KNOWLEDGE AND USE OF EMERGENCY CONTRACEPTIVES AMONG OUT-OF-SCHOOL FEMALE YOUTHS IN IDO LOCAL GOVERNMENT AREA, OYO STATE, NIGERIA

BY

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DEDICATION

This work is dedicated to Almighty God, who made it possible for me to start and finish this program and to my dearest family especially my children who supported me from the beginning till the end of this project.

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Every accomplishment in life is as a result of numerous contributions o f others that matter in one's life. This project is no exception.

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Lastly, I wish to express my appreciation to God for everything concerning this program. To Him be the glory, honour and adoration forever.

ABSTRACT

Unintended pregnancy among youths resulting from unprotected sexual activities poses a major challenge to their reproductive health. Use of Emergency Contraceptive Pills (ECPs) which are of different brands has been identified to prevent unintended pregnancy. Studies have been carried out on the utilization and effectiveness of ECPs among older women but information on young women's knowledge and its use will be useful in identifying gaps in knowledge and planning appropriate interventions. This study was therefore designed to assess the knowledge and use of ECPs among out-of-school female youths in Ido Local Government Area (LGA), Ibadan, Oyo State, Nigeria.

The study was a cross-sectional survey involving a four-stage sampling technique. Four wards in the LGA and three villages from each ward were randomly selected. Four hundred female youths aged 15-24 years were identified and 377 who consented were interviewed using pre-tested semi-structured questionnaires. The respondents were apprentices, traders and farmers. Data on demography, reproductive and sexual health as well as practice of ECPs were collected. In addition, knowledge was assessed on an 18-point score with scores of <10 and ≥10 points considered to be poor and good knowledge respectively. Data were analyzed using descriptive statistics and Chi square at $p = 0.05$.

Mean age of respondents was 20.7±1.1 years, 32.4% and 67.6% respondents were aged 15-19 and 20-24 years old respectively and 37.9% were married. Two hundred and sixty eight respondents (71.1%) were sexually active and 266 (70.6%) had been pregnant at least once. Two hundred and ten (78.9%) of the pregnancies were desired and 56 (21.1%) were unintended. Of the respondents who had unintended pregnancies, eight (14.3%) used ECPs once in three months and 40 (64.5%) had the pregnancies terminated with the consent of their partners. Two hundred and forty six (65.3%) of the respondents had ever heard of ECPs and 107 (28.4%) of them reported friends as source of information. The mean knowledge score on ECP was 11.1±2.0. Two hundred and sixty eight (71.0%) and 109 (28.9%) respondents had good and poor knowledge respectively. One hundred and ninety six (52.0%) respondents were aware of how ECPs work, while 144 (38.2%) knew how to take the drugs correctly. One hundred and thirty six (36.1%) respondents had ever used ECPs while 90 (24.0%) were current users and were mostly in the age group between 15-19 years old. Of the current users, 46 (51.1%) respondents used ECPs more than once in a month and 44 (49.0%) wished to

continue their use. Age, accessibility and affordability were the factors that significantly affected the use of ECPs.

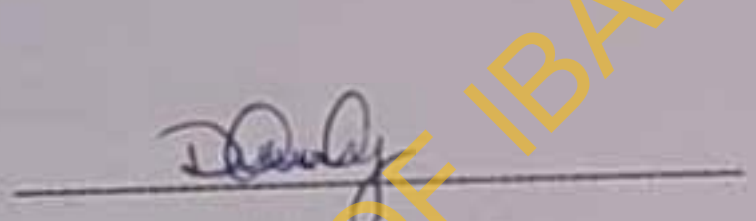
Knowledge on emergency contraceptives was above average among out-of-school female youths. However, correct use and intention to continue its use was poor. Community-based health education and peer education strategies should be instituted to improve knowledge and uptake of emergency contraceptives.

Keywords: Emergency contraceptives, Unintended pregnancy, Out-of-school female youths

Word count: 470

CERTIFICATION

I certify that this study was carried out by Oluwakemi Iyabo ADENIJI in the Department of Health Promotion and Education, Faculty of Public Health, College of Medicine, University of Ibadan, Nigeria.



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1. Female Youth: This is a young out-of-school female between the ages of 15-24years.
2. Contraceptive knowledge: The acquisition of information or understanding on contraceptives.
3. Emergency contraception: This is a modern method of birth spacing or prevention of unwanted pregnancy.
4. Emergency contraceptives: These are drugs that are used within 72 hours of unprotected sex to prevent unwanted pregnancy.
5. *Kuus*: These are small areas within a village which has different heads appointed by the traditional ruler in the village to oversee the affair of the people.

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CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

As affirmed at the 1994 International Conference on Population and Development in Cairo. women have the right to control the number and timing of their pregnancies (Ellertson, 2000). To realize this right, women throughout the world need to have knowledge and access to a broad range of contraceptives, as well as to safe abortion services. Implicit in this are the right of men and women to be informed and to have access to safe, effective, affordable and acceptable methods of family planning of their choice, as well as other methods of their choice for regulation of fertility which are not against the law. Also, they have the right of access to appropriate health care services that will enable women to go through pregnancy and childbirth safely and provide couples with the best chance of having a healthy infant.

Despite intense programmatic efforts by the Nigerian government and various non-governmental agencies to reverse the trend of persisting challenge of high fertility, and high rates of unintended pregnancy, unsafe abortion, maternal mortality and unmet need for contraception, there has been little evidence to suggest a systematic improvement in these indicators. To date, contraception has not been well consolidated in Nigeria as evidenced in recent Demography Health Survey data which indicated that only about 40% of sexually active, unmarried women are using a modern method of family planning--most commonly the male condom (National Population Commission. 2009). Part of the reasons for the poor use of contraception in Nigeria include the persisting cultural belief of the people, religious preaching which discourage the use of contraceptives, poor availability and distribution of contraceptives and women's fear of contraceptive side effects which could lead to infertility later on in life (Orji and Onwudiegwu, 2002; Ozumba, Obi and Ijioma, 2005).

Unintended pregnancy leading to unsafe abortion is one of the most important causes of maternal morbidity and mortality and it is a major medical and public health problem (Aziken, Okonta and Adedapo, 2003). Worldwide 42 million abortions are estimated to take place annually, with 22 million of these occurring safely and 20 million unsafely (Ahman and Shah 2009). While maternal mortality seldom results from safe abortions, unsafe abortions result in 70,000 deaths and 5 million disabilities per year (Ahman and Shah. 2009). Consequences of unprotected sex, such as unintended pregnancy and unsafe abortion, can be prevented by access to effective contraceptive services including use of emergency

contraceptives. Unintended pregnancy poses a major challenge to the reproductive health of young adults in developing countries (Arowojolu and Adekunle, 2000). With decreasing age of menarche and onset of sexual activity, young people are exposed early to unplanned and unprotected sexual intercourse leading to unintended pregnancy and invariably abortions. In Nigeria, unintended intercourse is the primary cause of unintended pregnancy and induced abortions (Arowojolu and Adekunle, 2000). Similarly, the rate of induced abortions is a good indicator of the current state of medical care and family planning in any country.

Emergency contraceptive pills are taken by a woman after unprotected intercourse. The pills are needed when intercourse is unexpected and without prior contraceptive coverage. Other indications include failure of barrier methods like the slipping or breakage of condoms, and after rape. It is essentially female driven, so its use and success rests mainly on how women perceive and practice it. Levonorgestrel-only pills and combined oral contraceptives are the most common emergency contraceptive methods available in Nigeria and they can be obtained over the counter from patent medicine and pharmaceutical shops (Oye-Adeniran, Adewole, Umoh, Oladokun and Gbadegesin, 2005).

Emergency contraceptives are used to avoid pregnancy after unprotected sexual intercourse unlike the regular methods of contraception that are taken before sexual contact. It has the potential, as the last resort, to avoid unwanted pregnancy and therefore prevent abortion; a desirable goal especially where abortion is illegal. These pills, which are predominantly variations of oral contraceptive regimens, are often called "morning after pills" or emergency contraceptive pills. This dispels the idea that the user must wait until the morning after unprotected sex to start treatment or that she will be too late if she cannot obtain treatment until the afternoon or night after. The name also stresses the fact that the regimens are not intended for on-going use.

Emergency contraceptive pills are hormonal pills which are packaged specially for emergency use. It is used when a woman has unprotected sex to avert pregnancies attributable to non-use or incorrect use of other modern contraceptives. Also, it is used in cases of lack of knowledge about or access to other methods or in cases of coerced sex and to reduce the rate of unsafe abortion.

By preventing unwanted pregnancy, emergency contraceptive pills reduce the need for induced abortion which is usually carried out under unsafe conditions thereby, incurring the risk of morbidity associated with it (Glasier, 2006). Generally, oral contraceptive pills and intrauterine devices (IUDs) are mainly used as emergency contraceptives. The IUD

works best if inserted within 5 days of having unprotected sex. The presence of the IUD prevents the fertilized egg from attaching to the wall of the uterus. A benefit of the IUD is that it can be left in for long-term use and may be a good choice if one cannot take birth control pills. However, the IUD does not prevent sexually transmitted diseases. When used within 72 hours after sexual contact, ECPs have the capacity to prevent pregnancy by 75-85% and with the use of IUDs unwanted pregnancy can be prevented by as much as 99% (Friedman, Mcquaid and Grendel, 2003). This is especially significant for youths that are not usually on a long-term regular contraceptive method and their sexual behaviour is rather unplanned, erratic and irregular.

Since ECPs act before implantation, they are medically and legally considered forms of contraception. The emergency contraceptive pills have three possible ways of action They are:

1. Ovulation is inhibited, meaning the egg will not be released;
2. The normal menstrual cycle is altered, delaying ovulation; or
3. It can irritate the lining of the uterus so that if the first and second actions fail, and the woman does become pregnant, the foetus will die before he or she can actually attach to the lining of the uterus (Gemzell-Danielsson and Marions, 2004)

Use of emergency contraceptives has been poorly promoted in Nigeria despite its advantage that it can be used by women immediately after sexual intercourse, and that it has high rates of effectiveness and safety (Otolde, Oronsaye and Okonofua, 2001). Additionally, the fact that it can be self-administered by women over a short period of time, without the need for a prescription means that its use can overcome some of the barriers that presently limit access to effective contraception in Nigeria. While most methods of contraception are intended for use before or during sexual intercourse, emergency contraceptive pills can be used within 24-72 hours but not later than 120 hours after unprotected sex. Knowledge and use of emergency contraceptives are particularly important because of high rates of unintended and teenage pregnancy.

There is no universally agreed definition of youth and adolescents. Therefore, each agency such as UN General Assembly, WHO, the World Bank, Commonwealth Youth Program and the National Youth Council have their own definitions. The United Nation General Assembly and the World Health Organization defines youth as persons between the ages of 15-24 years while the World Bank defines it as the ages between 15-25 years (United Nations, 2009). Commonwealth Youth Program and The National Youth Council define it as

ages between 15-29 years. Those who are considered as youths and adolescents are very much influenced by various socio-cultural, economic and political factors, as well as individual physical and psychological conditions. The youth period is the one between adolescence and adulthood. It is described as the period of physical and psychological development from the onset of puberty to maturity and early adulthood (International Planned Parenthood Federation, 1994). Also, it is a well-known fact that the youth period is a time of growth and development when young men and women experience great and rapid changes in their bodies, their concerns, their relationship and their roles in the society (AIDS Action 2002). It is also a period of life when young people seek to stretch beyond the protective shelter of the family and begin to create an independent vision and life.

1.2 Statement of the Problem

Youths are thought to be a healthy group because of the fact that they have survived the disease of early childhood and are several decades away from disease associated with aging (Babalola, Tambishe and Vondrasek, 2005). Despite this, they exhibit behaviour which acts as threats to their health. One of such behaviour relates to sexual activity. Experimentation with sexual intercourse is one of the typical features of youths and pre-marital sexual intercourse is a common practice among them. Although, sexual feelings may be expressed in many ways that are not harmful to health; unfortunately, many youths participate in risky sexual behaviours.

The risky sexual behaviours include early age of sexual debut, sexual intercourse with multiple partners and low utilization of contraceptives (Babalola, Tambishe and Vondrasek, 2005). The negative consequence of these behaviours is unintended pregnancy. Pregnancy in a female youth is ill timed as her reproductive organs are not matured to cope with the rigors of delivery. Overall, 23% of youths are already mothers or are pregnant with their first child (NPC, 2009).

The life threatening complications which young pregnant girls who engage in risky sexual behaviours face is numerous and they include pregnancy induced hypertension, anaemia, haemorrhage and vesico vaginal fistula. Some youths have sexual intercourse sporadically, which makes contraceptive planning difficult. Others experience contraceptive failure and their failure rates may be higher than adults due to their inexperiences (Babalola, Tambishe and Vondrasek, 2005). Also, many young women experience coerced sex, including rape.

In addition to these above, gender inequity and cultural norms often make it hard to address the issue of contraception for youths. In many cultures, sex-related issues are rarely discussed, even between spouses. Many young women also experiences coerced sex. A review of 14 studies conducted in developing countries found that 15-30 per cent of sexually active girls reported that their first sexual experience was coerced (Jejeebhoy and Bott, 2003).

Behavioral factors that frequently put youths at greater risk of pregnancy include experimentation and risk taking, as well as limited ability to plan ahead. The nature of relationships and frequency of intercourse are often different during these years than later in life. Shorter relationships, sometimes with long intervals in between, are not uncommon, and engaging in sexual intercourse may be infrequent and sporadic. This might lead to reluctance to adopt a regular family planning method or make it harder to plan to use one.

The emergency contraceptives are widely used in many developed countries but many women in developing counties are unaware of this pregnancy prevention option (Chuang and Freund, 2005). In Nigeria, a study among women who had previously had clandestine abortions revealed that 16% had used emergency contraceptives (Arowojolu and Adekunle, 2000). A recent review of emergency contraception literature from developed and developing countries indicates that awareness is generally low but slowly increasing. Even where the concept of the method is known, knowledge of accurate use is very low (Conard, Fortenberry, Blythe and Orr 2004).

1.3 Justification for the Study

Given the high prevalence of pregnancy, cost and increased morbidity and mortality among youths, developing interventions aimed at reducing unintended pregnancy has the potential to have a major impact on public health. One avenue for pregnancy prevention is the use of emergency contraceptive which many women have little or no knowledge about as previous studies had suggested that barriers to its use exist, such as concerns about what others may think, side effects and a perceived threat to the woman's "moral identity"(Abbot, Feldhams, Hoxey and Lowenstein, 2004).

Also, most previous studies had focused on adolescents who are in school in the urban areas and are between the ages of 13-19 years (Okonofua, Ogonor, Omorodon, Coplan, and Kaufman, 1999; Onyejekwe, 2001). To a large extent, this has left a substantial gap in information related to youths who are out of school in the rural areas and whose ages are between 15-24 years. In addition to this, studies in the past had been on female

undergraduates in the tertiary institutions (Akani, Enyindah and Babatunde. 2008; Aziken. Okonta. and Adedapo, 2003; Byamigisha, Miraube. Faxelid and Danielssen, 2006), not considering those in the primary and secondary schools or out of school who had been pregnant, had live babies or not and are sexually active.

Apart from this, previous studies had been on knowledge, perception and practice of emergency contraceptives in the urban communities among the above mentioned groups which has not however lead to decrease in number of unwanted pregnancies. To bridge this gap in body of knowledge. this study set out to assess the knowledge of out-of-school female youths in a rural community on emergency contraceptives and attitude contributing to the contraceptive behavior of youths.

In addition. this study provided data on the use of emergency contraceptives among those youths which could serve as a springboard for community based interventions on how to increase awareness on use and access to contraceptive education and services. Also, policy makers can use the data to modify existing policy programs on emergency contraception.

Therefore, to develop interventions to achieve increased use of emergency contraceptives in appropriate situations which is consistent with the Healthy People 2010 goals (Healthy people. 2010), it is important to determine how best to structure and deliver messages about emergency contraception. The aim of this study was therefore to assess the level of knowledge, awareness and use of emergency contraceptives among out-of-school female youths.

1.4 Broad objective

The broad objective of this study was to determine the knowledge and use of emergency contraceptives among out-of-school female youths in Ido LGA.

1.5 Specific objectives

The specific objectives of this study were to:

1. To document the prevalence of ECPs use among out-of-school female youths.
2. To document the awareness of ECPs among the study participants.
3. To assess the knowledge. understanding and skills of the study participants on ECPs.
4. To identify attitudes influencing the use of ECPs among out-of-school female youths

1.6 Research questions

The study answered the following research questions:

1. How many of the study population are currently using emergency contraceptives?
2. How many of the respondents are aware of emergency contraceptives?
3. What do the out-of-school female youths know about emergency contraceptives?
4. What are the attitudes that influence the use of emergency contraceptives among out-of-school female youths in Ido LGA?

1.7 Hypotheses

The following null hypotheses were tested by the study:

1. There is no significant difference between the age of out-of-school female youths and knowledge of emergency contraceptives in Ido LGA.
2. There is no significant difference between educational status of out-of-school female youths and awareness of emergency contraceptives in Ido LGA.
3. There is no significant difference between marital status of out-of-school female youths and use of emergency contraceptives in Ido LGA.

