DETERMINANTS OF EMERGENCY CONTRACEPTION USE AMONG YOUNG WOMEN: A CASE STUDY OF LUSAKA DISTRICT, ZAMBIA

By

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DECLARATION

I, **Shupe Manzi**, declare that this dissertation:

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ABSTRACT

The study investigated the determinants of emergency contraception use among young women (15-24 years old) as a preventive measure of unintended pregnancies and unsafe abortions. The research employed a quantitative method were a descriptive cross sectional study design was used. The study was conducted in Lusaka District among randomly selected 392 young women aged 15 to 24. A pre-tested structured self-administered questionnaire was used for data collection. Collected data was entered in Microsoft excel spread-sheet, and the Statistical Package for Social Science (SPSS) was used for statistical analysis.

Findings indicated that the awareness of EC was low, only 20 percent (n-80) were able to mention Emergency contraceptive pill, commonly known as 'morning after pills'. Of those who mentioned ECP, about 24 percent knew the recommended time- frame for using the method and 36 percent mentioned at least one symptom of side effects of EC. The common sources of information about EC reported were friends (60 percent), and the media (43.8 percent). Generally, attitude towards the use of EC was positive as 58.2 percent of the respondents had intentions to use EC in future and nearly half (48.5 percent) were for the idea that EC needed to be widely accepted and promoted among the youths. While for others, they had no intention to use or promote the use because of the presumed side effects such as infertility and it might encourage unprotected sexual intercourse and immorality, which would lead to the spread of sexually transmitted infections. However, only 4.3 percent (n-17) of the young women had used ECP at the time of the study. Lack of knowledge about EC was pointed out as the main reasons for not using EC. Awareness of EC and side effects were significant determinants of the use of EC at $p<0.05$.

In conclusion, the study indicated that information about EC was generally low, mainly due to lack of awareness activities, especially from health workers, although young women are eager to learn more about it. It also showed that a number of young women who had heard about the EC method did not have adequate information, mainly because the main sources of information about the method were friends. There is need to increase knowledge about EC, and avail youth-friendly reproductive health services to uphold preventive behaviour.

There is need for the health care providers, scientific agencies, women organization, the media industry, and the other concerned institutions to play an active role in disseminating accurate information about EC. The media industry should be effectively used to provide correct information about emergency contraception through public debates and advertising campaigns so that many can learn about EC, as it is the key to knowing more about other contraceptives. Advance provision and promotion of the proven emergency contraceptive methods would likely increase the use.

DEDICATION

This dissertation is dedicated to my parents, Abel J. Manzi and Dafless Ngwira Manzi who educated me and have been my source of inspiration.

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LIST OF ABBREVIATIONS AND ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
CRR	Centre for Reproductive Rights
CSO	Central Statistical Office
EC	Emergency Contraception
ECs	Emergency Contraceptives
ECPs	Emergency Contraceptive Pills
HIV	Human Immune Deficiency Virus
ICEC	International Consortium for Emergency Contraception
IUD	Intrauterine Device
PPAZ	Planned Parenthood Association of Zambia
RH	Reproductive Health
WHO	World Health Organisation
STIs	Sexually Transmitted Infections
SPSS	Statistical Package for Social Science
ZDHS	Zambia Demographic Health Survey
ZSBS	Zambia Sexual Behaviour Survey

GLOSSARY

Family planning- the use of contraceptive methods (either modern or traditional) to space or limit family size.

Contraception- the act of preventing pregnancy by use of modern or traditional methods.

Contraceptive method- any contraceptive methods known or used by young women.

Emergency contraception (EC)- methods that women use to prevent pregnancy after unprotected sexual intercourse, method failure, or incorrect use.

Maternal mortality - any reported death occurring during pregnancy, childbirth, or within two months after the birth or termination of a pregnancy.

Abortion – an operation or other intervention to end a pregnancy by removing an embryo or foetus from the womb.

Unsafe abortion- a procedure for terminating an unwanted pregnancy, either by persons lacking the necessary skills, or in an environment lacking the minimal medical standards, or both.

Knowledge of emergency contraception- to understand and describe the truth meaning of emergency contraception, appropriate duration for administration, indication, drug efficiency, precaution, and side effects.

Attitude and **perception will be used interchangeably toward emergency contraception**, which means opinion, idea, feeling and behaviour or a settled mode of thinking of the young women toward emergency contraception on indication and usage, target group, safety, health effects, drug efficacy and availability.

Experience of use – means experience using, causes, frequency, dosage, and administration, side effects of the pill to young women.

Young women or **youths** in this paper are classified as those respondents in the age group 15-24. This group is disintegrated into two groups; respondents aged 15-19 are classified as adolescents or teenagers and those aged 20-24 are considered as young adults.

CHAPTER ONE

BACKGROUND

1.0. Introduction

The chapter explores the background of the study. It discusses the global perspective of unplanned pregnancies and induced abortions. It also gives a concise overview of emergency contraception and the introduction of emergency contraception in Zambia. It further looks at the problem statement, the main objectives, specific objectives, research questions, and the rationale of the study.

1.1. Global perspective of unintended pregnancies and abortions

Globally, about one in four pregnancies is being terminated. This reflects the high incidence of unplanned and unwanted pregnancies in many developed and developing countries, a result far from universal contraceptive use. Of the 210 million pregnancies occurring each year, nearly 80 million are unintended (WHO, 2007). About 46 million pregnancies are estimated to end in induced abortion each year, and nearly 20 million of those abortions are unsafe. About 13 percent of maternal deaths globally are due to unsafe abortion, and total about 67,000 deaths annually (Tautz, 2004).

Approximately 95 percent of unsafe abortions take place in developing countries, where two in five unsafe abortions occur among women under age 25, and about one in seven women who have unsafe abortions are under 20 (Population Reference Bureau, 2005). For Africa, abortion remains illegal in all but a few countries in the region; women have to seek unsafe abortions from illegal practitioners. It is estimated that more than 4 million unsafe abortions are performed in Africa every year (Brookman-Amissah and Moyo, 2004). Thus, almost 60 percent of unsafe abortions in Africa are among women aged less than 25 years (Bayer et al. 2011). As a result, Africa has one of the highest death rates from abortion of 680/100 000 abortions (WHO 2006).

High incidences of unintended pregnancies and unsafe abortions, especially among the youths, is a powerful reminder that they need access to a wide range of contraceptive services, including EC, to help them safely control their own fertility (Oyebola, 2010).

However, no contraceptive method is 100 percent safe or reliable, and few people use their methods perfectly each time they have sex. Therefore, emergency contraception is the only safe and effective backup method that can be used to prevent pregnancy after unprotected sex or contraceptive failure (Institute of Medicine, 1995).

1.2. Emergency contraception

Emergency contraception may prevent pregnancy by delaying or inhibiting ovulation, by stopping the fertilization of an egg, or by inhibiting the implantation of a fertilized egg in the uterus (Hossain, 2009). Once implantation has begun, EC are ineffective since they cannot interfere with an existing pregnancy (CRR, 2004). The method includes emergency contraceptive pill and the emergency insertion of copper bearing intrauterine device (IUD) in the womb. Emergency contraception may be used when a condom breaks or slips off, when oral contraceptive pills have been missed or when a woman is raped or coerced into having sex (Trussell, 2009). The method is effective if taken within the third and fifth day (72-120 hours) after sexual intercourse and before the potential time of implantation, but it is more effective if taken earlier (Hossain, 2009). Research has shown that emergency contraception can reduce a woman's risk of becoming pregnant from a single act by 75 percent to 99 percent (Nayyar, 2000).

Emergency Contraceptive Pills (ECPs), which have shown to be safe and effective, are the only form of hormonal contraceptives that provide women a last chance to prevent unwanted or mis-timed pregnancy after unprotected intercourse or method failure. Emergency contraceptive pills prevent pregnancy in the same way other contraceptive methods do, including oral contraceptives, IUDs, and injectables, which sometimes act post-coitally, thus preventing fertilisation, if it had occurred (CRR, 2004).

Information concerning the use of emergency contraception is a sexual and reproductive right of all human beings regardless of age, marital status, socio-economic status, race, or religion (IPPF/WHR, 2006). Therefore, potential users especially the young people need to be aware that emergency contraception is an option before they need it. Thus, they should know where to seek services, and understand that treatment should be started as soon as possible because efficacy declines with each day or even hour of delay (ICEC, 2004).

1.3. Emergency contraception in Zambia

In the case of Zambia, the government endorsed the use of EC in 1997 following a needs assessment conducted by the World Health Organisation (WHO) in 1995 (PPAZ, 1998). The Ministry of Health, with the aim of strengthening reproductive health officially launched emergency contraception pill (ECP) in Zambia in 1998. It can be obtained free of charge at public health institutions and as an over the counter drug (Chavuma et al, 2010). Despite its effective potential to prevent unwanted pregnancies, cultural norms, and provider biases are significant barriers to accessing EC, especially in traditional health centres among the youths. The 2007 ZDHS reported that only 9.3 percent of women and 11.4 percent of men have knowledge of EC and that only 0.5 percent of women have actually used EC, indicating a deficiency in access and information about EC (CSO, 2009).

1.4. Statement of the Problem

Despite the wide range of effective contraceptive preference including EC, incidences of unintended pregnancies and unsafe abortion particularly among the youths remain high in Zambia. Fifty-eight percent, of all young people, aged 15-24 ever had sex and slightly more than half of the young females have had a pregnancy (CSO, 2010). According to ZDHS (2007), unsafe abortions due to unplanned pregnancies accounts for 30 percent of maternal mortality rate of 591 deaths per 100 000 live births (CSO, 2009). Unfortunately, about 80 percent of these deaths are among the youths under the age of 19. However, when death does not result from unsafe abortions, women may experience long-term disabilities, such as uterine perforation, chronic pelvic pain, or infertility (Bayer et al. 2011). Abortions are also a major drain on scarce medical resources as they increase pressure on hospital beds, nursing staff, blood supplies and medication needed to treat any life threatening medical complications resulting from abortion (Byamugisha, 2007).

The country is also currently facing the problem of teenage pregnancy because most of the youths, initiate sexual activities early before marriage, often without using contraceptives. It was evident that the median age at first sex for young people aged15-24 was 17.5 years for women (CSO, 2010). A survey in Lusaka revealed that nearly 64 percent of boys and 60 per cent of girls had already experienced intercourse by the age of 24 (Lemba et al, 1999). In addition, despite numerous national and local awareness campaigns on condom, the use at last sex has remained low at 11 percent for young women aged 15-24 (CSO, 2010). About twenty-eight percent of women aged 15 to 19 have began childbearing,

implying that about three in ten women have given birth already or are currently pregnant with their first child. Teenage pregnancy has been identified as a serious medical and health problem as it is associated with high maternal mortality and morbidity for both the mother and child (CSO, 2009). Furthermore, teenage pregnancy often compels the teens to enter into early marriages, which means that they may likely curtail their education or career. Thus, they cannot contribute fully in the overall socio-economic development of their communities and eventually their countries and are inclined to long-term welfare dependence (Byamugisha, 2007). Although the socio-economic burden of unintended pregnancies is significant, at the same time it is largely preventable, especially if women had access and information on a wide range of contraceptive methods.

In spite of the population policy, which targets the reduction of maternal morbidity and mortality, including unplanned pregnancies, it has been observed that the use of emergency contraception as a backup method of contraception seems to have remained unknown and under-used as a preventive measure to avoid unplanned pregnancies or unsafe abortions. The problem may then be stated that, we do not know the determinants of the use of emergency contraceptive methods as a preventive measure to avoid unplanned pregnancies and unsafe abortions among young women.

1.5. General Objectives

The main purpose of this paper is to establish determinants of emergency contraception utilisation among young women (15-24 years) as a preventive measure of unwanted pregnancies and unsafe abortion.

1.6. Specific Objectives

a) To assess the awareness of emergency contraception among young women.
b) To establish the sources of information of emergency contraception among young women.
c) To examine attitudes towards the use emergency contraception among young women.
d) To ascertain the extent to which young women are using Emergency Contraception.
e) To determine factors affecting the use of emergency contraception among young women.

1.7. Research Questions

a) Do young women have the necessary information on emergency contraception?
b) How are youths getting information on emergency contraception methods?
c) What are young women attitudes towards emergency contraception?
d) To what extent are young women using emergency contraception?
e) What factors affect the use of emergency contraception among young women?

1.8. Rationale of the Study

Zambia is one of the countries in southern Africa that has introduced emergency contraception as a mix method or dual protection method and the contraceptive can be obtained free of charge at the public health institution and as an over the counter drug. It is also regularly given to sexually assaulted victims, but has remained unknown and underused, even by women who are raped or sexually coerced. Evidence shows that, although 82 percent of all rape survivors managed to get to a health facility within the time window for ECPs, only 37 percent actually received ECPs from hospital staff (Keesbury et al, 2006). The state of affairs prompted the study, which seeks to understand why this contraceptive method has remained a secret to many potential users who are mainly young women. Increased provision and use of emergency contraceptive method would decrease the cost, the emotional, the physical and social risk experienced by women of reproductive age who engage in sexual activities.

Therefore, the findings of the study may facilitate EC awareness, which is key in knowing more about other methods of family planning and reproductive health services, and in turn may help young women know more about sexually transmitted infections (STIs) including HIV/AIDS. In addition, a number of studies have shown that EC acts as the vehicle for bringing the young women into contact with health professionals and hence providing opportunities for counselling on responsible sex behaviour, contraception, and prevention of sexually transmitted diseases including HIV/AIDS (Puri, 2007). Research has also shown that emergency contraception is a successful strategy for preventing unwanted pregnancies without decreasing regular contraceptive use or condom use (Lovvorn et al, 2000).

Furthermore, the study will provide baseline information, which may assist policy makers in developing appropriate evidence-based strategies to promote the use of emergency contraception among the young women. This may help to reduce high levels of fertility especially adolescent fertility, cost of abortion and consequences of unsafe abortion and will in turn reduce the incidence of maternal morbidity, and mortality.

CHAPTER TWO

REVIEW OF LITERATURE

2.0. Introduction

This chapter detailed the literature review relevant to the research topic with special emphasis on awareness, source of information, attitude, use, and barriers towards the use of emergency contraception, which are based on the specific objectives. The theoretical framework is also discussed.

