECPs among the Ever Users

Variable	Frequency	Percentage
Ever used ECPs (n=402)		
Yes	54	13.4
No	348	86.6
Number of times used in last 12 months (n=54)		
None	12	22.2
1-2	28	51.9
3-5	11	20.4
More than 5 times	3	5.6
Any health problem encountered (n=54)		
Yes	26	48.1
No	28	51.9

Less than half of those who had ever used ECPs, 26 (48.1%) stated that they had ever experienced a health problem. As illustrated in figure 6, the major health problem that was reported was nausea 3%, irregular menstruation 2.5%, fatigue 2.1% and abdominal pain 1.2%. Other problems 1.2%, which the respondents said that they experienced were loss of appetite, drowsiness, low libido, ulcers, swelling of body and back pains.

Figure 6: Health Problems Encountered by Respondents Who Had Ever Used ECPs



4.6.6 Socio-Demographic Factors that Influence Uptake of ECPs

Analysis was done to determine the association between socio-demographic characteristics and the uptake of emergency contraceptive pills. The results show that there was no significant association between the ever use of emergency contraceptive pills and marital status ($p= 0.782$), number of children ($p= 0.44$) and religion ($p= 0.053$). However, there was an association between ECPs uptake and age ($p= 0.001$), education level ($p= 0.000$) and occupation ($p= 0.031$). The relationships are presented in table 11.

Table 11: Relationship between Uptake of ECPs and Socio-Demographic Factors (n= 402)

Predictor Variable	Uptake of Emergency Contraceptive Pills		Chi-Square (χ^2)	p-value
	Yes	No		
	n (%)	n (%)		
Age (years) 15-19 20-24 25-29	6 (5.3) 20 (12.9) 28 (21.9)	108 (94.7) 135 (87.1) 100 (78.1)	14.265	0.001
Marital Status Married/living with partner Single With a boyfriend Separated/widowed	30 (13.4) 12 (12.0) 9 (17.6) 3 (11.1)	194 (86.6) 88 (88.0) 42 (12.1) 24 (88.9)	1.081	0.782
Level of Education None Primary Secondary Tertiary	9 (4.0) 22 (12.2) 16 (30.8) 7 (36.8)	142 (96.0) 158 (87.8) 36 (69.2) 12 (63.2)	29.872	0.000
Religion Protestant Islam Catholic No religion	33 (16.9) 12 (10.9) 8 (15.4) 1 (2.2)	162 (83.1) 98 (89.1) 44 (84.6) 44 (97.8)	7.679	0.053
Number of Children None One Two More than 2	24 (15.6) 12 (11.9) 12 (15.8) 6 (8.5)	130 (84.4) 89 (88.1) 64 (84.2) 65 (91.5)	2.701	0.44
Occupation none self employed employed student	16 (8.8) 16 (16.2) 15 (22.7) 7 (12.5)	165 (91.2) 83 (83.8) 51 (77.3) 49 (87.5)	8.863	0.031

4.6.7 Relationship between ECPs Uptake and Other Factors

Further analysis was conducted to establish whether there is an association between uptake of ECPs and sexual and reproductive health characteristics, alcohol and tobacco use and the level of knowledge on the use of ECPs. Results from chi-square statistics as shown in table 12 reveal that there is a significant relationship between uptake of ECPs and alcohol consumption ($p= 0.000$). The likelihood of using emergency contraceptives was higher (48.6%) among respondents who reported to take alcohol as compared to non-takers (9.9%). A relationship also exists between ECP uptake and cigarette smoking (fishers exact test $p= 0.034$). Respondents who smoked cigarettes were more likely to have used the ECPs.

From the study findings, it was established that those who had an early onset of sexual intercourse, that is, between the age of 15 and 19 years, were less likely to have ever used emergency contraceptive pills ($p= 0.019$). There was a significant association between use of emergency pills and having an induced abortion ($p= 0.005$). The female youth who had ever terminated a pregnancy were more likely to have used ECPs. There was also significant association between ever use of emergency contraceptive pills and the level of knowledge ($p= 0.005$). Respondents who had good knowledge regarding the usage of the ECPs were found to have used the pills more than those with inadequate knowledge, that is, 43.4% and 6.2%, respectively.

Table 12: Relationship between ECP Uptake and Other Factors

Predictor Variable	Uptake of Emergency Contraceptive Pills		Test Statistic/ p- value
	Yes	No	
	n (%)	n (%)	
Age at first intercourse in years (n= 344) Less than 15 15-19 Above 19	1 (2.9) 34 (14.5) 18 (23.4)	33 (97.1) 199 (85.5) 59 (76.6)	0.019 (χ^2 - 7.925)
Age at first pregnancy in years (n= 276) Less than 15 15-19 Above 19	0 (0.0) 17 (11.0) 20 (18.0)	10 (4.2) 138 (89.0) 91 (82.0)	0.112 (χ^2 - 4.376)
Ever been pregnant (n= 402) Yes No	37 (13.2) 17 (13.9)	243 (86.8) 105 (86.1)	0.874 (Fishers exact test)
History of unintended pregnancy (n= 402) Yes No	20 (14.0) 34 (13.1)	123 (86.0) 225 (86.9)	0.879 (Fishers exact test)
Ever had abortion (n= 402) None One	47 (12.2) 7 (38.9)	337 (87.8) 11 (61.1)	0.005 (Fishers exact test)
Cigarette smoking (n=402) Yes No	3 (50.0) 51 (12.9)	3 (50.0) 345 (87.1)	0.034 (Fishers exact test)
Alcohol use (n=402) Yes No	18 (48.6) 36 (9.9)	19 (51.4) 329 (90.1)	0.000 (Fishers exact test)
Knowledge level (n=138) Good knowledge Inadequate knowledge	53 (43.4) 1 (6.2)	69 (56.6) 15 (93.8)	0.005 (Fisher's exact test)

4.6.8 Multivariate Logistic Regression

Logistic regression was done to assess the predictors of uptake of emergency contraceptive pills among the female youth after controlling for possible confounding factors. The predictor variables which were found to be significant during bivariate analysis were used. From the analysis, age, level of education, number of abortions, history of alcohol use and level of knowledge on ECP were found to be statistically significantly associated with use of ECPs. The likelihood of using emergency contraceptive pills increased by 1.19 times as level of education increased. The youth who had history of alcohol use were 8.57 times more likely to use emergency pills than those who were non-takers of alcohol. On the other hand, those with history of having an abortion were 0.17 times more likely to use ECP's. Respondents aged below 20 years were 0.81 times less likely to use emergency contraceptive pills. The likelihood of using ECPs was 0.087 times higher among the respondents who had good knowledge on the method of contraception. Two variables were found not to be significant after controlling for confounding, that is, occupation, cigarette smoking and whether a respondent had ever been pregnant. The results of the logistic regression are summarised in table 13.