CHAPTER TWO

LITERATURE REVIEW

2.1 The Youths

International Planned Parenthood Federation (IPPF) defines young people as all people between 10 and 24 years of age (IPPF, 2004). This is the same definition used by the World Health Organization (WHO, 2004). The young people in this age bracket have feelings, thoughts and experiences relating to their sexual identity, sexual behaviour and sexual organs. Sexuality about youths is about a lot more than having sexual intercourse. It is about the social rules, economic structures, and religious ideologies that surround physical expressions of intimacy and the relationships within which such intimacy takes place. As external factors have a profound influence on young people and their sexual behaviour throughout their lives, it is in the interest of young people themselves, as well as the public good, to create an environment that is supportive and inclusive of young people's sexuality.

Currently, the emotional, social and health needs of young people are not being fully met. Every year, at least 111 million new cases of curable sexually transmitted infections (STIs) and half of all new HIV infections occur among young people and up to 4.4 million girls aged 15–19 seek abortion – the majority of which are unsafe (UNFPA, 2002). Ten per cent of births worldwide are to adolescent mothers, who experience much higher rates of maternal mortality than older women (UNFPA, 2002).

Rates of reported sexual abuse in 19 countries range from 7–34 per cent for girls and 3–29 per cent for boys (Ezcurra, 2005). Every five minutes a young person commits suicide, often due to emotional and social problems related to sexual and reproductive health, such as sexual violence and the breakdown of relationships (Grimes, Benson, Singh, Romero, Ganatra, Okonofua and Shah, 2006). Young people face increasing pressures regarding sexual intercourse and sexuality including conflicting messages and norms. On the one hand sex is seen as negative and associated with guilt, fear and disease, but through the media and friends it is portrayed as positive and desirable. Such pressures may be perpetuated by a lack of accurate information, skills, and awareness of their rights and by gender expectations.

Young people may feel that they lack a voice in a debate which is about them, but rarely involves them, or that the reality of their lives and the development of their sexual

identities are not understood. This results in many young people being either unable or reluctant to seek help for family planning counselling when they need it in terms of reproductive health issues, and may prevent them from giving input within policy and decision making processes.

2.2 The Reproductive Health Concerns/Problems of Female Youths

The sexuality associated with puberty is often seen as the starting point from the transition from adolescence to adulthood. This period is laced with the awakening of the sexual response system, which although not new to the youths, may lead to pregnancy and other complications. The World Health Organization estimates that 84 million unwanted pregnancies occur annually worldwide (WHO, 2004). Averagely, 46 million abortions take place every year, out of which 20 million are performed under unsafe conditions (Grimes, Benson, Singh, Romero, Ganatra, Okonofua and Shah, 2006). Seventy thousand women die yearly as a consequence of unsafe abortion, while five million suffer permanent or temporary disability ((WHO. 2005). Approximately 13% of pregnancy-related mortality worldwide is due to unsafe abortions and the majority of these deaths and morbidity occur in low-and-middle income countries (Popov. 1991). An important proportion of maternal deaths worldwide are attributable to induced unsafe abortion: Asia (20–25%), Africa (30–50%) and Russia (25–30%) (Henshaw and Morrow, 1990).

Most societies have dealt with the problems of pre-marital sexual intercourse by strictly supervising young girls so that sexual activity does not begin until after marriage. In some parts of the world, especially in the rural areas, it has been observed that there is often considerable pressure on young women to bear children immediately after marriage. Also, a young woman often does not have any status in the society until she bears a son. In some instances, a girl may be required to prove that she is fertile for the desired marriage to take place, or once married, in order to avoid been abandoned and left destitute. Therefore, most primary societies have social and cultural factors that put a premium on early fertility.

Today, young people become physically matured at a considerably early age than previous generations. As part of the achievement of complete sexual identity, most teenagers engage in heterosexual experience and experimentation. This starts with early dating and attainment of psychological readiness for sexual intercourse and in fact engages in it prior to marriage. Early sexual debut and sexual violence are two factors that are heavily influenced by cultural sexual norms and that have been found to be associated with unintended adolescent pregnancy. These two factors are related to each other as well, with many studies

showing that early first sexual encounters at a young age are often forced (Dunkle, 2004; Jewkes, Koenig, Lutalo and Zablotska, 2005), but also that many girls who experience childhood sexual abuse (which may or may not be penetrative sexual intercourse) are more likely to experience first consensual sex earlier than their peers who do not experience childhood sexual abuse (Gupta and Ailawada, 2005; Patel and Andrew, 2001; Ellsberg, 2005). Early sexual debut is associated with being less likely to use contraceptives (Jewkes,Koenig, Lutalo, and Zablotska, 2005). Sexual coercion does not allow for the necessary negotiation of contraceptive use (Maman, Campbell, Sweat and Gielen, 2000)

There is also evidence that girls experiencing sexual abuse are more likely to engage in riskier sexual behaviors, including early sexual debut, than their peers (Ellsberg, 2005; Gupta and Ailawada, 2005). One explanation for this is psychological; the stigma/trauma associated with sexual abuse can diminish a girl's sense of self-worth and reduce her motivation to protect herself against pregnancy or disease. Also, rightly or wrongly, the experience of sexual violence leads the victim to believe that she has no power to negotiate sex and/or contraceptive use, even outside the initial experience of abuse (Finkelhor and Browne, 2005).

Less than 5% of the poorest young people worldwide use modern contraceptive methods (UNFPA, 2003). On average, younger women are more fertile than older women; about 10% of pregnancies each year occur among youths (Senanayake & Faulkner, 2003; UNICEF, 2002). UNFPA reports that 10-13% of young unmarried women around the world have unwanted pregnancies (UNFPA, 2003) and at least 2-4.4 million abortions occur among young women in developing countries each year (Treffers, Olukoya, Fergusson and Liljestrand, 2002).

Youths are less likely to have information about abortion or resources to access safe services and because of this, they more often use unsafe methods when they try to self-induce an abortion, for example, by inserting objects into the vagina or uterus, using drugs or other toxic substances, or self-inflicting bodily harm to induce miscarriage (Ahman and Shah, 2009). They also seek out unqualified providers and have abortions in unhygienic circumstances. Youths may more often delay seeking care for abortion-related complications due to lack of transportation, lack of knowledge about where post-abortion care can be obtained, fears of censure from their parents and health-care providers, fear of legal repercussions, or lack of money to pay for services.

Studies have found a delay of about one year on average between starting sexual activities and first use of modern contraceptives (Airhihenbuwa, 2008) Many unplanned

pregnancies occur within a year after first sexual intercourse (Zabin and Kiragu, 2005.) Young people in general are not experienced in using contraception, and those of them who do initiate a family planning method often do not plan in advance or lack the skills or motivation to use it correctly and consistently.

Moreover, studies showed that after a 15-year decline, the birth rate in the United States increased by 5% from 2005-2007 among adolescents who are 15 to 19 years of age. In 2007, the average birth rate was 42.5 per 1000 women in this age group (Martin, Ceken and Bygdeman. 2009). The birth rate was highest among black and Hispanic teens. Nearly two thirds of young mothers reported that their pregnancies were unintended (Chandra, 2005). This increase in teen birth rates has occurred despite a 16% decrease, from 1991 to 2007, in the number of high school students who reported engaging in sexual activity according to the Centres for Disease Control and Prevention's Youth Risk Behavior Surveillance System.

Teen sexual activity, pregnancy, and childbearing are associated with substantial social, economic, and health costs. Pregnant youths have a higher preterm birth rate, and their babies have higher infant mortality rates (Ventura et al. 2001). Mothers aged 19 years or younger are more likely to drop out of high school and to remain single parents (Hoffman, 2008). In a study on "Kids having kids: Economic Costs and Social Consequences of Teens" it was found that 1 in 4 (26%) sexually active female adolescents in the United States have had at least 1 STI (Hoffman, 2008). Even among adolescent girls who report having only a single lifetime sexual partner, 1 in 5 has been diagnosed with an STI (Centre for Disease Control and Prevention, 2010).

The increase in birth rates among youths, unintended pregnancies, and frequency of STIs needs immediate attention. All individuals who choose to be sexually active, regardless of age, should have access to safe and effective contraceptive methods. Promoting availability and use of effective contraception is a public health imperative (Ventura , 2001).

2.3 Pregnancy and Related Complications

Worldwide, rates of teenage pregnancy range from 143 per 1000 in some sub-Saharan African countries to 29 per 1000 in South Korea (Treffers, Olukoya, Ferguson and Liljestrand 2002). The "Save the Children" foundation found that, annually, 13 million children are born to women under age 20 worldwide and more than 90% in developing countries (UNICEF, 2001). Complications of pregnancy and childbirth are the leading cause of mortality among adolescent between the ages of 15 and 19 in developing countries (Mayor, 2004). The highest rate of teenage pregnancy in the world is in sub-Saharan African where women tend to marry

at an early age (Treffers, Olukoya, Fergoson and Liljestrand, 2002). In the Republic of Niger, for example, 87% of women surveyed were married and 53% had given birth to a child before the age of 18 (Locoh, 2000).

In the Asian continent, early marriage sometimes means adolescent pregnancy, particularly in rural areas where the rate is much higher than it is in urbanized areas. The rate of early marriage and pregnancy has decreased sharply in Indonesia and Malaysia, although it remains relatively high in the former. In the industrialized Asian nations such as South Korea and Singapore, teenage birth rates are among the lowest in the world (Mehta, Suman, Groenen, Rietand Roque, 2006).

Pregnancy is another effect of youth's sexual activities. Pregnancy at this stage, particularly in the younger age group is associated with greater mortality and morbidity among mothers and offspring. Young people's mortality is compounded with less access to ante natal care than older women. Overall, 23% of women age 15–19 are already mothers or are pregnant with their first child (NDHS, 2008). Teenage childbearing is highest in the North West zone of Nigeria (45%) and lowest in the South East zone (8%) of the same country. Women with no education are much more likely to have begun childbearing before age 20 than women with secondary or higher education -55% compared with 3% (NDHS, 2008). Teenage childbearing also decreases with increasing household wealth. Forty-six per cent of women age 15–19 in the poorest households have begun childbearing compared with 5% of women age 15–19 in the wealthiest households (NDHS, 2008). Young women who have not reached full physical and psychological maturity are almost as three times as likely to die from complications of childbirth as older women. Some of the complications include hypertensive disorders, eclampsia, obstructed labour, death of the mother and baby. Furthermore, vesico-vaginal and recto vaginal fistulae may follow obstructed labour (NDHS, 2008).

The adverse effects of early child bearing on the mother are matched by disadvantage for her baby. Babies of mothers that are youths have lower chances of survival. Currently ,75 children per 1,000 live births die before their first birthday -40 per 1,000 before the age of one month and 35 per 1,000 between one and twelve months (NDHS,2008). These figures are indicative of poor health status and seriously underlining the inefficient health system, health screening and reproductive health services in Nigeria. Specifically, the high neonatal mortality of babies may be attributable to complications, which require medical attention at

birth. Some of these complications include low birth weights of babies born to youths who are twenty years and below (NDHS, 2008).

Moreover, the outcome of unwanted pregnancy may be termination of pregnancy, perinatal death or becoming an adolescent mother. The proportion of youths who seek abortion rather than continuing with unwanted pregnancy has been increasing. It has been estimated that 2-4.4 million abortions occur among youths in developing countries each year (Treffers, Olukoya, Fergusson and Liljestrand, 2002). This is due to the fact that they are less likely to have information about abortion or resources to access safe services and more often, they use unsafe methods when they try to self-induce an abortion, for example, by inserting objects into the vagina or uterus, using drugs or other toxic substances, or self-inflicting bodily harm to induce miscarriage. Also, they seek out for unqualified providers and have abortions in unhygienic circumstances (Treffers, Olukoya, Fergusson and Liljestrand,, 2002). Youths may often delay seeking care for abortion-related complications due to lack of transportation, lack of knowledge about where post-abortion care can be obtained, fears of censure from their parents and health-care providers, fear of legal repercussions, or lack of money to pay for services (Treffers, Olukoya, Fergusson and Liljestrand,, 2002).

Women of young age, nulliparity and low socioeconomic status are at an increased risk of suffering morbidity and mortality due to unsafe abortion in comparison to other women. In Nigeria, where induced abortion is highly restricted by law, youths have the highest risks of suffering serious complications from unsafe abortions. Among women admitted to hospital for treatment of unsafe abortion complications, those aged under 20 years account for 38-68% of cases in many developing countries (Olukoya, Kaya, Ferguson and AbouZah, 2001). These complications include cervical or vaginal lacerations, sepsis, haemorrhage, bowel or uterine perforation, tetanus, pelvic infections or abscesses, chronic pelvic inflammatory disease and secondary infertility. If left untreated, most of these complications can result to sterility, structural damages to the reproductive organs or death (Olukoya, Kaya, Ferguson and AbouZah, 2001). The Society of Gynaecologists and Obstetricians of Nigeria estimates that about 10,000 (50%) of the Nigerian women who die from unsafe abortions each year are adolescents and abortion complications are responsible for 72% of all deaths among teenagers below the age of 19 years (Raufu, 2002).

Apart from all these, young mothers are more likely to come from poor background and have low educational attainment. This situation is compounded with the likelihood of being single, and depriving the child of a father. These youths are not economically self-

reliant and lack affordable childcare for their babies. Also, the lack of competence at parenting (shown in negligence, less responsiveness and communication and authoritarian attitude) spells long time disaster for the child. The problems of adjustment to parenthood infer negative long term outcomes on the care of the child, especially at the infancy period. Whether a woman is married or not, having a child at a young age severely limits her education and employment prospects. Too early child bearing is a major impediment to improving the status of women in the developing world.

Less than 5% of the poorest young people worldwide use modern contraceptive methods (UNFPA, 2003). On average, younger women are more fertile than older women (Nevada State Health Division, 2001), and about 10% of pregnancies each year occur among teenagers (Senanayake and Faulkner, 2003; UNICEF, 2001). The worldwide average rate of births per 1000 young women aged 15-19 years is 65, with average rates of 25 in Europe, 56 in the Middle East and North Africa, 59 in Central Asia, 78 in Latin America, and 143 in Sub-Saharan Africa (Treffers, Olukoya, Fergusson and Liljestrand, 2001).

Approximately there are 211 million global pregnancies annually, out of these, 87 million are unintended, and almost 46 million end up in miscarriage or induced abortion (International Planned Parenthood Federation, 2006). Also, out of the 46 million women who choose to have abortion each year, more than 76 per cent are from the developing countries. In addition, an estimated 19 million women and girls who had unintended and unwanted pregnancies face the deadly consequence of unsafe abortion (IPPF, 2006). Eighty percent of teen pregnancies are unintended, and each year, one in nine young women aged 15-19 years become pregnant and more than half become mothers. Widespread emergency contraceptives use could prevent an estimated 1.7 million unintended pregnancies and 800,000 abortions each year (IPPF, 1998).

In a study of 15 West African countries, it was discovered that those with the highest contraceptive prevalence had the lowest maternal mortality rates and vice versa (IPPF, 2004). A study by Department for International Development (DFID, 2004) also strengthen the fact that accessible and effective family planning services may avert up to 35% of maternal deaths and help in achieving the Millennium Development Goals (MDGs) especially the goal of improving maternal health and reducing maternal mortality.

Nigeria with a currently estimated population of 138.3 million people (NDHS, 2008) and an annual growth rate of 2.8%, faces the persisting challenge of high fertility, high rates of unwanted pregnancies, unsafe abortion, maternal mortality and unmet need for

contraception (Orji and Onwudiegwu, 2002).The total fertility rate in Nigerian women is an average of 5.7 children per woman and this ranges from 4.7 to 6.3 children in urban areas and rural areas respectively (NDHS, 2008). The fertility rate varies by zones with the highest rate in North West Zone - 7.3 children. Also, it varies with mother's education and economic status. The poorest women have almost twice as many children as women who are wealthy (7.1 versus 4.0 children per women).

2.4 Implications of pregnancy complications

Given that youths comprise a little over half the population of Nigeria and other developing countries, this means that a growing number of young people will be at risk of early childbearing every year without the use of contraceptives. In an age of globalisation, it stands to reason, that so far as the absolute number of births to youths in Nigeria and other developing countries continue to increase, the problem has global dimensions. There is, therefore, need to support a global effort to reduce youths fertility rate and the associated problems of teenage motherhood (Jejeebhoy, 2004).

Women under 20 years are at greater risk of pregnancy related complications and are more likely to die during childbirth than older women (Grote, 2009). Pregnancy related complications are the leading causes of death among youths while babies born to them have high morbidity and higher mortality rates than children born to older women (Grote, 2009). The social consequences of teen births include compromised future education and employment (Jejeebhoy, 2004). In addition to this, the issue of sexually transmitted infections, particularly HIV/AIDS, adds increased urgency to addressing youths reproductive health issues (Jejeebhoy, 2004).