2.1. Overview of Emergency Contraception

Emergency Contraception (EC) is a contraceptive method used by women in the first few days following unprotected intercourse to prevent an unplanned pregnancy (WHO, 1998). This method is not recommended as a routine or regular contraceptive method. Different methods of emergency contraception, including the use of a combination of oestrogen and progestin, progestin alone, and post-coital insertion of an intrauterine device, are available (David and Weismiller, 2004). Depending on the method used, emergency contraception can reduce a woman's risk of becoming pregnant from a single act of intercourse by 75 percent to 99 percent (Anjali, 2000). Emergency insertion of a copper-bearing IUD is significantly more effective than use of ECPs, reducing the risk of pregnancy after unprotected intercourse by more than 99 percent (Trussell, 2007).

Any woman of reproductive age may need EC at some point to avoid unwanted pregnancy in the following situations; when no contraceptive method has been used; condom breakage, slippage or incorrect use; three or more consecutive missed periods; delays of taking combined oral contraceptive pills, or a scheduled injectable for more than two weeks. For others in case of rape or sexual assault when a woman is not currently using any contraception method, miscalculation of the periodic abstinence method or failure to abstain on the fertile day of the cycle, failed coitus interruptus for example, ejaculation in the vagina or external genitalia (Hossain et al. 2009).

The history of EC dates back to 15 B.C. when women prevented conception by sneezing, hopping, jumping, dancing, and douching with various herbs and roots. During the 1950s and 1960s, post-coital douching with Coca Cola was rumoured to work, perhaps people

believed the bicarbonate "fizz" inhibited conception. Earlier, methods relied on douching and disinfectants and were sometimes marketed as feminine hygiene to avoid legislative censure concerning birth control apparatus (Byamugisha, 2007).

The first documented case on EC was published in the mid-1960s when physicians in the Netherlands applied the veterinary practice of post-coital oestrogens administration to a 13-year-old girl who had been raped at mid cycle (Hodgson, 1994). In the same year, the World Health Organization (WHO) added the emergency contraceptive pill in the model list of essential drugs. As recently as the 1990s, nearly one-third of emergency contraceptive pill (ECP) prescribed in USA were for rape victims (Smith et al, 2009).

At one time, emergency contraceptive pills were known as 'morning-after pills', post-coital contraceptive pills or interceptive. Today, the term morning after pill is not recommended because the treatment may involve more than one pill, may not be necessarily a pill, and does not need to occur on the morning after, it can be before or after the morning. Research has shown that the treatment is more effective if used earlier. Therefore, the term emergency contraception and emergency contraceptive pill is recommended (Byamugisha, 2007).

The first recorded global conference to address EC was held in April 1995 at Bellagio, Italy. Twenty-four experts around the world representing the field of research, policy, communication, women advocacy, and medicine met to discuss EC. The meeting came out with a consensus statement on EC, which addressed issues of methods of EC, policy and regulatory, information, education, communication, advocacy and service delivery, monitoring and evaluation. The statement encouraged providers to learn about EC methods and make them available to all women who may need them.

Many governments in the world today are taking steps to put EC in women's hands, but millions of women who could benefit from EC have never heard of it. Among those who have, few know where they can get EC or how to use it (CRR, 2004). An essential component of programs providing emergency contraception is education, informing women about this important option before they need it. Because the period for treatment is short, efficacy declines with each day or even hour of delay. Women need to be aware that emergency contraception is an option, know where they can seek services, and understand

that treatment should be started as soon as possible after unprotected or inadequately protected intercourse (ICEC, 2004).

2.2. Emergency contraception mechanism of action

One main barrier to widespread use of emergency contraception is concerned with the mechanism of action. The precise mechanism of action of EC depends on the time in a woman's menstrual cycle, when intercourse occurred and when ECs are taken (Hossain, 2009). However, recent studies suggest that emergency contraception works by inhibiting or delaying ovulation or reducing sperm motility. Both methods, that is, the IUD and emergency contraception pills may prevent pregnancy by preventing the release of the egg, postponing ovulation, or interfering with fertilization, but clearly, one must act before implantation occurs. Emergency contraception cannot dislodge an implanted egg and thus cannot interrupt an established pregnancy or harm a developing embryo (IPPF/WHR, 2006).

Emergency contraception is not the same as early medical abortion. It is effective only in the first few days following intercourse before the ovum is released from the ovary and before the sperm fertilises the ovum. According to medical research and legal judgement, abortion can only take place after a fertilised egg has implanted in the uterus and requires a different drug apart from EC (CRR, 2004)). For this, ECs are not considered as a form of abortion by authoritative agencies such as the World Health Organisation (WHO). However, the methods are effective in preventing pregnancy when taken within 120 hours (five days) of unprotected sex, although they are more effective the earlier they are taken (IPPF/WHR, 2006).

2.3. Safety and side effects of emergency contraception

There have been no reported deaths or serious complications linked to emergency contraception. The emergency contraception method is easy to use and does not affect a woman's ability to become pregnant in future and neither does it affect breastfeeding. If mistakenly taken by a pregnant woman, these pills do not cause birth defects (Trussell, 2011). Women who are at increased risk for stroke, heart attack, or blood clots when taking hormonal contraceptives, such as birth control pills, can safely use emergency contraception pills (Blumenthal et al, 1996). However, the American Academy of

Paediatrics (AAP) and experts on emergency contraception have concluded that progestin-only ECPs may be preferable to combined ECPs containing oestrogen for use by women with a history of blood clots, stroke, or migraine (Wikipedia).

Furthermore, combined emergency contraceptive pill-treatment can be considered safe for women who would ordinarily be cautioned against the use of combined oral contraceptives for on-going contraception. Data are not available on the safety of current regimens of ECPs if used frequently over a long period. Nevertheless, the likelihood of serious harm for at least moderate repeated use is low. Certainly, repeated use of ECPs is safer than pregnancy, in particular, when the pregnancy is unintended and a woman does not have access to safe early abortion services (Trussell, 2011). In addition, experts have stated that emergency contraception, like all other contraceptives, reduces the absolute risk of ectopic pregnancy by preventing pregnancies (Wikipedia).

Women taking ECPs may experience the following side effects: nausea and vomiting, breast tenderness, abdominal pain, irregular vaginal spotting or bleeding, headache, dizziness, and fatigue. Temporary disruption of the menstrual cycle is also commonly experienced. These side effects are far less common for progestin-only ECPs (Nayyar, 2000). About 30-50 percent of women experience, nausea and 15-25 percent vomit (Trussell, 2011). Most of the side effects generally disappear within 24hours of taking the pill (Hossain, 2009). Side effects of IUDs may include abdominal discomfort, vaginal bleeding or spotting and infection. These side effects, with the exception of an infection, if it occurs, are temporary. However, neither ECPs nor IUD do protect against sexually transmitted infections (STIs), including HIV (Nayyar, 2000).

2.4. Fertile periods and emergency contraception

All contraceptive methods prevent pregnancy, either by influencing parts of the menstrual cycle, or by keeping the man's sperm from reaching the woman's ovum (egg). According to Mtawali (1997), the menstrual cycle is a series of carefully coordinated events that prepares the woman's body for pregnancy. There is no time in the menstrual cycle when there is no risk of pregnancy following unprotected sexual intercourse. This is true especially if the cycle is irregular, or if there is uncertainty about the date of the last menstrual period (Wilcox et al, 1995). The possibility of late ovulation also produces a persistent risk of pregnancy even in the fourth week (Wilcox, Dunson, 2001). Even in

women of regular cycle, there is variability in the phase and the follicular phase contributes to most of this. However, the degree of pregnancy risk depends on where you are in the menstrual cycle. Hence, to make an informed decision regarding the need for emergency contraception, it is important to have an understanding of the normal menstrual cycle and its relationship to fertility.

2.5. Emergency contraception in Africa

In Africa, knowledge of contraception is almost universal in most countries, although knowledge of EC, despite increases of its use over time, remains considerably lower, especially in sub-Saharan Africa (ICEC, 2008). However, efforts have been put in place to increase the availability of emergency contraception among the reproductive ages of sub-Saharan Africa.

The first conference on emergency contraception in Africa was held in November 1998 at Lilongwe, Malawi where 14 states attended. At the start of the conference, only Zambia and South Africa had taken official steps to offer emergency contraception through regular health care (Sanger et al, 1999). Studies on emergency contraception have been done in most of the countries in Africa, especially in South Africa and Nigeria. Most of these studies, for instance in Kenya, Ghana and Ethiopia, have shown that EC is underused due to low health promotion and its low availability.

In some countries (for example Uganda and Zambia), ECP counselling and services have been introduced in police precincts and rape care centres (Hossain, et al. 2009). In other countries, similar activities have been done by NGOs, for example in Zimbabwe, the Musasa Project, an NGO created to assist survivors of sexual assault and domestic abuse, compiled a manual that refers counselors to information about women's right to EC. In South Africa, an NGO Known as the Rape Crisis Center in Cape Town addressing the needs of survivors of sexual violence, maintains a Web site which recommends that rape victims who fear a pregnancy ask the district surgeon to provide them with EC (CRR, 2004)

Generally, in most of the countries where EC is available on the counter women do not even use them, for instance in South Africa, Kenya, Namibia and others. However, attempts to reach the disadvantaged population, such as refugees and displaced persons,

have been reported in Tanzania (Goodyear and McGinn, 1998). Recently, EC has been co-ordinated by Ecafrique based in Nairobi, Kenya.

2.6. Knowledge levels on emergency contraception

Most of the studies have shown that EC options are underutilised because of the lack of clients' awareness even though circumstances such as unprotected sex, improper use of regular contraceptives, failure of barrier methods and sexual violence have often lead contributed to an unwanted pregnancy and unsafe abortion. For example, in a study conducted in Nigeria, 38.1 percent were aware of emergency contraception while only 8.5 percent of them had ever practiced it (Nworah, 2009). The 2007 ZDHS reported that only 9.3 percent of women and 11.4 percent of men have knowledge of EC and that only 0.5 percent of women have actually used EC (CSO, 2009). Therefore, knowledge of emergency contraception is crucial since women must know that there is a contraceptive method that can prevent pregnancy after intercourse in order to seek treatment (Wesley, 1998).

It is important that potential users have information and are educated about EC before they actually need it through training of the service providers for provision of ECP, spreading knowledge about the methods among the potential clients and making it accessible to users that are key components of introducing any new method or service (Sebastian et al, 2005). If more information about emergency contraception was made available, we could prevent 1.7 million unwanted pregnancies and around 800,000 abortions every year (Trussel, 1992).

2.7. Attitude towards emergency contraception

If any new contraceptive technology is to become a viable option for decreasing unintended pregnancy, women and men must be willing to use the method and find it acceptable (Byamugisha, 2007). However, since ECP has not been widely used, very little has been known about the acceptability of this method (Harvey et al. 1999). Studies have shown that the majority of women have a positive attitude towards emergency contraception. They are for the idea that emergency contraception should be prescription free to minimise the barrier to access as well as reducing the risk of failure as early use improves the efficacy. Others, however, are in fear of irresponsible sexual behaviour and repeated use of ECP instead of a long-term contraception, which may encourage young

women to have unprotected intercourse and lead to the spread of sexually transmitted diseases, including HIV/AIDS (Aneblom, 2003).

2.8. Utilisation of emergency contraception

It has been estimated that the use of emergency contraceptive pills could halve the number of induced abortions (UNDP/UNFPA/WHO, 2001). However, the use of emergency contraception has remained low in both developed and developing countries. For example, a study carried out in Sweden on women presented for induced abortion showed that four out of five women (83 percent), were aware of EC and only 38.4 percent knew about the recommended time for using the method, and 22 percent had previous experience of using the method (Aneblom, 2003). A study conducted in Ethiopia among female students indicated that out of three hundred eighty nine (389) respondents, only 163 (41.9 percent) had ever heard or knew EC. Of those respondents who had heard of ECs, only 11 (6.8 percent) used them (Tajure et al. 2010). In Kenya, a study indicated that 56 percent of women surveyed had ever heard of EC and only 10 percent of them had ever used the method (Keesbury, et al, 2009).

Apart from the prevention of unintended pregnancies and induced abortion, the use of EC is also important as it introduces the clients to a regular and more effective contraceptive method by communicating information about other available contraceptive methods, about the importance of dual protection and about the correct and consistent use of contraception. A study in Bangladesh shows that, after initial use of ECPs, the proportion of women using a regular method of contraception increased from 72 to 93 percent (Khan and Hossain, 2008). In India, a follow-up of users six months after they had used ECPs for the first time showed that use of a regular family planning method increased significantly from 67 to 79 percent after using ECPs (Kumar et al. 2007).

2.9. Barriers to accessing emergency contraception

Studies have shown that lack of knowledge plays a major role in women not accessing EC. Thus, most of the women today have never heard of EC and so do not know when it should be used, and where or how to get it. Others, especially adolescents, access to EC is limited to feeling embarrassed or ashamed of asking for it, as well as having concerns about confidentiality (Brunton et al. 2006; Tilahun et al. 2010).

Past studies have shown that unmarried women and adolescents prefer to obtain EC in pharmacies or non-clinic based settings where they encounter more friendly providers (CRR, 2004). According to a 2007 ZDHS report, approximately only 10 percent of women pay for contraception in the public sector while 70 percent of women pay in the private sector (CSO, 2009). This clearly shows that women who feel marginalised in public health centres may encounter financial barriers to accessing contraception, including EC due to cultural and providers' biases.

Furthermore, access is limited if EC has to be obtained using a prescription. This requires women to make an appointment with a care provider, a time-consuming and often expensive task. For women on a limited budget, or those with extremely tight schedules, the prescription requirement can make accessing EC nearly impossible. The requirement for a prescription also poses problems when unprotected sexual intercourse occurs on a weekend when provider offices are likely to be closed (CRR, 2004).

Some practitioners also have concerns that the provision of EC may cause an increase in risky sexual behaviour and sexually transmitted infections, although this has not proven to be the case (Tajure et al. 2010). Limited prescribing and dispensing of EC by many practitioners and pharmacists can stem from their lack of knowledge about EC, negative attitude towards EC, moral or ethical issues with providing it, as well as worries about its efficacy and side effects.