Table 13: Results of Logistic Regression of the Possible Predictors of Uptake of Emergency Contraceptive Pills

Variable	Regression Coefficient	Standard Error	Wald's Statistics	Odds Ratio	p-value
Education	0.177	0.08	4.844	1.193	0.028
Occupation	0.078	0.112	0.489	1.081	0.484
Number of abortions	-1.781	0.558	10.186	0.169	0.001
Ever been pregnant	-0.706	0.384	3.373	0.494	0.066
Age	-0.215	0.045	22.591	0.807	0.000
Cigarette smoking	0.065	0.085	0.005	1.067	0.942
Alcohol consumption	2.148	0.400	28.840	8.568	0.000
Knowledge level	-2.444	1.049	5.431	0.087	0.020

CHAPTER 5

5. DISCUSSION OF FINDINGS

5.0 Introduction

This chapter provides a discussion of the major findings of the study in view of the stated objectives. The discussion is categorised in two. The first section of this chapter is on the practices of female youth on dealing with unintended pregnancies and the second section looks into the main objective of the study- the prevalence and determinants of uptake of emergency contraceptive pills among the youth in Kikambala division, Kilifi County.

5.1 Practices of Female Youth on Dealing with Unintended Pregnancies

Early initiation into sexual practices and child bearing pose a risk to health of the youth and children. From this study, more than three quarters of the youth were found to engage in sexual activity below the age of 19 years. One respondent was found to have started having sexual intercourse at the age of 9 years. A majority of the respondents had their first pregnancy below 19 years of age. As a result of this, the youth are at a risk of early marriages, high fertility rates, diseases such as HIV/AIDS and other STI's and poor socio-economic status.

A woman's level of education is positively related to her age at first birth, whereby women with at least some secondary school education begin childbearing more than three years after those with no education, 22.1 and 18.7 years respectively (KDHS 2008-2009). Findings from this study could explain why the youth in Kikambala reported an early onset of sexual intercourse and child bearing. One of the reasons could

be the low level of education as 37.6% of the respondents had no education at all and 44.8% had completed primary school. This indicates low literacy levels. These findings are lower than those of the Kenya Population and Housing Census (2009) which established that 67.5% of the population in Kilifi County had completed primary education.

The low literacy level within the study area is illustrated by the main reason given as to why majority of the youth had ever experienced unintended pregnancies. Almost half 51.1% of the respondents who had ever been pregnant experienced an unintended pregnancy. This is much higher than the proportion of unintended births in Kenya, 43% (KDHS 2008-2009). The main reason for this occurrence was lack of knowledge on appropriate contraceptives to use. Other respondents attributed the unwanted pregnancies to failure of the contraceptives and the fear of contraceptives side effects.

The youth make varied decisions to deal with unintended pregnancies. A majority of the respondents 79% ended up carrying the pregnancy to term. In some circumstances, some of the unintended pregnancies end up being aborted. In this study, 12.6% of the respondents revealed that they had an abortion and of these, almost all 83.3% of the abortions were conducted in private clinics. The main reason for abortion was the fear for discontinuing school, fear of parents and pressure from a partner.

When the respondents were asked which the most important risk of penetrative sexual intercourse, HIV/AIDS elicited the highest response 83.6%. In addition, 8% felt that pregnancy was a great risk. Their perception on safe sex methods was varied. Slightly more than half of study participants perceive the use of condoms as a way of practising

safe sex, which will protect an individual from contracting STI's and unintended pregnancies.

5.2 Prevalence and Determinants of Uptake of Emergency Contraceptive Pills among the Youth

5.2.1 Prevalence of ECP Uptake

The overall prevalence of uptake of emergency contraceptive pills was found to be low in the study population. Only 13.4% of the respondents had ever used this method of contraceptive. However, the proportion of women found to have ever used ECPs in this study is slightly higher than the national prevalence of use among all women aged 15-49 years which was 1.7% (KDHS 2008-2009). Other studies conducted in Africa, including Kenya indicate that the prevalence of usage of emergency pills is low. A survey conducted among women in Western Cape Province of South Africa revealed that only 4% of respondents had used ECPs. Another survey among tertiary school students in South East Nigeria indicated that only 8.5% of them had ever used emergency contraception. In a similar study done in Kibera slums, Kenya, a higher proportion of women 23% reported to have used emergency pills.

5.2.2 Determinants of Uptake of ECPS

Age

This study targeted female youth who were between the age of 15 and 29 years. Almost two-fifths of the respondents were in age group of 20-24 years. There was a significant association between use of emergency contraceptives and increasing age. The older participants were more likely to have used ECPs: 5.3% among those in the age group 15-19 years, 12.9% among 20-24 years and 21.9% among 25-29 years. These findings

corroborate those of KDHS (2008-2009) whereby the proportion of women who had ever used ECP increased with age, which is 0.5% among those aged 15 to 19, 3.0% among 20-24 and 3.3% in those aged between 25-29 years.

Marital Status

There was no significant relationship between usage of ECPs and the respondent's marital status. A larger proportion of those who had used the pills were married/living with their partners 55.6% and 22.2% were single. However, Dejene, T et al (2011) in their study on predictors of emergency contraceptive use, they found an association between use of ECPs and marital status. In that study, the female students who were married were 15.39 times more likely to have used emergency contraceptives than the single ones (COR 15.39; 95% CI: 7.14- 33.19). The study in Kibera also showed a strong correlation between use of ECPs and marital status.

Level of Education

Generally the level of education in this study was found to be low with 44.8% of the population having attained primary education, 12.9% secondary education and those with tertiary education were only 4.7%. The respondents level of education was found to be a predictor of use of emergency contraceptive pills in this study ($p= 0.000$). The use of ECPs increased from those without education to respondents who had tertiary level of education. These findings agree with those of KDHS (2008-2009), which established that contraceptive use among women increases with an increase in their level of education.

Religion

An individual's religious beliefs could play an important role in determining their social practices. For instance, the Catholic Church in Kenya has been against the use of any contraceptive method. In this study nearly a half of the respondents were Protestants 48.5% and 27.4% were Muslims. Religious status of the respondents did not influence their use of emergency contraceptives. On the contrary, a study in Ethiopia among university students found that emergency contraceptive use was higher among the Protestants compared to Orthodox and Muslim religions (COR 4.05; 95% CI = 1.762-9.32).

Occupation

Slightly over two-fifths 45% of the study population did not have any financially gainfully occupation. Those who had a source of income were 41% and they were either employed or self-employed. After controlling for confounding, occupational status was found not be a predictor of uptake of emergency contraceptive pills in this study. This finding differs from results obtained in a Kibera survey, in which occupation was found to be a determinant. The women who were self-employed were two times more likely to use ECPs than women who had no occupation.