2.5 Emergency Contraceptive

Emergency contraceptives are pills which are used by women within 72 hours after unprotected sexual intercourse to prevent pregnancy (Ellerson, 1996). The purpose of usage of emergency contraceptives is to prevent unplanned pregnancies and decrease the emotional costs of unintended pregnancies. It is sometimes referred to as the 'morning after pills' which is a form of birth control a pre-packaged dose of pills containing the hormone progestin, the same hormone found in oral contraceptives. It is not to be used as an ongoing method of birth control, but rather to be used when other contraceptives have failed. It is to be used in such cases as broken condoms, a dislodged or forgotten diaphragm or a series of forgotten

birth control pills or episodes of forced sexual intercourse such as rape or in cases of incest (Kaiser Family Foundation, 2005).

Surveys among university and post-secondary students in several African countries discovered that while a quarter to three quarters of youths had heard of emergency contraceptives, accurate knowledge about its use was minimal. Also in another Nigeria study, 75% of students surveyed were aware of the method, but only 12% knew that the first dose of emergency contraceptive pills should be taken within 72 hours of unprotected sexual intercourse (Arowojolu and Adekunle 2000). A 1997 survey of women in South Western Nigeria showed that at least 27.0% of women had ever been pregnant when they did not want to be. Similarly, in another survey in South Western and Northern Nigeria in mid-1990s, 20% of women reported ever having an unwanted pregnancy (Oye-Adeniran, Adewole, Umoh, Oladokun and Gbadegesin, 2006). It has also been estimated that about 12% of all pregnancies in Nigeria end in induced abortion and another 9% result in unplanned births.

It is of utmost importance that youths are aware of emergency contraceptives especially now that there is a high rate of unwanted pregnancy leading to procurement of unsafe abortions which increases maternal mortality rate. To understand how emergency contraceptives work; you should know what happens during reproduction. The reproduction process thus go this way: woman has two ovaries, one on each side of the uterus. Each month, one of the ovaries releases an egg into a fallopian tube. This is called ovulation. It typically occurs about 12–14 days before the start of the menstrual period. A woman can get pregnant if she has sexual intercourse around the time of ovulation. During sexual intercourse, the man ejaculates sperm into the vagina. The sperm travel up through the cervix and into the fallopian tubes. If a sperm meets an egg in the fallopian tube, fertilization (union of egg and sperm) can occur. The fertilized egg moves down the fallopian tube to the uterus. It then attaches to the uterus and grows into a fetus. Therefore, the way emergency contraceptives work is to inhibit ovulation thereby altering the menstrual cycle and irritating the lining of the uterus in order not to allow the fertilized egg to stay within it (Gemzell-Danielsson and Marions, 2004).

2.5.1 History of Emergency Contraceptive

The roots of modern emergency contraceptives date back to the 1920s, when researchers initially demonstrated that oestrogenic ovarian extracts interfere with pregnancy in mammals. Veterinaries were the first to apply these finding, administering oestrogens to

dogs and to horses that had mated when their owners had oot wanted them to. Despite scattered reports of clinical use of postcoital oestrogens in humans as early as the 1940s (Ellertson, 1996), the first documented case was not published until the mid- 1960s. This was when physicians in the Netherlands applied the veterinary practice of postcoital oestrogen administration to a 13- year – old girl who had been raped at mid-cycle (Ellertson, 1996). At around the same time, U.S researchers were investigating the efficacy of high dose oestrogens, and toward the end of the decade, these preparation became the standard (Ellertson, 2000).

In the early 1970s, the high dose oestrogen regimens gave way to a combined oestrogen – progestin standard. Canadian physician, Albert Yuzpe and his colleagues began studies in 1972 on this combined regimen. This was guided by their observation that a single dose of 100mg of oestrogen coupled with 1.0mg of the progestin induces endometrial changes that are incompatible with implantation (Ellertson, 1996) The "Yuzpe method" as it came to be known, replaced high dose oestrogen formulations because it offered a lower incidence of side effects. Also, it was due to the fact that the commonly used diethylstilbestrol was linked to vaginal cancer in the daughters of women who had taken it to prevent miscarriages (Ellertson, 1996).

Research on regimens that omitted oestrogen also began in the early 1970s, predominately in Latin America. A 1973 report described the results of a large scale trial investigating five doses of levonorgestrel ranging from 150mcg to 400mcg per tablet (Ellertson, 1996). The regimen was tested as an ongoing post – coital method, rather than an emergency formulation. Participants in the trial were instructed to take a tablet as soon as possible, but within three hours after intercourse and could use the method as often as necessary. The results of this research showed that the lower does were not efficacious and caused some menstrual disruption chiefly, a shortening of the cycle (Weiss and Friedman, 2007). This marked the first major venture into ongoing post – coital contraception and laid the ground for the levonorgestrel methods that is easily available in developing countries and Eastern Europe.

The late 1970s brought about the chief non-hormonal method available today- the copper releasing IUD. This device causes endometrial changes that inhibit implantation and the copper released appear to be directly embryotoxic. In addition to these methods mentioned, there are two other new methods which have been investigated. They are danazol and mifespristone. Danazol is a synthetic progestin and anti-gonadotrophin which was first

used as an emergency contraceptive in the early 1980s. On the other hand, mifepristone, more commonly known as RU-486, is potent anti-progesterone which is registered in four countries as an abortifacient (Gemzell-Danielsson, Kristina and Cameron 2011). Unlike oral contraceptives, these new methods have not been approved for daily use contraception and are expensive, and as a result might not be easily adoptable in developing countries.

2.5.2 Types of Emergency Contraceptive

Yuzpe method

The Yuzpe method is the best-studied method of oral postcoital contraceptives (Yuzpe Thurlow, Ramzy and Leyshon, 1993). Although the exact treatment varies widely in developing countries (Durham, 1994), the regimen typically used in North America and Europe consists of 200 mg of ethinyl estradiol and 1.0 mg of levonorgestrel. Half the dose is taken within 72 hours after unprotected intercourse, and the other half is taken 12 hours later. One reason for the popularity of the Yuzpe method is that the hormones it uses are the active ingredients found in several brands of ordinary combined oral contraceptives.

The brand marketed as Ovral in the United States and Canada, for example, contains 50 mg of ethinyl estradiol and 0.25 mg of levonorgestrel per tablet; therefore, four Ovral tablets (the dosage Yuzpe and his colleagues used after their original pilot study) constitute the complete regimen. Several other brands of combined oral contraceptives contain the same hormones needed for the Yuzpe method, but in lower doses (Trussel and Stewart, 1996). The women using these brands therefore have to take a greater number of pills; for example, women in the United States can use the brands Nordette, Levlen and Lo/Ovral for the Yuzpe method if they simply double the number of tablets of these lower dose oral contraceptives. (In other words, they would take four pills for each half of the regimen.) A number of triphasic oral contraceptive formulations also contain the hormones needed for the Yuzpe method. For example, eight of the yellow tablets (corresponding to cycle days 12-21) of Triphasil or Tri-Levlen constitute the complete regimen.

In the United States, no contraceptives are specifically marketed and packaged for emergency use. As a result, many clinicians simply cut up packages of oral contraceptives that contain the appropriate hormones (Grimes and Raymond, 2002). In several European countries, tablets equivalent to Ovral are available in four-pill strips labeled explicitly for emergency use. The brands are PC4 in Britain, Neo-primovlar in Finland and Tetragynon in

~~Switzerland.~~ Efficacy studies of the Yuzpe method have yielded greatly varying results, in part because the definition of efficacy is slightly different for a postcoital method than for a conventional method. In one approach, researchers observe women using emergency contraception in a given cycle, note the number of pregnancies that occur and divide that number by the number of women who took the drug. When studied in this fashion, the failure rate of the Yuzpe method ranges from about 0.2% to 2% (Van Look and von Hertzen, 1993). This rate is useful as it tells clinicians that of all women they treat with this therapy, 2% or fewer will likely experience pregnancy. However, these results do not account for the fact that some of the women would not have become pregnant even if they had not used the method under study.

Women do not generally use the Yuzpe method cycle after cycle. Instead, the method is used sporadically, typically at times when the probability of pregnancy is highest, such as following midcycle intercourse. Therefore, better studies of the method limit their scrutiny to women with regular cycles. For such women, an expected number of pregnancies can be estimated using published fertility tables if investigators record the cycle day of unprotected intercourse (or details about a woman's cycle, such as its usual length and the first day of the last menstrual period). From the 10 available studies that approached this optimal design (Trussell, 1992), it is possible to calculate a proportionate reduction in pregnancy associated with the use of the Yuzpe method. By comparing observed and expected pregnancies, investigators have demoostrated that the Yuzpe method reduces the chances of pregnancy by about 75% (Stewart, Harper, Ellerson, Grimes, Sawaya and Trussel, 1996). General medical consensus, however, is that the regimen has no contraindications (IPPF, 1994).

Despite the lack of evidence, some clinicians fear that the Yuzpe regimen may heighten the risk of fetal malformation if administered to a woman in early pregnancy. (A meta-analysis of the 12 available prospective studies failed to detect any statistically significant association between oral contraceptive use in early pregnancy and fetal malformation (Durham, 1994). To be most conservative, a clinician should talk with a woman before she begins the regimen to rule out the possibility of a preexisting pregnancy (i.e., one that resulted from an act of unprotected intercourse occurring more than 72 hours earlier).

Side effects of the Yuzpe method are the same as those commonly experienced with short-term use of combined oral contraceptives: nausea (including vomiting in about 20% of cases), headaches, breast tenderness, abdominal pain and dizziness. Nausea, by far the most

common of these, typically is reported by 50% of users (Stewart, Harper, Ellertson, Grimes, Sawaya and Trussel, 1996). Taking the tablets with food or with milk may lessen nausea, although whether such a practice inhibits absorption of the drug or renders it less effective remains to be investigated. Some clinicians also routinely give an antiemetics such as dimenhydrinate or cyclizine hydrochloride (Stewart, Harper, Ellertson, Grimes, Sawaya and Trussel, 1996).

Levonorgestrel

The levonorgestrel emergency contraceptive regimen consists of two doses of 0.75 mg of levonorgestrel taken 12 hours apart, starting within 48 hours after unprotected intercourse. Although progestins were among the first drugs used in postcoital contraception, few studies of the emergency levonorgestrel regimen have controlled for cycle day of unprotected intercourse (Ellertson, Webb and Blanchard, Briggs, Haskell, Shochet and Trussel, 2003).

The best and most recent of the levonorgestrel emergency contraceptive trials, conducted in Hong Kong (Ho and Kwan, 1993), indicates a failure rate of 2% and a proportionate reduction in pregnancy of 60%. The investigators randomly assigned women reporting for treatment within 48 hours after unprotected intercourse to receive either the Yuzpe or the levonorgestrel regimen. During the trial, 410 women used the latter. Investigators did not detect a statistically significant difference between the methods This trial is being replicated in a multinational study sponsored by the World Health Organization (Herzen, 1996). As noted previously, the levonorgestrel regimen has been studied as an ongoing or primary method of postcoital contraception. The Hungarian company, Gedeon Richter once marketed a strip of 10 pills containing 0.75 mg each for this use. Now the company markets a four-pill strip, to emphasize that the pills are intended for sporadic or emergency contraception.

The brand (Postinor) is advertised for women who have intercourse fewer than four times per month (Rodrigues, Grou and Joly, 2001). Like the Latin American Progestin-only formulations that paved its way, Postinor is meant to be taken within eight hours after unprotected intercourse when used as a primary postcoital method. Unlike commercial formulations of the Yuzpe method, Postinor is available in many developing countries and is even sold over the counter in some places (FDA, 2006). In addition, nine Chinese brands of "visiting pills" have been developed; eight of them involve a progestin, and some have consisted of levonorgestrel. A randomized, double-blind, multicenter trial was unable to

demonstrate a difference between one of these Chinese levonorgestrel formulations and Postinor (He, 2001).

Certain brands of progestin-only oral contraceptives can also be adapted for emergency use. The Ovrette brand, for example, contains 0.075 mg of dl-norgestrel, the equivalent of 0.0375 mg of levonorgestrel per tablet. Therefore, a total of 40 tablets make up the complete regimen (Rodrigues, Grou and Joly, 2001). Although such a regimen is impractical for most women, this option may be important for women with estrogen contraindications.

Mifepristone

Mifepristone, potent antiprogesterone, has been tested since the early 1980s for its abortifacient qualities (Hermann, 2012). More recently, in two studies evaluating mifepristone as an emergency contraceptive, the regimen consisted of 600 mg of the drug taken in a single dose within 72 hours after unprotected intercourse. No pregnancies were observed among mifepristone users in either trial, despite a combined enrollment of nearly 600 women. The side effect profile of mifepristone was also generally superior to that of the Yuzpe regimen, although menstrual disturbances appeared more commonly than with the Yuzpe method.

Lower doses of mifepristone may also be effective, and the time limit in which the therapy may be used could extend beyond 72 hours. The 600 mg dose is the same dose currently used as part of the medical abortion regimen provided in France (Peyron, 2003). The World Health Organization is investigating the efficacy of mifepristone in much smaller doses (50 mg and 10 mg). If proven safe and effective, a smaller dose (e.g., 10 mg or 1 mg) could be more palatable politically in countries where abortion is restricted, insofar as it might allay fears that women will hoard pills to use for medical induced abortion (von Henzen and Van Look, 2006).

Other methods

High-dose estrogens

Postcoital treatment with high-dose estrogens (the standard regimen wherever ~~emergency~~ contraception was offered during the 1960s and early 1970s) is at least as effective as the Yuzpe method, but produces more side effects (Camp, 2004). These regimens must be initiated within 72 hours after unprotected intercourse and are administered in two daily doses for five days. Each dose (2.5 mg of ethinyl estradiol, 10 mg of esterified or conjugated estrogens, or 5 mg of estrone) is equivalent to 25 mg of diethylstilbestrol (DES).

One example of a high-dose estrogen still prescribed as an emergency contraceptive is Lynoral, marketed and used in family planning programs in the Netherlands (Camp, 2004).

Danazol

The synthetic progestin and androgen danazol (marketed in the United States as Danocrine) can be used as an emergency contraceptive. The danazol regimen consists of two doses of 400 mg each, taken 12 hours apart. Regimens, involving three doses of 400 mg each, taken at 12-hour intervals, and two doses of 600 mg each, taken 12 hours apart, have also been investigated (Zullani, Colombo and Molla, 2009). Danazol's advantages are that its side effects are less prevalent and less severe than those associated with the Yuzpe method, and that it can be taken by women with contraindications to combined pills or estrogen. However, relatively little information is available about the regimen. Of the two most thorough trials of the regimen, one concluded that the method is effective, while the other concluded that danazol does not work (Webb, Russell and Eisten, 2002).

Copper IUD

A meta-analysis of 20 studies of the postcoital insertion of a copper IUD reveals that the failure rate of this approach is probably no higher than 0.1% (Trussell, Ellertson and Rodrigues, 1995). The IUD offers the additional advantage of providing up to 10 years of contraceptive protection. The service delivery challenges raised by the method, however, may be severe, particularly in some developing countries. In addition, the method is contraindicated for women at risk of sexually transmitted diseases who frequently are the same women who need emergency contraception (Hatcher, 1994).

2.5.3 Mode of Action, Benefits and Side Effects of ECPs

One important area of ECPs that has not been fully understood is its mode of action. Many researchers had dealt with this but no definite conclusion has been arrived at. This is because the mode of action of ECPs is a function of the period a woman takes it. For example, if it is taken prior to ovulation, it inhibits ovulation, if it is taken during ovulation, then it can prevent a fertilized egg from implanting in the uterus (Farrel, 1997; Trussell and Raymond, 1999). At the same time, some people thought that ECPs may prevent ovulation in the beginning of the cycle the way the oral contraceptives do or may possibly delay ovulation (Rodrigues and Grou, 1994). Research also showed that ECPs work by delaying or

preventing the release of an egg from the ovary, thereby preventing fertilization (Fundes, 2004). Therefore, ECPs can be summarized to have three possible ways in which it can work:

1. Ovulation is inhibited, meaning the egg will not be released.
2. The normal menstrual cycle is altered, delaying ovulation.

The above two reactions of ECPs will result in the woman not getting pregnant.

3. Lastly, it can irritate the lining of the uterus so that if the first and second actions fail, and the woman does become pregnant, the fetus will die before he or she can actually attach to the lining of the uterus.

According to the Planned Parenthood and the Reproductive Health Technologies Project (2002), ECPs, if taken within the first 72 hours of unprotected intercourse, emergency contraceptive pills are 75-89% effective in reducing the risk of pregnancy (von Hertzen, Piaggio and Ding, 2002). The effectiveness rate of 75% does not mean a 25% failure rate. Instead, when considering one hundred women who have had unprotected intercourse during the middle two weeks of their cycle, about eight became pregnant. If those eight had used emergency contraception, only two would have become pregnant (Pathfinders International, 2003). If all the one hundred women use progestin-only ECPs, only one is likely to become pregnant but if all the one hundred women use combined oral contraceptives as ECPs, only two are likely to become pregnant (Population Council, 2000).