Other important barriers to offering emergency contraception included moral, ethical, or religious opposition, and the possibility that using EC would negatively affect on-going regular methods of contraception. Other people think use of ECs may increase the prevalence of HIV/AIDS and STIs (Brunton and Beal, 2006).

2.10. Theoretical Framework

This research was based on the contraceptive risk-taking theory developed by Kristin Luker in 1969 (Luker , 1975). Luker's interest in the contraceptive problem grew out of her effort to understand rates of abortion in contraceptive sophisticated population. She was concerned about why women subject themselves to the hardships of unwanted pregnancy and abortion when contraceptives are inexpensive, efficient, and presumably convenient. Luker sought her answer in interviews with abortion patients and from these

interviews, she inferred that contraceptive risk-takers were making purposive decisions guided by the desire to maximise subjectively valued outcomes.

Luker argued that contraceptive behaviour was a direct result of a contraceptive decision, with the decision being determined by several direct and indirect sources of influence. She held that a principal source of influence would be the subjective expected utilities (benefit and costs) assigned to the outcomes of contraceptive use, that is, to the outcomes of contraceptive and pregnancy. More specifically, she held that, if the utilities assigned to contraceptive outcomes (for instance procurement and planning efforts) were high, utilities assigned to pregnancy outcome (for instance, role and lifestyle changes) were low, then the motivation to maximise outcomes would lead one to favour contraceptive use. On the other hand, if the utilities assigned to contraceptive outcomes were low and the utilities assigned to pregnancy outcomes were high, the maximisation of outcomes would lead one to favour contraceptive non-use or risk-taking.

Based on Luker's risk-taking theory, young women in developing countries, in particular Zambian young women, lack direct and indirect source of influence, which implicitly or explicitly bring out benefits and costs of Emergency Contraception, which has contributed greatly to women behaviour of supporting Emergency Contraception non-use or risk-taking. Besides lack of accurate, credible, and up-to-date information from sources of influence, it is difficult for young women to understand basic things such as the time span between an unprotected intercourse and dose for acceptable efficacy, and the mode of action. This contributes to disbeliefs and ethical misgivings about the method. Hence, women risk having unwanted pregnancy and unsafe abortions after unprotected sex or method failure when there is still ultimate chance to prevent it by using Emergency Contraception Pill.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0. Introduction

This chapter outlines the methods applied in carrying out the research by detailing the procedures and techniques of the study, data collection, and analysis. Thus the chapter is organized under the following sections; research design, study population, sample and sampling method, data collection, data analysis, ethical considerations and limitation of the study.

3.1. Study design

This study employed a descriptive cross sectional design. Orodho (2003) defines a descriptive survey as a method of collecting information by interviewing or administering questionnaires to a sample of individuals. Orodho and Kombo (2005) further state that, a descriptive design can be used when collecting information about people's attitudes, opinions, habits or any of the variety of education or social issues.

3.2. Study population

The study was conducted in Lusaka District, the capital city Zambia. Since the topic under discussion is not well known, Lusaka was selected as a study area because it would give a good representation of youths' understanding, attitudes, and opinion on emergency contraception as it is comprised youths of different socio- economic status. The population was drawn from six townships in Lusaka district that is high (Mtendere and Kaunda Square), medium (Kabwata and Chelstone), and low density (Avondale and Rhodes Park).

3.3. Sample and Sampling procedure

An appropriate sample size which is based on determining precision or margin of errors, confidence level, and estimation of degree of variability and response rate was not considered due to time and resources constraints. Instead, a sample 392 young women aged 15 to 24 years. The age bracket corresponds to the standard definition of young people as adopted and applied in many statistics and indicators by the United Nations and World Bank. These comprised 120 young women from low-density areas, 132 young

women from medium-density areas; and 140 young women from high-density areas of Lusaka.

This study employed both non-probability and probability random sampling technique to select a random and representative sample from a large population of young women aged 15-24 years found in that particular area at the time of the study. These were purposive and systematic sampling methods.

Six townships were purposively selected in terms of population densities that are low, medium, and high. In each of the townships, households were selected using systematic sampling. Then a female youth was identified from each selected household. If a selected household had no eligible respondent, a replacement was made using the sampling interval to select another household. In a situation where a selected household had more than one eligible female youth, a Kish grid table was used to select a respondent. Thus, the interviewer had to find out the number of eligible respondents in the household and a random number was chosen to select a particular person.

3.4. Data Collection Instruments

The study employed quantitative data collection design. Data was collected from the month of December 2011 to January 2012. Pre-tested structured questionnaires with open and closed questions were used to collect data from the eligible youths who consented to participate in the study. The questionnaire consisted of seven parts. (See a copy of the questionnaire in appendix 1). All filled in questionnaires were checked for completeness, accuracy, clarity, and consistence. Necessary corrections and changes were made in time. A questionnaire was used since information on emergency contraception is confidential especially among those with sexual experience.

3.5. Data Analysis Procedure

During data collection, 420 questionnaires were distributed among the eligible youths. The returned questionnaires were cleaned, checked for inconsistence and missed values. However, 28 questionnaires were excluded for analysis because they were not 50 per cent filled in and others were returned blank. Hence, 392 questionnaires were available for data analysis. The data from questionnaires was entered and coded in Microsoft Excel spread-sheet (Microsoft Office, 2007). The Statistical Package for Social Science (SPSS version

16.0) software was used to analyse the data generated. Descriptive and inferential statistical analyses were employed. Graphs, tables, cross tabulation summary tables were used for data presentation. Bavariate analysis and Binary logistic analysis were used to see the relationship between the characteristic variables and the dependent variables, which included knowledge, attitude, and use of emergency contraception. All test were two sided and statistical significance was set at $p<0.05$.

3.6. Ethical Consideration

Miller and Dingwall (1997) point out that the relationship between the participants and the interviewer is as important, even more so than the purpose of the research. On that basis, the following principles were put into consideration when carrying out the research; thus, voluntary participation was one of the principles of the research, which required that the participants were not forced to participate in the study. The participants assured of confidentiality that is they were guaranteed that the identifying information would not be availed to anyone. The principle of anonymity was also important, as participants remained anonymous throughout the study. Difficulties in data collection were avoided by reassuring the respondents that their names and addresses would not be recorded. Each participant was given the opportunity to answer and clarify questions regarding the survey as adequate time to complete the questionnaire was given.

3.7. Limitations of the Study

Bryman (2001) observed that different people adopt different stances concerning ethical issues that arise in connection with relationships between researcher and participants. To this end, the results of the study might not be generalised to all young women aged 15-24, since it was relatively small study conducted in six townships out of all the available townships in urban Lusaka. Thus, the sample selected may not be big enough to represent the entire population of the country.

Although the respondents had to volunteer to participate in the study, and confidential and anonymous self-administered questionnaires were used, the possibility of social reputation bias could not be eliminated as the study touched personal issues, which one could not be free to disclose.

Some of the eligible youths were not co-operative to fill in the questionnaire. This was a cost on the researcher in that several trips were made to collect the questionnaires. However, the questionnaires were only administered to respondents who voluntarily accepted to answer the questionnaire with no payments of any form given.

CHAPTER FOUR

FINDINGS OF THE STUDY

4.0. Introduction

The previous chapter discussed the methods applied during the study. This chapter outlines the main findings of the study. The findings are presented in two ways thus descriptive and inferential statistics and are based on the specific objectives of the study. These include background characteristics of the respondents, awareness of EC, sources of information of EC, attitudes towards EC, the extent to which young women are using EC and factors affecting the use of EC among young women.

4.1. Characteristics of Respondents

This section presents the background characteristics of the respondents. These are background information of the respondents, sexual experience, and pregnancy and abortion experiences, previous contraceptive methods use.

4.1.1. Background Information

A summary of some demographic and socio-economic characteristics, which include the age, marital status, level of education, employment status, income, religion, and residence, are provided in Table 4.1. A total of 392 young females from low, medium, and high-density areas participated in the study. The mean age of the participants was 19.9, median age of 20, and modal age was 24. The standard deviation was 2.7.

The majority of the respondents at the time of the survey were not married (82 percent) and had attained secondary education (68.1 percent). Furthermore, 79 percent were unemployed and only about 16 percent had an income. Almost all participants belonged to Christianity (98 percent) and most of them were Protestants (40.1 percent).

Table 4.1: Number and percent distribution of respondents' background characteristics by residential area

	Residence				
Characteristics	**Low**	**Medium**	**High**	**Overall**	**Number**
Age group (years)					
15-19	29.0	38.3	32.8	46.7	183
20-24	32.1	33.5	34.4	53.3	209
Marital status					
Unmarried	31.1	35.5	33.4	82.1	322
Married	32.4	32.4	35.3	13.5	53
Others	17.6	47.1	35.3	4.3	17
Education Level					
Uneducated	-	-	100	0.5	02
Primary	30.4	26.1	43.5	5.9	23
Secondary	30.3	37.1	32.6	68.1	267
Higher	32.0	35.0	33.0	25.5	100
Employment status					
Formal employment	38.1	40.5	21.4	6.8	42
Informal employment	29.2	36.2	34.6	14.4	49
Unemployed	32.7	28.6	38.8	78.8	301
Income					
Earning	32.3	32.3	35.5	15.8	62
None	30.3	36.4	33.3	84.2	330
Religious Denominations					
Catholic	25.3	44.4	30.3	23.0	99
Protestant	29.8	33.1	37.1	40.1	151
Pentecostal	35.1	31.3	33.6	34.2	134
Islam	50.0	50.0	-	0.5	02
None	33.3	50.0	16.7	1.8	06
Total	**30.6**	**35.7**	**33.7**	**100**	**392**

Source: Field Data (2011)

4.1.2. Sexual Experience

Forty-nine percent of respondents reported having ever had sexual intercourse and 32 percent were sexually active at the time of the survey. Thus, the majority of respondents who had sexual experience at the time of the survey were above 20 years (75 percent and 79 percent respectively), than the younger counterparts 15-19 years. Although it was interesting to note that most of the respondents had their first intercourse before 20 years of age (see Figure 4.1.). Furthermore, the majority of respondents had attained secondary education (60 percent and 58 percent respectively), never married (63.5 percent, 53.5 percent), from Pentecostal religious denomination (41percent and 39 percent respectively). Nevertheless, there was no much difference in terms of residential areas (Table 4.2).

Table 4.2: Percent distribution of respondents' sexual experience according to selected variables

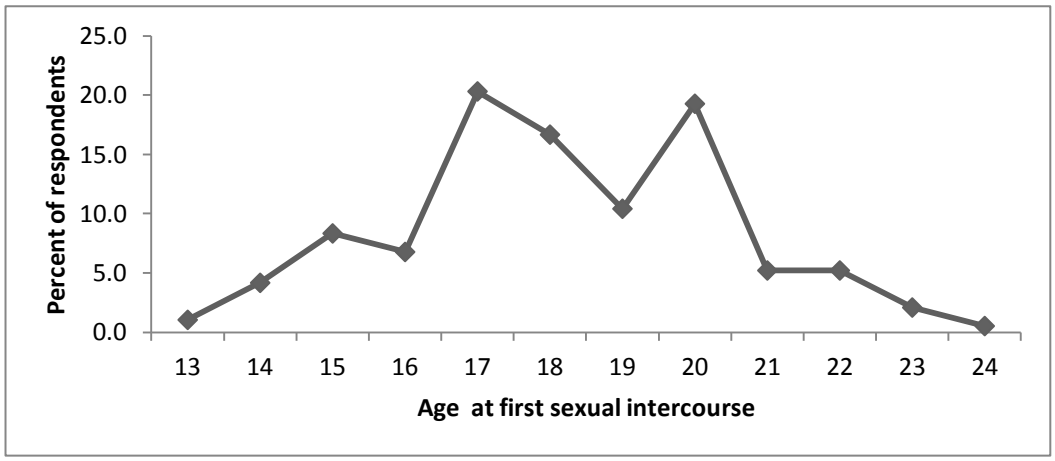
	Sexual Experience		
	Ever	**Current**	**Number**
Age			
15-19	25.5	21.3	48
20-24	74.5	78.7	144
Education			
Primary	7.8	5.5	15
Secondary	60.4	57.5	116
Higher	31.3	37.0	60
Uneducated	0.5	-	01
Religion			
Catholic	26.0	24.4	50
Pentecostal	41.1	39.4	79
Protestants	30.7	33.1	59
Islam	-	-	00
None	2.1	3.1	04
Residence			
Low	29.2	32.3	56
Medium	33.9	35.4	65
High	37.0	32.3	71
Overall % (n)	**100 (192)**	**100 (127)**	**49.0 (192)**

Source: Field Data (2011)

4.1.3. Age at first sexual intercourse

The age at which young people engage in sexual intercourse is vital in controlling unplanned pregnancies and subsequent unsafe abortions. The younger the age, the longer potential to be exposed to unintended pregnancies. To establish the age at first sex, young women were asked about how old they were when they first had sexual intercourse. According to the data, most of the young women had their initial sexual intercourse between 15 to 20 years. The youngest age reported was 13 years and the oldest age reported was 24 years. The mean age at first sexual intercourse was 18.2 years and the median age is 18 years (see Figure 4.1).