Knowledge of Emergency Contraceptives

Although the prevalence was 13.4%, a greater proportion 34.3% of those interviewed had knowledge on ECPs. This finding is consistent with other studies conducted in other countries which show that knowledge levels are generally higher than the actual uptake. A survey conducted in Western Cape Province of South Africa found that 30% of the women interviewed had heard about ECPs but only 13% had used them. A study

in Kibera slums, Kenya, established that almost three quarters 74% of the women had knowledge on emergency contraception but the prevalence was 23%. These present findings corroborate those of KDHS (2008-2009) whereby the proportion of all women who had used emergency contraceptives was 1.7% whereas 40.2% of all the women had knowledge on ECPs. Different results were obtained in a study in Nigeria on knowledge and determinants of EC among 384 university students, which found that the prevalence of use of ECPs was higher 27.6% than the level of good knowledge 18.5%. Respondents with good knowledge on emergency contraceptives were found to use the pills more than those with inadequate knowledge. Similarly, good knowledge was significantly associated with increased use of ECPs among university students in Ethiopia.

Risks Factors for Health

There was a significant association between alcohol consumption and uptake of emergency contraceptive pills ($p= 0.000$). Respondents who took alcohol were 8.57 times more likely to use the ECP's than those who reported not to take alcohol. Though the study did not establish the quantity of alcohol consumed by an individual, 62.2% were found to consume alcoholic drinks occasionally. These findings are similar to those by Falah-Hassani et al (2007) who found that the use of ECPs among girls aged 14–18 years increased with alcohol consumption. Results from a qualitative study among college students by Harper and Ellertson's (1995) revealed that drinking alcohol decreases the likelihood of contraceptive use.

Sexual and Reproductive Health Characteristics

The present study reveals a relationship between ever use of emergency contraceptives and history of having an abortion. After multivariate analysis, the age of first intercourse was no longer found to be significantly associated with the dependent variable. No association was found between the use of ECPs and respondents' age at first pregnancy and also history of unintended pregnancy. The respondents who had an early onset of sexual intercourse, below the age of 19 years, had used the ECPs fewer times than those who were 20 years and above. These findings are consistent with results from university students at Adama University in Ethiopia, which showed that students who started sexual intercourse at a later age, 20 years and above, were more likely to use emergency contraceptive pills than their younger counterparts (COR 2.368; 95% CI: 1.598- 4.105). Those who had ever terminated pregnancy were more likely to use ECPs than those with no history of abortion.

CHAPTER 6

6. CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusions

The main objective of the study was to find out the prevalence and determinants of uptake of emergency contraceptive pills among the youth. From the study findings, only 34.3% had knowledge on ECPs which demonstrates inadequate knowledge and the prevalence of use was low at 13.4%. Emergency contraception provides a good opportunity to reduce the chances of unintended pregnancies thereby promoting maternal health. With the present study findings, there could be a threat to maternal health among women in the study area in terms of unintended pregnancies, abortions, early pregnancies, complications arising from pregnancies and mortality. Even though the study did not seek to find out the availability of emergency contraceptive services at public health facilities within Kikambala division, a spot check during data collection and informal interviews with some health care workers indicated that most facilities rarely offer those services. These could be one of the reasons as to why there is inadequate knowledge and low prevalence on the use of ECPs.

An individual's age, level of education, history of abortion, and alcohol use were closely associated with the use of emergency contraceptive pills. The usage of the pills was found to increase with age. Further, the female youth who had attained tertiary education had used the ECPs more than those who had no education at all. This indicates the importance of literacy among the youth in order to understand their sexual and reproductive health needs and the use of mitigation measures such as emergency pills in case of unprotected sexual intercourse. Besides this, education will empower

them to seek gainful employment and in turn help to reduce early onset of sexual intercourse and early marriages. In this study, it was established that respondents who reported to consume alcohol were most likely to have ever used emergency contraceptive pills as compared to those who reported not to consume alcohol.

6.2 Recommendations

The Ministry of Health in Kenya in partnership with relevant stakeholders should:

1. Increase awareness on emergency contraceptive method among the youth.
2. Increase accessibility and availability of emergency contraceptive services at the community level especially in rural areas.
3. Promote behaviour change among the youth so as to discourage them from indulging in alcohol use/abuse and sexual activities at an early age.
4. Enhance the school health policy so that the students, both boys and girls, are properly guided on sexual and reproductive health issues that they may encounter as they grow up.

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APPENDICES

Appendix 1: Informed Consent Explanation Form

Hello. My name is Kevina Bwire and I am a post graduate student pursuing Masters in Public Health at the School of Public Health, University of Nairobi.

Purpose of the Study

I am conducting a study on the prevalence and determinants of uptake of emergency contraceptive pills among the youth in Kikambala division, Kilifi County.

Procedures

If you agree to participate in this study then information on your background characteristics, sexual and reproductive health issues, practices and knowledge on emergency contraception will be sought. The questionnaire will be administered with the help of a research assistant. The information that you provide during the study will be kept confidential. Only the interviewer and researcher will have access to the questionnaires and the information that you provide. The survey will take 15-20 minutes to complete.

Benefits of the Study

By participating in this study, and answering the questions, you will not receive any direct benefit. However, the information you provide will help to increase our understanding of the needs of the female youth in terms of sexual and reproductive health. I hope that the results of the study will improve and make more acceptable the health services currently available to you.

Risks

Your participation in this study will not involve any risks to you. The risk may be minimal as some of the information required is personal.

Rights

Your participation in this study is voluntary and you have the right to refuse to participate or not to answer any questions that you feel uncomfortable with. If you change your mind about participating during the course of the study, you have the right to withdraw at any time. The decision not to participate or to withdraw will not affect any aspects of your life. If there is anything that is unclear or you need further information, I shall be delighted to provide it.

Contacts

You may contact the researcher-Kevina Bwire on 0721-364096. In case of further queries, you may contact KNH/UON-ERC on P. O. Box 20723, Nairobi; Telephone: 020-2726300 extension 44355; 726300-9.

Do you have any question about the study?

Declaration of the Respondent:

I have understood that the purpose of the study is to collect information about the extent of use of emergency contraceptive pills, sexual and reproductive health issues, knowledge, attitude and practices of emergency contraceptive use. I have read or been informed about what the study entails. I have had the opportunity to ask questions about the study and any questions that I have asked have been answered to my satisfaction. Therefore I voluntarily consent to participate in this study and understand that I have the right to withdraw from the study at any time without in any way affecting my life.