Emergency contraceptives work best when used as soon as possible after unprotected sexual intercourse. Planned Parenthood cites emergency IUD insertion as being 99.9% effective (von Hertzen and Van Look, 2006). Moreover, an emergency contraceptive is a safe form of backup birth control if ones birth control fails or if one has unprotected sexual intercourse. It is used after intercourse, before Pregnancy occurs. After use, fertility returns to normal unless a form of birth control is continued.

In addition to this, a research report on effectiveness of ECPs between 72 and 120 hours after unprotected sexual intercourse confirms that if emergency contraceptives are taken within 72 hours of sexual intercourse, it reduces the likelihood of pregnancy by 81%-90% (Rodrigues, 2002). While delaying the first dose by 12 hours from the time of unprotected sexual intercourse, the odds of pregnancy increases by almost 50% (Piaggio, 1999). Like other contraceptives, emergency contraceptives are not 100% safe. If they fail, however, the available research suggests that it will not harm the fetus or the course of pregnancy (Piaggio, 1999). No matter the rate of its effectiveness, it is not effective once the process of implantation has begun or when pregnancy has been established (Piaggio, 1999).

Every drug no matter its effectiveness and safety has its own side effects, so also does ECPs. According to the Food Drug Administration, ECPs are safe and effective (Federal Register, 1999). However, ECPs will not cause birth defects if a woman inadvertently takes them while pregnant (American College of Obstetrician and Gynaecologist, 2006).Common side effects of emergency contraceptive pills are similar to those of birth control pills. They include nausea, abdominal pain, fatigue, headache, and menstrual changes. Breast tenderness, fluid retention, and dizziness may also occur. All these side effects do not last more than 24 hours (Pathfinders International, 2003). Many of these symptoms may be less severe with progestin-only or intrauterine forms of emergency contraceptives. Serious risks include heart attack, blood clots, and strokes. Emergency contraception does not protect against sexually transmitted infections, nor does it treat existing infections.

2.5.4 Studies on Emergency Contraceptive

Half of all the pregnancies in the United States, which is over three million a year, are unintended (Ellertson, 2000). Presently, emergency contraceptives have been used by only 1% of American women. Over three million women are not using birth control and are at risk for unintended pregnancy (Ellertson, 2000). Between 1990 and 2003, the unintended birthrate rose from 20% to 40% according to new analysis from the New York based Guttmacher Institute and the Women's Health and Action Research centre in Benin City, Nigeria. In 2008, 23% of women aged 15-19 years were already mothers or were pregnant with their first baby (NDHS, 2008.) Seven out of ten women are knowledgeable about at least one modern method of contraception while 95% sexually active, unmarried women know a method compared to only 68% of currently married women. With this, there are still 20% married women with an unmet need for family planning (NDHS, 2008.)

In countries where emergency contraceptive services are given, its availability and use vary widely, this depends on factors such as regulations of and policies regarding the method, providers' and women's attitudes toward it, their understanding and the cost. In the United Kingdom and Netherlands today, the method is an accepted part of family planning practice and well known among health care providers and their clients. This is partly due to the fact that the method is included in the health insurance systems of these countries (Glassier, 2006). Another factor that is of consideration in terms of acceptability in Netherlands is the lack of moral debate concerning the method. The only concern is the side effects and efficacy which seems to engender controversy. Notwithstanding, this method of contraception is

acknowledged and accepted even for teenagers, for whom sexual activity is socially sanctioned. On the other hand, in Malaysia, where abortion is strictly regulated, emergency contraceptive methods are marketed legally, but family planning organizations shy away from offering them. In China post-coital methods have long been offered by the government family planning service. However, these methods have not been separated into those advocated for emergency use only and those recommended for on-going use

In Mexico and Nigeria, awareness of emergency contraceptives continues to be low among women and the public (Ebuchi, Ekanem, and Ebuchi, 2006). Researches on how to create knowledge on its use and publicizing the method is largely concentrated in European countries while many developing counties and some developed ones are yet to conduct any research on the topic. The Nigerian government National Family Planning guidelines follow those developed by the Planned Parenthood Federation of Nigeria which includes emergency contraceptives. Levonorgestrel- only pills (Postinor-2, a dedicated product) and combined oral contraceptives (Lo-femenal, a regular contraceptive that in high dose can be used for emergency contraception) are the most common products used in Nigeria. These can be obtained over the counter, from the patent medicine shops and pharmacies (Ebuchi, Ekanem, and Ebuchi, 2006).

2.6 Awareness of Emergency Contraceptives among youths

In a study in Cameroon on a survey on awareness and practice of ECPs among university students, the general level of awareness was 63.0% (418/664). Majority of the respondents got aware of ECPs through friends -69.6%, family members -19.9%, various health personnel- 10.5% and audio – visual media -10.5% (Kongnyuy, Ngasso, Fomulu, Wiysonye, Kouam and Doh, 2007). In addition to this, awareness among students of University of Buea (Cameroon) was 63%, university students in Kenya 39% and Ghana 43.2% but among students in U.S.A was 86% and Jamaica, 84% (Kongnyuy, Ngasso, Fomulu, Wiysonye, Kouam and Doh, 2007).

Moreover, in another study in Nepal, it was documented that ECPs could play a critical role in reducing unintended pregnancy but few people are aware of it (Adhikari, 2009). The study based on factors affecting awareness of ECPs among college students in Katmandu, Nepal, only about two-thirds of college students (68%) had ever heard about ECPs. Bivariate analysis shows that males were more aware (72%) of ECPs than were females (64%). Similarly, the awareness level was significantly higher among younger,

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In a study in Cameroon on a survey on awareness and practice of ECPs among university students, the general level of awareness was 63.0% (418/664). Majority of the respondents got aware of ECPs through friends -69.6%, family members -19.9%, various health personnel- 10.5% and audio – visual media -10.5% (Konghyuy, Ngassa, Fomulu, Wiysonye, Kouam and Doh, 2007). In addition to this, awareness among students of University of Buea (Cameroon) was 63%, university students in Kenya 39% and Ghana 43.2% but among students in U.S.A was 86% and Jamaica, 84% (Konghyuy, Ngassa, Fomulu, Wiysonye, Kouam and Doh, 2007).

Moreover, in another study in Nepal, it was documented that ECPs could play a crucial role in reducing unintended pregnancy but few people are aware of it (Adhikari, 2009). The study based on factors affecting awareness of ECPs among college students in Katmandu, Nepal, only about two-thirds of college students (68%) had ever heard about ECPs. Bivariate analysis shows that males were more aware (72%) of ECPs than were females (64%). Similarly, the awareness level was significantly higher among younger,

unmarried youth who were from outside Kathmandu Valley, who lived with friends, and who had received reproductive health (RH) education in school/college. The study also found that students' sex, permanent place of residence (district), and RH education are significant predictors of awareness of ECPs. Males are 1.5 times more likely to be aware of ECPs compared to females. Furthermore, students who lived in Kathmandu Valley were 81% less likely to be aware of ECPs than were students from outside Kathmandu Valley. On the other hand, those students who received reproductive health education in school/college were almost nine times more likely to be aware of ECPs compared to those who did not. The awareness of ECPs among college students in Kathmandu is 66%, which is higher than the level found among university students in Kenya -39% (Muia, Ellertson, Lukhando, Fluier, Clark and Olenja, 1999), Ghana -43% (Baiden, Awini and Clark, 2002) and Cameroon -63% (Kang and Moneyham,2007). On the other hand, it was very low compared to the university students, for example, in the USA (94%) and Jamaica -84% (Vahratian, Patel, Wolff and Xu, 2008).

Also, in another study on ECPs and fertility awareness among university students in Kampala, Uganda, there was evidence that awareness of ECPs among university students is low (Byamugisha, Mirembe, Faxelid and Gemzell-Danielsson, 2006). Less than half of the students had ever heard about ECPs. Other studies among female undergraduates have indicated that 58 and 61 percent had heard about ECPs at the university of Benin and three tertiary institutions in Eastern Nigeria respectively (Aziken, Okonta and Adedapo, 2003; Ikeme, Ezewul and Uzodiemma, 2005). In a study done among tertiary students in Durban South Africa 56.5 percent had heard of EC (Roberts, Moodley and Esterhuzen, 2004).

It was also documented that the awareness and use of ECPs amongst female undergraduates in Niger Delta region of Nigeria is low in a study carried out 9 (Akani, Enyindah and Babatunde, 2008). About 50.7% of 600 respondents were aware of emergency contraception, amongst which reports of friends/peers as the source of awareness ranked highest (33.55%). About 88.2% of those that are aware of Emergency Contraception knew the correct timing. More than half (57.9%) did not know correct dosage of the available post-coital pill. While half (50.7%) of those having knowledge of postcoital pills agree to the efficacy; only a third (35.53%) agreed to have actually used it (Akani, Enyindah, and Babatunde, 2008).

2.7 Knowledge of Emergency Contraceptives among youths

Among the documented studies that had been carried out on emergency contraceptives was a study in Philadelphia (2008) which is on assessing attitudes about emergency contraceptives among urban, minority adolescent girls (Mollen, Barg, Cotesik, and Schwarz, 2008): 53 per cent reported been sexually active and 17 per cent reported a history of pregnancy. Specific knowledge gaps exist about emergency contraceptive pills, including misconceptions about the recommended time frame for taking the medication. Intention to use emergency contraceptive pills was affected by the conflicting attitudes that the emergency contraceptive pills work faster than birth control pills and that those who used them are irresponsible. Family and friends are important influence and has uninformed but generally supportive opinions and youths have a perception of limited behavioral control because of their age and concerns about confidentiality.

In another study in Uganda. (Byamigisha, Mirembe, Faxelid and Danielssen, 2006) focus was made on emergency contraceptives and fertility awareness among university students in Kampala, Uganda. The objective was to determine knowledge of ever used and their attitudes toward emergency contraceptives among female first year university students in Kampala. It was reported that 41.5 per cent had ever heard about emergency contraceptives. The ever pregnancy rate was 3.4 per cent and 42 per cent was in a steady relationship for three or four months. Also, the ever used rate was 14.5 per cent, 42 per cent did not know the time interval within which emergency contraceptive pills can work and one third thought it would interrupt an ongoing pregnancy.

In a study done in Cameroon to evaluate the knowledge, attitudes and experiences on emergency contraceptive pills by the university students carried out among a convenient sample of 700 students of the University of Buea (Cameroon) showed that response rate was 94.9% (66) (Byamugisha, Mirembe, Faxelid and Gemzell-Danilsson, 2006). However, knowledge of the general features of emergency contraceptive pills was low and misinformation was high among these students. Knowledge differed according to the source of information; informal source was associated with misinformation, while medical and informational sources were associated with better knowledge. Although the students generally had positive attitudes regarding emergency contraceptive pills, up to 65.0% believed that emergency contraceptive pills were unsafe. Those with adequate knowledge generally showed favourable attitudes with regards to emergency contraceptive pills. Forty-

nine students (7.4%) had used emergency contraceptive pills themselves or had a partner who had used them.

In a cross-sectional survey to assess the knowledge, attitude and practice of emergency contraceptives among 774 female students at Addis Ababa University and Unity University College from January to September 2005 (Tamire and Enqueselassi, 2007), it was discovered that about 43.5% of the students said that they had knowledge about emergency contraceptives. When asked about specific types of emergency contraceptives, among those who have ever heard of it, 279 (82.8%) mentioned pills and 115 (34.1%) mentioned intrauterine devices (IUDs). About 53% of the students had positive attitude towards emergency contraceptives and only 4.9% respondents reported that they had used emergency contraceptive methods previously.

In a study in Nigeria on how to evaluate the knowledge and perception of female undergraduates in the Niger Delta towards emergency contraceptives (Akani, Enyindah and Babatunde, 2008), it was discovered that approximately 51% of 600 respondents had knowledge of it (33.5%) and friends\peers were reported as the main source of information. About 88.2% of those that had the knowledge knew the correct timing, approximately 58% did not know the correct dosage, 50.7% agree to the efficacy and 35.3% have actually used it.

In another cross sectional and questionnaire based study that assessed the knowledge and practice of emergency contraception among 600 undergraduate students selected from four tertiary institutions in Anambra State Southeast Nigeria, (Nworah, Mbamara, Ugboaja, Ogelle and Akabuike, 2009) 38.1% had knowledge of emergency contraception while only 8.5% of them had ever practiced it. Friends were the major source of information about emergency contraception (34.7%) followed by the media (20.6%). None of the respondents cited family planning clinic as their source of information on contraceptives. Postinor was the commonest emergency contraceptive mentioned by the students who knew about emergency contraceptives (45.0%) followed by oral contraceptive pills (33.3%).

Also, in another study by Aziken, Okonta and Adedapo, (2003) on knowledge and perception of emergency contraceptives among female Nigerian undergraduates in Lagos, 43% were sexually active, 39% had ever practiced contraception and 34% had ever had an induced abortion. Overall, 58% of respondents knew about emergency contraceptives. However, only 18% of respondents who reported knowing about it knew the correct time frame in which it must be used to be effective.

In addition to this, a survey of 584 randomly selected female undergraduates of Olabisi Onabanjo University, Ogun State, Nigeria (Oladapo, Sule-Odu, Daniel and Fakoya, 2005) was conducted over a two-month period to evaluate the knowledge, practice and perception of emergency contraceptives. Sixty two point eight percent of the students had experienced sexual intercourse. A total of 446 (76.4%) of the respondents had knowledge of emergency contraceptive pills but only 18.5% of the sexually experienced students had used it previously. The level of knowledge was poor among the younger respondents and those in the lower levels of study. Only 6.1% of the students who knew about postcoital pills identified the correct timing of administration for maximal efficacy. Most respondents cited friends/relations (54.5%) and mass media (23.7%) as their main sources of knowledge while 3.8% and 5.4% of the respondents knew about it through the Family Planning Clinic and the University Health Centre, respectively. Concerns about future fertility and encouragement of sexual misbehaviours were cited reasons for disapproval of increased advertisement of EC by 30.3% of the students.

Recently, available evidence suggests that various categories of women have poor and inadequate knowledge of emergency contraceptives throughout the country. This is possible due to inadequate information, lack of adequate counseling and public health education which in turn manifest in the lack of knowledge on its use. Recently, there has been no systematic effort by government agencies to promote the use of emergency contraceptive services in Nigeria (Aziken, Okonta and Adedapo, 2003). Although, it has always been available in public and private health institutions, they are often poorly advertised and few women have access to the services. Though, non- governmental organizations and funding agencies have tended to promote emergency contraceptives programs, their coverage is often limited, and the lack of assurance of sustained funding is also a major limitation. Thus, appropriate education is necessary especially for youths so as to fill the gap.

2.8 Prevalence of Emergency Contraceptive use among youths

Adolescent and young adult women are characteristically less consistent users of contraception (Glei, 1999), perceived higher barriers to accessing reproductive care, and are more likely to report having either sporadic sexual intercourse or one that is initiated under the influence of alcohol (Wight, Henderson and Raab, 2000) especially when first becoming sexually active (Donovan,2000). Postcoital emergency contraception pills (ECPs) are a safe

and effective compensatory method to prevent pregnancy following unprotected intercourse and are increasingly available to this group of women.

One study of United State ECP users reported that 16% had multiple unprotected sexual acts since their last period (Blanchard, Haskell and Ferden, 2002). The most common reasons cited for requesting ECPs are failure to use any contraceptive method, condom breakage, and missed oral contraceptive pills (Levine, 2006)

Women who used ECPs also differed from their peers at the time they seek ECPs with respect to established risk factors for adverse reproductive outcomes. Studies in different settings found ECP users were of younger ages, are unmarried, tend to use condoms as the primary contraceptive method, have had a higher number of sexual partners (Black, Mercer, Johnson and Wellings, 2006) live in urban areas and had initiated sexual intercourse at youngerages (Verhoeven, Peremans, Avonts and Van Royen, 2006)

In a cross-sectional descriptive study on knowledge, attitudes and practice about emergency contraception which was conducted among nurses and nursing students in Kenya (Gichangi, Karanja, Kigondu, Fonck and Temmerman, 1999), 2.6% spontaneously listed ECP as a contraceptive method, whereas 48% of the respondents had heard of ECP. Knowledge about the types of EC, applications, and side effects was poor and 59% of the respondents considered EC as an abortifacient.

In another study on knowledge, use and attitudes towards emergency contraceptive pills among swedish women requesting for induced abortion(Aneblom, Larsson, Odlind and Tyden, 2002), only 3.5% of all respondents had personally used ECP in the past and 23% of those familiar with it intend to use it in the future. One out of five, 22%, had previously used the emergency contraceptive pill, of whom 69% had used the method once and 23% twice. Three women had used it three times, and four women up to seven times. Teenagers were more frequent users than women over the age of twenty, 41% vs. 2.1%, with 10% among women 30 years or older.