Figure 4.1: Percent distribution of respondents by age at first sexual intercourse



Source: Field Data (2011)

4.1.4. Pregnancy and abortion experiences

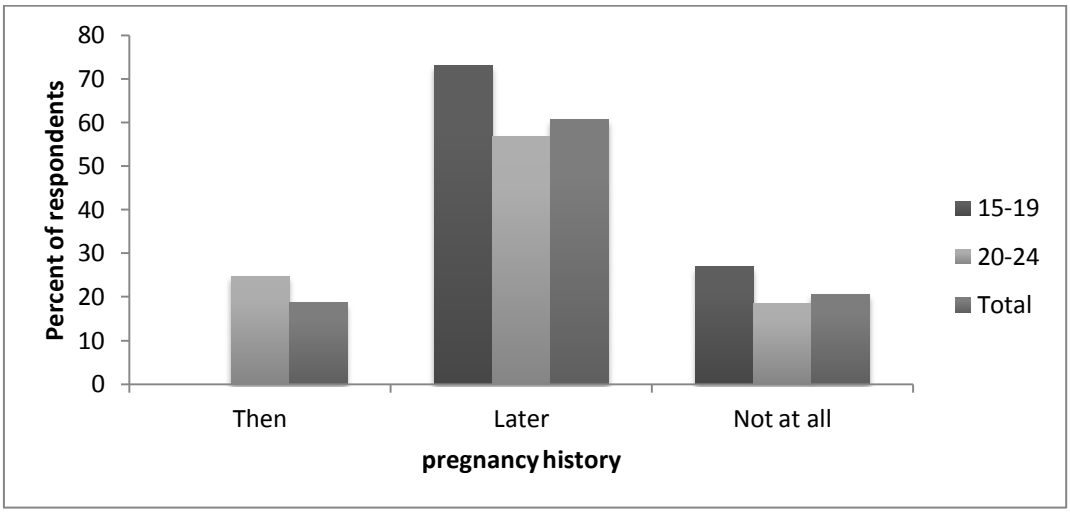
About 26 percent (n-101) of the respondents reported ever been pregnant and about three percent, were reported to be pregnant at the time of the study. Only one percent reported that they were not sure if they were pregnant at the time of the survey.

However, about 18 percent (n-34) of the respondents who had sexual experience reported having had abortion experience. Further still, 67 percent of the respondents heard about a friend or relative who had aborted before. Thus 59 percent reported that they heard of someone who had aborted at least once, while 29 percent reported that someone had aborted twice and 12 percent aborted more than twice.

Most of the reported pregnancies among the respondents were unintended as shown in figure 4.1.below. Sixty one percent wanted to be pregnant at a later stage and 21 percent did not want to be pregnant at all. Only 19 percent of the respondents had planned for the

pregnancy. Evidence also shows that 73 percent of the teenagers and 57 percent above the age of 20 wanted to be pregnant at a later stage. However, 27 percent of teenagers and 19 percent above the age of 20 never wanted to be pregnant.

Figure 4.2: Percent distribution of respondents' history of pregnancy by age group

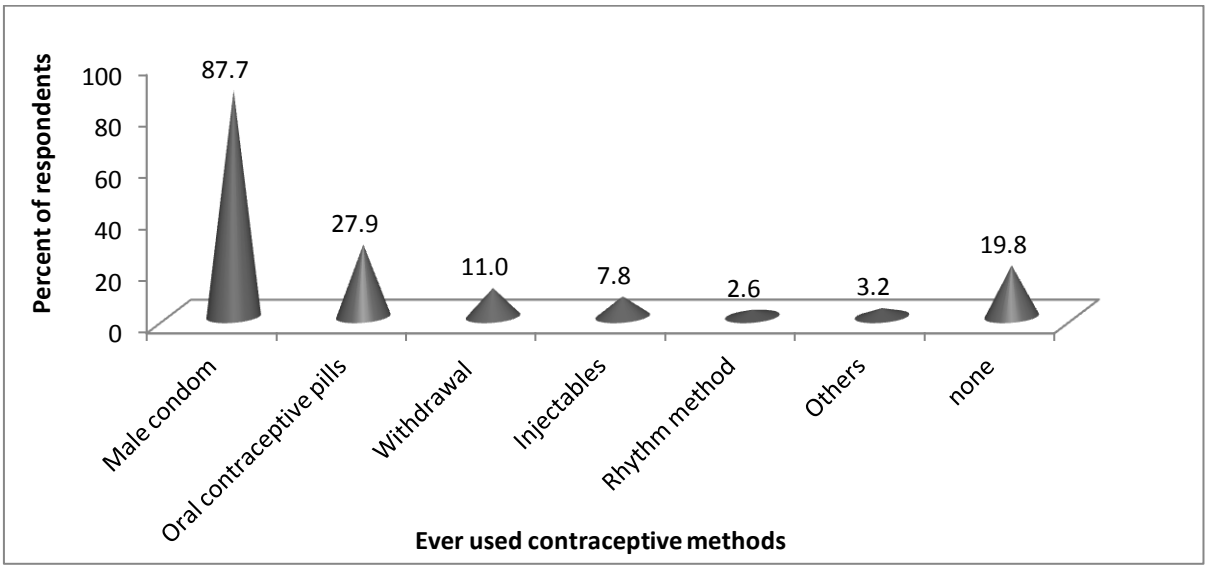


Source: Field Data (2011)

4.1.5. Ever used contraceptive methods

The findings had shown that less than half (39.3 percent) of the respondents with sexual experience had ever used contraceptive methods. The common contraceptive method ever used was the male condom (88 percent). Periodic abstinence or rhythm method was among the least used method at three percent. See Figure 4.3.

Figure 4.3: Percentage distribution of respondents by previous contraceptives ever used



Source: Field Data (2011)

4.2. Awareness of Emergency Contraception

To ascertain the awareness on emergency contraception, the section covers the findings of the following issues: identified methods of EC, sources of information of EC, recommended period of using EC, fertile period and symptoms of side effects. The sources of information of EC and type of information received about EC.

4.2.1. Awareness of emergency contraceptive methods

To establish the awareness of emergency contraceptive methods, participants were asked the question: 'Do you know something about, or any contraceptive method which one can take following unprotected sexual intercourse, or after failure of contraceptive method, to prevent pregnancy?'

The results showed that 40 percent (n-157) of the respondents were aware of something about or of any contraceptive method to use after unprotected sexual intercourse to prevent pregnancy. However, only 20 percent (n-80) of the respondents identified the emergency contraceptive pills commonly known as 'morning after pills', as a contraceptive method to use after unprotected sexual intercourse or method failure to prevent pregnancy. Moreover, no respondent mentioned IUD as emergency contraceptive method.

Furthermore, awareness of emergency contraceptive pill was generally low in all the three residential areas (28.8 percent in low-density areas, 36.2 percent in medium-density areas, and 35.0 percent in high-density areas), among different religious denominations (30 percent among the Catholics, 32.5 percent among the Protestants and 36.2 percent among the Pentecostals). There was a statistical significant relationship between age and awareness of EC at $p<0.05$, as most of the respondents were above the age of 20 (72.5 percent) as compared to their younger counterparts (27.5 percent). Largely the respondents who had never married (73.8 percent) were aware of ECP as compared to those who had ever married and was statistical significant at $p<0.001$. Education attainment was also statistically significant ($p<0.001$), thus a higher proportion of respondents (50 percent) with higher education were aware of the emergency contraceptive pill as compared to those with secondary education (47.5 percent). However, awareness was lowest among the respondents with primary education (2.5 percent). In addition, most of the respondents with sexual experience identified ECP (66.2 percent), compared to those with sexual experience (33.8 percent). Lastly, there was a significant relationship between previous

contraceptive use and EC awareness ($p<0.03$), most of the respondents who mentioned ECP had previously used contraceptives (60 percent) compared to the ones who had not used any type of contraceptives (40 percent) See table 4.3 below.

Other contraceptive methods identified as emergency contraception, included oral contraceptive pills (6.9 percent), traditional herbs (6.9 percent) and other mentioned medication such as antiboitics, cafemol and panadol (13.3 percent). To others methods coca cola mixed with cafemol or panadol and strong black tea could be used as emergency contraception after unprotected sexual intercourse or method failure. See table 4.3 below.

Table 4.3: Percent distribution of respondents' identified type of emergency contraception method by selected background characteristics

	Identified methods of emergency contraception					
Characteristics	**Emergency Contraceptive Pill**	**Contraceptive Pills**	**Tradition Medicine or herbs**	**Others**	**Do not Know**	**n**
Residence						**
Low	28.8	25.9	25.9	13.5	33.3	44
Medium	36.2	29.6	33.3	32.7	16.7	56
High	35.0	44.4	40.7	53.8	50	57
Age						
15-19	27.5	29.6	40.7	48.1	66.7	54
20-24	72.5	70.4	59.3	51.9	33.3	103
Marital Status						**
Never married	73.8	74.1	70.4	78.8	100	130
Married	17.5	25.9	25.9	17.3	-	18
Others	8.8	-	3.7	3.8	-	09
Education						**
Primary	2.5	3.7	11.1	11.5	16.7	10
Secondary	47.5	55.6	77.8	63.5	66.7	90
Higher	50.0	40.7	7.4	23.1	16.7	56
None	-	-	3.7	1.9	-	01
Religion						
Catholic	30.0	29.6	25.9	25.0	16.7	45
Protestants	32.5	48.1	44.4	36.5	16.7	58
Pentecostal	36.2	22.2	25.9	36.5	66.7	51
Islam	-	-	50.0	50.0	-	02
None	100	-	-	-	-	01

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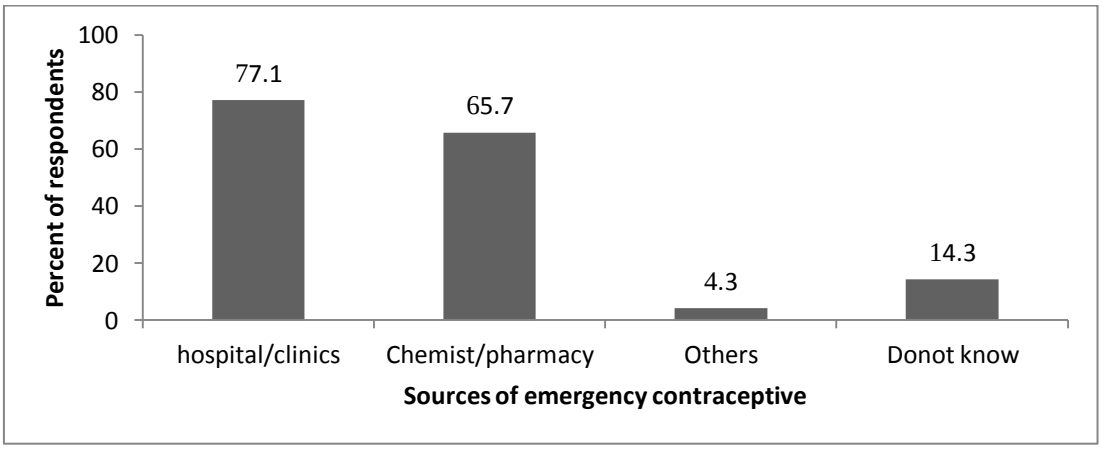
Sexual Experience						
Ever	66.2	74.1	70.4	61.5	50.0	102
Never	33.8	25.9	29.6	38.5	50.0	55
Previous contraceptive use						**
Ever	60.0	55.6	59.3	46.2	33.3	81
Never	40.0	44.4	40.7	53.8	66.7	76
Total (n)	100 (80)	100 (27)	100 (27)	100 (52)	100 (06)	157

Source: Field Data (2011) ** P< 0.05

4.2.2. Sources of emergency contraceptive method

The study revealed that of the 20 percent respondents who were aware of emergency contraceptive method, about 88 percent at least mentioned source of ECP. Seventy-seven percent identified hospital/clinic as the sources of ECP. About sixty-eight percent mentioned the chemist/pharmacy and others sources such as the NGOs, were the least at 4.3 percent. However, 14 percent did not know the source of emergency contraceptive method (see Figure 4.4.).

Figure 4.4: Percent distribution of respondents' awareness of sources of emergency contraception



Source: Field Data (2011)

4.2.3. Awareness of EC recommended time-frame

Table 4.4 shows that the recommended time-frame for using the identified EC effectively (72 to 120 hour after an unprotected intercourse) was identified by about 18 percent (n-27) of the participants. However, of the respondents who mention the emergency contraceptive pill only about 24 percent (n-19) identified the correct period of using the method. Generally, the awareness of emergency contraception was low in the three types of residential area, although awareness of the recommended period to use EC was higher among women over 20 (24.5 percent) than their younger counterparts (4.1 percent). The results also clearly show that the proportion of respondents who had attained higher education (39.3 percent) were better informed of the recommended periods of using EC than those with secondary education (6.0 percent) and primary level of education, no respondent identified the correct time-frame.

Furthermore, about 24 percent of the respondents stated that EC could be used within 24 hours. About nine percent stated that EC could be used within 12 hours; about seven percent stated that it could be used within 48 hours and three percent mentioned that EC should be taken immediately after unprotected sexual intercourse, especially during the fertile days. Even though these answers were correct about the recommended 72-120hour time limit, such misinformation of limiting EC to 48 hours and below might hinder someone from taking emergency contraceptives after those hours when they could still prevent pregnancy because they thought they had missed their "window" of effectiveness after 48 hours. In general, the duration of the recommended period was underestimated by 42.7 percent (n-67) of the participants; 39.5 percent (n-62) did not know the recommended time for using EC.

Table 4.4: Percent distribution of respondents' perceived recommended period for the identified contraception method according to selected background characteristics

Contraceptive method	Immediately	within 12 hours	within 24 hours	within 48 hours	within 72 -120 hours	Do not know	n
ECP	8.8	3.8	36.3	8.7	23.8	18.6	80
Other methods	8.5	2.8	11.3	4.2	10.4	62.3	77
Total	8.6	3.3	24.2	6.6	17.9	39.2	157
Characteristics							
Age							
15-19	8.2	6.1	22.4	6.1	4.1	53.1	54
20-24	8.8	1.9	22.5	6.9	24.5	35.3	103
Education							
Primary	30.0	-	20.0	-	-	50.0	10
Secondary	7.1	2.4	22.6	8.3	6.0	53.6	90
Higher	7.1	5.4	23.2	5.4	39.3	19.6	56
None	-	-	-	-	-	100	01
Residence							
Low	21.4	2.4	26.2	2.4	14.3	33.3	44
Medium	-	1.8	16.4	12.7	16.4	52.7	56
High	7.4	5.6	25.9	3.7	22.2	35.2	57
Overall (%)	**8.6**	**3.3**	**24.2**	**6.6**	**17.9**	**39.2**	**157**

Source: Field Data (2011)

4.2.4. Awareness of the fertile period

Despite how soon one takes ECPs, the effectiveness of the method also depends on where one is in the menstrual cycle. To obtain information on young women understanding of when a woman is most likely to conceive during the menstrual cycle, respondents were asked, "From one menstrual period to the next, are there certain days when a woman is more likely to become pregnant if she has sexual intercourse?" If the reply was "yes," the respondent was further asked whether that time was just before a woman's period begins, during her period, right after her period has ended, or halfway between two periods.