Signature of Respondent: _____ **Date:** _____

Signature of Researcher: _____ **Date:** _____

Appendix 2: Parents Informed Consent Form

Hello. My name is Kevina Bwire and I am a post graduate student pursuing Masters in Public Health at the School of Public Health, University of Nairobi.

About this consent form

This form contains information about the research that I am carrying out. The main aim is to get your permission to have your child aged between 15 and 17 years to participate in the study.

Procedures

If you agree to let your child participate in this study then information on her background characteristics, sexual and reproductive health issues, practices and knowledge on emergency contraception will be sought. The questionnaire will be administered with the help of a research assistant. The information that the child provides during the study will be kept confidential. Only the interviewer and researcher will have access to the questionnaires and the information that you provide. The survey will take 15-20 minutes to complete.

Benefits of the Study

By participating in this study, and answering the questions, your child will not receive any direct benefit. However, the information that she will provide will help to increase our understanding of the needs of the female youth in terms of sexual and reproductive health. I hope that the results of the study will improve and make more acceptable the health services currently available to you and your child.

Risks

There will be no risks that may arise by allowing your child to participate in this study. However, some of the information required is personal and may cause discomfort,

therefore to counter this, the participant will be asked to feel free and the confidentiality of the information provided is assured.

Rights

Participation of your child in this study is voluntary and you have the right to refuse her participation or to ask her not to answer any questions that she will feel uncomfortable with. If your child takes part in this study and you want her to withdraw, please feel free to inform us immediately. The decision not to participate or to withdraw will not affect any aspects of your life or your child's. If there is anything that is unclear or you need further information, I shall be delighted to provide it.

Contacts

You may contact the researcher- Kevina Bwire on 0721-364096. In case of further queries, you may contact KNH/UON-ERC on P. O. Box 20723, Nairobi; Telephone: 020-2726300 extension 44355; 726300-9.

Do you have any question about the study?

Statement of the Parent/Guardian Providing Informed Consent

I have read this consent form and this research study has been explained to me. I have had the opportunity to ask questions about the study and any questions that I have asked have been answered to my satisfaction. I voluntarily give my consent for my child to participate in this study and understand that I have the right to withdraw my child from the study at any time without in any way affecting my life.

Parent/ Guardian _____ **Date:** _____

Researcher: _____ **Date:** _____

Appendix 3: Child Assent Form

Hello. My name is Kevina Bwire and I am a post graduate student pursuing Masters in Public Health at the School of Public Health, University of Nairobi.

Purpose of the Study

I am conducting a study to find out about the knowledge and practices of the youth within Kikambala division on how to prevent unintended pregnancy after having sex without protection.

Procedures

If you agree to participate in this study then information on your background characteristics, sexual and reproductive health issues, practices and knowledge on how to prevent unintended pregnancy immediately after unprotected sex will be sought. The questionnaire will be administered with the help of a research assistant. The information that you provide during the study will be kept confidential. Only the interviewer and researcher will have access to the questionnaires and the information that you provide. The survey will take 15-20 minutes to complete.

Benefits of the Study

By participating in this study, and answering the questions, you will not receive any direct benefit. However, the information you provide will help to increase our understanding of the needs of the female youth in terms of sexual and reproductive health. I hope that the results of the study will improve and make more acceptable the health services currently available to you.

Risks

Your participation in this study will not involve any risks to you. The risk may be minimal as some of the information required is personal.

Rights

Your participation in this study is voluntary and you have the right to refuse to participate or not to answer any questions that you feel uncomfortable with. If you change your mind about participating during the course of the study, you have the right to withdraw at any time. The decision not to participate or to withdraw will not affect any aspects of your life. If there is anything that is unclear or you need further information, I shall be delighted to provide it.

Contacts

You may contact the researcher- Kevina Bwire on 0721-364096. In case of further queries, you may contact KNH/UON-ERC on P. O. Box 20723, Nairobi; Telephone: 020-2726300 extension 44355; 726300-9.

Do you have any question about the study?

Declaration of the Respondent:

I have understood that the purpose of the study is to collect information about the extent of use of methods used to prevent unintended pregnancy after having sex without protection and factors that contribute to it and sexual and reproductive health issues. I have read or have been informed about what the study entails. I have had the opportunity to ask questions about the study and any questions that I have asked have been answered to my satisfaction. I therefore agree to take part in this research study.

Signature of Child: _____ **Date:** _____

Signature of Researcher: _____ **Date:** _____

Appendix 4: Informed Consent Explanation Form (Swahili Version)

Fomu ya Maelezo na Ruhusa ya Kushiriki katika Utafiti

Habari. Jina langu ni Kevina Bwire na mimi ni mwanafunzi wa shahada ya Masters katika Afya ya Umma katika Shule ya Afya ya Umma, Chuo kikuu cha Nairobi.

Madhumuni ya Utafiti

Ninafanya utafiti kuhusu kiwango cha matumizi na sababu za matumizi ya dawa za dharura za kuzuia mimba miongoni mwa vijana katika eneo la Kikambala, jimbo la Kilifi.

Taratibu ya Utafiti

Kama utakubali kushiriki katika utafiti huu, habari juu yako, ya jinsia na masuala ya afya ya uzazi, matendo na ufahamu wako juu ya mpango wa uzazi kwa dharura. Maswali haya yataulizwa na mtafiti msaidizi. Majibu utakayotupa wakati wa utafiti yatawekwa siri kati ya mhojaji na mtafiti. Utafiti itachukua muda wa dakika 15-20 kukamilisha.

Faida ya Utafiti

Kwa kushiriki katika utafiti huu, na kujibu maswali, huwezi kupokea faida yoyote ya moja kwa moja. Hata hivyo, habari utakayotoa itasaidia kuongeza kuelewa kwetu kwa mahitaji ya vijana wa kike katika masuala ya afya ya uzazi. Natumaini kwamba matokeo ya utafiti huu yataboresha na kufanya kukubalika zaidi kwa huduma za afya.

Hatari ya utafiti

Hakuna hatari yoyote itakayokupata ukishiriki katika utafiti huu. Hata hivyo baadhi ya maswahili yatakoyoulizwa yataguzia hali yako binafsi na ya siri.

Haki zako

Ushiriki wako katika utafiti huu ni kwa hiari na una haki ya kukataa kushiriki au kutojibu swali lolote ambalo unatakwishi nalo. Unaweza kujiondoa katika utafiti huu kwa wakati wowote. Uamuzi wa kutoshiriki au kujiondoa wakati wowote katika utafiti huu hautaathiri maisha yako. Kama kuna swala lolote ambalo haujalewa na ungependa ufafanuzi, nitakuwa na huru wa kutoa.