In Nigeria, ECPs use among adolescents was low (Okonofua and Ilumoka, 1991).Studies from western and southern Nigeria have found rates of contraceptive use among sexually active adolescents of about 30% (Okpani and Okpani, 2000) considerably lower than the rates reported for developed countries. For example, prevalence of ECPs use among sexually active Danish adolescents was 95% (Arowojolu and Adekunle, 2000). As was the case in Kenya (Wieland, Boldsen and Knudsen, 2002) the low levels of contraceptive use among adolescents in Nigeria may reflect inadequate contraceptive knowledge and access, as well as

the spontaneity of adolescent sexual activities. They may also reflect the notion among youths that it is easier and safer to obtain an abortion than to practice contraception on a regular basis (Okonofua, 1999)

2.9. Conceptual Framework

The conceptual framework relevant to this study is the ecological model (Moore, 2003). The ecological model has to do with in-born traits of an individual and influence of significant others i.e. the family, friends and the society on the individual's behaviour.

2.9.1 Ecological Model: The ecological model has three dimensions: the individual and their behaviour, the physical environment and the social environment. These dimensions comprehensively address public health problems at five levels which are intrapersonal, interpersonal, institutional, community and policy levels

Intrapersonal level – These include knowledge, attitude and belief of youths on ECPs and associated health problems.

Knowledge – In this study, intrapersonal knowledge of the youths on emergency contraceptives include how it works, its side effects, dosage and effectiveness.

Attitude – This study includes the attitude of youths on the use of emergency contraceptives.

Belief – The study examined female youths' belief on using emergency contraceptives which include the observation that its use earlier in life may hinder conception when they marry eventually

Interpersonal level – Roles of the significant others– In respect to this study, the different roles played by the parents, immediate and extended family members and peers in using ECPs is examined and how these affect the lives of these youths in adopting emergency contraceptives.

Institutional level – The government policy on ECPs in relation to its availability, affordability and accessibility.

Community level – P This study relates how the community perceives the use of ECPs among youths

Policy level – Laws and policies on contraception in the country.

Fig 1: The ecological model (Moore, 2003)

CHAPTER THREE

METHODOLOGY

3.1 Research Design

The research was a descriptive cross-sectional survey designed to assess knowledge and use of emergency contraceptive among out-of-school female youths in Ido Local Government Area of Oyo State.

3.2 Description of the study area

Ido Local Government Area is one of the 774 Local Government Area recognized by the constitution of the Federal Republic of Nigeria (Oyo State website, 2010). It is one of the 33 Local Government Areas in Oyo State which was formerly called Akinyele West Local Government. It was created during the second Republic on the 24th of May, 1989 with its headquarters at Ido. It shares boundaries with Iseyin and Afijio Local Government Areas to the North, Akinyele Local Government Area to the East and Itesiwaju East Local Government Area to the West and Ogun State to the south. It has a landmass of 1,010.954 square kilometers with the 2010 estimated population of 117,129 using a growth rate of 3.2% from 2006 census (Oyo State website, 2010).

The leadership structure in the study area is hierarchical, with the Onido of Ido as the head. Each area under the community is divided into *Koas* which has different heads that oversee the affairs of the people in the area and report to the *Onido of Ido* (the traditional ruler). The residents of the Local Government Area are mostly farmers, others are traders, transporters and civil servants. They belong to the Yoruba ethnic group and other tribes such as Hausa and Igbo also stay in the community. The predominant occupation in the Local Government is farming due to the soil fertility in the area which enhances the production of maize, cocoa, oil palm, coconuts, cassava and vegetables.

Ido Local Government Area is a semi-urban community with eleven wards within it. In the Local Government, the population density areas were stratified into the high, medium and low density areas. The highly populated residential areas include Ido, Awotan, Polytechnic, Apete, Odebode and Nigeria National Petroleum Corporation. The medium density residential areas are Bafogun, Alapata, Oloje, Abudu, Elesin Dada, Agboopa, Eboda, Jagun and Olokiti and the low density areas are Alabi, Olowe, Idi-obi Akinale, Oko, Apena

and Oloro. Out of the 11 wards, four of them were randomly selected for the study. Those were 2, 4, 7 and 8 which has the type of population density areas described above. It comprises of Odebode,Oko, Abudu, Apete, Awolan, Oloro, NNPC, Dada, Ido, Olojede and Oloje.

3.3 Study population

The study population consisted of out-of-school female youths between the ages of 15 -24 years within Ido Local Government Area.

3.3.1 Inclusion criteria

The inclusion criteria were: female, aged 15-24 years, out-of-school, sexually active, had ever been pregnant, with or without live babies, in or out of a legal conjugal relation and may or may not reside in the same area with their spouse, parent or guardian.

3.3.2 Exclusion criteria

All male youths and in-school female youths within the community were excluded from the study.

3.4 Sample size

The sample size for this study was calculated using the Leslie and Kish formula (1965) below. The prevalence for this study (72%) was arrived at based on the research work done on 'knowledge and use of contraceptives among adolescent mothers in Egbeda local Government area, Oyo State' in which there were more users among adolescent mothers with one child than those with more children (Onyekekwe 2001).

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

Where n = sample size

Z = confidence level which is 1.96

p = 72% or 0.72

$Q = 1 - 0.72 = 0.28$

Therefore n= $\frac{1.96^2 \times 0.72 \times 0.28}{0.05^2}$

= 309

This was rounded up to 400 in order to take care of attrition.

3.5 Sampling procedure

A four-stage sampling technique was used to select the out-of-school female youths surveyed. Ido Local Government is made up of 11 wards. A ward is an administrative or electoral division of a town. Each ward is made up of villages/districts.

The four stage sampling method used for selecting the study respondents consist of:

Stage 1: The eleven wards in the LGA were stratified into high, medium and low density areas in the ratio of 1:2:1.

Stage 2: Four wards were then randomly selected by balloting from the three density areas:

ward 2- low density area, consisting of 15 villages

ward 4- high density area, consisting of 12 villages

ward 7- medium density area, consisting of 25 villages

ward 8- medium density area, consisting of 20 villages

Stage 3: Three villages were selected from each of the four wards through balloting system.

They are:

1. Ward 2- Odebode, Oko and Abudu.
2. Ward 4- Apete, Aromi and Awolan
3. Ward 7- Apena, Oloro and NNPC.
4. Ward 8- Ido, Olojede and Oloje

Stage 4: Any out-of-school female youths in the age category of 15-24 years that were available and consented to participate in the study based on the sample size were selected.

3.6 Data collection instrument

The data for the study was collected using both qualitative and quantitative methods. Pre-tested focus group discussion guide and interviewer administered questionnaire were used to collect qualitative and quantitative data.

The focus group discussion guide contained questions on knowledge of ECPs and its use. The interviewer administered questionnaire had five sections which addressed the objectives of the study. The sections are:

a. Socio-demographic data- this include the personal data of the respondents. These are the age as at last birthday, the religious affiliation, ethnicity, marital status and number of children. Also, information on the occupation of the respondents was collected as well as level of education.

b. Reproductive and sexual history--information was collected from the respondents to know the number of pregnancies carried by them if there are any, the number of miscarriages or abortions which is in line with the characteristics of the youths for the study.

c. Awareness and knowledge on emergency contraceptives- information on the level of awareness and knowledge of the youths on ECPs was also collected.

d. Practice of emergency contraceptives- the number of youths using ECPs as at the time of data collection and those that will want to continue using it.

e. Attitudes influencing the use of emergency contraceptives- the attitudes of the respondents and the significant others on the use of ECPs.

3.7 Validity of the Instrument

In order to ensure the validity of the instrument, group of items which are representative of the content of the traits to be measured was included in the instrument. This includes the socio-demographic information, reproductive and sexual history, knowledge and usage of emergency contraceptives as well as factors that could affect its use. The FGD result was also used to modify the final draft of the questionnaire. Both the qualitative and quantitative instruments were written in English language and translated to Yoruba language to ensure that the questions are asking what they are expected to.

Also, the validity of the content of the quantitative instrument was strengthened through review of literature and supportive information obtained during the focus group discussion. Furthermore, it was reviewed extensively by the researcher's supervisor and other lecturers in the department of Health Promotion and Education so as to provide face validity of the instrument.

3.8 Reliability of the instrument

The reliability of the instrument was conducted using forty female youths in Akinyele Local Government Area. The instrument was given to them twice at a week interval apart. The two sets of responses were correlated and the Alpha (Cronbach) result was 0.617

3.9 Data collection procedure

Two focus group discussions were conducted among the target population for two days (one per day) in Akinyele Local Government Area before the survey. The Local Government Area was chosen because it has similar characteristics with the chosen survey area. The first one was among youths whose age was between 15-19 years and the second one with those aged between 20-24 years. The researcher paid advocacy visits to the identified villages prior to the procedure so as to identify key informants who will be able to identify the discussants. A central place was chosen as the meeting place for the two groups on both days and permission was taken to record the discussion on tape so as not to lose important information. Each focus group discussion lasted two hours and refreshments were served. These data were used to modify the questionnaire.

The quantitative instrument for data collection was a questionnaire with open and close ended questions on, 'Knowledge and use of emergency contraceptives' which was interviewer administered. Four female research assistants who can speak Yoruba language fluently were hired and trained to collect data from respondents. The researcher was physically present within the Local Government Area assisting where there were difficulties and supervised the data collection process.

3.10 Data management and analysis

After the data collection exercise was over, the self-administered copies of the questionnaire were collated and edited by the researcher with the help of the research assistants. The data were checked for completeness. Serial numbers were given to the questionnaires for easy identification and they were stored in a safe place from destruction by water or fire. During data cleaning, twenty three records were eliminated because of missing data; leaving 377 copies of the questionnaire were usable for analysis.

Thereafter, a coding guide was developed after careful review of the responses. The questionnaires were hand-coded by the researcher. A template was then designed on the Statistical Package for Social Sciences (SPSS) software for entering of the coded data. Data

on each questionnaire was entered into the computer using the SPSS software and this was used to generate frequency data, tables and to perform cross tabulation of variables. Descriptive statistics and Chi square were used to test for association between categorical variables and the level of statistical significance was set at $p = 0.05$.

The focus group discussion was manually recorded and tape recorded. This was then transcribed, organized and summarized. Analysis of the content was done to look for trends and patterns that reappear within each group which was thereafter noted. Also, comparisons were made between the different responses from the two groups and these responses were put together and then compared with contrasting ones. The findings from these were used to support or refute findings from the quantitative survey results.

3.11 Ethical considerations

Approval for the study was given by both the Oyo State Ethical Review Committee and UI/UCH Ethical Review Committee. The study followed the standard ethical principles guiding the use of human participants in research. The principles are:

Respect for persons: Entry into the Local Government Area was done through letter of introduction from the Department of Health Promotion and Education, University of Ibadan. Verbal informed consent was given by the respondents, respondents' spouse (for those who are married) and parent/guardian (for single and unmarried respondents) in order to respect the rights of the study participants to participate or not (see Appendix 4). The instrument was adequately translated into Yoruba language in order for the research assistants to understand the questions and ask respondents appropriately.

Confidentiality: Respondents' confidentiality was ensured by appropriate training of research assistants, adequate field supervision by the researcher and supervisor, limited access by research assistants to completed questionnaires and there were no individual identifiers in the recorded data as well as in the questionnaire.

Non-maleficence: The respondents were assured of no risks involved in answering the questions as they are for research purpose only. To ensure integrity of the study, interview was conducted with each respondent in a private place.

Voluntariness: The respondents were given the choice to withdraw from the research if they so wish at any point during the research.

Beneficence: The respondents were informed that they would have an indirect benefit from the research. This is in the sense that the information obtained from the study will help to

provide suggestions on how to design and implement appropriate health education strategies so as to provide adequate information to youths on ECPs

3.12 Limitations

The design of this study was to obtain information from respondents on their knowledge, awareness and use of emergency contraceptives using questionnaire. The information requested was personal and viewed by them as an intrusion into their privacy. This limitation was addressed by assuring the participants that their responses would be kept confidential and the researcher took her time to establish rapport with the participants and also entertained questions to seek for clarification before the commencement of the interview. Secondly, there was no means of verifying the responses of the respondents. Hence, the study relied on their voluntariness in responding to the questions, legitimacy of the interviews within the household of the respondents and assurance of privacy and confidentiality.

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CHAPTER FOUR

RESULTS

4.1 Socio-demographic characteristics of respondents

A total of 377 questionnaires were analyzed. Most of the respondents 255 (67.6%) fall within the 20-24 years age group followed by the 15-19 years age group 122 (32.4%). The overall mean age was 20.7 ± 1.1. The major religious affiliation among the respondents was the Islamic religion 198 (52.5%) and majority of the respondents are Yoruba (see table 4).1.One hundred and forty three (37.9%) of the respondents are married as at the time of the study, 110 (29.2%) are single, 90 (23.9%) are co-habiting with their partners, 25 (6.6%) are separated and 9 (2.4%) are divorced. Among the respondents, 249 of them had more than one child and 128 had no child (see table 4.1). Also, 111 (29.5%) of the respondents had one form of education (see table 4.1).

The predominant occupation was trading 275 (72.9%) followed by artisans 68 (18.0%) and farming 34 (9.0%). Two hundred and thirty one respondents (61.3%) were staying with their husbands, 5 (1.3%) with their parents-in-law, 97 (25.7%) stays with their parents, 3 (0.8%) in the apartment rented by their boyfriends. 1 (0.3%) stays with a friend, 13 (3.4%) stays alone while the others 27 (7.2%) stay in other places.

Table 4.1: Socio-demographic characteristics of the respondents

Variable	Number (377)	%
Age (years)		
15-19	122	32.4
20-24	255	67.6
Religion		
Christianity	179	47.5
Islam	198	52.5
Ethnicity		
Yoruba	321	85.1
Igbo	44	11.7
Hausa	9	2.4
Marital Status		
Single	110	29.2
Married	143	37.9
Divorced	9	2.4
Separated	25	6.6
Co-habiting	90	23.9
Number of Children		
None	128	34.0
1-2	157	41.7
3 and above	92	24.4
Level of Education		
Primary education	76	20.2
Secondary education	166	44.0
Some form of education	111	29.5
No formal education	24	6.4
Occupation		
Trading	275	72.9
Artisan	68	18.0
Farming	34	9.0

4.2 Pregnancy history

Two hundred and sixty six respondents (70.6%) had been pregnant at least once, out of which 210 respondents (78.9%) desired the pregnancy while 56 (21.0%) did not. One hundred and sixty eight (63.2%) respondents had support during the time of pregnancy, out of which 103 (61.3%) of them reported that they got the support from their partners. One hundred and sixty four (61.7%) respondents carried their pregnancy to term and delivered them and 20 (12.2%) of them had more than two children born alive and are still living. Table 4.2 shows further, response of respondents on ages of their children that are still alive, pregnancies that were not carried to term, places where pregnancies were terminated, reasons for doing so and people that decided on terminating the pregnancies.

Table 4.2: Respondents' pregnancy history

Variable	Number	%
Age of children living (N=164)		
<1 year	39	23.8
1-5 years	109	66.5
>5 years	16	9.8
Pregnancy(ies) not carried to term (N=102)		
Terminated	62	60.8
Miscarriage/abortion	28	27.5
Stillbirth	12	11.8
Where pregnancies were terminated (N=62)		
Clinic/maternity	39	63.0
Hospital	19	30.6
Mission home	4	6.5
Reasons for terminating the pregnancy (N=62)		
Did not desire it	36	58.1
No fund for child's care	14	22.6
Neglected by family/peers	8	13.0
Too young to be a mother	4	6.5
Person that decided to terminate the pregnancy (N=62)		
Partner	40	64.5
Myself	15	24.2
Friends	5	8.1
Parent	2	3.2

4.3 Knowledge of emergency contraceptives

Out of the 246 (65.3%) respondents who had knowledge of ECPs, 119 (48.4) of them heard about it one to three years ago and their source of information is mainly from friends/peers 107 (43.5%), health clinics 116 (47.2%), media 19 (7.7%), family members and market places-two (0.8%) respectively. Two hundred and seventy nine (74.0%) of the respondents reported that they have seen ECPs before and 207 (84.1%) of them feels it can be used as a regular form of contraceptives. The knowledge of the respondents was assessed on an 18-point score with scores of <10 and ≥10 points considered to be poor and good knowledge respectively and the mean knowledge score was 11.11. The distribution of respondents' response on if they have ever heard of ECPs, the types, mode of action and who the information on ECPs should be given to is shown in table 4.3.