The findings in the study table below show that the fertile period ('a woman is most likely to conceive in the middle between two menstruations') was known by 23 percent (n-91). Thirty-four percent (n- 135) thought it was either 'just before' or 'just after' a menstrual period. Two percent of the respondents thought the fertile period was during menstrual period. Only one percent (n- 5) thought it was anytime before or after menstrual periods. A larger proportion of participants with higher education were able to mention the fertile

period as the period when one may conceive, compared to the respondents with secondary education. Those with primary education were the least at about 9 percent.

Table 4. 5: Percent distribution of respondents by knowledge of the fertile period during the ovulation cycle, according to selected background characteristics

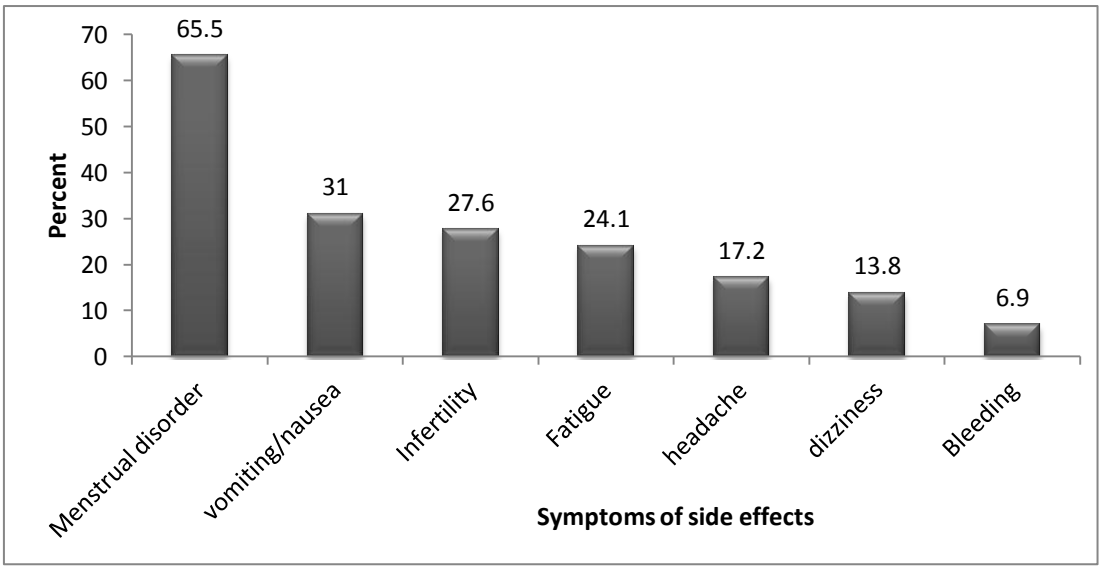
Characteristics	**Just before period begins**	**During periods**	**Right after period has ended**	**Halfway between two periods**	**Anytime before or after periods**	**Don't Know**	**n**
Age							
15-19	30.6	2.7	2.7	20.8	1.1	42.1	183
20-24	31.6	1.9	3.8	25.4	1.4	35.9	209
Marital Status							
Never married	29.6	2.3	3.8	23.2	1.5	39.6	341
Married	50	-	-	20.6	-	29.4	34
Others	23.5	5.9	-	29.4	-	41.2	17
Education							
Primary	17.4	4.3	4.3	8.7	4.3	60.9	23
Secondary	30.7	2.6	3	22.1	0.4	41.2	267
Higher	36	1	4	30	3	26	100
None	-	-	-	-	-	100	2
Residence							
Low	32.5	3.3	2.5	25	-	36.7	120
Medium	33.6	3.6	2.9	22.1	1.4	36.4	140
High	27.7	-	4.5	22.7	2.3	43.2	132
Overall (%)	**31.1**	**2.3**	**3.3**	**23.2**	**1.3**	**38.8**	**392**

Source: Field Data (2011)

4.2.5. Awareness of the symptoms of side effects of emergency contraception

The study indicated that 36 percent (n- 29) of respondents at least mentioned one symptom of side effects, which might be caused after taking ECP. Figure 4.5 shows that the commonly known symptom of side effects was menstrual disorder at about 66 percent, followed by vomiting/nausea at 31 percent and the least known was bleeding at seven percent.

Figure 4.5: Percent of distribution of respondents' awareness of symptoms of side effects

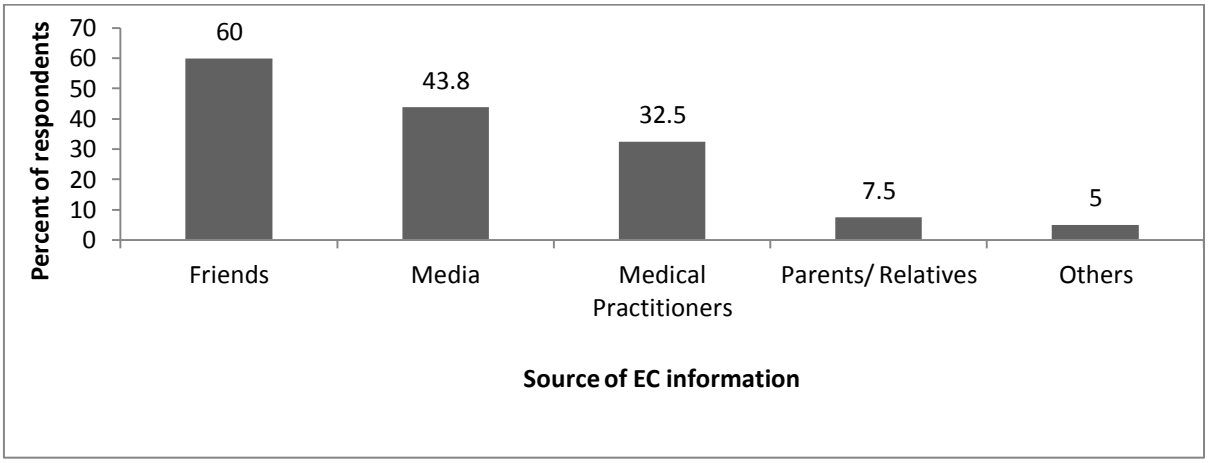


Source: Field Data (2011)

4.3. Awareness on sources of Information of Emergency Contraception

Results in figure 4.6 below revealed that 95 percent of the respondents who had heard about ECP mentioned the source of information. The common cited sources of information about ECP were friends (60 percent); media, which included internet, television/radio, newspaper, and magazines (43.8 percent); medical practitioners (32.5 percent); and the least cited sources of information parents/relatives (7.5 percent). Other sources included teachers, lecturers, and family planning workshops (5.0 percent).

Figure 4. 6: Percent of respondents sources of information on emergency contraception

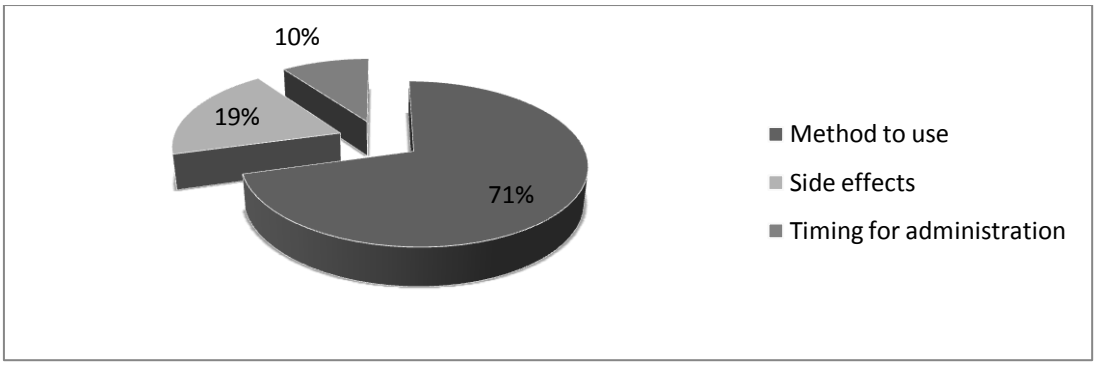


Source: Field Data (2011)

4.3.1. Information on emergency contraception method

Figure 4.7 shows the kind of information received about emergency contraception method. Most of the participants (71 percent) who had heard about EC, only heard about the type of method to use after unprotected sexual intercourse. Others had heard about side effects (19 percent), and 10 percent mentioned the timing for administration. This clearly shows that although some of the young women had heard about emergency contraception they had no detailed information on the mechanism of action, timing of the dose, its effectiveness, and safety to reduce the chances of pregnancy during the fertile window period.

Figure 4.7: Percent distribution of respondents' information about emergency contraceptive method



Source: Field Data (2011)

4.4. Attitude towards the use of Emergency Contraception

This section highlights the main findings on young women's attitude towards the use of emergency contraceptive methods. It covers issues on the intention to use EC, intention to use EC when married, attitude towards promoting the use of EC and attitude towards the use of EC based on attitude statements.

4.4.1. Intention to use Emergency Contraception

The study revealed that more than half (58.2 percent) of the respondents had stated their intention to use EC in future to avoid unwanted pregnancies and abortions, if they learn more about the contraceptive methods. The intention to use EC in the future was evident in all the study sites among the youths (55.8 percent in low-density areas; 57.9 percent in medium-density areas; and 60.6 percent in high-density areas) with different levels of education (52.2 percent, had primary education; 57.3 percent, had secondary education, and 63 percent had higher education) and from different religious denominations. A larger

proportion of respondents with sexual experience (65.1 percent) had intention to use EC in future compared to those without sexual experience (51.5 percent). See table 4.6 below.

Table 4.6: Percent distribution of respondents' future intention to use emergency contraception by selected characteristics

Characteristics	**Intention**	**Number**
Residence		
Low	55.8	120
Medium	57.9	140
High	60.6	132
Age		
15-19	54.1	183
20-24	61.7	209
Marital status		
Never married	56.6	341
Married	70.6	34
Others	64.7	17
Education		
Primary	52.2)	23
Secondary	57.3	267
Higher	63.0	100
None	-	02
Religion		
Catholic	52.7	93
Protestants	63.1	157
Pentecostal	56.7	134
Islam	100.0	02
None	33.3	06
Sexual Experience		
Ever	65.1	192
Never	51.5	200
Total (%)	**58.2**	**392**

Source: Field Data (2011)

4.4.2. Reasons for not intending to use Emergency Contraceptive methods

Findings in table 4.7 show that some respondents had no intentions to use EC in future due to the following reasons. Forty-three percent of the participants were afraid of health side effects, more especially infertility (barrenness). About 30 percent of the respondents were not intending to use EC in the future because it was against their religious beliefs as they thought it might cause abortion. Twelve percent of the participants lacked adequate

information about EC so they were not ready to take the risk of using the method. Furthermore, about 10 percent preferred using regular contraceptives before sexual intercourse, which they thought, were safer, while about five percent of the respondents were ready to keep a pregnancy at any time.

Table 4.7: Percent distribution of respondents' reasons for not intending to use EC in future

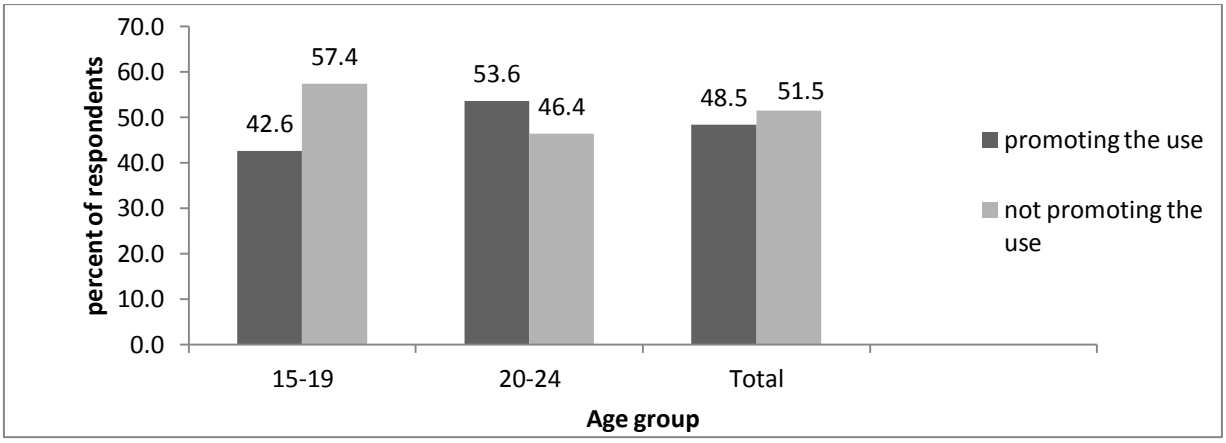
	Age group			
Reasons	**15-19**	**20-24**	**Overall**	**n**
Health side effects/infertility	56.3	43.7	43.3	71
Religious prohibition/abortion	53.1	46.9	29.9	49
Lack of information	35.0	65.0	12.2	20
Prefer other contraceptive methods before sex	31.2	68.8	9.8	16
Keep the pregnancy	12.5	87.5	4.9	8

Source: Field Data (2011)

4.4.3. Attitude towards promoting the use of emergency contraception

Figure 4.8 below shows that about 49 percent of the respondents were for the idea that EC use should be encouraged among young women. The findings further indicated that the majority of young women (53.6 percent) above the age of 20 supported the use of EC, while the women below the age of 20 at 42.6 percent did not.

Figure 4.8: Percent distribution of respondents' attitude towards promoting the use of emergency contraception by age group



Source: Field Data (2011)

4.4.4. Reasons for promoting emergency contraception

The findings clearly revealed that respondents were promoting the use of emergency contraception use among young women due to the following stated reasons: about 68 percent (n-129) of the respondents would promote the use of EC among young women to help prevent unwanted pregnancies and abortions. While 14.2 percent (n-27) of the respondents were of the opinion that promoting, EC would help in promoting girl child education by reducing teenage pregnancies. Furthermore, about seven percent (n-13) respondents thought EC would assist those sexually abused or raped to prevent the devastating effects of unwanted pregnancy and unsafe abortion. About five percent (n-9) believed that it was young women's right to be availed the right information about EC and let them be given a chance to decide whether to use the contraceptive in case of emergency. However, about four percent stated that EC could help in fighting against the problem of street kids. See Table 4.8 below.