Mawasiliano

Unaweza kuwasiliana na mtafiti - Kevina Bwire kwa nambari ya simu 0721-364096. Unaweza pia kuwasiliana na KNH / UON – ERC, P. O. Box 20723, Nairobi; Simu: 020-2726300 extension 44,355; 726,300-9.

Je, una swali lolote kuhusu utafiti huu?

Azimio la kujibu:

Nimeelewa kuwa madhumuni ya utafiti huu ni kukusanya habari kuhusu kiwango cha matumizi ya dawa za kupanga uzazi wa dharura, masuala ya ngono na afya ya uzazi, maarifa, tabia na matendo ya matumizi ya dawa za kupanga uzazi za dharura za uzazi. Nimesoma na nimefahamishwa kuhusu utafiti huu. Nimepata nafasi ya kuuliza maswali kuhusu utafiti na maswali yoyote nimejibiwa vizuri.

Kwa hivyo ninajitolea kushiriki katika utafiti huu na niko na huru ya kujiondoa kutoka utafiti wakati wowote bila kuathirika kwa maisha yangu kwa njia yoyote.

Sahihi ya mwenye kujibu: _____ **Tarehe:** _____

Sahihi ya Mtafiti: _____ **Tarehe:** _____

Appendix 5: Parents Informed Consent Form (Swahili Version)

Fomu ya Ruhusa ya Wazazi ili Watoto Washiriki katika Utafiti

Habari. Jina langu ni Kevina Bwire na mimi ni mwanafunzi wa shahada ya Masters katika Afya ya Umma katika Shule ya Afya ya Umma, Chuo kikuu cha Nairobi.

Kuhusu Fomu Hii

Fomu hii inatoa maelezo kuhusu utafiti ninayofanya. Lengo kuu ni kupata ruhusa kutoka kwako ili mtoto wako aliye kati ya miaka 15 na 17 ashiriki katika utafiti huu.

Madhumuni ya Utafiti

Ninafanya utafiti kuhusu kiwango cha matumizi na sababu za matumizi ya dawa za dharura za kuzuia mimba miongoni mwa vijana katika eneo la Kikambala, jimbo la Kilifi.

Taratibu ya Utafiti

Kama utamruhusu mtoto wako ashiriki katika utafiti huu, habari juu yake, ya jinsia na masuala ya afya ya uzazi, matendo na ufahamu yake juu ya mpango wa uzazi kwa dharura yataulizwa. Maswali haya yataulizwa na mtafiti msaidizi. Majibu atakayotupa wakati wa utafiti yatawekwa siri kati ya mhojaji na mtafiti. Utafiti itachukua muda wa dakika 15-20 kukamilisha.

Faida ya Utafiti

Kwa kushiriki katika utafiti huu, na kujibu maswali, mtoto wako hataweza kupokea faida yoyote ya moja kwa moja. Hata hivyo, habari atakayotoa itasaidia kuongeza kuelewa kwetu kwa mahitaji ya vijana wa kike katika masuala ya afya ya uzazi. Natumaini kwamba matokeo ya utafiti huu yataboresha na kufanya kukubalika zaidi kwa huduma za afya.

Hatari ya utafiti

Hakuna hatari yoyote itakayokupata wewe ama mtoto wako katika kushiriki kwa utafiti huu. Hata hivyo baadhi ya maswahili yatakoyoulizwa yataguzia hali binafsi ya mtoto wako na ya siri kwa hivyo mtoto wako ataulizwa awe huru na atahakikishiwa kuwa yote atakayosema yatawekwa siri.

Haki zako

Ushiriki wa mtoto wako katika utafiti huu ni kwa hiari na una haki ya kukataa kushiriki kwake au kutojibu swali lolote ambalo anatakwishi nalo. Anaweza kujiondoa katika utafiti huu kwa wakati wowote. Uamuzi wa kutoshiriki au kujiondoa wakati wowote katika utafiti huu hautaathiri maisha ya mtoto au mzazi. Kama kuna swala lolote ambalo haujalewa na ungependa ufafanuzi, nitakuwa na huru wa kutoa.

Mawasiliano

Unaweza kuwasiliana na mtafiti - Kevina Bwire kwa nambari ya simu 0721-364096. Unaweza pia kuwasiliana na KNH / UON – ERC, P. O. Box 20723, Nairobi; Simu: 020-2726300 extension 44,355; 726,300-9.

Je, una swali lolote kuhusu utafiti huu?

Azimio la Mzazi/Mlezi

Nimesoma fomu hii na nimeelezwa madhumuni ya utafiti hii. Nimeuliza maswali kuhusu hii utafiti na majibu nimepata. Hivyo basi, ninajitolea kumruhusu mtoto wangu kushiriki katika utafiti huu na ninaelewa kuwa niko na huru ya kumuondoa kutoka utafiti wakati wowote bila kuathirika kwa maisha yangu au yake kwa njia yoyote.

Sahihi ya Mzazi/ Mlezi: _____ **Tarehe:** _____

Mtafiti: _____ **Tarehe:** _____

Appendix 6: Child Assent Form (Swahili Version)

Fomu ya Maelezo kwa Watoto Kushiriki katika Utafiti

Habari. Jina langu ni Kevina Bwire na mimi ni mwanafunzi wa shahada ya Masters katika Afya ya Umma katika Shule ya Afya ya Umma, Chuo kikuu cha Nairobi.

Madhumuni ya Utafiti

Ninafanya utafiti kuhusu kiwango cha matumizi na sababu za matumizi ya dawa za dharura za kuzuia mimba miongoni mwa vijana katika eneo la Kikambala, jimbo la Kilifi.

Taratibu ya Utafiti

Kama utakubali kushiriki katika utafiti huu, habari juu yako, ya jinsia na masuala ya afya ya uzazi, matendo na ufahamu wako juu ya mpango wa uzazi kwa dharura. Maswali haya yataulizwa na mtafiti msaidizi. Majibu utakayotupa wakati wa utafiti yatawekwa siri kati ya mhojaji na mtafiti. Utafiti itachukua muda wa dakika 15-20 kukamilisha.

Faida ya Utafiti

Kwa kushiriki katika utafiti huu, na kujibu maswali, huwezi kupokea faida yoyote ya moja kwa moja. Hata hivyo, habari utakayotoa itasaidia kuongeza kuelewa kwetu kwa mahitaji ya vijana wa kike katika masuala ya afya ya uzazi. Natumaini kwamba matokeo ya utafiti huu yataboresha na kufanya kukubalika zaidi kwa huduma za afya.

Hatari ya utafiti

Hakuna hatari yoyote itakayokupata ukishiriki katika utafiti huu. Hata hivyo baadhi ya maswahili yatakoyoulizwa yataguzia hali yako binafsi na ya siri.