Table 4.3: Respondents' knowledge of emergency contraceptives

Variable	Number	%
Ever heard about emergency contraceptives (ECPs) (N=377)		
Yes	246	65.3
No	131	34.7
Type of ECPs you have heard of (N=246)		
Emergency pills	118	48.0
Intrauterine device (IUD)	103	41.9
Others (condoms, oral pills, injectable, etc.)	25	10.2
Heard that ECPs do the following (N=246)		
Prevents unwanted pregnancy	185	75.2
Does not prevent unwanted pregnancy	28	11.4
Prevents sexually transmitted infections	29	11.8
Does not work	3	1.2
Has side effects	1	0.4
Maximum time for use and effects of ECPs is 5 days or 120 hours after unprotected sex (N=246)		
True	144	58.5
False	102	41.5
Information about ECPs should only be given to married women (N=246)		
True	94	38.2
False	152	61.8

4.4 Practice of emergency contraceptives

Table 4.4 below shows the details of practice of emergency contraceptives among the respondents. Out of the 136 (36.1%) who had ever used ECPs, 109 (80.1%) agreed that they liked using it and 62 (45.6%) prefer the daily oral contraceptive pills. Out of the 90 respondents who are current users of ECPs, 52 (58.0%) got it from the government hospitals, 8 (9.0%) from the private hospitals, 10 (11.1%) from the patent medicine store and 20 (22.2%) from the primary health care centres. Out of these respondents, 29 (32.2%) used it once in a month while 22 (24.4%) of them had used it in the past three months. Moreover, out of the current users, 81 (90.0%) of them used ECPs during their last sexual intercourse and they reported that counseling, giving of adequate information on ECPs and partner's preference of it made them liked using it and also that it is safe. Also, 44 (49.0%) of the current users wish to continue using ECPs (see table 4.4).

Table 4.4: Respondents' practice of emergency contraceptives

Practice statement	Yes	No
I have ever used ECPs (N=377)	136 (36.1%)	241 (64.0%)
I am currently using ECPs (N=136)	90 (66.2%)	46 (33.8%)
I use ECPs because it is safe (N=90)	87 (96.7%)	3 (3.3%)
Counseling on ECPs help to use it better (N=90)	81 (90%)	9 (10%)
Adequate information is given on the use, dosage and side effects of ECPs (N=90)	78 (87.0%)	12 (13.3%)
I use ECPs to prevent unwanted pregnancy (N=90)	89 (99.0%)	1 (1.1%)
I prefer using ECPs because it has less side effects (N=90)	85 (94.4%)	5 (6.0%)
I use ECPs because my partner prefers it (N=90)	4 (4.4%)	86 (96.0%)

4.5 Attitudinal disposition on the use of emergency contraceptives

One hundred and forty (37.1%) respondents disagreed that adults are not willing to discuss contraception issues with youths, though. 95 (25.2%) of the respondents agreed that parents have a positive influence in counseling their children on ECPs. Out of the respondents, 95 (25.2%) agreed that ECPs can only be used if approved by their partners and 120 (32.0%) reported that ECPs can cause abortion and delay in getting pregnant. Also, 118 (31.3%) respondents agreed that there is availability and accessibility of ECPs and 122 (32.4%) of them said it is affordable. In addition to this, 105 (28.0%) of the respondents agreed that the policy on use of emergency contraceptives is flexible and 55 (15.0%) reported that it is not against their religion to use emergency contraceptives. Table 4.5 below showed other respondents' attitudinal disposition to the use of ECPs.

Table 4.5: Attitudes influencing respondents' use of emergency contraceptive

Statement (N=377)	SA	A	D	SD
Adults are not willing to discuss contraception issues with youths	46 (12.2%)	72 (19.1%)	140 (37.1%)	119 (31.6%)
ECPs can only be used if approved by one's sexual partner	59 (15.6%)	95 (25.2%)	95 (25.2%)	128 (34.0%)
ECPs cause abortion and delay in getting pregnant when married later in life	55 (14.6%)	120 (32.0%)	128 (34.0%)	74 (19.6%)
Availability and accessibility of ECPs	81 (21.5%)	118 (31.3%)	72 (19.1%)	106 (28.1%)
Affordability of ECPs	103 (27.3%)	122 (32.4%)	75 (19.9%)	77 (20.4%)
Policy on ECPs is flexible	95 (25.2%)	105 (27.9%)	95 (25.2%)	82 (21.8%)
Religion is a barrier to use of ECPs	46 (12.2%)	55 (14.6)	121 (32.9%)	152 (40.3%)

4.6 Test of hypotheses

Ho1: There is no significant difference between the age of the youths and knowledge of emergency contraceptives (ECPs).

Table 4.6: Summary of t-test Analysis on Knowledge of ECPs between different age levels.

Variable	N	Mean	Std.D	t	df	Sig.	Remark
Knowledge of ECPs							
15-19 years	122	23.69	8.19	2.435	375	.015	Significant
20-24 years	255	25.86	8.03				

In testing this hypothesis, the t-test statistics was used to analyse the data. Table 4.6 shows the respondents' knowledge of ECPs by age and also shows that there is a significant difference between young (15-19 years) and old (20-24 years) youths in their knowledge of ECPs ($t=2.435$; $df=375$; $p<0.05$). Therefore, Ho1 is rejected. The mean scores show that older youths have more knowledge (mean=25.86) than the younger ones (mean (23.69).

Ho1: There is no significant difference among youths with various educational qualifications in their awareness of emergency contraceptives

Table 4.7: Summary of ANOVA on ECPs awareness among youths with different educational qualifications.

Source	Sum of squares	df	Mean square	F	Sig.	Remark
Between groups	92.491	7	9.617	1.019	.433	Not significant
Within groups	3382.992	369	9.618			
Total	3475.482	376				

Table 4.7 reveals that there is no significant difference among youths of various educational status in their awareness of ECPs ($F_{(7,369)}$=1.049; p>0.05). Therefore, HO_2 is not rejected.

H_{O3}: There is no significant difference between marital status of respondents and use of emergency contraceptives.

Table 4.8: Respondents 'use of ECPs by marital status

Variation	Sum of squares	df	Mean square	F	Sig.	Remark
Between groups	66.94	5	13.39	1.170	.323	Not significant
Within groups	4245.47	371	11.44			
Total	4312.41	376				

In testing this hypothesis, the respondents were categorized into single, married, divorced, separated and co-habiting groups and the ANOVA statistics was used to analyze the data. Table 4.8 shows that there is no significant difference between the various levels of marital status and their use of ECPs ($F_{(5,371)}$ =1.170; p>0.05). Therefore, the H_{O3} is not rejected.

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1 Socio demographic characteristics

Majority of the respondents are between ages 20-24 years of age, are married, have more than one child and have used ECPs. This implies that youths in this age range use emergency contraceptives more than those in the age range of 15-19 years. A previous study (Oye-Adeniran, Adewole, Umoh, Oladokun and Gbadegesin, 2006) showed that older, married women tend to use contraceptives more. It can also be implied that the study sample might be more experienced and matured in matters relating to sexual matters and would not want to be burdened with unintended pregnancy which can have a negative financial and social impact on the family. Moreover, the findings of the study revealed that respondents between the ages of 15-19 years are still single, have been pregnant before but have no child and some of them are currently using ECPs. Similar findings have been documented by Sedgwick (2010) among adolescents studied where it was revealed that the adolescents engage in sporadic sexual relationship, have high pregnancy and abortion rates as a result of intermittent and sometimes, improper or non-use of contraceptives. Further on, it showed that pregnant adolescents have a higher preterm birth rate and their babies have higher mortality rates. Also, they are likely to drop out of school and remain single parent.

The respondents' levels of education attainment were found to be generally low. This limited education has several implications for their social and economic development. First, limited education undermines their opportunity for employment in the formal sector and this in turn will limit their future social and economic development and those of their offspring. This is shown in the fact that most of them are petty traders. Secondly, low education among young people is positively associated with low self-esteem. This psychological disposition put the young mothers in a disadvantaged position in negotiating sexual intercourse, use of contraceptives and prevention of sexually transmitted diseases. Invariably, they derive satisfaction in uncontrolled fertility as means of being relevant in their matrimonial home and the society at large. Among the factors that could be responsible for low level of education include the rural area setting where they reside, early sexual debut, sporadic sexual intercourse resulting in early pregnancy which could lead to expulsion from school and may not be able to return back to school due to the demand of childcaring.

5.2 Reproductive and sexual history

Most of the respondents had an average of two pregnancies. Given their relative young ages, they are at risk of pregnancy related complications as a result of the fact that their reproductive organs are not fully developed yet. It has been reported that youths who are pregnant are at a higher risk of having preterm babies and also, their babies usually have higher mortality rates (Sedgwick, 2010). Another source of concern is the fact that there is a high percentage of pregnancy wastage. This is a further confirmation of the risks and outcome associated with youth pregnancy. The complications of pregnancy at such an early age include severe eclampsia, pre-eclampsia, obstructed labour, intrauterine death, vesico and recto-vaginal fistula following obstructed labour (Sedgwick, 2010).

In addition to this, the percentage of respondents who terminated their pregnancy through the fact that they did not desire it and that it was their partner that made the decision revealed that there is reduced use of ECPs due to lack of knowledge or any other form of family planning method. In a study on knowledge and perception of ECPs among female undergraduates in the Niger-Delta in Nigeria (Akani, Enyindah and Babatunde, 2008), it was documented that unintended intercourse is the primary cause of unintended pregnancy and induced abortions and that the rate of induced abortions is a good indicator of the current state of medical care and family planning in any country.

5.3 Knowledge of emergency contraceptives

The findings of the study revealed high knowledge of ECPs and most of the respondents know the types. Also, they know the mode of action of the ECPs and got information about it mainly from their friends 107 (28.5%) but do not know the correct timing for taking the pills 100 (26.5%). These survey findings were similar with the FGD in which the majority of the discussants heard about ECPs while most of them did not know the right timing for taking the pills. The findings of the study further revealed that the older the youth, the more knowledge they have about ECPs ($p<0.05$). In a study on knowledge, attitude, and practice on emergency contraceptives among female university students in Addis Ababa, Ethiopia, about 41.9% of the students had heard about emergency contraceptive, however, below 10% of them have identified the correct timing of administration of the pills after unexpected sexual contact (Robert, Moodley and Esterhuizen, 2004). Several studies conducted in higher institutes in South Africa, Ghana, Nigeria and other developing countries reported more or less similar findings (Eliz and Christina, 2002; Arowojolu and Adekunle,

2000). Also, in the study above which was done among female university students in Addis Ababa, Ethiopia, pills are the most widely known emergency contraceptive method and the knowledge of students on emergency contraceptives was significantly higher for senior students (graduating class) as compared to their juniors. These findings showed further on that whether the youths are in school or out of it, they still have knowledge on ECPs.

In addition to this, in another study on emergency contraception on' knowledge and perception of female undergraduates in the Niger Delta of Nigeria', about 50.7% of 600 respondents were aware of emergency contraception; amongst which reports of friends/peers as the source of knowledge ranked highest (33.55%) (Akani, Babatunde and Eyindah, 2008).

5.4 Practice of emergency contraceptives

In the findings from the study, about one third of the respondents 137 (36%) had ever used ECPs. This could be attributed to the fact that 143 (37.9%) of the respondents are married and has on the average one child. In a study on knowledge, attitude and practice on ECPs among female university students in Addis Ababa, Ethiopia (Tamire and Enqueselassie, 2007), the trend of ever use of emergency contraceptives significantly increases with increasing age, and was higher among students who are married and have one or more child.

Out of the respondents, only few of them, 92 (24%) are currently using ECPs as at the time of the study and also few of them 94 (24.9%) stated that they will like to continue This is in line with the fact that the utilisation of modern methods of contraception has always been shown to be poor among Nigerian adolescents. Studies from Western and Southern Nigeria have found rates of contraceptive use among sexually active adolescents to be low - 30% (Arowojolu and Adekunle, 2000; Okpani and Okpani, 2000). The 2008 NDHS found that only 11% of sexually active women aged 15-19 years use any modern contraceptives. Such rates of contraceptive use are much lower than that seen in similar age groups in many Sub-Saharan African countries, or than the one in industrialised countries.

5.5 Factors influencing use of emergency contraceptives

The respondents 95 (25.2%) agreed that parents have a positive influence in counselling their children. This is supported by a study on assessing attitudes about ECPs among urban, minority adolescent girls (Mollen, Barg, Hayes, Gorcsik, Blades and Schwarz.

2008) which stated that family and friends are important influences and also, information given to them by health personnel. In another study on ECPs and fertility awareness among university students in Kampala, Uganda (Byamigisha, Mirembe, Faxelid and Gemzell-Danilssen, 2006), almost half of the respondents 63 (21.6%) thought that parents should educate and advise the youth about ECPs. This is an issue to address since parents will usually have the final stake in solving the social and economic problems of an unwanted pregnancy. Young women are usually not able to economically cater for themselves and the pregnancy (Lorssen, Anablom, Odlind and Tyden, 2002). It is thus important to promote parent-child communication about sexual issues (Babalola, Tambashe and Vondrasek, 2005).

Moreover, the flexibility of policy on ECPs and the availability, accessibility and affordability of it makes it easier to use.

5.6 Conclusion

This study documents the knowledge and prevalence of emergency contraceptive use among out-of-school female youths in Ido Local Government Area. It revealed increased knowledge on what ECPs are and its mode of action, although there was an average knowledge on timing for taking the drugs correctly and also low prevalence of use. Furthermore, it showed respondents who are between the ages of 20-24 use the ECPs to reduce the burden of unintended pregnancy.

Some of the factors that may predispose the youths to incorrect dosage of ECPs and its use include reduced information on it as well as the cultural factors which could affect their moral identity in the society. This situation may lead them to a higher parity and related social consequences. There is therefore an unmet need for ECP use among youths especially in the urban setting and therefore, there is an urgent need for a community based peer education strategies to pass reproductive health education information to youths and to improve on it at a steady rate.

5.7 Recommendations

Considering the above findings, the following recommendations were made:

1. The three tiers of government in Nigeria (Federal, States and local Government) should at their various levels, form a working partnership with Non-Governmental

Organisations (NGOs) to design and implement sustainable community based health education programmes to promote ECP use among youths.

2. Health education strategies should explore and identify effective means of providing information on ECPs to youths in the communities.
3. It is necessary that educational intervention should be put in place by NGOs such as Planned Parenthood Federation of Nigeria to provide correct knowledge on timing for taking the drugs correctly.
4. Pictorial educational materials which should have a strong motivational content should be developed for the youths by NGOs and health organisations so as to pass across a message on the knowledge on the timing and dosage of ECPs.
5. The local government and the NGOs should give basic training on contraception to patent medicine store sellers in order to equip them as partners for quality ECP service delivery to youths.
6. ECPs should be made readily available and at a low cost. This should be promoted in a way that would help to overcome social and personal obstacles to their use.
7. Youth friendly organisations such as youth friendly clinics should be established in the community to enable youths to interact with one another.

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APPENDIX I

QUESTIONNAIRE

TITLE OF RESEARCH:

KNOWLEDGE AND PREVALENCE OF EMERGENCY CONTRACEPTIVES USE AMONG YOUTHS IN IDO LOCAL GOVERNMENT, OYO STATE, NIGERIA

Dear Respondent.

I am ADENIJI Oluwakemi, a Postgraduate Student at the Department of Health Promotion and Education, University of Ibadan.

This questionnaire is designed to assess the knowledge and prevalence of emergency contraceptives use among out-of-school female youths aged between 15- 24 years. It is to assess their knowledge, reproductive and sexual history, practice and factors that could influence or hinder its use.

The information given will be used only for the purpose of research and confidentiality is guaranteed.

Would you want to participate in this research?

a. Yes b. No

Would you allow your child/ward/partner to participate in this research?

a. Yes b. No

Thank you very much

Date of interview .....

Place of interview.....

Serial number.....

Interviewer's name.....

Investigator's signature.....

Instruction:

Please circle or give appropriate answer where applicable.

Section A: Demographic data

1 Age as at last birthday..... years

What is your date of birth.....

2 Religion: 1. Christianity 2. Islam

3. African traditional religion

3 Nationality:

1. Nigerian 2. Others (specify)

4 Ethnicity: 1. Yoruba 2. Igbo 3. Hausa

5 Marital status: 1. Single 3. Divorced

2. Married (year married).....

4. Separated 5. Living together (cohabiting)

6 Number of children: 1. None 2. 1 - 2 3. 3 and above

7 Highest educational qualification:

1. No formal education 2. Koranic education

3. Primary education 4. Junior secondary education

5. Senior secondary education 6. Informal education

8 What kind of work do you do? .....

9 In which accommodation are you currently residing?

1. Husband's apartment 2. Parent-in-law's house 3. My parent

4. Apartment rented by boyfriend 5. Staying with a friend

6. Staying alone

B: Pregnancy history

Some of the following questions are very personal and may appear embarrassing. You have some of confidentiality).

1. Have you been ever been pregnant since you started menstruation? .....
2. For the pregnancy you had/have, did you desire it?

   1. Yes 2. No

   If No why? .....

3. Did you receive any support during the pregnancy?

   1. Yes 2. No

4. Who gave the support?

   1. Partner 2. Parent 3. Peers 4. Community member

   5. Others (specify)

   If No, why? .....

5. How many of the pregnancy (ies) was/were carried to term and delivered?

   .....

6. How many of the children born alive are living now?

   .....

7. What are the ages of children? .....
8. How many pregnancy (ies) were not carried to term? .....
9. What happened to the pregnancy (ies) not carried to term?