Table 4.8: Percent distribution of respondents' reasons for promoting the use of EC

	Age Group			
Reasons	**15-19**	**20-24**	**overall**	**n**
To prevent unwanted pregnancies and unsafe abortions	47.3	52.7	67.9	129
May promote girl child Education by reducing teenage pregnancies	22.2	77.8	14.2	27
Sexually abused or raped	23.1	76.9	6.8	13
Youths should be availed to the right information about EC	55.6	44.4	4.7	9
May help fight the problem of Street kids	25.0	75.0	4.2	8
Non Response	25.0	75.0	2.1	4
Overall (%)	**41.1**	**58.9**	**48.5**	**190**

Source: Field Data (2011)

4.4.5. Reasons for not promoting the use of emergency contraception

The research showed that some respondents were not promoting the use of EC due to the following reasons: about 35 percent (n-70) of the youths were afraid of the health side effects, which might cause infertility (barrenness). About 34 percent (n-68) were of the opinion that the method might encourage immorality, which could increase the spread of sexually transmitted diseases such as HIV/AIDS. Furthermore, 22 percent (n-45) of the study youths indicated that it might encourage youths to engage in unprotected sexual intercourse before marriage; and about seven percent of respondents (n-14) said that it was against religious values since it could result in abortion. See Table 4.9 below.

Table 4.9: Percent distribution for respondents' reasons for not promoting the use of EC

	Age Group			
Reasons	**15-19**	**20-24**	**overall**	**n**
the side effects might cause to loss of fertility	52.9	47.1	34.7	70
may encourage immorality which might increase the spread of sexually transmitted diseases	44.1	55.9	33.7	68
may encourage unprotected sex before marriage	57.8	42.2	22.3	45
Religious prohibition as it may cause abortion	71.4	28.6	6.9	14
Non response	60	40	2.5	05

Source: Field Data (2011)

4.4.6. Attitude towards the use of emergency contraception based on statements

Table 4.10, below shows the findings of respondents on the attitude towards EC based on questionnaire attitude statements. The results clearly indicated that 83 percent of the respondents agreed with the statement, which said that the use of EC could increase if it were widely promoted, and 65 percent agreed that EC use could increase if it were readily available to reduce incidences of unintended pregnancies. However, more than half of these respondents of different ages, marital status, level of education, religious denomination and residential areas are for the idea that the use of EC may increase if it is widely promoted and widely available to reduce the incidences of unplanned pregnancies.

On the other hand, it was interesting to note that about 66 percent of the participants agreed with the statements that EC could promote unprotected sexual intercourse, and about 58 percent of the respondents were in fear that EC would encourage immorality among the youths. Thus, more than half of the respondents of different age groups, education attainment, religious denominations, and residential areas were all in fear that EC could promote immorality and unprotected sexual intercourse.

Furthermore, 48 percent of the respondents agreed with the statement that EC was safe and effective when used correctly. Another group, almost equal to it (46 percent), agreed with the statement that EC was suitable for sexually abused or raped women. It was also evident that participants of different background characteristics also agreed with the statement that EC was safe and effective when used correctly. More than half of respondents from low and high residential areas were of the opinion that EC should be readily available to help

reduce incidences of unplanned pregnancies, and that the use of EC would increase if it were widely promoted to the young people.

It should also be stated that less than half of the respondents agreed with the following statements: that EC would destroy social and cultural norms (38 percent); about 36 percent agreed that it was against religious beliefs, and 29 percent agreed that EC might decrease the use of other contraceptives. Moreover, it was also noted that less than half of the respondents of different age groups, marital status, education attainment, religious beliefs, and residential areas agreed to the statements mentioned.

Table 4.10. Percent distribution of the respondents' attitude to emergency contraception based on attitude statements according to selected background characteristics

Characteristics	n	a)Wide use of EC may promote immorality among the young	b) Wide use of EC may encourage unprotected sexual intercourse.	c) EC may destroy social and cultural norms if widely promoted.	d) EC is suitable for sexually abused women.	e) EC is against religious beliefs, as it will cause an abortion.	f) Easy access to EC might decrease the use of other contraceptive methods.	g) EC is safe and effective if used correctly.	h) EC should be readily available to help reduce incidences of unplanned pregnancies.	i) The use of EC would increase if it was widely promoted to the young people.
Age										
15-19	183	61.2	66.7	39.9	47.0	41.0	23.5	42.6	61.7	78.7
20-24	209	54.8	64.9	36.5	44.7	30.8	34.6	52.9	68.3	86.5
Marital status										
Never married	341	57.6	63.6	38.6	45.8	35.5	30.8	44.9	66.0	82.6
Married	34	62.3	77.4	34.0	45.3	39.6	24.5	66.0	60.4	84.9
Others	17	47.1	70.6	41.2	47.1	23.5	17.6	52.9	64.7	82.4
Education										
Primary	23	60.9	60.9	34.8	43.5)	34.8	30.4	52.2	56.5	78.3
Secondary	267	58.1	64.4	40.4	46.4	36.7	28.1	46.4	64.8	81.6
Higher	99	55.6	69.7	31.3	44.4)	32.3	33.3	52.5	66.7	86.9
None	02	100	100	100	50	50	-	-	50	100

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Religious Denominations										
Catholic	93	60.2	71.0	43.0	37.6	30.1	29.0	51.6	64.5	81.7
Protestants	157	63.7	66.2	37.6	46.5	35.0	28.0	46.5	69.4	83.4
Pentecostal	133	50.4	61.7	36.1	48.9	39.1	30.1	46.6	59.4	82.0
Islam	1	-	-	-	100	-	100	100	100	100
None	7	42.9	71.4	28.6	71.4	57.1	42.9	57.1	85.7	100
Residence										
Low	120	47.5	65.8	35.0	55.0	32.5	32.5	40.8	60.8	84.2
Medium	140	67.1	75.0	46.4	50.0	42.9	34.3	45.0	54.3	73.6
High	131	57.3	55.7	32.1	32.8	30.5	21.4	58.0	80.9	91.6
Total	**392**	**57.8**	**65.7**	**38.1**	**45.8**	**35.5**	**29.4**	**48.1**	**65.2**	**82.9**

Source:FieldData(2011)

4.5. Experience of using Emergency Contraception

This section gives the findings of experiences of using emergency contraception. It is organised in the following manner: emergency contraceptive method use, sources of emergency contraceptive method and symptoms of side effects experienced.

4.5.1. Emergency Contraceptive method use

The table below show that 4.3 percent of the study respondents had ever used the emergency contraceptive pill. The findings also indicated that age, marital status, previous contraceptive use and history of pregnancy was statistically significant at $p< 0.05$. Most of the youths who had used EC were above the age of 20 (88.2 percent) and had higher education (64.7 percent), compared to respondents with secondary level of education (35.3 percent)). Mainly the respondents who had used EC were not married (94 percent), belonging to protestant religious denomination (47 percent), and had previously used a contraceptive method (82.4 percent), compared to those who had never used any contraceptive method (17.6 percent). However, there was no much difference in terms of residence. In addition, the study also showed that six percent (n-24) of the respondents knew a friend who had used EC.

Table 4.11: Percent distribution of respondents' experience of using emergency contraceptive method according to selected variables

	Emergency contraceptive use		
Characteristics	**Ever used**	**Number**	**P value**
Age			
15-19	11.8	02	**0.03**
20-24	88.2	15	
Marital Status			
Never married	94.1	16	0.37
Married	5.9	01	
Education			
Primary	-	-	0.27
Secondary	35.3	06	
Higher	64.7	11	
None	-	-	
Religious Denominations			
Catholic	17.6	03	0.61
Protestants	47.1	08	
Pentecostal	29.4	05	
Islam	5.9	01	
None	-	-	

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Residence			
Low	29.4	05	0.44
Medium	23.5	04	
High	47.1	08	
Previous contraceptive use			
Ever used	82.4	14	**0.00**
Never used	17.6	03	
Pregnant history			
Ever	70.6	12	0.86
Never	29.4	05	
Total	**4.3**	**17**	

Source: Field Data (2011)

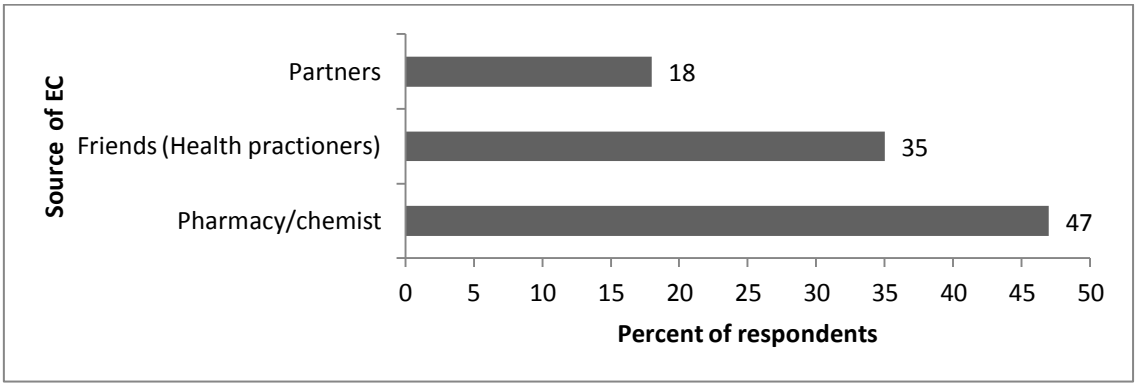
4.5.2. Sources of Emergency Contraceptive Method

The results in the figure 4.9 below show that the major source of ECP was the pharmacy or chemist at 47 percent and friends who were mainly health practitioners (35 percent). For others, their partners (18 percent) gave the contraceptive to them.

However, the study revealed that most of the young women agreed with their partner when taking ECPs (59 percent). Twenty-four percent of the respondents were influenced by friends to take ECP. Eighteen percent reported that their partners made the decision, as they were not ready to keep the pregnancy.

Besides, about 35 percent of the young women had used EC once two years previously, while 29 percent had used it once in less than six months earlier and the rest had used it once in the period between one to two years. About 36 percent had used EC once for more than six to two years previously.

Figure 4.9: Percent distribution of respondents by source of emergency contraceptive.

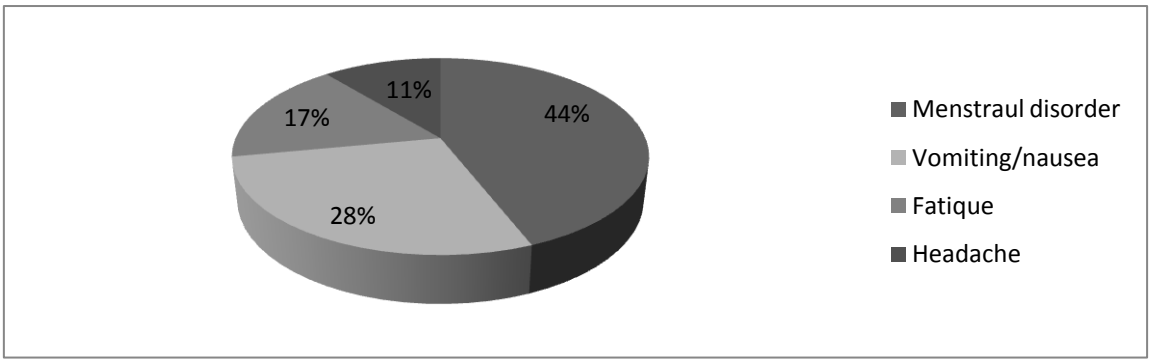


Source: Field Data (2011)

4.5.3. Symptoms of Side effects experienced after taking ECP

More than half (59 percent) of the respondents had experienced side effects after taking ECP. Figure 4.10 showed that the common symptom of side effects experienced was menstrual disorder (44 percent) and the least was headache at 11 percent.

Figure 4.10: Percent distribution of respondents by experienced side effects after taking ECP



Source: Field Data (2011)

4.6. Factor that influence the use of emergency Contraception method

This section gives the reasons that might affect the use of emergency contraception among young women. Thus, it gives the reasons that prompted and hindered the use of emergency contraception.

4.6.1. Factors that prompted the use of Emergency Contraceptive methods

The study revealed that most of the respondents were compelled to use emergency contraception due to the following stated reasons: respondents decided to use EC mainly because they did not use any regular contraceptives (47 percent), hence they were scared of becoming pregnant. The other 35 percent opted to use ECP because of condom breaking or slipping off, and about 18 percent used ECP had fear of conceiving because they had had no previous sexual experience.

4.6.2. Factors that hinder the use of Emergency Contraceptive Methods

The findings of the study clearly stated that the use of emergency contraception had been hindered by reasons, which included lack of information (79 percent). Some of the respondents did not know that such a contraceptive existed, while others thought EC was not available and some lacked awareness of where to access it or the correct information

about safety and efficiency of the method, its time- frame and the mechanism of action. Furthermore, about thirteen percent of the respondents were afraid of health side effects, which were presumed to be posed by the contraceptive method. About six percent of the respondents never had had unprotected sexual intercourse and three percent preferred using regular contraceptive methods.

4.7. Multivariate Model of Factors Determining the use of EC

Binary logistic regression analysis was conducted to predict the determinants of using emergency contraceptive methods among young women using variables that showed statistical significant relationship in the bavariate analysis. These are age, sexual experience, previous contraceptive use, awareness of EC, awareness of side effects and attitude towards EC use.

According to the analysis of Hosmer and Lemeshow statistics, the model was a good fit ($p = 0.996$). While a test of the full model against a constant only model was statistically significant, indicating that the predictor as a set reliably distinguished between those likely to use EC and not likely use EC (chi-square = 44.506, $p<0.000$ with df 6). Nagelkerke's R^2 of 0.505 indicated an average good relationship of 50.5 percent between predictors and prediction. Prediction success overall was 92.1 percent (58.8percent ever used and 96.3 percent never used).