Haki zako

Ushiriki wako katika utafiti huu ni kwa hiari na una haki ya kukataa kushiriki au kutojibu swali lolote ambalo unataashwishi nalo. Unaweza kujiondoa katika utafiti huu kwa wakati wowote. Uamuzi wa kutoshiriki au kujiondoa wakati wowote katika utafiti huu hautaathiri maisha yako. Kama kuna swala lolote ambalo haujaelewa na ungependa ufafanuzi, nitakuwa na huru wa kutoa.

Mawasiliano

Unaweza kuwasiliana na mtafiti - Kevina Bwire kwa nambari ya simu 0721-364096. Unaweza pia kuwasiliana na KNH / UON – ERC, P. O. Box 20723, Nairobi; Simu: 020-2726300 extension 44,355; 726,300-9.

Je, una swali lolote kuhusu utafiti huu?

Azimio la kujibu:

Nimeelewa kuwa madhumuni ya utafiti huu ni kukusanya habari kuhusu kiwango cha matumizi ya dawa za kupanga uzazi wa dharura, masuala ya ngono na afya ya uzazi, maarifa, tabia na matendo ya matumizi ya dawa za kupanga uzazi za dharura za uzazi. Nimesoma na nimefahamishwa kuhusu utafiti huu. Nimepata nafasi ya kuuliza maswali kuhusu utafiti na maswali yoyote nimejibiwa vizuri. Kwa hivyo ninajitolea kushiriki katika utafiti huu.

Sahihi ya Mtoto: _____ **Tarehe:** _____

Sahihi ya Mtafiti: _____ **Tarehe:** _____

Appendix 7: Questionnaire for Survey

**PREVALENCE AND DETERMINANTS OF UPTAKE OF EMERGENCY
CONTRACEPTIVE PILLS AMONG THE YOUTH IN KIKAMBALA
DIVISION, KILIFI COUNTY**

IDENTIFICATION

Questionnaire code: _____

Respondent no: _____

Village: _____

Sub- location: _____

Location: _____

Date of Survey: _____

Time Started: _____

Time Stopped: _____

Name of interviewer: _____

Signature: _____

1. Age of respondent (years)
 1. 15-19
 2. 20-24
 3. 25-29

2. Please specify your marital status.
 1. Single
 2. Married
 3. Living with a partner
 4. Divorced
 5. Other (specify).....

3. Current residence

4. Level of education you completed
 1. Primary
 2. Secondary
 3. Polytechnic
 4. College
 5. University
 6. None
 7. Other.....

5. Religion
 1. Protestant
 2. Catholic
 3. Islam
 4. No religion
 5. Other.....

6. Number of children you have
 1. None
 2. One
 3. Two
 4. Three
 5. More than three

7. Occupation
 1. Student
 2. Self-employed
 3. Employed
 4. Housewife
 5. None

6. Other (specify).....

SEXUAL AND REPRODUCTIVE HEALTH ISSUES

8. Reproductive and sexual history

- 1. Stable sexual relationship
- 2. Casual sexual relationship
- 3. Never had sexual relationship

9. What does safe sex mean to you? (You may mark multiple choices)

- 1. Not having sex
- 2. Monogamy
- 3. Using condom
- 4. Not becoming pregnant
- 5. Protection from STIs
- 6. Using contraceptive methods
- 7. Having sexual intercourse with an unknown partner
- 8. Other (specify).....

10. Which is the most important risk during penetrative sexual intercourse in your opinion?

- 1. Pregnancy
- 2. HIV/AIDS
- 3. Sexually transmitted infections
- 4. Losing virginity
- 5. Other (specify).....

11. What was your age at first intercourse? (years)

- 1. ≤ 14 years
- 2. 15-19
- 3. ≥ 20 years

12. Have you ever been pregnant?

- 1. Yes
- 2. No

13. If yes, what was your age at first pregnancy (years)

- 1. ≤ 14 years
- 2. 15-19
- 3. ≥ 20 years

14. Have you ever had an unintended pregnancy?

- 1. Yes

2. No (if no, skip to 21)

15. Reasons for unintended pregnancy (multiple response)

1. Failure of contraceptive method
2. Forgot to take contraceptive
3. Forced to have sex
4. Lack of knowledge on appropriate contraceptive
5. Other (specify).....

16. In your opinion, what should be done in case of an unintended pregnancy?

1. Have an abortion
2. Partners should marry
3. Partners should end the affair.
4. Pregnancy should be continued.
5. Other (specify).....

17. How did you end up with the unintended pregnancy?

1. I went to have an abortion alone.
2. I went with my partner to have an abortion.
3. I went with a friend to have an abortion
4. We married and the pregnancy continued.
5. Pregnancy continued, we did not marry
6. Other (specify).....

18. How many abortions have you had in the past two years?

1. None (If none skip to Q.21)
2. One
3. Two
4. Three
5. More than 4 (specify).....

19. If ever had any abortions, where did it take place?

1. Private clinic
2. Government health facility
3. Self-infliction
4. CHW
5. Traditional healer
6. Traditional Birth Attendant
7. Others (specify).....

20. What are the reasons for having an abortion?

1. Economic constraints
2. Fear for dropping out of school

- 3. Fear of parents
- 4. Fear of stigma from the community
- 5. Pressure from partner
- 6. Others (specify).....

21. In your opinion, who should be responsible for contraception during sex?

- 1. Man only
- 2. Woman only
- 3. Both man and woman.
- 4. Any one of them
- 5. Other (specify).....

22. Is there anything a woman can do after unprotected sex to protect against pregnancy?

- 1. Yes
- 2. No
- 3. I do not know

23. If yes, what are some of the things that a woman can do as mentioned above.

EMERGENCY CONTRACEPTIVE USE KNOWLEDGE AND PRACTICES

24. Have you ever used emergency contraceptives?

- 1. Yes
- 2. No

25. Which of the following is an emergency contraceptive pill?

- 1. IUCD
- 2. Implants
- 3. Female sterilization
- 4. Male sterilization
- 5. Oral pills
- 6. Postinor 2
- 7. Injectables
- 8. Condoms
- 9. Withdrawal
- 10. Safe days
- 11. Lactation amenorrhea
- 12. Others (specify).....