   1. Terminated 2. Miscarriage/abortion 3. Still birth

10. If pregnancy (ies) was terminated, where?

    1. Hospital 2. Clinic/Maternity 3. Patent Medicine store

    4. Herbalist home 5. Mission home 6. Friend's house

    7. Own house 8. Others (specify)

11. What are your reasons for terminating the pregnancy?

    1. Did not desire it 2. Too young to be a mother 3. No fund for child's care 4. Neglect by family/peers

21. Who made the decision to terminate the pregnancy?

1. Myself 2.Partner 3. Parent 4. Friends 5.Others (specify)

Section C: Knowledge of emergency contraceptives

22. What did you know about emergency contraceptives?

1. Yes 2. No

If No, go to Section D

23. Which type have you heard of?

1. Pills 2. IUCD 3. Others (specify)

24. When did you hear about emergency contraceptives?

1. <1 year 2. 1 - 3 years 3. 4 - 6 years 4. >6 years

25. What have you heard about it?

1. It can prevent unwanted pregnancy
2. It does not prevent unwanted pregnancy
3. It prevents sexually transmitted diseases
4. It is convenient to use
5. It does not work
6. It has side effects
7. Others (specify)

26. How did you get to know about ECPs?

1. Friends/peers 2. Family members 3. Media 4.Health clinics
5. Health talks in market places 6. Others (specify)

Please determine which of the following statement is true or false:

		True	False
27	Emergency contraceptives interrupt an established pregnancy		
28	Emergency contraceptive pills can only prevent pregnancy but does not cause abortion		

29	The maximum time a women can take the pills and expect effectiveness is 5 days or 120 hours after unprotected sex		
30	Emergency contraceptives effectiveness is optimal when used within 24 to 48 hours after unprotected sex.		
31	Emergency contraceptives can be used with more than one act of unprotected sex.		
32	Emergency contraceptive pills are very effective when used as a regular contraceptive method.		
33	Emergency contraceptives cannot be taken before sexual intercourse		
34	The pills protect against sexual transmitted infections		
35	Emergency contraceptives cause abdominal cramps and severe bleeding		
36	Information about emergency contraceptives should only be given to married women		

Section D: Practice of emergency contraceptives

37. Have you ever used emergency contraceptives?

1. Yes 2. No

If Yes, why? .....

If No, go to question 38

38. Are you currently using emergency contraceptives?

1. Yes 2. No

If No, go to question 48

39. Where did you get the emergency contraceptives?

1. Government hospitals 2. Private hospital/maternity centre
2. Primary health care centre 4. Patent medicine store 5. Mission home
6 Others (specify)

40. How often do you use emergency contraceptives?

1. Once a week 2. >Once a week 3. Once a month

4 >Once a month

41. When was the last time you used it?

1. In the past one week 2. In the past two weeks 3. In the past two months

4. In the past three months 5. In the past six months 6. Others (specify)

42. Did you use emergency contraceptives during the last sexual intercourse?

1. Yes 2. No

43. If No, why?

1. I don't like taking pills 2. I cannot afford it

3. I cannot get it easily to buy 4. I was afraid of the side effects of the pills

5. Others (specify)

44. Do you like using emergency contraceptives?

1. Yes 2. No

If Yes, why? .....

45. Do you intend to continue to use emergency contraceptives?

1. Yes 2. No 3. Not sure

If Yes, give your reason(s) .....

46. Which other contraceptive method do you know?

1. Oral daily contraceptive pills 2. Condoms 3. Foaming tablets

4. Withdrawal method 5. Injectable 6. IUD 7. Others (specify)

47. Which contraceptives are you using presently?

.....

48. If you have never used any form of contraceptives, why?

.....

Please tick your option for each of the statement:

		Yes	No
49.	I use emergency contraceptives because it is safe		
50.	Counseling on use of emergency contraceptives help to use it bener		
51.	It is quite safe to use emergency contraceptives		
52.	Adequate information is given on the use, dosage and side effects of emergency contraceptives		
53.	Emergency contraceptives should only be taken in cases of rape or incest		
54.	I have a moral objection to the use of emergency contraceptives		
55.	I use emergency contraceptives so as to prevent unwanted pregnancy		
56.	I prefer using emergency contraceptives because it has less side effects		
57	Emergency contraceptives services offered to married women alone is safer		
58	Using emergency contraceptives makes me to be sexually active		
59	I use emergency contraceptives because my partner prefer it		

Section E: Factors affecting the use of emergency contraceptives

		SA	A	D	SD
60	Parents give information on emergency contraception to their children				
61	It is not important to counsel youths on emergency contraception method				
62	Parents have influence in counseling youths on contraception issues				
63	One should not use emergency contraceptives except it is approved by one's sexual partner				
64	Emergency contraceptive pills cause abortion and delay in getting pregnant when married later on in life				
65	It is bad for a youth to have sex with anybody she likes				
66	It is against my religion to use emergency contraceptives.				
67	Health workers are always willing to offer emergency contraception services and counseling.				
68	There is availability and accessibility of emergency contraceptives.				
69	Policy on use of emergency contraceptives is flexible.				
70	Youths using emergency contraceptives are looked at in the society as not morally upright.				
71	Emergency contraceptives is cheap.				

APPENDIX 2

QUESTIONAIRE (YORUBA VERSION)

AKORI IWADI: IMO NIPA IDENA OYUN NINI NIPA LILO EGBOGI PAJAWIRI ATI WIWOPO RE LAARIN AWON ODO NI ILOBA IPINLE IDO TI IPINLE OYO.

Oludahun tooto.

Oruko mi ni Iyaafin ADENIJI Oluwakemi. Mo je akeeko ni eka ilanileko nipa imo ilera ara ilu ti ile iwe giga julo ti ilu Ibadan.

Iwe ibeere yi ni a se lati fi le mo nipa imo ti awon odo ti won ko si ni ile iwe mo nipa idena oyun nini nipa lilo egbogi pajawiri ati wiwoho re laarin awon odo ti ojo ori won wa laarin odun meedogun si merinlejoogun. Eyi yio fun wa ni anfani lati le mo nipa imo ti won ni lori egbogi pajawiri ti a fi ndena oyun nini. Itan ibisi. bi won se nlo egbogi ti a ndena oyun nini yii ati awon ohun ti o le se okunfa tabi idiwo fun lilo egbosi yi.

Gbogbo idahun ti a ba fi sile ninu iwe yi ni a o lo fun iwadi ijinle nikan ati wipe a ko ni je ki o lu jade si enikankan. A bo wa fun o gegebi olukopa ninu iwadi ijinle yi ni awon igba ti a ko ni fi oruko yin si inu iwe ibeere yi.

Nje o se tan lati kopa ninu iwadi yi nipa didahun awon ibeere yi?

a) Beeni b) Beeko

Nje o se tan lati gba ki omo/aya/alabasona re kopa ninu iwadi yi nipa didahun awon ibeere yi?

a) Beeni b) Beeko

A dupe pupo.

Ojo iforowanilenuwo.....

Ibi iforowanilenuwo.....

Nomba idanimo enikokan.....

Oruko oluforowanilenuwo.....

Ifowosi oluwadi.....

Iwaasoma:

Fun awon ibeere wonyi, jowo yi ami roboto tabi odo si awon onka idahun re nikan.

IPA KINNI: MIMO NIPA YIN

1. Omo odun melo ni o ni ojo ibi re ti o koja lo? Odun.....

   Ojo/osu/odun wo ni a bi o?.....

2. Esin wo ni o nse?

   1. Onigbagbo 2. Musulumi 3. Esin ibile

3. Orile ede re?

   1.Nigeria 2.Omiran (salaye)

4. Isori iran

   1. Yoruba 2. Ibo 3. Hausa

5. Nje o ti ni oko?

   1. Daduro 2. O ti se igbeyawo 3. A ti tu igbeyawo ko

   4. A ko jo gbe papo 5. A njo gbe papo lai se igbeyawo

6. Omo melo lo ni?

   1. Ko si okookan 2. Okan si meji 3. Meta ati ju be lo

7. Iwe eri wo lo gba?

   1. Nko lo si ile iwe rara 2. Ile eko meiwa

   3. Ile iwe alako beere 4. Ile iwe girama kekere

   5. Ile iwe girama agba 6. Ile iwe olaileto

   6. Omiran (salaye)

8. Iru ise wo ni o nse?.....

9. Odo enl o ngbe lowolowo bayi?

   1. Odo oko mi 2. Ile ebi oko mi 3. Ile awon obi mi

   4. Ile ti orek unrin mi gbe lin mi

   5. Mo ngbe pelu ore mi 6. Mo ndagbe 7. Omiran (salaye)

Ipe keji: Itan Ibisi

10. Nje o ti loyun lati igba ti o ti bere si nse nkan osu?

.....

11. Oyun ti o ni tabi ti o ti ni ri, se o wun o lati ni?

1. Beeni 2. Beeko

Ti o ba je beeko, kinni idi re? .....

12. Nje o ri iranlowo kankan ninu oyun yi?

1. Beeni 2. Beeko

13. Ti o ba je beeni, tani o fun o ni iranlowo?

1. Eni ti o fun mi ni oyun
2. Awon obi mi
3. Awon ore mi
4. Awon aradugbo
5. Omiran (salaye)

Ti o ba je beeko, kinni idi re?.....

.....

14. Melo ninu oyun ti o ni yi lo pe osu mesan ti o si bi?

.....

15. Melo ninu omo ti o ti oyun yi bi lo wa laye?

.....

16. Kinni ojo ori omo/awon omo yi?.....

17. Melo ninu oyun yii ni ko pe osu mesan?.....

18. Kinni o sele si awon oyun ti o ni ti ko pe osu mesan?

1. Mo ba je 2. O wole funrare 3. O bi ni oku omo

19. Ibo ni o ti ba oyun naa je?

1. Ile iwosan 2. Ile itoju alaisan abe ile tabi ile agbebi
3. Ile ita ogun 4. Ile babalawo/adahunse
5. Ile iwosan onigbagbo 6. Ile ore 7. Ile mi
8. Omiran (salaye)

20. Nje idi pataki wa ti o ti ba oyun naa je?

1. Nko fe oyun 2. Mo kere ju lati di iya olomo
3. Ko si owo lati toju omo
4. Ko si oluranlowo lati odo awon obi/elegbe mi

21. Tani o se ipinu lati ba oyun yi je?

1. Emi ni 2. Oko/ololufe/aresona mi
3. Obi mi 4. Awon ore mi 5. Omiran (salaye)

IPA KETA: IMO NIPA GBOGI PAJAWIRI TI A FI NDENA OYUN NINI

22. Nje o ti gbo nipa egbogi pajawiri ti a fi ndena oyun nini?

1. Beeni 2. Beeko

Ti o ba je beeko, lo si ipa keta

23. Ewo ninu iru awon egbogi pajawiri ni o ti gbo ri?

1. Onikoro 2. Eyi ti a ma nfi si ile omo lati oju ara

3. Omiran (salaye)

24. Nigba wo lo gbo nipa egbogi pajawiri yi?

1. O din ni odun kan seyin
2. Odun kan si odun meta
3. Odun kan si odun mefa
4. O le ni odun mefa

25. Kini o gbo tabi o mo nipa egbogi yi?

1. O ndena oyun ti a ko ba fe
2. Ko fa idena fun oyun ti a ko ba fe
3. O ndena arun ti a le ko nipa ibalopo okunrin ati ibinrin
4. O rorun lati lo
5. Ko si ise kankan ti egbogi yii nse
6. Egbogi yii ni awon alcebu ti o le se akoba fun ara ti a ba lo
7. Omiran (salaye)

26. Nibo ni o ti gbo nipa ilana idena oyun yi?

1. Ore tabi ebgbe mi
2. Awon obi mi
3. ile ise mohunmaworan/asoromagbesi
4. Ile eto ise ilera
5. Idanilekoo laarin oja
6. Omiran (salaye)

Ejowo e so eyi ti o je ninu awon ibeere yi:

		Oota	Iro
27	Egbogi pajawiri ti a fi ndena oyun nini ma nba oyun je.		
28	Egbogi yi le dena oyun nini sugbon kii se oyun.		
29	Asiko ti o ga julo ti egbogi pajawiri yi le fi sise ti o pe iye wa laarin ojo marun tabi ogofa wakati lai lo nkan idabobo oyun kankan.		
30	Egbogi pajawiri le sise daradara ti a ba lo laarin wakati merinleloogun si mejidinlaadota leyin ibalopo laarin okunrin ati obinrin lai lo nkan idabobo oyun kankan.		
31	Egbogi yi se lo ti a ba ni ajose po pelu okunrin ju ekan lo lai lo idabobo kankan.		
32	Egbogi pajawiri a ma sise daradara ti aba lo deedee gegebi egbogi ti o le fi dena oyun.		
33	A ko le lo egbogi yi sunju ibalopo pelu okunrin.		
34	Egbogi pajawiri le dena awon aarun ti a le ko nipa ibalopo laarin okunrin ati obinrin.		
35	Lilo egbogi yi le fa ki inu ma run ni tabi ki eje ma da lara eni.		
36	Abileko nikan ni a le lunni alaaye lori lilo egbogi pajawiri ti a fi ndena oyun.		

Ipa kerin: Bi a se le lo egbogi pajawiri ti a fi ndena oyun nini

37. Nje o ti lo egbogi pajawiri yi ri?

1. Beeni 2. Beeko

Ti o ba je beeni, kinni idi re?. .....

Ti o ba je beeko, lo si ibeere ikejidinlaadota.

38. Nje o nlo egbogi pajawiri yi lowolowo?

1. Beeni 2. Beeko

Ti o ba je beeko, lo si ibeere ikejidinlaadota

39. Nibo ni o ti gbe ra egbogi yii?

1. Ile iwosan ijoba 2. Ile iwosan/agbebi ti adani

3. Ile iwosan ti ijoba ibile 4. Ile ita ogun

5. Ile iwosan ti onigbagbo 6. Omiran (salaye)

40. Bawo ni e se nlo egbogi pajawiri si?

1. Eekanso l'ose 2. O ju eekanso l'ose 3. Eekanso l'osu

4. O ju eekanso l'osu

41. Igba wo ni o lo egbogi pajawiri yi gbeyin?

1. Ose kan seyin 2. Ose meji seyin

3. Osu meji seyin 4. Osu mefa seyin

5. Osu mefa seyin 6. Omiran (salaye)

42. Nje o lo egbogi pajawiri ti a fi ndena oyun ninu ibalopo ti o ni pelu okunrin gbeyin.

1. Beeni 2. Beeko

43. Ti o ba je beeko, kinni idi re?

1. Nko feran lati ma lo egbogi pajawiri

2. Nko ni owo lati ra

3. Nko ri ra laara

4. Eru n bami nitori awon wahala ti o ro mo lilo oogun yi

5. Omiran (salaye)

44. Nje o feran lati ma lo egbogi pajawiri yii?

1. Beeni 2. Beeko

Ti o ba je beeni, kinni idi re?, ...

Ti o ba je beeko, lo si ibeere ikejidinlaadota.

38. Nje o nlo egbogi pajawiri yi lowolowo?

1. Beeni 2. Beeko

Ti o ba je beeko, lo si ibeere ikejidinlaadota

39. Nibo ni o ti gbe ra egbogi yii?

1. Ile iwosan ijoba
2. Ile iwosan/agbebi ti adani
3. Ile iwosan ti ijoba ibile
4. Ile itaja ogun
5. Ile iwosan ti onigbagbo
6. Omiran (salaye)s

40. Bawo ni e se nlo egbogi pajawiri si?

1. Eekanso l'ose
2. O ju eekanso l'ose
3. Eekanso l'osu
4. O ju eekanso l'osu

41. Igba wo ni o lo egbogi pajawiri yi gbeyin?

1. Ose kan seyin
2. Ose meji seyin
3. Osu meji seyin
4. Osu mefa seyin
5. Osu mefa seyin
6. Omiran (salaye)

42. Nje o lo egbogi pajawiri ti a fi nilena oyun ninu lbalopo ti o ni pelu okunrin gbeyin.

1. Beeni
2. Beeko

43. Ti o ba je beeko, kinni idi re?

1. Nko feran lati ma lo egbogi pajawiri
2. Nko ni owo lati ra
3. Nko ri ra tasia
4. Eru n bami nitori awon wahala ti o ro mo lilo oogun yi
5. Omiran (salaye)

44. Nje o feran lati ma lo egbogi pajawiri yii?

1. Beeni 2. Beeko

45. Nje o ni lokan lati ma lo egbogi pajawiri yi lo?

1. Beeni 2. Beeko 3. Ko daju

46. Awon ilana miran woni o mo ti a le fi dena oyun nini?

1. Egbogi onihoro ti a ma nlo ni ojojumo
2. Roba idabobo
3. Egbogi ahoyaya ti a nfi si oju ara
4. Ilana onyiyokuro nkan omokunrin
5. Abeere ti a fi ndena oyun nini
6. Okun ti a nfi si inu ile omo
7. Omiran (salaye)

47. Iru ilana idena oyun nini woni onlo bayi?

.....

48. To oko ba ti lo ilana idena oyun nini kankan ri, kinni idi re?

.....