The Wald criterion demonstrated that awareness of EC and side effects had a statistical significant relationship ($P<0.05$) with use of emergency contraceptive method. Accordingly, young women who had knowledge about emergency contraceptive were six times more likely to use EC than those who lacked knowledge about EC (OR- 6.06). While those who had adequate information about EC side effects were fifteen times more likely to use EC than their counterparts (OR-15.48).

Furthermore, age, sexual experience, and attitude had a positive relationship with use of emergency contraception, despite there being no statistical significant association. The respondents who were above the age of 20 were more likely to use EC than their counterparts (OR = 1.50), while those with positive attitude were two times more likely to use EC than those with negative attitude (OR = 1.65). Those who had sexual experience were eight times more likely to use EC those without sexual experience (OR-7.78).See Table 4.12.

Table 4.12: multivariate model of factors determining the use of emergency contraception by selected variables

	Emergency contraception use			
	Number	**S.E.**	**Sig.**	**Exp(B)**
Constant		1.22	1.00	0.00
Age				
15-19	02	1.00	0.69	1.50
20-24	15			
Sexual Experience				
Ever	17	0.41	1.00	7.78
Never	-			
Previous use of contraceptives				
Ever used	14	0.91	0.58	0.61
Never used	03			
Awareness of EC				
Ever heard	17	0.87	0.04	6.06
Never heard	00			
Knowledge of side effects				
Ever heard	12	0.72	0.00	15.48
Never heard	05			
Attitude towards EC				
Positive	15	0.96	0.61	1.65
Negative	02			

Source: Field Data (2011)

CHAPTER FIVE

DISCUSSION OF THE FINDINGS

5.0. Introduction

This chapter discusses the findings on the determinants of emergency contraceptive use among young women in Lusaka District. The results are underlined according to the specific objectives of the study, which were; to assess the awareness of emergency contraceptive methods, establish the sources of information, examine attitudes towards the use of the method, ascertain the extent to which young women are using the method and determine factors affecting the use of emergency contraceptive methods among young women.

5.1. Awareness of emergency contraception

The results from the study revealed that 40 percent of the respondents had heard about emergency contraception, but only 20 percent identified the proven EC as Emergency Contraceptive Pill commonly known as "morning after pills." Awareness of emergency contraception was lower in these findings compared to other studies among young women in Nigeria (58 percent), Kenya (39 percent), Ghana (43.2 percent), and Uganda (45.1 percent) (Aziken et al, 2003, Muia et al, 1999, Baiden et al, 2002, Byamugisha, 2007). Nevertheless, higher than the studies conducted in Zambia thus, Lusaka (7.5 percent) and Kitwe (12 percent) among women of abortion and Ndola (3.9 percent) (Chavuma, 2010, Bwanali, 2007, Mijere, 2005) However, no respondent mentioned of intra uterine contraceptive device as a form of EC. The same was revealed in a study in Pakistan and Ndola in Zambia, where none of the respondents mentioned IUD or mifepristone as an emergency contraceptive (Naz et al, 2009, Mijere, 2005). Although it was different with a study done in Nigeria where awareness levels about IUD were found to be relatively similar with the hormonal EC (Nworah, 2009).

Some respondents in the study believed that medicated drugs such as Panadol, cafemol and antibiotics; and other methods like, coca cola mixed with cafemol and black tea could be used as forms of emergency contraception. These findings were reflected in a study in Nigeria (11 percent) and Pakistan (20 percent) where in the absence of correct

information regarding proven emergency contraceptives, some respondents believed that medications such as antibiotics and antimalarial medicines, could be used as EC to prevent unwanted pregnancies (Aziken et al, 2003, Naz et al, 2009). The use of these drugs as emergency contraceptive could be harmful to young women's health.

The finding of the study had indicated that of the young women who had heard about Emergency Contraceptive Pill, only about 24 percent mentioned the recommended time-frame for using the method. These findings were higher than other studies in Nigeria (18 percent) and India (14.7 percent) but lower than the study in Sweden (38 percent) (Aziken et al, 2003, Puri, 2007, Aneblom, 2002). About 33 percent of the respondents mentioned 24 hours and below as the period of taking EC, though, such misinformation might hinder someone from taking EC after those hours when they could still prevent pregnancy because they thought they had missed their "window" of effectiveness after 24 hours (Aneblom, 2003).

According to Byamugisha (2007), worries about side effects caused by the contraceptives can be a hindrance to EC use. The symptom of side effects mentioned were menstrual disorder, vomiting and nausea, infertility, headache, fatigue, dizziness, and bleeding. This was in agreement with a study in India were side effects of ECP include vomiting and nausea but irregular bleeding and headache may also occur (Nayyar, 2000).

Young women would be in better position to come up with informed decision about planning pregnancies and understanding how family planning methods work and how they would wish to manage their reproductive health if they had better knowledge about fertility (Byamugisha, 2007) According to ZDHS (2007), only 24 percent of the women reported the correct fertile period (CSO, 2009). In a study done in Lusaka, Zambia among women with abortion experience, knowledge about the fertile period in the menstrual cycle was limited with less than a third (24 percent) correctly identifying the fertile period (Chavuma et al, 2010).These findings are consistent with the study finding were only 23 percent of respondents mentioned the correct fertile period. Thirty-four percent thought it was either 'just before' or 'just after' a menstrual period. Two percent of the respondents thought the fertile period was during menstrual period. Only one percent thought it was anytime before or after menstrual periods. These findings demonstrate poor fertility awareness among the young women.

The study showed that awareness of EC and side effects were significant determinants of EC use among young women, this was in agreement with other studies in Ethiopia and Nigeria were knowledge of EC was significantly associated with increased likelihood of using the method.(Tilahun et al, 2010, Aziken et al, 2003).

5.2. Sources of emergency contraception information

The findings of the study show that the common cited source of information were friends (60 percent) and media (43.8 percent)). A study done in Lusaka also showed that the main source of information was from friends (80 percent) (Chavuma et al, 2010). In Uganda, the main source of information were friends and the media (Byamugisha, 2007); in Nigeria, it was also friends (36.7) and the media (22.8) (Nworah, 2009). The results were also consistent with a study in Zambia, which found that clinic-based providers and community based contraceptive distributors as not being the most frequent sources of information on ECPs for adolescents (Skibiak et al. 2001).

5.3. Attitude towards the use of emergency contraception

According to Sable (2006), a positive attitude is very important for increasing access of information and availability of the ECPs to the users. In the study, most of the respondents had a positive attitude towards the use of EC as they had intentions to use in the method in the future (58.2 percent) and promoted the use (48.5 percent) among the young women to prevent unwanted pregnancies and abortions. Although these results were lower than a study conducted in Lusaka at University Teaching Hospital (UTH) where 88 percent of the respondents had a positive attitude towards EC (Chavuma, 2010).

Some of the respondents were of the opinion that promoting EC would help in promoting girl child education by reducing teenage pregnancies. This was consistent with a study done South Africa where one student commented, “Coming from an African township background like mine where you see unplanned pregnancies ruining teenagers’ lives every day, EC could be a necessity (Kistnasamy, 2009). For others, EC would assist those sexually abused or raped to prevent the devastating effects of unwanted pregnancy and unsafe abortion. According to the CRR Briefing Paper (2004), women who have already suffered the trauma of sexual assault should not have to undergo the additional trauma of an unsafe abortion. Some believed it was young women’s right to be availed the right information about EC and let them be given a chance to decide whether to use

the contraceptive in case of emergency. However, about four percent stated that EC could help in fighting against the problem of street kids.

However, some of the participants indicated that they were afraid of health side effects, which might interfere with their fertility. This was also evident in the study done in Uganda, where young people believed that contraceptives interfered with fertility, and they were frightened to use something that could harm their ability to reproduce and believed that pills burned the woman's eggs and when used they are abortifacient (Nalwadda et al, 2010). This also came up in the study conducted in South Africa, where they encountered both religious and moral objection regarding premarital sex and the notion that EC was an abortifacient (Kistnasamy, 2009). Confusing EC with induced abortion can negatively affect the acceptability of the method especially in countries like Zambia were most religious groups consider abortion as a sin (Chavuma, 2010). This was not different in the study where, about 30 percent of the respondents were not intending to use EC because it was against their religious beliefs, as they believed it would cause abortion. However, Naz (2009) clearly stressed that the use of EC is not against religion. In addition, medical studies have shown that EC is not an “abortion pill” but a safe, effective method of birth control after unprotected sex or when routine contraception fails. It is simply a higher dose of the same medication in typical birth control pills, and works by preventing an egg from being fertilized (CRR, 2012).

Those who opposed the use of EC were in fear that it will promote unprotected sexual intercourse and increased rate of immorality, which may lead to wide spread of sexually transmitted infections including HIV. This finding was in agreement with other studies where respondents were in fear that EC would promote promiscuity and repeated use of ECP instead of a long-term contraception, which may encourage young women to have risky sexual behaviour, thereby increasing the spread of sexually transmitted diseases, including HIV/AIDS (Aneblom, 2003, Byamugisha, 2007, Kistnasamy, 2009, Tajure et al. 2010). However, several studies have shown that EC does not increase the risk of STIs among the users. Research has clearly demonstrates that improving the availability of EC does not increase any form of 'sexual risk'-taking behaviour (Gold, 2004, Lo and Fan, 2004, Jackson and Bimla, 2003). Rather, it was found that use of EC might be the stimulus that brings young women into contact with health care providers, thus providing

opportunities for counselling in matters of responsible sexual behaviour; contraception; and prevention of sexually transmitted diseases, including HIV/AIDS (Puri, 2007).

5.4. Experience of using emergency contraception

The study revealed that only 4.3 percent (n-17) of the young women had ever used emergency contraception. The findings are much slightly higher than that of Nigeria (2 percent) and South Africa (1 percent) had used EC (Aziken et al, 2003, Mqhayi, 2004). It is interesting to note that more young women above the age of 20 had used EC than those under the age of 19. This finding is consistent with the study conducted in AAU, Ethiopia, South Africa, Nigeria, and France, which reported that age, has a significant effect on the practice of EC, where older age groups are more likely to use EC when compared to younger age groups (Tilahun, 2010). Although it is in contrast with a study conducted in Sweden were more teenager used EC than the older counterparts. (Aneblom, 2002).

Findings of the study also indicated that most of the respondents obtained ECP from pharmacy or chemist and friends who were mainly health practitioners. As in a study conducted in Nigeria, the major source of EC commodities was the patent medicine dealer (Nworah, 2009).

5.5. Factors affecting the use of emergency contraception

It was revealed in the study that the major barrier to emergency contraceptive use was lack of knowledge (79 percent) thus some of the young women did not know that such a method was available and those who had heard about the method had no adequate information about the use and where to access it. Similar finding were found in Ethiopia and Zambia in Ndola, where lack of awareness of the place where it is available, lack of correct information, low promotion and availability of the methods in most health institutions was the possible reason for low EC practice (Tajure, 2010, Mijere, 2005).Others had fear of side effects especially causing infertility. These results are consistent with other studies in Ethiopia, Nepal and Uganda where lack of knowledge, and fear of side effects as barrier to EC use (Tilahun et al, 2010, Adhikan, 2009, Byamugisha, 2007)).

CHAPTER SIX

CONCLUSION AND RECOMMENDATIONS

6.0. Introduction

This chapter gives the conclusion and the recommendations of the study based on the research findings and discussions.

6.1. Conclusion

The study was carried out on 392 young women aged 15-24, from low, medium, and high-density populated areas of Lusaka in Zambia. Most of the participants were aged 20-24 (53 percent) with the medium age of 18. Almost 98 percent of the participants belonged to Christianity. The majority of the respondents during the time of the survey were not married (82 percent) and had attained secondary education (68 percent). However, about 79 percent of the respondents were not in employment and only about 16 percent respondents had an income.

Awareness on EC should be created among women to have their rights and opinions about the extent of family size (Naz et al. 2009).The findings have shown that only 20 percent identified the recommended emergency contraceptive method commonly known as "morning after pill." This suggests low awareness levels among the young women and it could be that they are lacking any educational program and service promotion on emergency contraception (Tajure et al. 2010).

As that was not enough, it was evident that of those who knew about EC they seriously lacked accurate knowledge about the use and availability. In the absence of correct information about the proven EC methods, some of the young still believed that medicated drugs such as panadol, cafemol and antibiotics could be used as EC, which have proven to be dangerous to health. Only 24 percent of the participants who mentioned ECP were able to give the correct period for using EC and 36 percent at least mentioned one symptom of side effects.

On the other hand, lack of detailed information about the method may be linked to the source of information; friends (60 percent) as the main source of information may lack required information on the subject. This was actually evident, as 71 percent of the young women who knew about ECP had only heard about the type of method to use after

unprotected sexual or contraceptive failure. According to Nworah et al. (2009), friends as major source of information about emergency contraception commonly occurs in communities where the parents and agents of socialization (schools, churches, hospitals, non-governmental organizations) fail to provide such information often as a result of religious, socio-cultural and other reasons.

Generally, attitude towards the use of EC was positive. More than half (58.2 percent) of the respondents had intentions to use EC in future and nearly half (48.5 percent) were for the idea that EC needed to be widely accepted and promoted among the youths. The reason for the need to promote EC included its prevention of unplanned pregnancies and unsafe abortions, promotion of girl education by reducing teenage pregnancies. EC could also the help in fighting against the problem of street kids, while others stated that it could be used in case of sexual abuse or rape. While others felt that young women deserved to be availed right information about EC.

Besides that, others were against the promotion of EC use mainly because they were afraid of side effects, which they presumed could cause infertility (barrenness). Yet others felt EC would encourage unprotected sexual intercourse before marriage which might lead to the spread of sexually transmitted diseases such as HIV/AIDS. In addition, that is strictly against principles of African culture where virginity is highly upheld and sex before marriage is not allowed (Kistnasamy, 2009. Although a number of studies have shown that EC acts as the vehicle for bringing the young women into contact with health professionals and hence providing opportunities for counselling on responsible sex behaviour, contraception, and prevention of sexually transmitted diseases including HIV/AIDS (Puri, 2007). The rest rejected it as against their religious beliefs since they thought it could cause abortion.