26. How soon should EC be used after unprotected sexual intercourse?
1. Within 120 hours
 2. After 120 hours
 3. Do not know
 4. Other
27. Is EC is a method of early abortion?
1. Yes
 2. No
 3. Do not know
28. Can EC prevent sexually transmitted infections?
1. Yes
 2. No
 3. Do not know
29. What are the perceived health effects of ECPs? (answer with Yes, No, Do not know against each choice)
1. Causes abortion
 2. Causes cancer
 3. Results to infertility
 4. Causes ectopic pregnancies
 5. Causes rapture of the uterus
 6. Uterine bleeding
 7. Irregular periods
 8. Sexually transmitted infections
 9. Others (specify).....
30. What are the sources of emergency contraceptives? (multiple response)
1. Government health facility
 2. Pharmacy
 3. Private clinic
 4. Friend
 5. Others (specify).....
31. Are EC Pills 95% effective in preventing pregnancy within 1st 24 hours after unprotected sex?
1. Yes
 2. No
 3. Don't know
 4. Not sure

32. When should one take Emergency pills?

1. After unprotected sex
2. Condom tear
3. Coerced sex
4. In case of rape
5. As a regular contraceptive
6. Other (specify)

33. What are the reasons for taking emergency pills?

1. To prevent STI's including HIV/AIDS
2. To prevent pregnancy
3. Other reasons (specify).....

34. How many times have you used ECPs in the last 12 months?

1. None
2. 1-2
3. 3-5
4. More than 5 times

35. Did you encounter any problem after using ECPs? (skip to 37 if answer is 'NO' in question 24)

1. Yes
2. No

36. What problem(s) did you encounter after using the ECP? (skip to 37 if answer is 'NO' in question 24)

1. None
2. abortion
3. infertility
4. ectopic pregnancies
5. abnormal uterine bleeding
6. nausea
7. vomiting
8. irregular menstruation
9. sexually transmitted infections
10. headache
11. fatigue
12. breast tenderness
13. Others (specify).....

37. Where did you learn about ECPs?

1. Newspaper/magazine
2. Internet

- 3. Friend
- 4. Health care worker
- 5. CHW
- 6. Parents
- 7. Others (specify).....

SOCIO- ECONOMIC STATUS

38. Have you done any work in the last two weeks?

- 1. Yes
- 2. No

39. If no, what is your reason? (probe)

40. If yes, what is your occupation (what work do you normally do)? (probe)

OTHER HEALTH ISSUES

41. Do you currently smoke cigarettes?

- 1. Yes
- 2. No

42. Do you currently take alcohol?

- 1. Yes
- 2. No (If no, End Interview)

43. If yes, which alcoholic beverages do you consume frequently?

- 1. Mnazi
- 2. Beer
- 3. Wines and spirits
- 4. Others (specify).....

44. How frequently do you take alcohol?

- 1. Daily
- 2. Weekly
- 3. Monthly
- 4. During occasions
- 5. Others (specify).....

Appendix 8: Questionnaire in Swahili

**KIWANGO CHA MATUMIZI NA SABABU ZA MATUMIZI YA DAWA ZA
DHARURA ZA KUZUIA MIMBA MIONGONI MWA VIJANA KATIKA ENEO
LA KIKAMBALA, JIMBO LA KILIFI.**

IDENTIFICATION/ KITAMBULISHO

Nambari ya fomu: _____

Nambari ya mhojiwa: _____

Kijiji: _____

Kata- Ndogo: _____

Kata: _____

Tarehe ya Utafiti: _____

Wakati wa Kuanza: _____

Wakati wa kumaliza: _____

Jina la mtafiti: _____

Sahihi: _____

HABARI BINAFAASI

1. Umri wako (miaka)
 - a. 15-19
 - b. 20-24
 - c. 25-29

2. Taja hali yako ya ndoa.
 - a. Sijaolewa
 - b. Katika ndoa
 - c. Naishi na mchumba
 - d. Hali ya talaka
 - e. Lingine (taja).....

3. Mahali unapoishi sasa

4. Kiwango cha elimu uliokamilisha
 - a. Shule yamsingi
 - b. Shule ya upili
 - c. Polytechnic
 - d. College
 - e. Chuo kikuu
 - f. Sijasoma
 - g. Lingine (taja).....

5. Dini
 - a. Protestant
 - b. katholiki
 - c. kiislamu
 - d. sina dini
 - e. lingine (taja).....

6. Una watoto wangapi?
 - a. Sina
 - b. Mmoja
 - c. Wawili
 - d. Watatu
 - e. Zaidi ya watatu

7. Kaziunayofanya
 - a. Mwanafunzi
 - b. Mfanyibiashara
 - c. Nimeajiriwa
 - d. Mke nyumbani

- e. Sina kazi
- f. Lingine

MASWALA YA AFYA YA UZAZI NA KIJINSIA

- 8. Historia ya ngono na afya ya uzazi
 - a. Uhusiano imara ya kijinsia
 - b. Uhusiano usiodhabiti wa kijinsia
 - c. Sijawahi kuwa na uhusiana wa kijinsia

- 9. Ngono salama inamaanisha nini? (unaweza chagua Zaidi ya jibu moja)
 - a. Kutoshiriki ngono
 - b. Kuwa na mpenzi mmoja
 - c. Kutumia mpira
 - d. Kutoshika mimba
 - e. Kujizuia na magonjwa ya zinaa
 - f. Kutumia dawa za kupanga uzazi
 - g. Kufanya ngono na mtu usiyejua
 - h. Lingine (taja)

- 10. Kwa maoni yako ni nini hatari zaidi katika kufanya ngono?
 - a. Kushika mimba
 - b. HIV/AIDS
 - c. Magonjwa ya zinaa
 - d. Losing virginity
 - e. Lingine (taja).....

- 11. Je, ulikuwa umri gani ulipofanya ngono mara ya kwanza?..... (miaka)
 - a. \leq miaka 14
 - b. Miaka 15-19
 - c. \geq miaka 20

- 12. Je, umewahi kushika mimba?
 - a. Ndio
 - b. Hapana

- 13. Kama ndio (no.12), ulikuwa miaka ngapi? (miaka)
 - a. \leq miaka14
 - b. miaka15-19
 - c. \geq miaka 20

- 14. Je, umewahi kushika mimba bila kutajaria/kutaka?
 - a. Ndio

- b. Hapana (enda swali la 21)
15. Sababu ya mimba ambayo hukutarajia
- Nilisahau kumeza tembe ya kupanga uzazi
 - Nililazimishwa kushiriki ngono
 - Njia ya kupanga uzazi ilikosa kufanya kazi
 - Sikuwa na habari kuhusu njiz za kupanga uzazi
 - Lingine.....
16. Ni nini kinaweza kufanywa mtu akipata mimba bila ya kupangia/kutarajia?
- Kuavya mimba
 - Kuoana
 - Kutengana
 - Kuendelea na mimba
 - Lingine
17. Hatima ya mimba uliyopata bila kutarajia ilikuwa gani?
- Nilienda mwenyewe kutoa mimba
 - Nilienda na mchumba wangu kutoa mimba
 - Nilienda na rafiki kutoa mimba
 - Niliolewa na nikaendelea na mimba
 - Niliendelea na mimba lakini sikuolewa
 - Lingine
18. Umewahi kutoa mimba ngapi kwa miaka miwili iliyopita?
- Hakuna (enda swali la 21)
 - Moja
 - Mbili
 - Tatu
 - Zaidi ya nne (fafanua)
19. Ulitoa mimba wapi?
- Kiliniki
 - Hospitali ya serikali
 - Nilitoa mwenyewe
 - Mhudumu wa afya jamii
 - Traditional healer
 - Mkunga
 - Lingine (taja).....
20. Sababu ya kutoa mimba?
- Kuogopa kufukuzwa shuleni
 - Kuogopa wazazi