Jowo fa ila ni apa otun si eyi ti o ro wipe o je idahun nina awon ibeere yii:

		Beeni	Beeko
49	Mo nlo egbogi pajawiri ti a fi ndena oyun nini nitori wipe ko si ewu kankan ti o ro mo lilo re.		
50	Amoran ti a ma nfun ni lori lilo egbogi yi je ki lilo re lorun.		
51	O rorun nti wipe ko si ewu nlnu lilo egbogi yii.		
52	Mo gba alaye ti o pe iye nipa lilo.iye nti ewu ti o ro mo lilo egbogi pajawiri.		
53	Igba ti a le lo egbogi yi nikan ni igba ti a ba fi ipa ba ni lo po tabi ti ebi ti o sun mo ni ba ni lo po.		

54	Lilo egbogi yi lodi si eko ti a ko mi.		
55	Mo nlo egbogi yii nitori nko fe oyun airotele.		
56	Mo nlo egbogi pajawiri ti a fi ndena oyun nitori wipe ewu ti o ro mo lilo re ko po.		
57	Lilo egbogi pajawiri rorun fun abileko nikan ati wipe ko si ewu kankan ti o ro mo.		
58	Lilo egbogi yi fun mi ni anfani lati ni ibalopo pelu okunrin ki okunrin ti mo ba se alapade pelu.		
59	Mo nlo egbogi yii nitori wipe enikeji mi fe ki nlo.		

Ipa karun: Awon ohun ti o le se okunfa tabi idiwo fun lilo egbogi pajawiri ti a fi ndena oyun nini

Fun ibeere kokandinlogota titi de ookandinlaadorin, je ki amo bi o se faramo si:

		Mo gba gbajudaju	Mo faramo	Mo tako	Mo tako Gan
60	Awon obi ma nfun awon omo won ni alaaye lori ilana ti a fi ndena oyun nini.				
61	Ko si anfani kankan ninu ki a fun awon odo ni imoran lori didena oyun nini nipase lilo egbogi pajawiri				

62	Awon agbalagba ko ni ife si a njiroro pelu awon odo lori awon ilana ti a fi ndena oyun nini.				
63	A ko gbodo lo egbogi pajawiri ayafi ti enikeji wa ba lowo si.				
64	Egbogi yii a ma ba oyun je ti a ba lo ati wipe o le fa idaduro fun omo bibi leyin wa ola.				
65	Ohun ti o buru jai ni ki odo ma ni ibalopo pelu okunrin ki okunrin ti o ba ri.				
66	O rako esin mi lati lo egbogi yii.				
67	Awon osise eleto ilera ma nse lati fun gbogbo eniyan ni amoran ati fun won ni egbogi yii.				
68	Egbogi pajawiri yi ma nwa ni gbogbo igba ti a ba fe lo nitori wipe a le ri ra ni ibikibi.				

69	Ofin ti o ro mo lilo. rira ati riri egbogi pajawiri yii rorun.				
70	Awon ara ilu ma nfi oju omo alaileko wo awon odo to nlo egbogi pajawiri.				
71	Egbogi pajawiri ti a ti ndena oyun nini ko won rara.				

APPENDIX 3

FOCUS GROUP DISCUSSION GUIDE

TOPIC: KNOWLEDGE AND PREVALENCE OF EMERGENCY CONTRACEPTIVES USE AMONG YOUTHS IN IDO LOCAL GOVERNMENT AREA, OYO STATE, NIGERIA

INTRODUCTION (ENGLISH)

Good day to you all. My name is Oluwakemi. I and my colleagues here are from the Department of Health Promotion and Education, Faculty of Public Health, College of Medicine, University of Ibadan. With me are ..... (mention names of others in the team.) We are grateful to you for agreeing to participate in this discussion. We have invited you to discuss about your knowledge on emergency contraceptives. We hope that the information we'll get will enable us to know the depth of knowledge of youths on emergency contraceptives and to know the areas we need to help. We would like to assure you that there is no right or wrong answer during this discussion. We would like to encourage you to feel free to express yourselves as we are all women here and what we are going to discuss concern us.

We will also like to assure you that all we are going to discuss here will be kept as secret. Therefore, your names will not be needed but, rather we will give you numbers to help our recording of this discussion. We seek your permission to record the discussion on audiotape. We are going to do this to enable us to remember all that we will talk about during this discussion. We will also be jotting down some points. Anyone that wishes to answer any question will be asked to raise up her hand. When you are called upon to answer, please mention your number before expressing yourself. Your contribution is important to us. We shall now start the discussion.

INTRODUCTION (YORUBA)

E ku oju ojo. Oruko mi ni Oluwakemi. Emi ati awon elegbe mi ni a wa lati eko ilanileko nipa imo ilera ara ilu ti ile iwe giga julo ti ilu Ibadan. Peiu mi ni.....

(daruko awon miran.)

A dupe lowo yin ti e gba lati kopa ninu iii oro jomitoro yii. A pe yin wa si ibi yii lati jiroro lori imo ti eni nipa egbogi pajawiri ti a le lo lati fi dena oyun nini. A lero wipe awon iro ti e ba fun wa ninu ijiroro yii, yio ran wa lowo lati mo imo awon odo nipa egbogi yii ati lati mo iru iranlowo ti a le se nipa imo ti won mo. A fe fi da yin loju wipe ko si esi ti o tona tabi ti ko tona minu ijiroro yii. A si lero wipe e o turaka nipa didahun awon ibeere wa gegbi e ti mo wipe obinrin ni gbogbo awa ti a wa ni ibi yii.

A fe fi da yin loju wipe gbogbo ohun ti a ba so ni ibi yii yio wa ni bo n kele. Nitori naa, a ko nilo oruko yin. A o fun enikookan ni nomba idanimo. A bere fun ase yin lati le lo ero gbohungbohun fun ijiroro wa yii. Eyi yio ran wa lowo lati rantl gbogbo ohun ti a o jiroro le lori. Ti enikeni ba fe dahun ibeere kankan, a ro wa ki a na owo wa soke, ki e si daruko nomba yin ki e to dahun. Fifowosopo ati kikopa awa ti a wa ni ibi yli se pataki. Nibayi, a o bere ijiroro naa.

QUESTIONS (IBEERE)

1. What are the types of reproductive health problems faced by youths in this community?

   Kinni awon isoro ilera ibisi ti o ndoju ko awon odo ni agbegbe yiiriu awon wo ni?

   Probe for (se iwadi fun)

   - Unintended pregnancy (oyun airotele)
   - Sexually transmitted diseases (awon arun ti a le ko nipa ibalopo)
   - Sexual relationship between youths (ibalopo laarin awon odo)

2. How would you describe the sexual behavior pattern of youths? Probe for reasons why sexual behaviours are high, medium or low.

   E jowo e se alaye bi ibalopo laarin awon odo se wopo to ni agbegbe yli. (Beere fun idi ti ibalopo se po pupo, die tabi kere julo)

3. How many of the youths in this community have heard about emergency contraceptives?

Melo ninu awon odo agbegbe yii ni o ti gbo nipa egbogi pajawiri ti a fi le dena oyun nini?

Probe (se iwadi)

- Sources of information (awon ona wo ni e gba gbo nipa e)
- What have you heard about it? (kini e ti gbo nipa e)
- Why is it important especially for youths? (kini idi re ti egbogi pajawiri yii fi wulo paapaa julo laarin awon odo)

4. How many youths have seen the emergency contraceptives?

Odo melo ni o ti ri egbogi pajawiri yii ri?

Probe for (se iwadi fun.)

- What it looks like (bawo ni o se ri)
- What people think about it (kini ero awon eniyan nipa re)
- What people like or dislike about it (kini awon eniyan feran tabi korira nipa re)

5. What are the uses of emergency contraceptives?

(Kini a le lo egbogi pajawiri yii fun.)

Probe for (se iwadi fun)

- To prevent unwanted pregnancy (lati fi dena oyun)
- To abort pregnancy (lati fi se oyun)
- To prevent sexually transmitted diseases (lati fi dena arun ti a le ko nipa ibalopo)

6. What do you know about emergency contraceptives?

(Kini o mo nipa egbogi pajawiri yii?)

Probe for (se iwadi fun)

- When should it be used? (igba wo ni a le lo)
- How should it be used? (bawo ni a se le lo)
- Experiences of those who have used it (iriri awon ti o ti lo egbogi yii ri)

7. What factors can facilitate/hinder the use of emergency contraceptives?

(Kini awon ohun ti o le ran lilo tabi d lilo egbogi yii

lowo.

Probe for (se iwadi fun)

- Money (owo)
- Accessibility (o wa ni arowoto)
- Availability (o rorun lati ri ra)

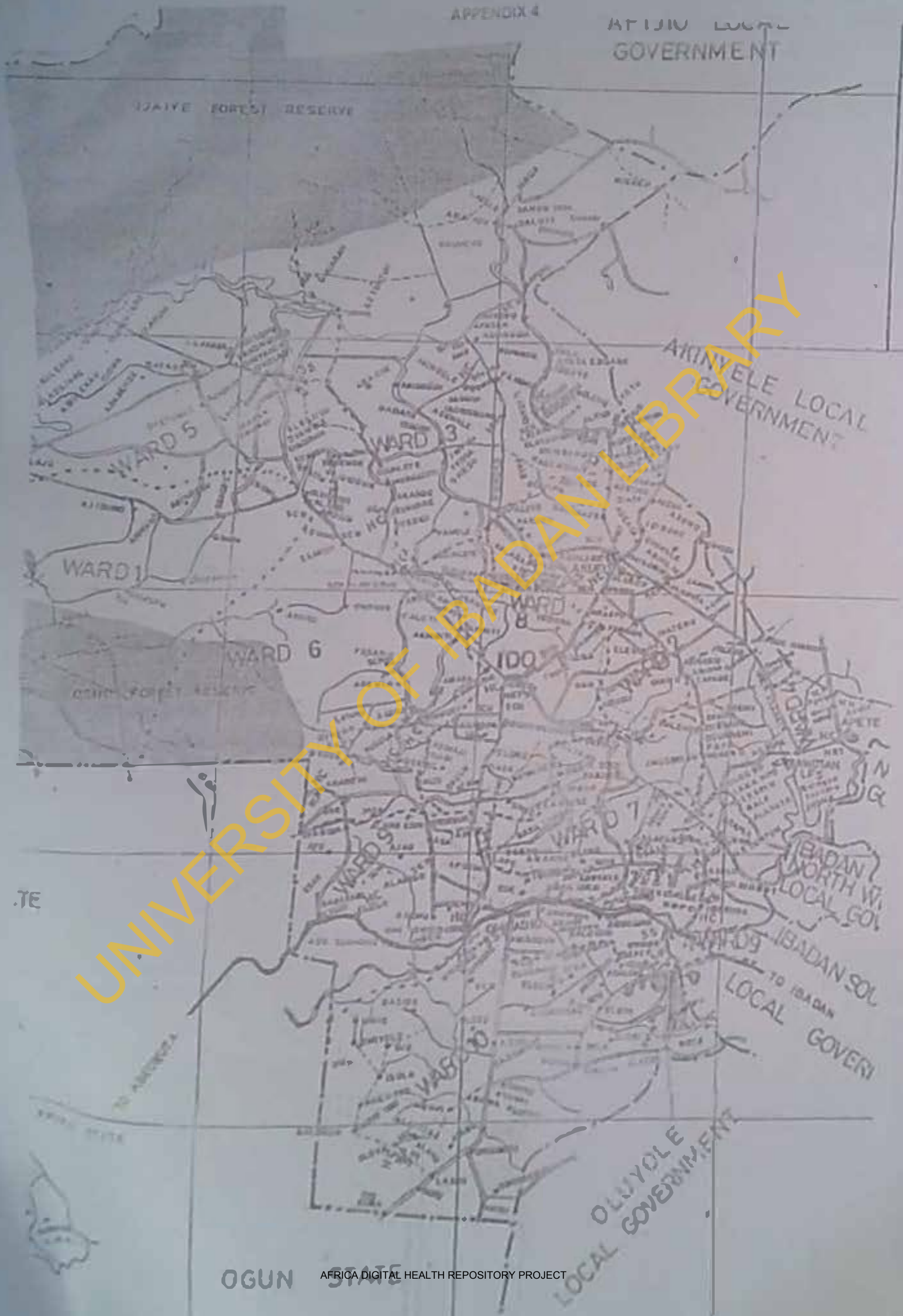
8. What will youths want to know about emergency contraceptives?

Kini awon odo fe mo tabi gbo nipa egbogi pajawiri?

9. What are your suggestions in promoting the use of emergency contraceptives?

Kini awon aba ti a ni fu igbesoke egbogi ipajawiri lilo?

APPENDIX 4



African Regional Health Education Centre
Department of Health Promotion & Education
College of Medicine, University of Ibadan
Ibadan, Nigeria.

UNIVERSITY COLLEGE HOSPITAL
IBADAN, NIGERIA.
Telephone: Ibadan (234)-2-2410088, 2410149, 2413516
2413503 (20Lines) Ext: 3505, 3503, 3508.

DR. I. O. OLASEHA

Ref: HPEA/20

Date: 25th March, 2010

TO WHOM IT MAY CONCERN

LETTER OF IDENTIFICATION

This is to certify that Mrs. O. I. Amisi with Matric Number 135095 is an MPH student in this Department.

Kindly accord him her due recognition and necessary assistance.

Thank you.

Dr. I. O. Olaseha
Ag. Head of Department

APPENDIX 6A

INSTITUTE FOR ADVANCED MEDICAL RESEARCH AND TRAINING (IMRAT)
COLLEGE OF MEDICINE, UNIVERSITY OF IBADAN, IBADAN, NIGERIA.

Telefax: 234-805-8182846, 0792..., 0702...3210,3129,3114, 2451,Fax: 234-2-2413545
E-mail: ...@yahoo.com, ...@yahoo.com

Ag. DIRECTOR: Professor Adeyinka G. Falusi, B.sc (Hons), M.Phil., Ph.D.

UI/UCH EC Registration Number: NHREC/05/01/2008a

NOTICE OF FULL APPROVAL AFTER FULL COMMITTEE REVIEW

Re: Knowledge and Prevalence of Emergency Contraception use among Youths in Ido Local Government Area, Oyo State, Nigeria.

UI/UCH Ethics Committee assigned number: UI/EC/10/0061

Name of Principal Investigator: Oluwakemi I. Adeniji

Address of Principal Investigator: Department of Health Promotion & Education, College of Medicine, University of Ibadan, Ibadan

Date of receipt of valid application: 26/04/2010

Date of meeting when final determination on ethical approval was made: 24/06/2010

This is to inform you that the research described in the submitted protocol, the consent forms, and other participant information materials have been reviewed and given *full approval by the UI/UCH Ethics Committee.*

This approval dates from 24/06/2010 to 23/06/2011. If there is delay in starting the research, please inform the UI/UCH Ethics Committee so that the dates of approval can be adjusted accordingly. Note that no participant accrual or activity related to this research may be conducted outside of these dates. *All informed consent forms used in this study must carry the UI/UCH EC assigned number and duration of UI/UCH EC approval of the study.* It is expected that you submit your annual report as well as an annual request for the project renewal to the UI/UCH EC early in order to obtain renewal of your approval and avoid disruption of your research.

The National Code for Health Research Ethics requires you to comply with all institutional guidelines, rules and regulations and with the tenets of the Code including ensuring that all adverse events are reported promptly to the UI/UCH EC. No changes are permitted in the research without prior approval by the UI/UCH EC except in circumstances outlined in the Code. The UI/UCH EC reserves the right to conduct compliance visit to your research site without previous notification.

UI/UCH EC
24 JUN 2010
APPROVED
COLLEGE OF MEDICINE, U.I.

Dr. A. A. Adenipekun
Chairman, Medical Advisory Committee,
University College Hospital, Ibadan, Nigeria
Vice-Chairman, UI/UCH Ethics Committee
E-mail: ...@yahoo.com

Research Unit ...

APPENDIX 6B

TELEGRAMS.....

TELEPHONE.....

MINISTRY OF HEALTH
DEPARTMENT OF PLANNING, RESEARCH & STATISTICS DIVISION
PRIVATE MAIL BAG NO. 5027, OYO STATE OF NIGERIA

Your Ref. No......
All communications should be addressed to
the Honourable Commissioner quoting
Our Ref. No. AD 13479/124

Date: 28th May, 2010

The Principal Investigator
Department of health promotion and education.
Faculty of Public Health.
University of Ibadan

Attention: Mrs Adeniji Oluwakemi

Re: Oyo State Research Ethical Review Committee (OSREREC)

In response to your letter requesting for ethical approval for the implementation of your Research Proposal titled Knowledge and prevalence of emergency contraceptives use among youths in Ido LGA. Oyo State Nigeria.

The Committee has noted your compliance with all ethical concerns raised. In the light of this, I am pleased to convey to you the approval of the committee for implementation of the Research Proposal in Oyo State, Nigeria.

Please, note that the committee will monitor, closely, and follow up the implementation of the research study. However the Ministry of Health would like to have a copy of the results and conclusions of the findings as this will help in policy making in the health sector.

Wishing you all the best.

Mrs V.A. Adepoju
Director, Planning, Research & Statistics