Furthermore, the study revealed that at least 4.3 percent of the respondents had ever used ECP. Most of them obtained EC from the pharmacy or chemist and friends who were mainly health practitioners. Some of the participants indicated that they had experienced side effects such as menstrual disorder, vomiting, nausea and fatigue and headache after taking ECP. The main reasons that prompted the respondents to use EC were condoms breaking or slipping off, lack of sexual experience and unprotected sexual intercourse. However, the main reasons for not using EC included, lack of information about the method, that is, its availability, how and where to access it, while others were afraid of

unknown side effects. Lastly, multivariate analysis clearly showed that awareness of EC and side effects were statistical significant determinants to EC use at $p< 0.05$, therefore youths should be provided with adequate information to promote the use of EC.

6.2. Recommendations

- There is seriously need for the health care providers, scientific agencies, women organization and the other concerned institutions to play an active role in devising suitable strategies to routinely disseminate information about the available EC methods and accurate information with more emphasis on the correct timing of use openly without fear and favour. That may help the young people in making informed contraceptive decision.
- Some of the youths believed that other methods tradition medicines and medicated drugs such as cafemol, panadol and antibiotics could be used as an EC. The use of medication not recommended as EC maybe dangerous to the health of the young women. Therefore, advance provision and promotion of the proven emergency contraceptive methods would likely increase the use.
- The media industry should be effectively used to provide correct information about emergency contraception through public debates and advertising campaigns so that many can learn about EC as that is the key to knowing more about other contraceptive methods, this would promote responsible behaviours among young women.
- There was low fertility awareness among the young women, regardless of age as a preventive measure of unplanned pregnancies and unsafe abortions. Therefore, there is need for continuous effort to educate young people about the menstrual cycle and more emphasis should be on fertility period.
- Further research on determinants of emergency contraception use should assess factors why the health care providers and other concerned institutions have not widely promoted emergency contraception to the young people from the time it was introduced as a mix or dual protection method of family planning. The knowledge of health-care providers to be assessed to identify whether they have appropriate knowledge and understanding to make them have a positive attitude towards the use of the emergency contraception among the young women.

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APPENDICES

APPENDIX A

QUESTIONNAIRE SERIAL NO: | | | |

CONSENT FORM

The University of Zambia

School of Humanities and Social Sciences

Directorate of Research and Graduate Studies

Department of Population Studies

Title of the study**: Determinants of emergency contraception use among young women: A case study of Lusaka District.**

Introduction

Dear respondent,

Iam a postgraduate student at the University of Zambia, pursuing Master of Arts in population Studies. As part of the course, the study being conducted is on Determinants of emergency contraception use among young women.

As a respondent, your participation is voluntary and anonymous. All responses provided in this research will be treated with confidentiality and only be used for this academic purposes. I therefore, ask you to answer the questions as honest as possible without fear that your identity will be revealed.

Your participation in this research is greatly valued and appreciated.

I hereby consent to participate in this research

....

Initial Signature of the volunteer

Part 1: Background Information

NO	QUESTIONS AND FILTERS	RESPONSES/CATEGORIES	SKIP TO
101	Date of interview	. . . . .	
102	What is your Date of Birth?	. . . . .	
103	How old were you at your last birthday?	AGE IN COMPLETE YEARS... ☐	
104	What is your current marital status?	SINGLE. . . . . 1 MARRIED. . . . . 2 DIVORCED. . . . . 3 SEPARATED. . . . . 4 WIDOWED 5	
105	Have you ever attended school?	YES. . . . . 1 NO. 2	→ to Q107
106	What is the highest level of school you attended: Primary, secondary, or higher?	PRIMARY. . . . . 1 SECONDARY. . . . . 2 HIGHER. 3	
107	Are you in employment?	FORMAL EMPLOYMENT. . . . . 1 INFORMAL EMPLOYMENT. . . . 2 UNEMPLOYED. . . . . 3 →	to Q109
108	What is your occupation, that is, what kind of work do you mainly do?	. . . . .	
109	What is your monthly income?	. . . . .	
110	What tribe do you belong to?	. . . . .	
111	What is your religious denomination?	CATHOLIC . . . . . 1 PROTESTANT. . . . . 2 PENTECOSTAL . . . . . 3 ISLAM. . . . . 4 OTHER (SPECIFY). 5	
112	What type of residential area do you live in? Low, medium, or high-density area?	LOW . . . . . 1 MEDIUM. . . . . 2 HIGH. 3	

Part 2: Knowledge about contraception methods

NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
Q201	Do you know of something or any method that can be used to delay or avoid getting pregnant?	YES. . . . . 1 NO. 2	→ to Q301
Q202	Which method do you know?	A. PILLS. . . . . 1 B. MALE CONDOM. . . . . 2 C. FEMALE CONDOM . . . . . .3 D. INJECTABLES. . . . . 4 E. IUD . . . . . 5 F. IMPLANTS . . . . . 6 G. DIAPHRAGMS . . . . . 8 H. FOAM/JELLY . . . . . .9 I. EMERGENCY CONTRACEPTIVE PILL. . . . . 10 J. FEMALE STERILISATION. . 11 K. MALE STERILISATION . . . . . 12 L. WITHDRAWAL. . . . . 13 M. LACTATIONAL METHOD. . . 14 N. RHYTHM METHOD. . . . . 15 O. OTHERS (SPECIFY). 99	
Q203	Do you know of a place where you can obtain a contraceptive method?	YES. . . . . 1 NO. 2	→ to Q205
Q204	Where is that? (more than 1 answer is allowed)	GOVT HOSPITAL . . . . . 1 GOVT HEALTH CENTRE. . . . . 2 MISSION HOSPITAL. . . . . 3 PRIVATE CLINIC/HOSPITAL. . . . . 4 MOBILE CLINIC. . . . . 5 OTHERS (SPECIFY). 99	
Q205	Do you know about the side effects or problems you might experience with the method and what to do?	YES. . . . . 1 NO. 2	

PART 3: Knowledge about emergency contraception

NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
Q301	As far as you know, do you know something about, or any contraceptive method which one can take the following day after unprotected sexual intercourse, or after failure of contraceptive method, to prevent pregnancy	YES. . . . . 1 NO. . . . . 2 →	to Q308
Q302	What type of contraceptive method is that?	----------	
Q303	What is the limit time-frame for using this method after unprotected sexual intercourse?	---------- ----------	
Q304	Do you know of a place where you can obtain this contraceptive method?	YES. . . . . 1 NO. . . . . 2 →	toQ306
Q305	Where is that? (more than 1 answer is allowed)	----------	
Q306	Do you know about the side effects or problems you might experience with this contraceptive method?	YES. . . . . 1 NO. . . . . 2 →	to Q308
Q307	What side effects or problems is one likely to experience?	----------	
Q308	From one menstrual period to the next, are there certain days when a woman is more likely to become pregnant if she has sexual intercourse?	YES. . . . . 1 NO. . . . . 2 — DON'T KNOW. . . . . 99 →	toQ401
Q309	Is this time just before her period begins, during her period, right after her period has ended, or halfway between two periods?	JUST BEFORE HER PERIOD BEGINS . . . . . 1 DURING HER PERIOD . . . . . 2 RIGHT AFTER HER PERIOD HAS ENDED. . . . . .3 HALFWAY BETWEEN TWO PERIODS . . . . . 4 OTHER (SPECIFY). . . . . 5 DON'T KNOW 99	

Part 4: Sources of Knowledge of emergency contraception

NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
Q401	Have you ever seen or heard of any emergency contraception information?	YES. . . . . 1 NO. 2	→ to Q501
Q402	From which source did you obtain information about Emergency Contraception? (more than one answer is allowed)	A. GYNAECOLOGIST. . . . . 1 B. PHARMACIST . . . . . 2 C. NURSE . . . . . 3 D. MEDIA. . . . . 3 E. PARENTS. . . . . 4 F. RELATIVES . . . . . 5 G. FRIENDS. . . . . 6 H. OTHER (SPECIFY). 99	
Q403	What kind of information did you receive?	ADMINISTRATION . . . . . 1 PRECAUTION . . . . . 2 SIDE EFFECTS. . . . . 3 OTHER (SPECIFY) 99	
Q404	What kind of information do you still need?		
Q405	Have you ever recommended emergency contraception to a friend?	YES. . . . . 1 NO. 2	
Q406	Why?		

Part 5: Attitudes towards emergency contraception

NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
Q501	Do you think you will use emergency contraception to delay or avoid pregnancy at any time in the future?	YES. . . . . 1 NO. 2	
Q502	Give reasons to your answer above.		
Q503	Would you ever use emergency contraceptive method if you were married?	YES. . . . . 1 NO. . . . . 2 DONT KNOW. 9	
Q504	Why?		
Q505	Should young women be encouraged to use emergency contraception?	YES. . . . . 1 NO. 2	
Q506	Give reasons for your answer above		

Continuation of Attitude towards Emergency Contraception: Tick ( ) the appropriate level of agreement on your opinion about emergency contraception below:

Q509	STATEMENT	Strongly Agree	Agree	Uncertain	Disagree	Completely Disagree
		1	2	3	4	5
a	Wide use of EC may promote immorality among the young people					
b	Wide use of EC may encourage unprotected sexual intercourse					
c	EC may destroy social and cultural norms if widely promoted.					
d	EC is suitable for sexually abused women					
e	EC is against religious beliefs, as it will cause an abortion.					
f	Easy access to EC may decrease the use of other contraceptive methods					
g	EC is safe and effective if used correctly.					
h	EC should be readily available to help reduce incidences of unplanned pregnancies.					
I	The use of EC would increase if is it widely promoted to the young people					

Part 6: Sexual Behaviour

NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
Q601	Have you ever had a sexual relationship?	YES. . . . . 1 NO. 2	→ to Q603
Q602	Do you intend to wait until you get married to have sexual intercourse for the first time?	YES. . . . . 1 NO. . . . . 2 DON'T KNOW. 9	To Q613

Q603	How old were you when you had sexual intercourse for the very first time?	AGE IN YEARS.	
Q604	The first time you had sexual intercourse; did you use any contraceptive method?	YES. . . . . 1 NO. . . . . 2 DONTKNOW/DONT REMEMBER. .99	→ to Q606
Q605	Which method did you use?		
Q606	Are you currently in a sexual relationship?	YES. . . . . 1 NO. 2	→ Q608
Q607	Which contraceptive methods are you currently using if any?	CONDOM . . . . . 1 WITHDRAWAL. . . . . 2 SAFETY PERIOD. . . . . 3 CONTRACEPTIVE PILL . . . . . 4 OTHER (SPECIFY). 99	
Q608	Have you ever been pregnant?	YES. . . . . 1 NO. 2	→ Q613
Q609	Are you pregnant now?	YES. . . . . 1 NO. . . . . 2 →	to Q613
Q610	At the time you became pregnant, did you want to get pregnant <u>then</u>, did you want to wait until <u>later</u>, or you did <u>not want</u> to have any more children at all?	THEN. . . . . 1 LATER. . . . . 2 NOT AT ALL. 3	
Q611	Have you ever had a pregnancy that miscarried, was aborted, or ended in a stillbirth?	YES NO MISCARRIED . . . . . 1 2 ABORTED . . . . . 1 2 STILLBIRTH. 1 2	
Q612	If your answer is yes to the above question then when did the last such pregnancy end?	MONTH. . . . . . YEAR.	
Q613	Do you know of a friend or relative who has aborted or terminated the pregnancy?	YES. . . . . 1 NO. . . . . 2 →	to Q701
Q614	Do you happen to know how many times have they aborted?		

PART 7: Experiences and factors affecting the use of emergency contraception

NO	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
Q701	Have you ever used emergency contraception?	YES. . . . . 1 → NO. 2	to Q703
Q702	What was the reason for not using emergency contraception?	NEVER HAD UNPROTECTED SEXUAL RELATION. . . . . 1 AFRAID OF HEALTH EFFECT . . . . . 2 EFFICIENCY IS LOW. . . . . 3 LACK OF KNOWLEDGE. . . . . 4 OTHER (SPECIFY) 99	Skip to Q711
Q703	What did you obtain the emergency contraceptive method?	----------	
Q704	Why did you choose to use emergency contraception?	CONVENIENT TO USE . . . . . 1 ALLERGIC TO ORAL CONTRACEPTIVE PILL. . . . . 2 FAILURE OF OTHER CONTRACEPTIVES . . . . . 3 DID NOT USE OTHER CONTRACEPTIVES . . . .4 OTHER (SPECIFY) 99	
Q705	When was the first time that you used emergency contraception?	LESS THAN 6 MONTHS . . . . . .1 MORE THAN 6 MONTH TO 1 YEAR. .2 MORE THAN 1 YEAR TO 2 YEARS. . .3 MORE THAN 2 YEARS (SPECIFY NUMBER OF THE YEAR). 4	
Q706	How often do you use the emergency contraception?	. . . . . .	
Q707	Have you ever experienced side effects or problems after taking emergency contraception?	YES. . . . . 1 NO. . . . . 2 →	to Q708
Q708	Which side effects or problems did you experience?	---------- ----------	

Q709	Does your husband/partner know that you use emergency contraception method?	YES. . . . . 1 NO. . . . . 2 DON'T KNOW. 9	→ to Q710
Q710	Would you say that using emergency contraception is mainly your decision, mainly your husband's/partner's decision, or did you both decide together?	MAINLY RESPONDENT . . . . . 1 MAINLY HUSBAND/PARTNER. . . . . 2 JOINT DECISION. . . . . 3 OTHERS (SPECIFY). 99	
711	Do you know any of your friends who have ever used emergency contraception?	YES. . . . . 1 NO. . . . . 2 DONT KNOW. 9	
712	Have you ever used other contraceptive methods for pregnancy prevention apart from emergency contraception?	YES. . . . . 1 → NO. 2	to Q713
713	If No give the reason why you have not used other contraceptive methods	NEVER HAD SEXUAL RELATION . . 1 AFRAID OF HEALTH EFFECT. . . . . 2 LACK OF KNOWLEDGE . . . . . 3 LACK OF ACCESS. . . . . .4 OTHER (SPECIFY) 99	
714	If yes mention the types of contraceptives you have ever used	CONDOMS. . . . . 1 WITHDRAWAL. . . . . 2 NORMAL CONTRACEPTIVE PILL . . .3 PERIODIC ABSTINENCE OR RHYTHM METHOD. . . . . 4 OTHERS (SPECIFY) 99	

Thank you for your participation