- c. Kuogopa kutengwa na jamii
 - d. Shida ya fedha
 - e. Mchumba alinilazimisha
 - f. Lingine (taja).....
21. Ni nani anafaa achukue jukumu la kuzuia mimba baada ya kufanya ngono?
- a. Mwanaume
 - b. Mwanamke
 - c. Wote wawili
 - d. Yeyote
 - e. Lingine (taja).....
22. Je, mwanamke asipotumia kinga katika ngono, kuna lolote ambalo anaweza fanya ilikuzuia mimba?
- a. Ndio
 - b. Hapana
 - c. Sijui
23. Kama ndio, ni nini mwanamke anaweza kufanya?

MATENDO NA UFAHAMU KUHUSU NJIA YA DHARURA YA KUPANGA UZAZI

24. Umewahi kutumia tembe/njia za dharura za kuzuia mimba (ECPs)?
- a. Ndio
 - b. Hapana
25. Ni njia gani kati ya hizi ya kuzuia mimba?
- a. IUCD
 - b. Implants
 - c. Female sterilization
 - d. Male sterilization
 - e. Oral pills
 - f. Postinor 2
 - g. Injectables
 - h. Condoms
 - i. Withdrawal

- j. Safe days
 - k. Lactation amenorrhea
 - l. Others (specify).....
26. Je ECPs zafaa kutumiwa kati ya muda gani baada ya kufanya ngono bila kinga?
- a. Kabla ya masaa 120
 - b. Baada ya masaa 120
 - c. Sijui
 - d. Lingine (taja)
27. Je, EC ni njia ya kutoa mimba?
- a. Ndio
 - b. Hapana
 - c. Sijui
28. Njia ya EC inaeweza kuzuia magonjwa ya zinaa ikitumiwa mapema?
- a. Ndio
 - b. Hapana
 - c. Sijui
29. Unadhani madawa ya ECPs yanaweza leta madhara gani?
- a. Kuavya mimba
 - b. Saratani
 - c. Magonjwa ya zinaa
 - d. Results to infertility
 - e. Causes ectopic pregnancies
 - f. Causes rapture of the uterus
 - g. Uterine bleeding
 - h. Irregular periods
 - i. Mengine.....
30. Madawa ya dharura ya kuzuia mimba inapatikana wapi?
- a. Hospitali ya serikali
 - b. Pharmacy
 - c. Kiliniki
 - d. Marafiki
 - e. Lingine (taja).....
31. Je, dawa za ECP zinaweza karibu 95% za mimba katika masaa 24 ya kwanza baada ya kufanya ngono bila kinga?
- a. Ndio
 - b. Hapana

- c. Sijui
 - d. Sina uhakika
32. Ni wakati gani mwanamke anafaa kutumia dawa za dharura za kuzuia mimba?
- a. Baada ya ngono bila kinga
 - b. Kinga ikipasuka
 - c. Kama njia ya kupanga uzazi
 - d. Akinajisiwa
 - e. Akilazimishwa kufanya ngono
 - f. Lingine
33. Sababu ya kutumia tembe za ECPs?
- a. Kuzuia magonjwa ya zinaa
 - b. Kuzuia mimba
 - c. Sababu zingine
34. Umetumia tembe za ECPs mara ngapi kwa miezi 12 zilizopita?
- a. Sijatumia
 - b. 1-2
 - c. 3-5
 - d. Zaidi ya mara 5
35. Ulipata matatizo gani baada ya kutumia ECPs? (unaweza kuchagua zaidi ya jibu moja)
- a. Kuavya mimba
 - b. saratani
 - c. infertility
 - d. mimba ya mishipa
 - e. abnormal uterine bleeding
 - f. kuchafuka roho
 - g. kutapika
 - h. irregular menstruation
 - i. Others (specify).....
36. Ulijulia wapi kuhusu ECPs?
- a. Gazeti
 - b. Internet
 - c. Rafiki
 - d. Mhudumu wa afya
 - e. Mhudumu wa afya ya jamii
 - f. Wazazi
 - g. Lingine (taja).....

MASWALA YA KIFEDHA

37. Umefanya kazi yoyote katika wiki mbili zilizopita?

- a. Ndio
- b. Hapana

38. Kama haujafanya, ni kwa sababu gani? (probe)

39. Kama umefanya, ni kazi gani haswa unaofanya?

MASWALA MENGINE YA AFYA

40. Je, unavuta sigara?

- a. Ndio
- b. Hapana

41. Je huwa unakunywa pombe?

- a. Ndio
- b. Hapana (Kama la, maliza utafiti)

42. If yes, unakunywa aina gani ya pombe?

- a. Mnazi
- b. Bia
- c. Wines and spirits
- d. Lingine (taja).....

43. Unakunywa pombe mara ngapi?

- a. Kila siku
- b. Kila wiki
- c. Kila mwezi
- d. Katika sherehe
- e. Lingine (taja).....

Appendix 9: Emergency Contraceptive Pills Knowledge Score Sheet

	QUESTION	NO KNOWLEDGE (zero-0 point)	GOOD KNOWLEDGE (1 point)
1	Which of the following is an emergency contraceptive pill?	Other options	Postinor 2
2	How soon should ECPs be used after unprotected intercourse?	After 120 hours Don't know Other options	Within 120 hours
3	Is EC a method of early abortion?	No Don't know	Yes
4	Can EC prevent STI's?	Yes Don't know	No
5	What are the sources of ECPs?	Don't know	Government health facility Pharmacy Private clinic Friend
6	Are ECPs 95% effective in preventing pregnancy within the 1 st 24 hours after unprotected sex?	No Don't know Not sure	Yes
7	When should one take ECPs?	As a regular contraceptive Don't know	After unprotected sex Condom tear In case of rape Coerced sex
8	What are the reasons for taking ECPs?	To prevent STIs	To prevent pregnancy

Appendix 10: KNH/UON-ERC Research Approval Letter

Appendix 11: Research Authorization Letter by Kilifi County

Appendix 12: Declaration of Originality Form